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THIRD ASIAN AND PACIFIC POPULATION CONFERENCE

(Colombo, September 1982)

SELECTED PAPERS

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC
Bangkok, Thailand

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FOREWORD

The Third Asian and Pacific Population Conference, held at Colombo in September 1982, served a significant purpose in refocusing attention on the continuing population problems of this region. The Conference was the third in the series of decennial gatherings of the ESCAP members and associate members, convened to consider all aspects of population issues and their important impact on economic and social progress.

The First Asian Population Conference, held at New Delhi in 1963, provided a regional forum for experts from ESCAP member countries and elsewhere to examine the major problems of planning for economic and social development in the light of current and prospective trends in the growth, composition and geographical distribution of the region's population. The Second Asian Population Conference was convened at Tokyo in 1972 with the aim of providing a better understanding of the central role that population plays in achieving development targets. The Second Conference also sought to assist Asia-Pacific Governments in determining and applying the most effective means of influencing population trends and patterns, so as to hasten efforts to reach the goals of the Second United Nations Development Decade. Among other things, the Second Conference stressed the need to integrate population planning into the overall development process.

Quite appropriately, the central theme of the Third Asian and Pacific Population Conference was "An integrated approach to population and related development issues". More than ever before, countries of this region now have a greater awareness of how population factors affect development progress. More and more countries are realizing that development efforts can no longer afford to ignore demographic questions, regardless of a country's policy on the rate of growth and distribution of its population. All societies, whatever their political or economic ideologies, are acknowledging the pivotal interrelationships of demographic factors with development policies, such as those related to education, health, housing, food and agriculture, industrialization, employment and improvement of the status of women. None the less, in many of the developing countries in this region, population planning has yet to be fully recognized as an integral part of overall development planning.

The report and the Asia-Pacific Call for Action on Population and Development adopted by the Third Conference have already been published by ESCAP. A detailed picture of the region's population problems and prospects is presented in this volume, containing selected papers prepared for the Conference. I feel confident that these publications will prove useful for member States in weighing the crucial population factors in overall economic and social development.

S.A.M.S. Kibria
Executive Secretary

Bangkok
January 1984

CONTENTS

Page

FOREWORD ..... .

INTRODUCTION ..... .

Topic 1. DEMOGRAPHIC SITUATION AND OUTLOOK 1

1.1 Working paper 3
by Mercedes B. Concepcion

1.2 Demographic trends and their development implications 9
by ESCAP Population Division

1.3 Determinants of recent declines in fertility in the ESCAP region 41
by ESCAP Population Division

1.4 Determinants and consequences of low fertility in low-fertility countries 61
by Shigemi Kono

1.5 Alternative population projections and the food and agriculture economy of the developing countries in ESCAP 75
by Food and Agriculture Organization

1.6 Implications of mortality trends and differentials in the ESCAP region 83
by Lado T. Ruzicka

Topic 2. FORMULATION AND IMPLEMENTATION OF INTEGRATED POPULATION AND DEVELOPMENT POLICIES 101

2.1 Working paper 103
by P.B. Desai

2.2 Review of the integration of population and development policies and programmes in Asia 106
by Gavin W. Jones

2.3 Population situation and policies in countries of the Asia and Pacific region 121
by United Nations Population Division

2.4 Integration of population and development policies: A comparison of the developing regions of the World 140
by United Nations Population Division

CONTENTS *(continued)*

Page

Topic 3. URBANIZATION AND GROWTH OF CITIES, INCLUDING SMALL TOWNS ... 149

3.1 Working paper ... 151
by Nibhon Debavalya

3.2 Urbanization in the ESCAP region ... 158
by ESCAP Population Division

3.3 The role of medium size cities in the urbanization process ... 178
by Ashish Bose

Topic 4. SPATIAL MOBILITY, INCLUDING REDISTRIBUTION PROGRAMMES, OTHER INTERNAL MIGRATION AND INTERNATIONAL MIGRATION ... 187

4.1 Working paper ... 189
by Toshio Kuroda

4.2 Internal migration in the countries of the ESCAP region ... 194
by ESCAP Population Division

4.3 International migration in the ESCAP region ... 212
by R.T. Appleyard

4.4 Circular mobility and its policy ... 224
by Mei Ling Young

4.5 The implications of contract migration to West Asia ... 238
by International Labour Organisation

Topic 5. STRATEGIES FOR MEETING BASIC SOCIO-ECONOMIC NEEDS IN THE CONTEXT OF ACHIEVING THE GOALS OF POPULATION POLICIES AND PROGRAMMES ... 251

5.1 Working paper ... 253
by Godfrey Gunatilleke

5.2 Recommendations of the regional seminar on strategies for meeting socio-economic needs and for increasing women's participation in development to achieve population goals ... 267

Topic 6. EVALUATION OF INTEGRATED SCHEMES AND STRATEGIES IN FAMILY PLANNING/FAMILY WELFARE/FAMILY HEALTH PROGRAMMES ... 271

6.1 Working paper ... 273
by R.H. Pardoko

6.2 Recommendations of the regional seminar on evaluation of schemes and strategies for integrated family planning programmes ... 278

6.3 Experiences in integrated family planning programmes in the ESCAP region ... 280
by ESCAP Population Division

CONTENTS *(continued)*

Page

Topic 7. **INCREASING INVOLVEMENT OF NON-GOVERNMENTAL ORGANIZATIONS, LOCAL GOVERNMENTS AND LOCAL INSTITUTIONS WITH A VIEW TO PROMOTING GREATER COMMUNITY PARTICIPATION IN FAMILY PLANNING/FAMILY WELFARE/FAMILY HEALTH PROGRAMMES** 285

7.1 Working paper 287
by M.A. Sattar

7.2 Community participation in family planning: role of non-governmental organizations 294
by International Planned Parenthood Federation

Topic 8. **INTERRELATIONSHIP BETWEEN DEMOGRAPHIC FACTORS AND POLICIES AND PROGRAMMES INFLUENCING WOMEN'S INVOLVEMENT IN THE DEVELOPMENT PROCESS** 305

8.1 Working paper 307
by Attiya Inayatullah

8.2 Review of programmes for integrating women into development process 314
by ESCAP Social Development Division

Topic 9. **POPULATION PROBLEMS OF SMALL ISLAND COUNTRIES OF THE ESCAP REGION** 319

9.1 Working paper 321
by Ian Pool

9.2 Recommendations of the conference seminar on population problems of small island countries of the ESCAP/SPC region 332

Topic 10. **FINANCIAL AND TECHNICAL ASSISTANCE IN THE FIELD OF POPULATION THROUGH THE PROGRAMME FOR TECHNICAL CO-OPERATION AMONG DEVELOPING COUNTRIES AND OTHER CHANNELS TO SUB-REGIONAL GROUPINGS AND TO COUNTRIES NEEDING SUCH ASSISTANCE, ESPECIALLY IN THE AREAS OF INFORMATION, COMMUNICATIONS, TRAINING AND RESEARCH** 333

10.1 Working paper 335
by Richard Elliot Benedick

10.2 Assessment of needs in the field of population activities in the ESCAP region ... 342
by ESCAP Population Division

10.3 Promotion and support of TCDC in the field of population 352
by ESCAP ECDC TCDC Services

10.4 UNFPA financial and technical assistance to the ESCAP region 355
by United Nations Fund for Population Activities

INTRODUCTION

The Economic and Social Commission for Asia and the Pacific (ESCAP), in its resolution 74 (XXIII) on regional co-operation in the field of population, decided "to establish the Asian Population Conference as a statutory organ of the Commission, to be convened every ten years synchronizing with the decennial population and related censuses, for the consideration of all aspects of population questions and of their impact on economic and social development". Further, the Committee on Population, at its second session held in December 1978, recommended to the Commission that the Asian Population Conference should be continued as a statutory organ of the Commission but that it should thereafter be referred to as the "Asian and Pacific Population Conference". The recommendations of the Committee on Population were endorsed by the Commission at its thirty-fifth session in 1979.

The Economic and Social Commission for Asia and the Pacific (ESCAP) organized the Third Asian and Pacific Population Conference at Colombo from 20 to 29 September 1982. Financial assistance for the Conference was provided by the United Nations Fund for Population Activities (UNFPA). Host facilities were generously provided by the Government of Sri Lanka. Earlier, in the series, the First Asian Population Conference was held at New Delhi from 10 to 20 December 1963, and the Second Asian Population Conference at Tokyo from 1 to 13 November 1972.

The Third Asian and Pacific Population Conference was attended by the following members and associate members of the Commission: Afghanistan, Australia, Bangladesh, Bhutan, Brunei, China, Cook Islands, Fiji, France, Hong Kong, India, Indonesia, Iran, Japan, Kiribati, Malaysia, Maldives, Nepal, the Netherlands, New Zealand, Pakistan, Papua New Guinea, the Philippines, the Republic of Korea, Singapore, Sri Lanka, Thailand, Tonga, Trust Territory of the Pacific Islands, the Union of Soviet Socialist Republics, the United States of America and Viet Nam.

An integrated approach to population and related development issues was adopted as the theme of the Conference. In particular, the Conference aimed to further the understanding of the two-way interrelationships between population and development, and to stress the need to take into full consideration relevant population factors in the formulation and implementation of policies and programmes for achieving overall national development goals, and recognize the influence of development on population dynamics. The Conference also aimed to provide a forum for exchange of experiences in the formulation of plans, programmes and strategies for integrating population elements in development processes, and to assist countries in evolving appropriate mechanisms for formulating and implementing effective integrated population and development policies and programmes.

The main responsibility for planning the Conference fell on the Preparatory Committee which held three meetings in December 1980, September 1981 and September 1982. The discussion at the Conference was organized around 10 topics in separate sessions. The Committee agreed that many of the topics would benefit from detailed consideration by selected expert groups at pre-Conference seminars and that the conclusions and observations of such seminars could constitute major inputs to the main Conference. In view of the limited time available to discuss major technical issues in sufficient detail at the Conference itself, the Committee stressed the need for at least three such pre-Conference seminars. Accordingly, three pre-Conference seminars were organized by ESCAP and they were: (a) Regional Seminar on Evaluation of Schemes and Strategies for Integrated Family Planning Programmes with Special Reference to Increased Involvement of Local Institutions, held at Bangkok from 15 to 22 June 1981; (b) The ESCAP/SPC Conference Seminar on Population Problems of Small Island Countries of the ESCAP/SPC Region, held at Noumea, New Caledonia, from 15 to 19 February 1982; and (c) Regional Seminar on Strategies for Meeting Basic Socio-economic Needs and for Increasing Women's Participation in Development to Achieve Population Goals, held at Pattaya, Thailand, from 27 April to 3 May 1982. The reports of those pre-Conference seminars have

already been published by ESCAP as *Asian Population Studies Series* Nos. 51, 52 and 53 respectively. Hence, only their recommendations are included in this volume.

The Conference documentation consisted of country statements, background papers, working papers, special papers and general papers. The country statements were prepared by the participating governments and delineated the population profile of the country in the context of the Conference theme and the topics. The background papers aimed primarily at providing basic data and background information for the discussion of a topic. The working papers were the main documents for discussion, and were prepared by the discussion leaders for their respective topics/sessions. To the extent possible, they were based on the background papers and other papers prepared on the topic, and were meant to pose problems and issues and suggest ways and means of dealing with them. The special papers dealt with topics of specialized interest but not covered under any of the other categories of papers, and were essentially supplementary or supportive in nature. Finally, the general papers were those prepared by specialized agencies or organizations mainly relating to their population activities in the ESCAP region. In all, the Conference had the benefit of some 60 papers consisting of 19 background papers, 10 working papers, 20 special papers and 11 general papers, which were all specially prepared for the Conference. The present publication includes selected papers from amongst the first three categories.

The organization of the Conference with such wide-ranging topics of crucial interest and importance to the countries of the region, and its preparations and documentation was indeed an ardous task. The staff of the Economic and Social Commission for Asia and the Pacific began intensive preparations for the Conference almost two years before the actual date of the Conference. In carrying out the task, the ESCAP secretariat was fortunate in receiving the full and continuous support, co-operation and expertise of the governments of the members and associate members of the Commission. Valuable support and co-operation was also received from the United Nations family, its specialized agencies, and other organizations. Special acknowledgements are due to the Government of Sri Lanka for providing excellent host country facilities, and to the United Nations Fund for Population Activities for making available supplementary funds for the Conference.

1.1 WORKING PAPER

by

Mercedes B. Concepcion*

Nearly a decade has elapsed since the representatives of 137 nations and United Nations bodies to the 1974 World Population Conference in Bucharest, Rumania, agreed on a World Population Plan of Action (WPPA) as a policy instrument within the broader context of development. In preparation for the 1982 Third Asian and Pacific Population Conference, the ESCAP secretariat papers have summarized the recent demographic situation, traced the prospective population trends in the region, and reported on the population policies formulated by governments as a response to the Plan of Action.

This working paper will take stock of the efforts exerted by ESCAP Member-States to implement WPPA; highlight selected major issues confronting the peoples of the region by the end of this century; and describe some of the practical approaches employed by governments within the region to resolve such issues.

Implementation of WPPA

At the start of the 1980s, 16 countries of the region with a combined population of 2.1 billion were still dissatisfied with their current high rates of population growth and desired lower rates. These governments perceived their rates of population change as constituting an impediment to the rapid attainment of social and economic development and an improved quality of life for their peoples.

In general, there was more emphasis in the ESCAP region than in other regions on modifying fertility as a means of reducing population growth. A number of countries had adopted a broad array of incentive and disincentive schemes to promote smaller families. At the same time, a majority of governments had formulated policies designed to modify spatial distribution and internal migration and had engaged in socio-economic restructuring.

The following paragraphs summarize the progress made in response to the call for action sounded in Bucharest. Such schemes will be described under some of the pertinent headings of WPPA as a guide.

Population growth

Although WPPA had not prescribed quantitative growth rate targets, it did state that "as a result of social and economic development and population policies as reported in the Second United Nations Inquiry on Population and Development, population growth rates in the developing countries as a whole may decline from the present level of 2.4 per cent per annum to about 2 per cent by 1985." The annual growth rates reported in the background paper indicate that East Asia and Oceania had already attained average rates of 1.7 per annum during the 1970-1980 period. Eastern South Asia and Middle South Asia were projected to reach annual growth rates of 1.91 per cent and 1.98 per cent by 1985-1990, respectively. However, only Indonesia, Singapore, Thailand, and Viet Nam in Eastern South Asia and India and Sri Lanka in Middle South Asia were expected to realize population rates of change below the subregional averages.

That the countries in the region were well aware of the need to curb their current growth rates is manifest in the official targets released by governments. Bangladesh contemplated a decline of 1.3 per cent in its growth rate to attain a level of 1.5 per cent by 1985. Fiji wanted an annual rate of natural increase of 2 per cent and a decrease in fertility acceptable by world standards. The

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Republic of Korea aimed to achieve a rate of 1.6 per cent during its current five-year plan; the Philippine Development Plan, 1983-1987, stated that the population growth rate would be reduced to 2.0 per cent by 1987. Thailand intended to lower its growth rate to 2.1 per cent by 1981. In Indonesia's Third Five-Year Plan (1979-1984), the targeted average rate of annual increase is 2 per cent while Malaysia proposed to reduce its population growth rate from 3 per cent annually in 1975 to 2 per cent by 1985. Pakistan aspired for a rate of population growth of 2.5 per cent in 1982/83, a reduction of 0.4 from the level of 1978/79. Nepal endeavoured to decrease its population rate of growth to 1 per cent by 1983. Noteworthy is China's population growth target of 0.5 per cent by 1985 and zero growth in the year 2000.

Morbidity and mortality

From the available statistical data, it is evident that the countries of the ESCAP region have had greater progress in reducing their mortality levels than countries in Africa. The Plan of Action had recommended that "countries with the highest mortality levels should aim by 1985 to have an expectation of life at birth of at least 50 years and an infant mortality rate of less than 120 per thousand live births." Although Japan, Nauru and Fiji now enjoy life expectancies at birth of 70 years or more, there were still 10 countries in the region where life expectation at birth was 50 years or below. Moreover, the United Nations projections reveal that except for Iran and Sri Lanka, Middle South Asia has Infant Mortality Rates estimated in excess of 120 during the early part of the eighties. The same is true for Democratic Kampuchea and the Lao People's Democratic Republic in Eastern South Asia.

In general, health policies were integrated into the national development plans of countries in the region. Moreover, the five- and ten-year plans of several countries such as Nepal, Pakistan, the Philippines, the Republic of Korea, and Thailand featured quantitative targets for reducing mortality and morbidity. To illustrate, Nepal's plan was to reduce the infant mortality rate from a level of 200 in 1975/76 to 150 in 1979/80; Pakistan projected a decline in crude death rate from 14 deaths per 1,000 in 1975 to 10.2 in 1983; the Philippines, from 10.6 to 8.8 in 1987. Although at a relatively low level, the Republic of Korea's infant mortality rate was targeted to fall further to 20 in 1981. Thailand's goal was to reduce mortality caused by food and water-borne diseases by 30 per cent during the period, 1977-1981.

Despite the declines achieved and projected, the pace of mortality reduction has slackened in recent years. In an effort to arrest such a deceleration, there has been a shift towards a primary health care approach in a number of the region's countries. From the experience of Sri Lanka which has been highly successful in reducing morbidity and mortality, it appears that public health and nutrition programmes (along with such factors as high literacy levels) may have a significant impact.

Reproduction

In accord with the plan of Action, governments in the ESCAP region attempted in varying degrees to integrate and coordinate family planning programmes with health and other social services designed to raise the quality of human life. In 1980, 16 countries in the region had policies designed to reduce fertility. Twenty-five governments directly supported family planning programmes while one other provided indirect support.

The Plan started that the aforementioned projected declines in population growth rates and the increased expectations of life were consistent with decreases in the birth rate of developing countries from a level of 38 per 1,000 in the early seventies to 30 per 1,000 by 1985. A glance at the United Nations projections of crude birth rates for the region in 1980-1985 reveals that all of East Asia except Mongolia, Singapore and Malaysia in Eastern South Asia, Sri Lanka in Middle South Asia and Australia, New Zealand and Fiji had birth rates below 30 per thousand. While most of the countries in Eastern South Asia are projected to have birth rates below 30 per 1,000 by 1990-1995, only India and Sri Lanka in Middle South Asia were estimated to reach such levels 10 years hence.

In the region, China's effort to reduce fertility is unique. The government aims for a one-child family and has mounted an ambitious campaign to alter traditional values with respect to marriage and family formation or has made family limitation an object of sustained community interest and pressure. The Indonesian family planning programme has strengthened its links with rural areas through a village-based delivery system and is maintaining acceptors through a variety of measures extending beyond family planning. By such means, the government hopes to achieve

a 50 per cent reduction in fertility by the end of the century. Malaysia was pursuing its goal of a crude birth rate of 20 per 1,000 by 1982 by focusing on the physical, social and economic welfare of families. A number of countries had identified quantitative targets – crude birth rates of 25 births per 1,000 by 1985 for India; 38 by 1979/80 for Nepal; 35.5 in 1982/83 for Pakistan; and a net reproduction rate of unity by the year 2000 for the Philippines.

Population structure

The Plan of Action urged governments "when formulating their development policies and programmes, to take fully into account the implications of changing numbers and proportions of youth, working-age groups and the aged, particularly where such changes are rapid." Specifically, the Plan charged developing countries "to consider the implications which the combination of the characteristically young age structure and moderate to high fertility has on their development." In addition, other countries were enjoined "to consider the contrary implications of the combination of their aging structure with moderate to low or very low fertility."

Current and prospective declines in fertility in the ESCAP region are certain to affect the age structure. Although the interval since 1970 is too limited for significant changes in age distribution to occur, their is evidence that the proportion below 15 years of age has fallen in all ESCAP subregions. Such changes are only suggestive of long-term trends but are worth noting since they represent a reversal of inveterate demographic trends.

In the decade of the seventies, China and Sri Lanka experienced a reduction of 13 per cent in the proportions of children in their populations; Fiji, 15 per cent; the Republic of Korea, 20 per cent; Singapore, 29 per cent, and Hong Kong, 31 per cent. In the current decade, the fraction of China's population under 15 will diminish by 22 per cent. Corresponding declines in Singapore, the Republic of Korea, Sri Lanka, and Fiji will be 13, 12, 9, and 7 per cent, respectively. Although the analogous reductions in Indonesia, the Philippines and Thailand were around 9 per cent during the seventies, a faster decline was projected for the current decade, rising to 15 per cent for Indonesia and 18 per cent for Thailand.

Concomitant changes have taken place in the proportions of the elderly in these countries. Between 1970 and 1980, Hong Kong's population aged 65 and older grew by nearly three fifths (4.0 to 6.3 per cent), Singapore's by nearly one half (3.3 to 4.9 per cent), Fiji's by three tenths (2.4 to 3.1 per cent); the Republic of Korea's by one fifth (3.3 to 4.0 per cent); Sri Lanka's and Indonesia's by one seventh, and Malaysia's by one eighth. By the end of the century, the United Nations projects that more than 1 in 7 persons in Japan will have celebrated his sixty-fifth birthday, 1 in 14 Chinese will be at least 65 years of age while 1 in 13 Singaporeans will have turned 65. The corresponding fraction among Australians, New Zealanders and those living in Hong Kong will be 1 in 10.

While not specifically directed toward changes in population structure, the great majority of ESCAP countries had, nevertheless, adopted a variety of socio-economic measures designed to take in the implications of an increasing proportion in the working ages. Prominent among these measures were employment creation (Bangladesh, India, Pakistan, the Philippines, Singapore, Sri Lanka) and labour-intensive production methods (Indonesia, Thailand).

Population issues

The review of the papers prepared for the Conference underscore the enormous growth in numbers projected for the remaining decades of this century. Despite assumed continuing moderation in annual population growth rates nearly a billion more people are expected to swell the region's ranks during these twenty years. By the end of this century, India is expected to gain 276 million persons while China is projected to have 263 million more. Although these two immense increments overshadow those foreseen for other countries, it should be recognized that for the same period at least 50 million individuals will be added to the populations of Indonesia, Bangladesh and Pakistan, and that about 20 million will augment the numbers in Burma, the Philippines, Thailand, Viet Nam, and Iran. Such ample additions will come to pass in spite of the rapid fertility declines experienced by some of these countries in the previous decade and the further shrinkages anticipated. Against this demographic backdrop, the following issues confronting the ESCAP Member States come to the fore:

Current and prospective reductions in the number of children born to women are bound to manifest their influence on the age structure.

Evidence is mounting that the proportion below 15 has fallen in various countries of the region. Nearly all the decreases in the proportion of children will be absorbed by the working ages, 15-64. This raises the question of adequate employment opportunities for the growing numbers of workers. At the same time, there is a foreseeable rise in the absolute and relative size of the older population.

Although rapid growth in the population of working age does not necessarily lead to increasing unemployment, the attainment of full employment is rendered more difficult and costly. At times of rapid population growth, full employment can be attained through increased capital accumulation or through the generation of more labour-intensive techniques. The greater the growth of the working age population, however, the greater is the investment required and the more the demand for alternative uses of capital. Given the overall low proportion of urban industrial employment, the creation of enough jobs in urban industries to absorb the expanding labour force appears unlikely. Hence, most of the new entrants to the labour force will have to be absorbed by agriculture either through an enlarged land/capital base or through the use of labour-intensive technology. The evidence is mixed as to the potential for labour absorption in the ESCAP region.

Rapid growth of the working age population denotes that a large fraction of the workers are young and inexperienced. In general, inexperienced workers are less productive; consequently, average productivity is lower. In turn, *per capita* income drops and the resources available for new investments diminishes. Furthermore, with swelling ranks of unskilled workers entering the labour market, wages are apt to fall. The gap between the wages of unskilled and skilled workers is likely to widen thereby increasing inequalities in the society.

As the population ages the ratio of workers to retired persons wanes, consequently the burden of support will be heavier on future generations of workers. Public pension insurance schemes will require far greater financial resources to cover the increments in the older population as well as to provide for the schemes which will have matured. A sizable part of the GNP will have to cover the cost of maintaining public medical and health insurance schemes.

Universally elevated male-female differences in proportions widowed with female fractions typically four to five time higher are a consequences of much lower mortality among females at the upper ages, leading to declining sex ratios plus a greater frequency of remarriages among widowers than among widows. These imply an intensification of social preoccupations with special housing as one-person households composed of elderly widows or of two-person households reflecting increased life expectancy proliferate. In addition, the society will have to cope with the ensuing medical, economic and psychological problems of this sector.

Joint survival of husband and wife and the probability of their children being orphaned may also be affected by sex differences in mortality. Social norms regulating remarriage of widows and widowers account for the much higher proportions of widows found in most South Asian populations.

In certain countries of the region – India, Bangladesh, Pakistan, and the eastern part of Malaysia – female mortality exceeds that of males at most or all ages below 50. Such mortality patterns results in high masculinity ratios as well as higher male than female expectations of life at birth.

Higher male than female masculinity ratios have some social implications in particular for family formation and composition. Differential mortality may create a shortage of brides on the marriage market. Adjusting to this situation may require a change in the age difference between grooms and brides or result in an increased proportion of bachelors in the population.

In recent years, mortality declines have slackened or even stagnated in some countries at levels too high not to be amenable to further improvement, given the present state of medical technology and knowledge.

Deficiencies in data notwithstanding, there are indications in various countries of the region that mortality decline may well have slowed or stopped altogether. This appears to be the case among the large populations of the region such as Bangladesh, India, Indonesia, Pakistan. The causes are still not well known although continuing widespread poverty and illiteracy, imbalanced distribution of the health infrastructure between urban and rural areas and inadequate health services in the villages and hinterland appear to be the most commonly recognized.

Despite successful control of many infectious diseases through public health programmes and

expansion of the health care services, it is not at all clear whether the decline in the national mortality levels implies a narrowing of the gaps existing between prospects of survival among various subgroups of the population. The benefits of development in general, and of the health services in particular have been inequitably distributed. The ones who benefit disproportionately are those who are better off in terms of education, caste, political power, place of residence, or a combination of all these characteristics. The rest of the disadvantaged remain so with the gap worsening in the face of their increasing numbers and proportion. Any improvement in their position and any betterment of their living conditions would still leave them far behind the more advantaged groups.

Policy and programme responses

Governments through their development policies and programmes in general, and through their public health measures and health care delivery systems in particular, provide for the betterment of the physical and social environment in which their citizens live. Governments may also act to improve the skills and capabilities of individuals and their families to avail themselves of the facilities offered free of charge or accessible commercially. Some examples of such actions are the establishment of a minimum wage policy, education, job creation, price regulatory mechanisms for foodstuffs.

Equally important is the action of individuals in protecting their own health and that of their dependents. Higher educational attainment of the parents (wife in particular) influences the children's health and chances of survival, and presumably those of the parents themselves. To have a better paid and more secure job means not only the ability to spend for food and clothing, to pay for a better house in an area well serviced by public amenities but also to defray the costs of curative health services in case of need.

National recognition of the importance of demographic factors in social and economic development has accompanied growing consciousness of the likely international consequences of national population trends and policies. As previously stated, most of the countries in the ESCAP region had formulated policies to modify population growth. Malaysia's population policy in the 1970s encompassed wider dimensions than family planning. Rural development, the opening of new territories, urban renewal programmes and the establishment of growth centres were contemplated to influence the country's demographic structure. The Government of Thailand had adopted measures to transform fertility levels, secure a more equitable income distribution, vanquish economic stagnation, and expand the delivery of educational and health services to the outlying areas. The Sri Lankan Government acknowledged the role of free education, nutrition supplements as part of the health care services, improved income distribution, and labour-intensive production methods in resolving growth-related problems.

In Bangladesh, the Government had declared the population problem as the country's major problem and had accorded it top priority. Population control formed an integral part of the total development process and all development ministries were involved in population activities. Nepal, Pakistan and the Philippines intended to achieve their quantitative targets through a mix of approaches: maternal and child health, family planning, population information, the raising of educational levels, and so on. Moreover, quite a number of countries had resorted to complex systems of incentives and disincentives ranging from family planning schemes in rural banks (the Philippines) to preferential school admission policies in favour of smaller families (Singapore). India had followed China's example in raising the legal minimum age at marriage.

An examination of the determinants of mortality decline in the region makes it clear that the existence of health infrastructure alone is not a sufficient condition for the reduction of mortality. Concomitant changes in the social and economic sphere play supporting roles. Thus, high levels of literacy which create an awareness of ways to protect health and which lead to intensive utilization of the health services available, social welfare policy, provision of adequate housing, environmental hygiene, and the like, together with a rapid rate of economic growth and its accompaniments such as higher employment levels, improved wage structure and more equitable income distribution will go far in attacking the causes and consequences of mortality. For these reasons, countries with such diverse social and economic backgrounds as China, the Republic of Korea, Sri Lanka, West Malaysia, Singapore, and Hong Kong now enjoy low levels of mortality.

To sum up, demographic and development trends can be expected to be more closely

interrelated in the eighties and thereafter than ever before. The unfolding patterns of morbidity and mortality suggest that the simple transfer of health and medical technology from the more developed countries can no longer be relied upon to effect significant declines in mortality without concomitant economic and social change in the rural areas and amongst the poor. While further decreases in fertility may be expected from current development and family planning efforts, swifter and sustained fertility reductions may now have to depend on the degree to which economic and social transformations considerably modify the prevailing structure of costs and benefits of children on one hand, and on the amount to which programme efforts materially reduce contraceptive costs, on the other. All these factors presume a greater need for integrating population objectives into development policies, plans and programmes. How this is to be contrived is the challenge to policy makers, planners and social science researchers in the eighties and beyond.

1.2 DEMOGRAPHIC TRENDS AND THEIR DEVELOPMENT IMPLICATIONS

by

ESCAP Population Division

Introduction

This paper summarizes the recent demographic situation and considers prospective trends and their development implications among the 39 members and associate members of ESCAP located in Asia and the Pacific.[1] Changes between 1970 and 1980 in population size, growth, distribution and structure are described, followed by an overview of trends in the components of population change, that is fertility, mortality and international migration.[2] An assessment is then made of prospective population trends up until the end of the twentieth century together with an examination of their development implications.

During the 1970s there was an enormous growth in the amount and range of demographic information collected by countries in the ESCAP region. Since 1970 almost every country has conducted a census of population. There has also been a big increase in the number of countries conducting sample surveys in the effort to collect timely and reliable demographic data to supplement those obtained from censuses.[3] These advances, together with some improvements in the collection of vital events through civil registration and in the analytical techniques developed to handle incomplete data, have greatly enhanced our knowledge of recent population trends. But despite the growth in information, there are still big gaps in our understanding of the demographic situation in several countries. Only a few countries have a complete and reliable system of civil registration from which demographic indicators can be monitored on an annual basis; indicators derived from surveys are subject to wide margins of sampling and non-sampling errors. Moreover, hardly any country has continuous and reliable data on international migraion. Thus, for the majority of the countries in the ESCAP region, even estimates of numbers of persons and growth rates of population are subject to the possibility of substantial error.

The provisional results of many of the national censuses have now been released and the total populations as enumerated for these countries are shown in the annex to this paper. However, because of the provisional nature of these figures, the non-availability of breakdowns of the total enumerated population by various population characteristics, and for the sake of providing population estimates for uniform dates, the primary data source used in the preparation of the various tables in this paper is the population estimates and projections prepared biennially by the United Nations Population Division in New York in collaboration with the regional commissions. The latest available data relate to the assessment made in 1980; hence, the figures quoted for 1980 were based on the best information available at that time. It follows that since this assessment was made before the results of the 1980 round of population censuses were available, the figures used will not necessarily agree with those from the censuses. When the final results of the censuses become available, our view of the demographic situation in the ESCAP region may well be significantly improved. Bearing in mind the above, it will be apparent that the figures cited in this paper should be regarded as orders of magnitude rather than precise quantities. Indeed, the emphasis here is on outlining the broad

[1] For an excellent account of population trends covering all regions of the world, see *The World Population Situation in 1979: Conditions, Trends, Prospects, Policies* (United Nations publication, Sales No. E. 80. XIII. 4) and L. Tabah, "World population trends: a stocktaking", *Population and Development Review*, vol. 6, No. 3, September 1980.

[2] For an analysis of regional demographic trends prior to 1970, see "The demographic situation in the ECAFE region", in *Population Strategy in Asia: the Second Asian Population Conference*, Tokyo, November 1972, Asian Population Studies Series No. 28 (E/CN.11/1152).

[3] *Review of Demographic Sample Surveys in Asia and the Pacific, 1970-79* (ST/ESCAP/135).

magnitude and direction of changes rather than an in-depth analysis or an assessment of the causes of changes in particular countries.

Size, growth and distribution

Table 1 shows that between 1970 and 1980 the estimated population of countries in the ESCAP region grew from 2.0 billion to 2.5 billion persons, equivalent to an annual growth rate of 20 persons per 1,000 population, or 2.0 per cent. Although the annual growth rate between 1970 and 1980 was around 10 per cent lower than that in the preceding decade, when it had been 2.2 per cent, the additional increment in absolute numbers was substantially greater, 443 million compared with 400 million persons between 1960 and 1970, because of the larger base population in 1970 than in 1960. By 1980 the population of the countries in the ESCAP region amounted to 56 per cent of the world's population, compared with 55 per cent in 1970.

The substantial growth in the size of the population of the ESCAP region is, of course, a result of the fact that annual numbers of births continue to exceed greatly annual numbers of deaths. This phenomenon is a function of the decline in mortality levels (see section on mortality) and the past and continuing high levels of fertility. These have led to an ever-increasing number of women coming into the childbearing ages and an increasing number of annual births. Moreover, despite the fact that there have been considerable falls in fertility during recent years in several countries, and that further declines are highly probable, the population of the region is almost certain to continue to grow in the foreseeable future because of its relatively young age structure and the continuation of fertility significantly above replacement level (see section on fertility). Indeed, if the current annual population growth rate of 2.0 per cent continues into the future, the population of the ESCAP region would double to around 5.0 billion persons by the year 2015, a figure greater than the world's current population size.

The figures in table 1 highlight the wide variation in estimated population size among the 39 countries in the ESCAP region. The overall figures are dominated by those for the two largest countries, China and India, which together accounted for slightly more than two thirds of the ESCAP region's total population in 1980. Consequently, the trends in the overall figures will largely reflect the balance of what is happening in China and India and will conceal the diverse developments elsewhere. A convenient way of disaggregating the overall ESCAP totals is to examine the figures for component subregions, of which four have been designated here, namely, East Asia, East South Asia, Middle South Asia and Oceania. The constituent countries and areas contained within these geographical areas are listed in table 1.

This broad grouping of countries based on geographic proximity brings out some of the wide demographic variations in different areas of the region. Among the contrasts between the four subregions are their differing sizes and growth rates and their differing net additions in population recorded between 1970 and 1980. For example, East Asia, which includes China and has the largest population size, grew at a significantly lower annual rate (1.7 per cent) than did either East South Asia (2.2 per cent) or Middle South Asia (2.3 per cent), and despite having by far the largest population base in 1970 added fewer people over the decade (177 million) than did Middle South Asia (192 million), the fastest growing subregion. The annual growth rate of the ESCAP region and its component areas between 1970 and 1980 can be contrasted with corresponding figures of 2.8 per cent in Africa, 2.5 per cent in Latin America, 0.9 per cent in North America and 0.5 per cent in Europe.

Examination of the figures for the individual countries shown in table 1 reveals several interesting features. Japan, by far the largest of the developed countries in the ESCAP region, with an estimated population of 117 million persons in 1980, had the lowest growth rate of all countries (except for Democratic Kampuchea) but nevertheless added some 12 million persons between 1970 and 1980. Australia, the second most populous of the developed countries, grew from 12.6 million in 1970 to 14.5 million persons in 1980, representing a growth rate of 1.4 per cent. Of course, the growth rate also includes the net balance of international migration and Australia was a relatively large net recipient of population over the period. However, Australia, together with the relatively low fertility countries of the Republic of Korea, Singapore and Sri Lanka, were the only countries (apart from Democratic Kampuchea) to add fewer persons to their population between 1970 and 1980 than in the preceding decade.

Apart from China, India and Japan, only Indonesia (148 million) among the countries in

Table 1. Population estimates, change[a] and growth[a], 1960, 1970 and 1980, world and ESCAP region

Country or area	Population (in millions)			Change		Annual growth[b] rate (percentage)	
	1960	1970	1980	1960-1970	1970-1980	1960-1970	1970-1980
World	3 037.2	3 695.6	4 432.1	658.4	736.6	2.0	1.8
ESCAP	1 640.9	2 041.2	2 483.8	400.4	442.6	2.2	2.0
East Asia	805.1	979.7	1 156.7	174.7	176.9	2.0	1.7
China	682.0	838.4	994.9	156.4	156.5	2.1	1.7
Hong Kong	3.1	3.9	5.1	0.9	1.2	2.5	2.6
Japan	94.1	104.3	116.6	10.2	12.2	1.0	1.1
Mongolia	0.9	1.2	1.7	0.3	0.5	2.9	2.9
Republic of Korea	25.0	31.9	38.5	7.0	6.5	2.4	1.8
South East Asia	228.4	290.1	360.5	61.7	70.4	2.4	2.2
Brunei	0.1	0.1	0.2	0.0	0.1	...	...
Burma	22.3	27.7	35.3	5.5	7.5	2.2	2.4
Democratic Kampuchea	5.4	6.9	6.7	1.5	–0.2	2.4	–0.3
Indonesia	97.7	122.2	148.0	24.5	25.8	2.2	1.9
Lao People's Democratic Republic	2.4	3.0	3.7	0.6	0.8	2.2	2.3
Malaysia	8.2	10.9	14.1	2.7	3.2	2.9	2.6
Philippines	28.1	37.5	49.2	9.4	11.7	2.9	2.7
Singapore	1.6	2.1	2.4	0.4	0.3	2.4	1.4
Thailand	27.2	36.5	47.1	9.3	10.6	2.9	2.5
Viet Nam	35.4	43.1	53.7	7.8	10.6	2.0	2.2
Middle South Asia	591.8	752.2	944.1	160.4	191.9	2.4	2.3
Afghanistan	9.8	12.3	15.9	2.5	3.6	2.3	2.6
Bangladesh	51.4	68.3	88.2	16.8	19.9	2.8	2.6
Bhutan	0.9	1.0	1.3	0.2	0.3	2.0	2.2
India	439.4	552.5	684.5	113.0	132.0	2.3	2.1
Iran	21.6	28.4	38.1	6.8	9.8	2.7	3.0
Maldives	0.1	0.1	0.2	0.0	0.0	2.1	3.0
Nepal	9.3	11.4	14.3	2.1	2.9	2.0	2.2
Pakistan	49.4	65.7	86.9	16.3	21.2	2.9	2.8
Sri Lanka	9.9	12.5	14.8	2.6	2.3	2.4	1.7
Oceania[c]	15.6	19.1	22.5	3.5	3.4	2.0	1.7
Australia	10.3	12.6	14.5	2.2	1.9	2.0	1.4
Fiji	0.4	0.5	0.6	0.1	0.1	2.8	1.9
New Zealand	2.4	2.8	3.3	0.4	0.4	1.7	1.5
Papua New Guinea	1.9	2.4	3.2	0.5	0.7	2.3	2.6
Samoa	0.1	0.1	0.2	0.0	0.0	2.5	1.0
Solomon Islands	0.1	0.2	0.2	0.0	0.0	2.8	3.4

Sources: The figures in this table and each subsequent table except table 7 have been obtained from the estimates and projections of the world population made by the United Nations in its 1980 assessment. The results of this assessment are contained in United Nations *World Population Prospects as Assessed in 1980* United Nations publication, Sales No. E.81. XIII.8 and *Demographic Indicators of Countries: Estimates and Projections As Assessed in 1980* (ST/ESA/SER.A/82).

[a] Computed on unrounded figures; hence, the sum of the parts may not add to the totals.

[b] Annual exponential growth rate (r) defined as $r = (\log_e P_1 - \log_e P_0)/n$.

[c] In this and subsequent tables Oceania includes other island members or associate members of ESCAP with a population of less than 150,000 in 1980 which are not shown separately, namely, Cook Islands, Guam, Kiribati, Nauru, Niue, Tonga, Trust Territory of the Pacific Islands, Tuvalu and Vanuatu.

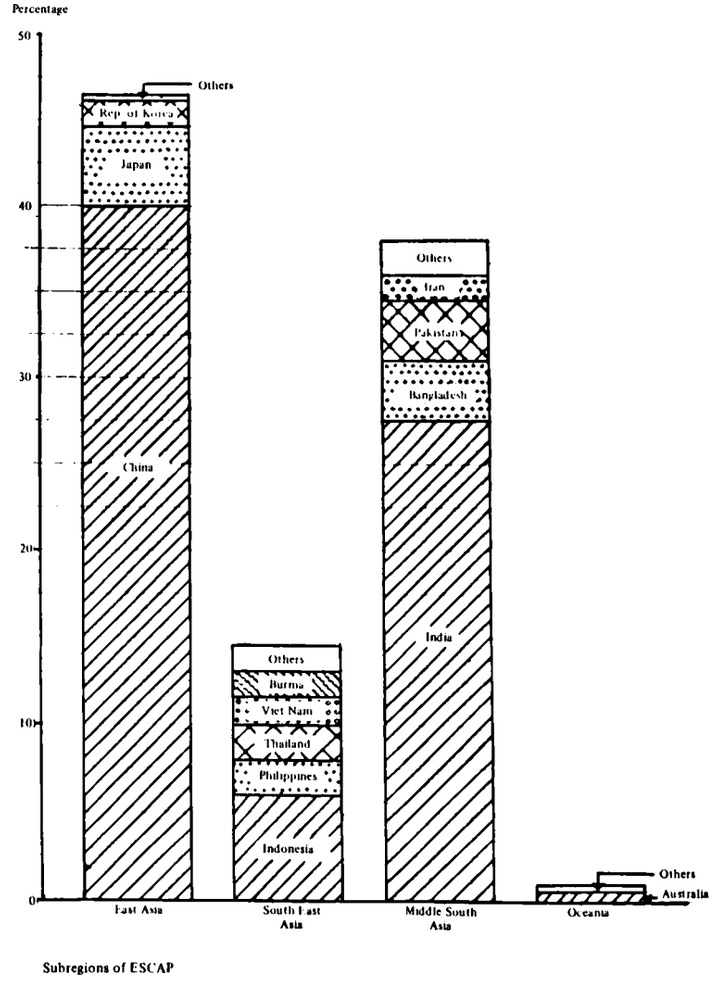
the ESCAP region had a population estimated to be in excess of 100 million persons in 1980. But two countries in the Middle South Asian region, Bangladesh (88 million) and Pakistan (87 million), with annual growth rates nearer 3 per cent than 2 per cent, had populations rapidly approaching that mark. Several countries with medium-sized populations, defined here as those with between 35 million and 60 million persons, such as Burma, Iran, the Philippines, Thailand and Viet Nam, added yearly increments of around 1 million to their populations between 1970 and 1980.

Among the smaller countries the annual increments in numbers, though not large from a regional perspective, were by no means insignificant from a national perspective bearing in mind the size of their populations and the fact that many such countries, Afghanistan, Mongolia and Nepal for example, are among the least developed in the region. As in many of the larger countries, the effect of any falls in the birth rates has been partially offset by falls in the death rates, which have resulted in sustained high rates of population growth. The exceptionally high annual growth rates in the relatively prosperous Brunei and Hong Kong are largely a function of the high levels of international migration into these regions.

In an overview of the demographic trends in the ESCAP region there is a temptation to omit reference to the island countries on account of their small numbers of people.[4] Of the 14 island countries which are members or associate members of ESCAP, all except Maldives are located in the Pacific. In terms of population size, just as China and India overshadow most of the countries in Asia, Papua New Guinea (3.2 million) dominates the Pacific island countries, where the least populated of the countries, Niue and Nauru, contain respectively just 3,000 and 7,000 persons. Apart from Papua New Guinea, only Fiji, Samoa and Solomon Islands had populations in excess of 150,000 persons in 1980. The Pacific countries are characterized by enormous diversity and are widely scattered geographically with a single country often comprised of numerous islands. In this context, the collection of reliable demographic data through population censuses or civil registration is extremely difficult. The omission of only a very small number of events gives rise to the possibility of large errors in vital rates. Moreover, because of high rates of net out-migration and the critical importance of this component of population change in many of the island countries, even an assessment of population growth rates becomes highly speculative. For these reasons, demographic indicators have been shown separately only for Papua New Guinea and Fiji in subsequent tables.

In contemplating the demographic situation in the ESCAP region, it will be apparent that it is acutely important to take cognizance of the fact that the vast bulk of the population resides in a few countries. A striking presentation of the population concentration is given in figure 1, which shows the percentage distribution of the population of ESCAP countries for the four subregions and the most populous countries

Figure 1. Percentage distribution of the estimated population of the ESCAP region by subregions and principal countries, 1980



[4] For an account of recent population trends in the Pacific, see *Report of the ESCAP/SPC Conference Seminar on Population Problems of Small Island Countries Region*, Asian Population Studies Series No. 52.

within these regions. The dominance of East Asia and Middle South Asia, which taken together countained more than four fifths of the region's population in 1980, is immediately observed. As already stated, it is, of course, the pre-eminence of the world's two largest countries China (40 per cent) and India (28 per cent) that gives rise to the population imbalance.

The topic of internal migration with its correlate of increasing urbanization is not discussed at length in this paper.[5] However, as background to an understanding of the discussion below it is useful to examine the estimated urban and rural distribution of the population and its changes over time as shown in table 2. In interpreting the figures, it has to be remembered that changes over time in the relative distribution of the population between urban and rural areas do not merely result from migration. Reclassification of rural areas as urban, generally on the basis of increases in their popular size, and to a lesser extent differential rates of natural increase are also important factors. The figures show that the estimated proportion of the population in the ESCAP region living in urban areas increased by 4 percentage points over the decade. Nevertheless, in 1980 more than 7 out of every 10 persons still resided in rural areas, with middle south Asia remaining the most rural of the four subregions.

While the dominant flow of internal migration over the past decade was from rural to rural areas (largely on account of marriage and agricultural mobility), there were large drifts from rural areas to the big cities and towns in several countries. Urbanization is a phenomenon associated with industrialization and economic development with the more industrialized countries such as Australia (89 per cent) and Japan (78 per cent) being overwhelmingly urbanized. Countries in the process of rapid industrialization, such as the Republic of Korea, experienced big gains in their urban population in the 1970s. However, there are still many countries, among which are Bangladesh (11 per cent) and Nepal (5 per cent), with only a very small fraction of their population living in urban areas. Moreover, despite the shrinkage in the proportion of the rural population, the absolute number of persons in rural areas still grew more rapidly than the number in urban areas during the 1970s.

[5] The topics of internal migration and urbanization are taken up in some detail in two separate background papers prepared by the secretariat for the Conference.

Age and sex structure

The age structure of a population depends on past movements in rates of fertility, mortality and migration. In a growing population, where there is little or no overseas migration, and where there are no fluctuations in the components of growth, the number of persons at any age will normally be smaller than in the immediately younger age group. Hence the population distribution takes on a pyramidal shape. In practice, this regular shape is distorted by either one factor or a combination of factors such as age-selective migration, disproportionate losses of large segments of the population through natural disasters or wars, or fluctuations in annual numbers of births.

The effects of changing fertility on the age structure of a population generally become apparent very quickly. A fall in fertility has the immediate effect of lowering the proportion of young children in the population and, if it continues, shifting the whole age distribution upwards as the proportion of children and young adults shrinks and that of the elderly increases. The effects of decreasing mortality rates are more complex. Other things being equal, the effects of falling infant and childhood mortality, which respond most rapidly to improved health conditions, make for an increase in the proportion of children in the population. But the combined effects of falling fertility and falling mortality rates at every age have the effect of increasing the proportion of elderly persons in a population.

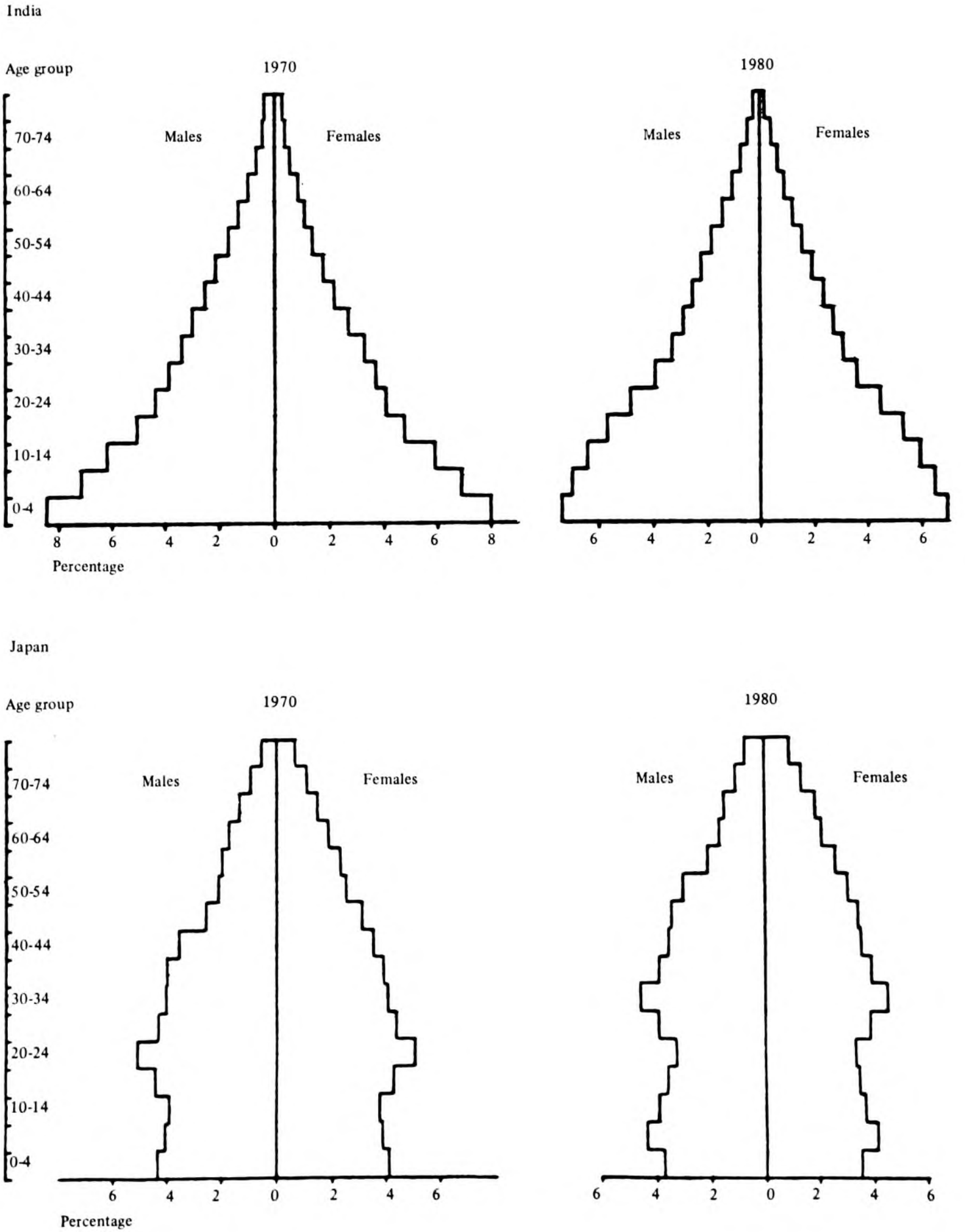
The consequences of the various effects are vividly depicted in figure 2, which shows the sharply contrasting population age structures of India and Japan at two points in time. The pyramidal age structure of the population of India in 1970 is typical of that of a developing country with high fertility. The vast majority of the population is concentrated at the young ages with only tiny fractions in the older age groups. The smaller proportions of persons in the two youngest age groups in 1980 as compared with 1970 suggest that there has been a fall in fertility over the period. The proportions at the base of the pyramid can be expected to shrink further if reductions in fertility continue into the future. The age structure of the population of Japan, which is similar to that of many of the Western developed countries that have had relatively low fertility and mortality rates for a long period in the past, is seen to be much less broad at the base and having a closer resemblance

Table 2. Percentage distribution of the population in urban and rural areas,[a] 1970 and 1980, ESCAP region

Country or area	Urban		Rural	
	1970	1980	1970	1980
ESCAP region	24	28	76	72
East Asia	28	32	72	68
China	22	25	78	75
Hong Kong	90	90	10	10
Japan	71	78	29	22
Mongolia	45	54	55	46
Republic of Korea	41	55	59	45
South East Asia	20	23	80	77
Brunei	61	...	39	...
Burma	23	27	77	73
Democratic Kampuchea	12	14	88	86
Indonesia	17	20	83	80
Lao People's Democratic Republic	10	13	90	87
Malaysia	27	33	73	71
Philippines	33	36	67	64
Singapore	73	74	27	26
Thailand	13	14	87	86
Viet Nam	18	23	82	77
Middle South Asia	20	23	80	77
Afghanistan	11	15	89	85
Bangladesh	8	11	92	89
Bhutan	3	4	97	96
India	20	22	80	78
Iran	41	50	59	50
Nepal	4	5	96	95
Pakistan	25	28	75	72
Sri Lanka	22	27	78	73
Oceania	71	76	29	24
Australia	85	89	15	11
Fiji	36	42	64	58
New Zealand	81	85	19	15
Papua New Guinea	10	28	90	72

[a] Caution should be exercised in drawing conclusions about apparent changes over time because of uncertainties inherent in the data and because of area reclassifications (see text for explanation).

Figure 2. Percentage distribution of the population by age and sex, 1970 and 1980, India and Japan



to a rectangle than to a pyramid up until the middle ages. There is a much smaller fraction of Japan's population concentrated in the younger ages than is the case with India's population, but considerably higher proportions at the middle and older ages. The effects of these differences are such that the median age of Japan's population in 1980 at 32 years was more than 12 years older than that of India, where 50 per cent of the population was under the age of 20.

Table 3 sets out some of the basic data on the age structure of the population in countries and areas in the ESCAP region. The contrasting pattern of the age structure of developing and developed countries outlined above is seen in the figures for the individual countries. With only a few countries in the ESCAP region having low fertility and categorized as developed, it is hardly surprising that the overwhelming majority of the population in the ESCAP region is concentrated at the young ages. Although there was some slight aging of the population in most countries over the past decade, primarily reflecting declining fertility rates, in 1980 more than one in every three persons in the ESCAP region was under age 15 and half under age 21.

The ratio of the number of children below age 15 and elderly persons aged 65 and over to the number of persons of working age (15-64 years) is termed the dependency ratio. It is a crude indicator of the relationship between those persons who bear the responsibility of support in society and those who depend on them for their upbringing, education and well-being. It is, of course, merely an age-based classification and the numerator and denominator are not composed entirely of dependants and producers respectively.

Table 3 shows that while there has been some fall in the burden of dependency in 1980 as compared with 1970 there were still some 71 dependants for every 100 persons of working age. Indeed, as fertility declines further, and the transition from young to mature population distributions occurs, it is to be expected that an increasingly larger proportion of the population will be in the age group 15-64 with corresponding further declines in the dependency ratio. The widely contrasting dependency ratios underline the economic disadvantage of the population structure of developing countries as compared with the more developed countries. For example, in 1980 the dependency ratio in Bangladesh and Iran at 94 was around double the corresponding figure for Japan. Further insight into the contrasting pattern of dependency is obtained by disaggregating the dependency ratio into its components of child and old-age dependency.

Components of the dependency ratio for selected countries, 1980

Country	Dependent age groups per 100 population aged 15-64		
	Under 15	65 and over	Under 15 and 65 and over
Bangladesh	89	5	94
China	55	9	64
India	70	5	76
Australia	39	14	54
Japan	35	13	48
New Zealand	43	14	57

Thus, the overall dependency ratio masks the magnitude of the differential in the weight of child dependency between developing and developed countries. In Bangladesh in 1980, there were 89 children for every 100 adults, some 54 points higher than the corresponding figure for Japan. In developing countries the weight of old-age dependency is, of course, substantially less than that of child dependency and is less than that in developed countries. In 1980 the ratio of the age group 65 and over to that of 15-64 years was 5:100 in Bangladesh, which was 8 percentage points lower than the corresponding figure for Japan.

Just as there are imbalances in the age structure of different populations so too are there disparities in the sex structure. A population's sex structure is determined by the sex ratio at birth, by the differential mortality of the two sexes throughout their lives and by differential net migration. In every country of the world there are more boys born than girls, the sex ratio at birth generally being in the range of 103-106:100. But in most countries the death rates of males exceed those of females at all (or most) ages so that the natural surplus of males in any generation is steadily eroded until at the older ages the number of women exceeds that of men. The effect of net migration varies from country to country but does not generally have a major impact on a

Table 3. Characteristics of the age structure of the population, 1970 and 1980, ESCAP region

Country or area	1970					1980				
	Distribution (percentage)			Dependency ratio[a]	Median age[b] (years)	Distribution (percentage)			Dependency ratio[a]	Median age[b] (years)
	0-14	15-64	65+			0-14	15-64	65+		
ESCAP region	40	56	4	80	20	37	59	4	71	21
East Asia	37	58	5	74	21	33	62	6	63	24
China	39	56	5	77	20	34	61	6	64	23
Hong Kong	37	59	4	69	21	26	68	6	47	25
Japan	24	69	7	45	29	23	68	9	48	33
Mongolia	44	53	3	88	18	43	54	3	86	18
Republic of Korea	42	55	3	83	19	34	62	4	61	22
South East Asia	43	54	3	85	18	40	56	3	77	19
Brunei	43	54	3	86	17	...	...	...	...	...
Burma	40	56	3	78	20	41	55	4	82	19
Democratic Kampuchea	43	54	3	85	18	36	61	3	65	21
Indonesia	43	54	3	84	18	39	58	3	74	20
Lao People's Democratic Republic	42	56	3	80	19	42	55	3	83	19
Malaysia	45	52	3	94	17	40	56	4	78	19
Philippines	46	52	3	93	17	42	55	3	81	19
Singapore	39	58	3	73	20	27	68	5	48	25
Thailand	45	52	3	92	17	41	56	3	79	19
Viet Nam	41	55	4	81	20	42	55	4	83	19
Middle South Asia	43	54	3	87	18	41	56	3	80	19
Afghanistan	44	54	2	86	18	45	53	2	90	17
Bangladesh	46	51	3	96	17	46	52	3	94	17
Bhutan	42	55	3	81	19	42	55	3	82	19
India	43	54	3	84	19	40	57	3	76	20
Iran	46	51	4	96	17	45	52	3	94	17
Maldives	46	52	3	94	14	...	...	...	...	...
Nepal	42	55	3	82	19	43	54	3	84	19
Pakistan	46	51	3	98	17	45	52	3	92	17
Sri Lanka	42	55	4	84	19	36	60	4	68	21
Oceania	32	61	7	65	25	30	63	8	60	26
Australia	29	63	8	59	28	26	65	9	54	29
Fiji	44	54	2	85	18	37	60	3	67	20
New Zealand	32	60	8	67	26	27	64	9	57	27
Papua New Guinea	42	55	3	82	19	42	54	3	84	19

[a] Ratio of the population aged under 15 and those aged 65 and over per 100 persons in the population aged 15 to 64.

[b] The age which splits the population into two halves such that 50 per cent are younger and 50 per cent are older.

country's overall sex structure, although it can be important in particular age groups or in particular geographic regions.

Table 4 sets out some basic data on the sex ratio at different ages in 1970 and 1980 for countries and areas in the ESCAP region. In interpreting the figures for a particular country, it is important to understand how each of the factors mentioned above has had an impact on the age structure. Given the young age structure of the population of the ESCAP region, the overall (4 per cent) excess of males, as well as the general pattern in the different age groups, is in line with expectations. The effect of the uneven sex ratio at birth is sufficiently important to ensure a continuing, albeit reducing, imbalance in most countries in all but the oldest age group shown,

Table 4. Sex ratio of the population (males per 100 females), 1970 and 1980, ESCAP region

Country or area	1970				1980			
	All ages	0-14	15-64	65 +	All ages	0-14	15-64	65 +
ESCAP region	104	104	105	90	104	105	105	90
East Asia	104	103	106	85	104	104	105	86
China	105	103	108	87	104	104	106	86
Hong Kong	104	107	107	44	108	105	114	69
Japan	96	105	96	78	97	105	98	75
Mongolia	100	100	101	78	100	102	100	83
Republic of Korea	101	107	100	62	102	104	102	74
South East Asia	98	101	97	78	99	102	98	79
Brunei	114	104	123	136	...	...	...	...
Burma	98	102	96	87	99	103	97	81
Democratic Kampuchea	100	102	100	79	100	101	100	79
Indonesia	97	101	96	75	99	102	98	76
Lao People's Democratic Republic	102	102	102	90	101	102	102	80
Malaysia	102	104	101	107	102	104	101	101
Philippines	102	103	100	90	102	103	102	88
Singapore	105	106	106	77	104	105	105	85
Thailand	101	104	102	60	101	103	100	80
Viet Nam	94	95	95	77	94	98	93	76
Middle South Asia	107	105	108	108	107	107	107	105
Afghanistan	104	105	97	84	105	105	105	84
Bangladesh	107	106	108	110	107	106	106	109
Bhutan	104	108	103	78	106	108	107	82
India	107	105	109	109	107	107	108	105
Iran	102	103	102	88	103	100	102	88
Maldives	100	105	93	300	...	...	...	...
Nepal	102	105	101	84	104	107	104	84
Pakistan	107	106	108	120	108	108	107	114
Sri Lanka	108	103	112	122	106	102	107	119
Oceania	103	106	105	74	102	104	104	78
Australia	102	105	105	71	101	105	103	76
Fiji	104	104	104	100	101	104	100	100
New Zealand	100	104	102	74	100	104	103	77
Papua New Guinea	109	107	112	106	108	106	110	100

that is, 65 and over. In that age band the effects of differential mortality are so strong as to produce very large surpluses in the numbers of females as compared with the numbers of males in most countries.

Fertility and marriage

Between 1965-1970 and 1975-1980 there were declines in the birth rate in practically every country and area in the ESCAP region, as is shown by the figures in table 5. Five-year average figures have been given so as to smooth erratic annual fluctuations and because of the uncertainty as to the accuracy of single-year indicators. Even these five-year average figures need to be considered as approximations given the speculative nature of the basic data for many countries. However, it should be borne in mind that for several countries currently experiencing rapid fertility declines, such as Malaysia, the Republic of Korea and Thailand, the figures will overestimate the current level of fertility.

The crude birth rate, which relates the annual number of births to the estimated mid-year total population, has fallen markedly in each of the four subregions, albeit from different levels and at different rates of decline. The fall in the crude birth rate was most spectacular in east Asia, where it fell from 31 live births per 1,000 population in 1965-1970 to a corresponding figure of 21 in 1975-1980, representing a decline of almost one third; this decline was largely attributable to the big apparent reduction in fertility in China. There were also declines in the crude birth rate in East South Asia and in Middle South Asia but the respective rates in 1975-1980 at 35 and 38 were still considerably higher than the rate for East Asia 10 years earlier. Further, there were still eight countries with a rate of 40 or more births per 1,000 population in these two subregions in 1975-1980.

The crude birth rate is a rather weak indicator of the level of fertility as it is influenced by the age and sex structure of the population. Caution should be exercised before making comparisons because of big differences in the age structure between countries. Thus it is preferable to relate births to the number of women of reproductive age, that is, 15 to 49, as in the general fertility rate (GFR). Table 5 shows that the crude birth rate slightly understates the declines in fertility that took place between 1965-1970 and 1975-1980 as assessed through the GFR. The GFR fell by 40 per cent in China and 19 per cent in India, although in India in 1975-1980 it was still very slightly higher than it had been in China 10 years earlier.

Further insight into levels of fertility is given in table 6, which shows the total fertility rate (TFR) for three quinquennia. The TFR, defined as the sum of the age-specific fertility rates for a given period, represents the average number of children that a woman would bear if she were subjected throughout her reproductive ages to the age-specific fertility rates prevailing in that given period.

At its peak the TFR represents "natural fertility", that is, the fertility level observed in non-contracepting populations with uninterrupted marriage in the childbearing ages. A TFR in the neighbourhood of 8 or 9 children per woman is generally considered to approximate natural fertility. However, the precise level of the TFR under conditions of natural fertility varies markedly from country to country depending on such factors as secondary sterility, length of lactation and other cultural factors influencing the frequency of intercourse. At its nadir the observed TFR can be below replacement level. For a generation of women to replace itself each woman must produce on average one daughter who will survive to the age of the woman at the birth of the daughter. This generally corresponds to an average completed family size of approximately 2.1 children in conditions of low mortality and approximately 2.5 children in conditions of high mortality, which allows for such factors as the differential in the sex ratio at birth and infant, childhood and adult mortality. Since by definition the TFR is a period indicator and does not relate to an actual generation of women, it can go below replacement level for some years without an actual generation ending up with below-replacement fertility, because the generation may formerly or subsequently experience compensating higher fertility. Moreover, a population may not go into immediate decline even with a total fertility rate below 2.1 if it has a relatively young age structure.

None of the countries or areas in the ESCAP region that are shown in table 6 currently have a TFR of the level expected under conditions of natural fertility. However, several countries, particularly among those in middle south Asia, have an estimated TFR which is not far short of natural fertility. Thus, the TFR in Afghanistan and Bangladesh for the quinquennium 1975-1980 was of the order of 7 children per woman and that

Table 5. Birth rates and change, 1965-1970 and 1975-1980, ESCAP region

Country or area	Crude birth rate (per 1,000 population)		Percentage change 1965-1970 to 1975-1980	General fertility rate (per 1,000 women aged 15-49)		Percentage change 1965-1970 to 1975-1980
	1965-1970	1975-1980		1965-1970	1975-1980	
ESCAP region	37	29	−20	164	124	−24
East Asia	31	21	−32	137	87	−36
China	32	21	−34	149	90	−40
Hong Kong	24	19	−21	104	74	−29
Japan	18	15	−15	63	56	−11
Mongolia	42	37	−11	182	162	−11
Republic of Korea	32	25	−21	138	100	−28
South East Asia	42	35	−16	180	147	−18
Burma	40	39	−4	166	164	−1
Democratic Kampuchea	44	31	−30	189	123	−35
Indonesia	43	34	−22	183	139	−24
Lao People's Democratic Republic	45	44	−2	190	190	0
Malaysia	39	33	−15	181	140	−23
Philippines	41	36	−11	183	153	−16
Singapore	25	17	−31	109	63	−42
Thailand	42	32	−23	187	137	−27
Viet Nam	41	40	−3	173	168	−3
Middle South Asia	43	38	−13	194	164	−15
Afghanistan	50	48	−3	219	219	0
Bangladesh	50	47	−6	233	217	−7
Bhutan	45	43	−4	192	187	−3
India	42	35	−16	186	151	−19
Iran	45	44	−2	213	202	−5
Nepal	46	44	−4	191	194	2
Pakistan	47	43	−8	224	199	−11
Sri Lanka	32	28	−12	141	115	−18
Oceania	24	22	−11	106	91	−14
Australia	20	17	−16	84	68	−19
Fiji	32	29	−11	140	111	−21
New Zealand	23	18	−21	100	74	−26
Papua New Guinea	42	42	0	191	193	1

Table 6. Total fertility rates[a] (TFR), 1965-1970 to 1975-1980, ESCAP region

Country or area	TFR			Change in TFR	
	1965-1970	1970-1975	1975-1980	1965-1970 to 1970-1975	1970-1975 to 1975-1980
ESCAP region	5.4	5.0	4.2	−0.4	−0.8
East Asia	4.7	4.2	3.0	−0.5	−1.2
China	5.1	4.5	3.1	−0.6	−1.4
Hong Kong	4.0	2.9	2.3	−1.1	−0.6
Japan	2.1	2.1	1.8	0.0	−0.3
Mongolia	5.9	5.6	5.4	−0.3	−0.2
Republic of Korea	4.5	4.1	3.4	−0.4	−0.7
South East Asia	6.0	5.6	4.9	−0.4	−0.7
Brunei	...	...	...	...	...
Burma	5.4	5.5	5.5	0.1	0.0
Democratic Kampuchea	6.2	5.5	4.1	−0.7	−0.4
Indonesia	6.1	5.7	4.7	−0.4	−1.0
Lao People's Democratic Republic	6.1	6.2	6.2	−0.1	0.0
Malaysia	6.1	5.2	4.6	−0.9	−0.6
Philippines	6.0	5.5	5.0	−0.5	−0.5
Singapore	3.4	2.6	1.8	−0.8	−0.8
Thailand	6.3	5.6	4.5	−0.7	−1.1
Viet Nam	5.7	5.7	5.6	0.0	−0.1
Middle South Asia	6.2	5.9	5.4	−0.3	−0.5
Afghanistan	6.9	6.9	6.9	0.0	0.0
Bangladesh	7.0	6.9	6.7	−0.1	−0.2
Bhutan	6.3	6.2	6.2	−0.1	0.0
India	6.0	5.6	5.0	−0.4	−0.6
Iran	7.0	6.5	6.4	−0.5	−0.1
Maldives	...	...	...	...	...
Nepal	6.2	6.4	6.5	0.2	0.1
Pakistan	7.2	6.7	6.4	−0.5	−0.3
Sri Lanka	4.7	4.2	3.9	−0.5	−0.3
Oceania	3.5	3.2	2.9	−0.3	−0.3
Australia	2.9	2.5	2.1	−0.4	−0.4
Fiji	4.6	3.3	3.6	−1.3	0.3
New Zealand	3.2	2.8	2.2	−0.8	−0.6
Papua New Guinea	6.2	5.9	6.3	−0.3	0.4

[a] The total fertility rate measures the average number of liveborn children per woman that would result if women survived to the end of their reproductive period and throughout this time were subject to a set of age-specific fertility rates prevailing at the given period.

in Iran, Nepal and Pakistan around 6.5 children per woman. While most of these countries registered small declines in the TFR in the 10 years preceding 1975-1980, the current levels of fertility are still above those that prevailed in countries such as India, Indonesia and the Philippines 10 years earlier.

However, there have been conspicuous and sustained reductions in fertility in many of the lesser developed countries in East Asia and East South Asia. For example, Indonesia, Malaysia, the Philippines and Thailand had a TFR of 6 or above in the quinquennium 1965-1970 but have experienced rapid declines in the subsequent 10 years so that by the quinquennium 1975-1980 their TFR was around 4.5 children per woman. There has also been a very big fall in the TFR in China, which by the quinquennium 1975-1980 was at 3.1, some two children less than 10 years earlier. Moreover, the TFR in India has also shown a downward tendency although it continues to be above that of China 10 years earlier.

Among the developed countries of the region, namely, Australia, Japan and New Zealand, TFR fell to around or below replacement level in 1975-1980. Similar and marked falls have also occurred in the most prosperous of the developing countries or areas, namely, Hong Kong and Singapore, while the fertility level in the Republic of Korea is on a similar downward path. It is highly probable that several if not all of the latter will experience protracted periods of below-replacement level fertility in the 1980s.

It is beyond the scope of this paper to consider in detail differential fertility within countries and the mechanisms and causes of the decline. Knowledge of these matters has been greatly enhanced by the large number of demographic surveys conducted in the 1970s, and in particular through the World Fertility Survey (WFS). Twelve countries or areas in Asia, namely, Bangladesh, Hong Kong (partially), Indonesia, Iran, Japan, Malaysia, Nepal, Pakistan, the Philippines, the Republic of Korea, Sri Lanka and Thailand, together with Fiji in the Pacific, participated in WFS.[6] The findings of WFS have generally shown that within practically every country there are differentials in fertility by woman's urban-rural residence, her educational level and the occupational status of her husband.[7] There are also big ethnic differentials in fertility in some countries, such as Malaysia.

Among the key factors in the fertility decline in developing countries have been changes in government attitudes towards growth, the spread of education and increased availability of contraception through the spread of services offered through organized family planning programmes. An important demographic factor associated with the decline has been the marked change that has taken place in marriage patterns in many countries within the ESCAP region.

Few countries have detailed statistics on marriage. However, once statistics on marital status from the 1980 round of censuses become available they will enable an up-to-date assessment of how marriage patterns have changed during the 1970s. In the meantime, WFS data can be used to show how marriage age and the proportions married have varied over time among participating countries in the region.[8]

Table 7 shows the age at which the twenty-fifth percentile of different cohorts of women had married in 10 countries in the ESCAP region. The figures in table 7 can be compared across the rows in looking at time trends for different cohorts within the same country or down the columns in comparing similar age cohorts in different countries. Some caution needs to be exercised in comparing the figures because of various sampling and non-sampling errors in the data and because of differences in the concept of marriage in different countries. However, the main message in the figures is clear. That is an increase in the age at which the twenty-fifth percentile of women enter marriage is discernable for every country, although the amount of change and the age from which the changes have taken place varies from country to country. Thus, the biggest changes (amounting to more than three years) have occurred in Sri Lanka, Fiji and Malaysia and the smallest in Thailand and Nepal. However, despite the changes, there are still marked variations in the marriage age of the twenty-fifth percentile of the youngest cohort shown, that is, aged 15-19. In Bangladesh and

[6] For detailed findings, see individual country reports which have been published, except for Iran.

[7] See, for example, M. Hodgson and J. Gibbs, "Children ever born", *Comparative Studies*, No. 12, WFS, London, 1980.

[8] See D.P. Smith, "Age at first marriage", *Comparative Studies*, No. 7, (London, WFS, 1980).

Table 7. Ages by which 25 per cent of women entered marriage for age cohorts in selected ESCAP countries participating in WFS

Country	Age cohorts in survey year[a]					Change between age cohorts 15-19 and 35-39 (years)
	15-19	20-24	25-29	30-34	35-39	
Bangladesh	12.9	11.7	11.5	10.7	10.4	2.5
Fiji	19.0	18.1	17.2	16.2	15.9	3.1
Indonesia	16.1	15.0	13.9	13.7	13.3	2.8
Malaysia	b	18.6	17.5	16.4	15.5	3.1
Nepal	14.4	13.4	13.0	13.0	13.5	0.9
Pakistan	15.5	14.5	14.4	14.1	13.7	1.8
Philippines	b	19.2	18.6	18.2	18.0	1.2
Republic of Korea	b	21.0	20.7	19.9	18.6	2.4
Sri Lanka	b	19.6	18.3	17.0	16.3	3.3
Thailand	18.5	18.0	17.8	17.7	17.7	0.8

Source: Adapted from table 4 in D.P. Smith "Age at first marriage", *Comparative Studies,* No. 7, (London, WFS, 1980).

[a] The surveys were taken at varying points in time ranging between 1974 and 1978.

[b] Cohort had not reached twenty-fifth percentile.

Nepal the respective marriage ages of the twenty-fifth percentile were 13 and 14 compared respectively with figures of 21 and 20 for the Republic of Korea and Sri Lanka.

Mortality

Less is known about the level and pattern of mortality than about the level and pattern of fertility in the ESCAP countries. This is not because birth registration statistics are significantly more complete and accurate than death registration statistics. It is because much more information is available on fertility from sample surveys and from population censuses than is the case with mortality. The statistical base of the mortality estimates for several of the countries shown in tables 8 and 9 is extremely fragile. It follows that the figures are subject to substantial margins of possible error.

Table 8 shows that every area and country in the ESCAP region experienced falls in the crude death rate between 1965-1970 and 1975-1980, although there were marked variations between countries. In the latter period, only four of the countries shown, namely, afghanistan, Bhutan, the Lao People's Democratic Republic and Nepal, had a crude death rate of 20 or more per 1,000 population, compared with seven countries 10 years ealier.

However, not too much should be deduced from the figures in table 8 because the crude death rate, though providing a realistic picture of the relation between mortality and growth, is a weak index of relative mortality levels. It is strongly influenced by the age structure of the population, which means it has only limited value for comparing between countries or within the same country at different points in time. A population with an old age structure with a large proportion of elderly people makes for a relatively high crude heath rate; conversely a population with a young age structure with a relatively low infant and childhood mortality makes for a relatively low crude death rate. Thus it will be apparent that the small differences between some of the developed and developing countries are primarily a function of differences in their age structures (see section on age structure above).

A better index of mortality for comparative purposes is life expectancy, which standardizes for differences in the age structure between populations. In general, life expectancy below 50 years is indicative of high mortality, that between 50 and 60 years of medium mortality and that above 60 years of low mortality.

Table 8. Death rates and change, 1965-1970 and 1975-1980, ESCAP region

Country or area	Crude death rate (per 1,000 population)		Percentage change 1965-1970 to 1975-1980
	1965-1970	1975-1980	
ESCAP region	15	11	−23
East Asia	11	7	−32
China	11	7	−34
Hong Kong	5	4	−18
Japan	7	6	−9
Mongolia	11	8	−26
Republic of Korea	10	8	−22
South East Asia	18	14	−24
Brunei	6	4	−40
Burma	18	14	−18
Democratic Kampuchea	19	...	...
Indonesia	21	16	−23
Lao People's Democratic Republic	23	20	−11
Malaysia	12	8	−34
Philippines	12	9	−28
Singapore	6	5	−9
Thailand	12	9	−28
Viet Nam	21	14	−33
Middle South Asia	19	16	−18
Afghanistan	26	23	−10
Bangladesh	22	19	−13
Bhutan	24	21	−14
India	19	15	−20
Iran	17	14	−22
Nepal	24	21	−14
Pakistan	18	15	−16
Sri Lanka	8	8	−1
Oceania	10	9	−12
Australia	9	8	−11
Fiji	5	4	−16
New Zealand	9	8	−9
Papua New Guinea	19	16	−18

In spite of a gain of some six years in the estimated life expectancy of people living in the ESCAP region between 1965-1970 and 1975-1980, largely due to reductions in infant and childhood mortality, 7 of the 26 countries shown in table 9 had an average life expectancy below 50 years. Moreover, the gap between the majority of the developing countries and developed countries appears to have widened. Indeed, the average life expectancy for persons living in East South Asia and Middle South Asia at 52 and 49 respectively implies that there is considerably more scope for further reductions in mortality rates for the majority of countries in these subregions. The relatively high life expectancy in a few of the developing countries such as China, where it was tentatively estimated at 67 years in 1975-1980, provides the exception rather than the rule. Indeed, the figure for China contrasts markedly with an estimated life expectancy of 49 years in India, and considerably lower levels in many of the other less developed countries in the region. It appears to be the case that mortality has fallen most where there have been large improvements in primary health care and education, as, for example, in China, Malaysia and Sri Lanka.

In the more developed countries life expectancy rose to in excess of 70 years and has now reached a point where further big gains cannot be achieved without a breakthrough in medical knowledge which will help to prevent or delay in particular deaths from neoplasms and/or diseases of the circulatory system.[9] It was not, however, by extending the life span of individuals who survive to old age that the large gains in life expectancy to the current high levels in the developed countries were achieved. It resulted largely by substantially reducing the risk of death among infants and young children from infective, parasitic and nutritional diseases as well as from pneumonia. Indeed, substantial further reductions in infant and childhood mortality remain the key to obtaining more marked improvements in life expectancy in developing countries. Thus, there are currently fewer than 10 infant deaths per 1,000 live births in countries like Japan, while estimated corresponding figures for Afghanistan and India are 200 and 120 respectively.[10] Indeed, the evidence suggests that such reductions will not come about simply through greater use of vaccination and antibiotics but will require major efforts in social and economic development such as improvements in nutrition, sanitation, sewerage and education.

One further feature worth noting in the figures on life expectancy shown in table 9 is the disparity in life expectancy between males and females in most countries. Indeed, there is a slight tendency for the gap to widen with increasing life expectancy and it is of the order of 5 to 6 years in Japan, Australia and New Zealand. The higher male than female life expectancy in some of the countries in Middle South Asia, such as Pakistan and India, stems from the higher female than male child mortality and the high risks of maternal mortality. The former is often attributed to the greater care shown towards and value placed on male than female children in such countries; the latter results from the high levels of fertility and poorly developed maternal care facilities.

International migration

Few countries in the ESCAP region have reliable flow or stock data for measuring international migration, and quantitative information on this topic is generally less readily available than that on either fertility or mortality.[11] During the 1970s international migration has been an important component of population growth in Australia, Brunei, Hong Kong and New Zealand, and to a much a lesser extent in Malaysia (Sabah and Sarawak) and Singapore. While the migratory moves to Australia, Hong Kong and New Zealand have been of the traditional permanent settlement nature, those to Brunei are of a temporary nature and have been made in response to labour demand.

Temporary migration for employment in the more affluent countries, particularly the oil exporting countries, has become an important factor in the large outflows that have taken place from Pakistan, India, Bangladesh, the Philippines, Thailand, Sri Lanka, Nepal and the Republic of

[9] For a list of the various diseases in these two cause groups together with figures showing their relative contribution to mortality at different ages on a country-by-country basis, see *World Health Statistics Annual, 1980,* "Vital statistics and causes of death", WHO, Geneva.

[10] United States Department of Commerce, Bureau of the Census, *Demographic Estimates for Countries with a Population of 10 Million or more, 1981* (Washington, D.C.).

[11] The topic of international migration is taken up in another background paper prepared for the Conference. See also *Trends and Characteristics of International Migration since 1950* (United Nations publication, Sales No. E.78.XIII.5).

Table 9. Expectation of life at birth (years) by sex, 1965-1970 and 1975-1980, ESCAP region

Country or area	Persons		Males		Females		Gain over 10-year period			Excess of female life expectancy	
	1965-1970	1975-1980	1965-1970	1975-1980	1965-1970	1975-1980	P.	M.	F.	1965-1970	1975-1980
ESCAP region	53	58	52	58	54	59	6	6	5	2	2
East Asia	60	68	58	66	62	69	8	8	8	3	3
China	59	67	58	66	61	69	8	8	8	3	3
Hong Kong	68	76	65	74	72	79	8	8	7	7	5
Japan	71	76	68	73	74	78	4	5	4	5	5
Mongolia	58	62	56	60	60	65	4	4	5	4	4
Republic of Korea	58	62	56	60	59	65	5	4	5	3	4
South East Asia	47	52	46	51	48	54	6	5	6	3	3
Burma	48	52	46	51	49	54	5	5	5	3	3
Democratic Kampuchea	45	...	44	...	47	...	...	...	...	...	...
Indonesia	42	48	42	46	43	49	5	5	5	2	2
Lao People's Democratic Republic	40	44	39	42	42	45	3	3	4	3	3
Malaysia	57	63	55	62	58	65	7	7	7	4	4
Philippines	56	61	54	59	57	62	5	5	5	3	3
Singapore	68	71	66	69	70	73	3	3	3	4	5
Thailand	56	60	53	58	58	63	5	5	5	5	5
Viet Nam	43	53	42	51	45	54	10	9	10	3	3
Middle South Asia	46	49	47	50	46	49	3	3	3	−1	−1
Afghanistan	38	40	37	40	38	41	3	3	3	1	1
Bangladesh	43	46	44	46	43	46	2	2	2	−1	−1
Bhutan	40	43	40	44	39	42	4	4	4	−2	−2
India	46	49	47	50	46	49	3	3	3	−1	−1
Iran	49	54	48	53	49	54	5	5	5	1	1
Nepal	40	43	40	44	39	42	4	4	4	−2	−2
Pakistan	48	51	50	52	47	50	2	2	3	−3	−2
Sri Lanka	64	65	64	64	65	66	1	0	2	2	3
Oceania	64	66	62	64	67	68	1	2	1	4	4
Australia	72	73	69	70	75	76	1	1	1	6	6
Fiji	68	71	66	70	70	73	3	3	3	4	4
New Zealand	72	73	69	70	75	76	1	1	1	6	6
Papua New Guinea	45	50	45	50	45	50	5	5	5	−1	−1

Korea. However, the direct demographic impact on these sending countries of temporary migrants is not readily perceptible from the data currently at hand. Only in the very small island countries such as the Cook Islands, Samoa and Tonga does temporary migration act as a major check on the rate of population growth.

Another form of international population movement prevalent in the 1970s has been through the flow of refugees, particularly within East South Asia and also from Afghanistan. Although refugee mobility is in some cases likely to have a significant demographic impact on both sending and receiving countries, it cannot be accurately assessed at present because of the lack of quantitative information.

Prospective trends

The paucity of robust data for the majority of countries in the ESCAP region makes any assessment of the current demographic situation uncertain. Projections of population trends into the future are characterized by even greater uncertainties.

Moreover, in contemplating the future, it should be recalled that in recent history only in the last 10 years has the growth rate of the world's total population begun to moderate, and much of the demographic change that occurred in the 1970s was somewhat unforeseen. Inevitably, therefore, the position over say the next 10 or 20 years is characterized by a large element of uncertainty. The longer into the future one looks the greater is that uncertainty. Indeed, the projected figures presented in several of the tables in this paper are based on just one out of an infinite number of possible assumptions about the future path of the components of population change, that is, the set which appeared most plausible at the time the projections were prepared. It follows that undue emphasis should not be given to the detail of the individual figures. But, in spite of this caution, the broad outline of the picture given with respect to population growth is unlikely to be markedly out of line with reality, at least over the next decade.

Table 10 shows that the ESCAP region is expected to grow from an estimated 2.5 billion in 1980 to 2.9 billion in 1990 and to 3.4 billion persons by the year 2000. While annual growth rates are expected to moderate, from 1.6 per cent to 1.4 per cent, the growth in absolute numbers will continue to rise because of the ever-widening base population.

By far the largest population increment projected for the next 10 years (216 million) will be in Middle South Asia, which includes India and several other highly populated and low-income countries. Over the corresponding period a further 148 million persons are also expected in east Asia primarily because of the growth in China (see table 10). At the country level, India is expected to add the most people in each of the next two decades, 136 million and 140 million persons respectively, closely followed by China. Although the monumental increases projected in these two countries overshadow those projected in other countries, it should be kept in mind that several of the other less developed countries can expect more than 10 million persons in each of the next two decades, namely, Bangladesh, Pakistan, Indonesia, the Philippines, Iran, Viet Nam and Thailand. These big increases will occur in spite of the fact that some of these countries have experienced rapid declines in the birth rate during the 1970s and that further declines are anticipated in the projections.

For the smaller countries, annual increments in numbers are expected to be by no means insignificant from a national perspective bearing in mind the developmental problems they already face because of rapid population growth. Thus, among the poorest countries in the region, such as Afghanistan and Nepal, annual growth rates are expected to continue well above the 2.0 per cent mark in the foreseeable future, implying large proportionate increases in the population. Similarly, many of the sparsely populated and low-income island countries are expected to experience continued high growth rates.

Growth and poverty

Population growth and poverty tend to reinforce each other. As Nancy Birdsall eloquently states in an incisive study of the two variables: "Developing countries are like long distance runners, racing against time to eliminate poverty. For all of them, rapid population growth is a burden which slows them down. A quick glance at the race also shows it is an unfair one. The weaker runners are those advancing most slowly and already behind the pack. They also have the highest population growth rates and are thus the most severely handicapped."[12] Of course,

[12] Nancy Birdsall, "Population growth and poverty in the developing world", *Population Bulletin* (Population Reference Bureau Inc.), vol. 35, No. 5, 1980.

Table 10. Projected population, change[a] and growth[a], 1980, 1990 and 2000, world and ESCAP region

Country or area	Population (in millions)			Change		Annual growth[b] rate (percentage)	
	1980	1990	2000	1980-1990	1990-2000	1980-1990	1990-2000
World	4 432.1	5 241.9	6 118.9	809.8	876.9	1.7	1.6
ESCAP region	2 483.8	2 929.4	3 381.8	445.6	452.5	1.6	1.4
East Asia	1 156.7	1 304.2	1 447.0	147.6	142.8	1.2	1.0
China	994.9	1 127.6	1 257.3	132.7	129.7	1.2	1.1
Hong Kong	5.1	6.3	7.0	1.4	0.7	2.0	1.1
Japan	116.6	123.2	129.3	6.6	6.1	0.6	0.5
Mongolia	1.7	2.2	2.7	0.5	0.5	2.6	2.1
Republic of Korea	38.5	45.0	50.8	6.6	5.8	1.6	1.2
South East Asia	360.5	439.3	519.3	78.8	80.0	2.0	1.7
Brunei	0.2	0.3	0.4	0.1	0.1	3.5	1.8
Burma	35.3	44.7	55.1	9.4	10.4	2.4	2.1
Democratic Kampuchea	6.7	8.7	10.6	2.0	1.9	2.6	2.0
Indonesia	148.0	173.5	198.7	25.5	25.2	1.6	1.4
Lao People's Democratic Republic	3.7	4.7	5.7	1.0	1.0	2.3	2.0
Malaysia	14.1	17.7	21.3	3.6	3.6	2.3	1.8
Philippines	49.2	62.8	77.0	13.6	14.2	2.4	2.0
Singapore	2.4	2.7	3.0	0.3	0.3	1.3	0.9
Thailand	47.1	57.9	68.6	10.8	10.7	2.1	1.7
Viet Nam	53.7	66.2	78.9	12.5	12.7	2.1	1.8
Middle South Asia	944.1	1 159.9	1 386.3	215.8	226.3	2.1	1.8
Afghanistan	15.9	20.6	26.5	4.7	5.9	2.6	2.5
Bangladesh	88.2	116.2	148.4	28.0	32.2	2.8	2.4
Bhutan	1.3	1.6	2.0	0.3	0.4	2.3	2.2
India	684.5	820.9	960.6	136.4	139.8	1.8	1.6
Iran	38.1	51.0	64.9	12.9	13.9	2.9	2.4
Maldives	0.2	0.2	0.3	0.0	0.1	2.7	2.3
Nepal	14.3	18.0	22.5	3.7	4.5	2.3	2.2
Pakistan	86.9	113.4	140.0	26.5	26.6	2.7	2.1
Sri Lanka	14.8	18.1	21.1	3.3	3.0	2.0	1.5
Oceania[d]	22.5	25.8	29.2	3.4	3.4	1.4	1.2
Australia	14.5	16.2	17.8	1.7	1.6	1.1	1.0
Fiji	0.6	0.7	0.8	0.1	0.1	1.6	1.0
New Zealand	3.3	3.7	4.0	0.4	0.4	1.1	1.0
Papua New Guinea	3.2	4.1	5.2	1.0	1.1	2.6	2.3
Samoa	0.2	0.2	0.2	0.0	0.0	1.5	0.7
Solomon Islands	0.2	0.3	0.4	0.1	0.1	3.5	2.9

[a] Computed on unrounded figures; hence, the sum of the parts may not add to the totals.

[b] Annual exponential growth rate (r) defined as $r = (\log_e P_1 - \log_e P_0)/n$.

poverty implies many other factors apart from low income, such as inadequate education, nutritional deficiencies and poor health, housing and employment prospects. These variables are all highly interrelated. In this section, population growth is considered in relation to income; the implications of growth on the other variables is examined separately in subsequent sections.

In general the very high growth rates prevailing in many of the developing countries, with their massive increases in absolute numbers, and their correlates of young age structures and heavy concentrations of persons in the non-productive ages, tend to depress production and increase costs for social overhead needs such as schools and health facilities. Increases in costs for social overhead needs mean a reduction in the amount of capital available for productive investment. Table 11 shows that the majority of the Asian developing countries can be categorized as having low incomes, that is, with *per capita* incomes below $US 400 in 1979. The five most populous of the region's developing countries fall into this

Table 11. Growth rates of population and demographic indicators, GNP and GNP per capita, periods between 1970 and 1980, selected countries in the ESCAP region

Country	GNP per capita[a] 1979	Annual GNP growth (percentage) 1970-1979	Annual population growth (percentage) 1970-1980	Annual GNP per capita growth (percentage) 1970-1979	Life expectancy (years) 1975-1980	Total fertility rate (per woman) 1975-1980
Low-income countries						
Bangladesh	110	3.4	2.6	0.8	46	6.7
Nepal	130	2.5	2.2	0.3	43	6.5
Burma	150	4.4	2.4	2.0	52	5.5
Afghanistan	240[b]	3.3	2.6	2.7[b]	40	6.9
India	210	3.7	2.1	1.6	49	5.0
Sri Lanka	230	4.2	1.7	2.5	65	3.9
China	260	4.5	1.7	2.8	67	3.1
Pakistan	270	4.3	2.8	1.5	51	6.4
Indonesia	360[b]	7.2	1.9	5.3[b]	48	4.7
Middle-income countries						
Thailand	600	6.9	2.5	4.4	60	4.5
Philippines	640	6.6	2.7	3.9	61	5.0
Malaysia	1 450	8.0	2.6	5.4	63	4.6
Republic of Korea	1 510	9.9	1.8	8.1	62	3.4
Singapore	3 770	8.1	1.4	6.7	71	1.8
Industrialized countries						
Japan	8 730	5.0	1.1	3.9	76	1.8

Sources: Columns 1 and 4 have been extracted from the 1981 *World Bank Atlas*, (Washington, DC, 1982). Column 2 is an approximation which has been derived by aggregating columns 3 and 4. The source for columns 3, 5 and 6 is given in table 1.

[a] GNP per person is defined as the value of goods and services produced in a country, plus net income received from abroad from investments and citizens' earnings outside the country, per person residing in the country in a given year.

[b] Relates to 1978.

group and are characterized by a sizable proportion of the population living below the poverty line. A recent study conducted by the United Nations found that there has been a widening in the disparity between countries in income distribution and that this had been associated with the rapid population growth of many of the developing countries.[13]

Between 1970 and 1979 every country had a growth in its annual total GNP, although the gains were highly uneven ranging from 3 to 4 per cent per year for the very poorest countries such as Bangladesh and Nepal to more than double that amount for many of the middle-income countries such as the Republic of Korea. Further, for the majority of the poorer countries the growth in GNP was not significantly above annual population growth rates, resulting in relatively small increases in *per capita* income. So, while high population growth rates have not prevented economic advance they have been associated with lower increases in *per capita* income. Looked at in another way, countries with the lowest incomes have suffered from a combination of slow economic growth and rapid population growth.

The experience of some of the middle-income countries shown in table 11 suggests that rapid population growth is compatible with substantial advances in *per capita* income. However, with slower increases in population size *per capita* income might have been even higher. Although a reduction in the rate of population growth is not a panacea for economic growth, it is a reasonable assumption that a lighter population burden would speed up the pace of development. Within any given country, for any given amount of resources, the depth and incidence of poverty could be reduced with a lower rate of population growth.

Table 11 also presents figures on life expectancy and on the total fertility rate to bring out the clear associations between these variables and income per person. It is seen that there is a marked tendency for countries with the lowest *per capita* income to have the lowest life expectancy and highest total fertility rate. The correlation is, however, by no means a perfect one, as, for example, the demographic indicators of China and Sri Lanka indicate. One reason behind these apparent deviations may be the easier access to health, family planning and educational services in these countries together with more equitable income distributions.

[13] See chapter VII of *World Population Trends and Policies: 1979 Monitoring Report*, vol. 1. "Population trend", (United Nations poblication, Sales No. E.79.XIII.4).

Food and nutrition

Between 1960 and 1976 food production grew faster than population in Asia and the Pacific. But as table 12 shows this was not the case in all developing countries, most notably among several of those in South Asia and the Pacific, where food production lagged behind population growth and already inadequate daily food supplies *per capita* diminished. This may well have led to a lowering of nutritional levels. Even in the large developing countries such as China and Indonesia, where food production kept ahead of population growth, there was a slowing down of the excess in the 1970s as compared with the 1960s.

A fall in *per capita* food production occurred in some countries of the ESCAP region during the 1970s. However, by itself this need not pose a problem, if it is countered by growing production in other sectors of the economy and exports provide the necessary foreign exchange for food imports. Unfortunately, this has not been the case for the majority of the countries in the ESCAP region, where most of the labour force is engaged in agriculture. Such countries have therefore to spend a growing proportion of their limited foreign exchange on importing food.

It is possible to increase agricultural yields by labour-intensive techniques up to certain limits. However, the crucial factors that inhibit greater agricultural production in the developing countries are shortage of funds or credit for investment, lack of irrigation and over-dependence on the vagaries of rain and inadequate facilities for transport. Apart from these constraints in a few developing countries, such as Bangladesh for example, the availability of land for agricultural and food production is diminishing due to use of land for urban expansion, industries, highways and housing for the growing rural population. Greater investment and the application of scientific and technological advancements in agriculture to increase output will go a long way towards keeping food production ahead of population growth and stave off chronic hunger.

However, chronic undernutrition and malnutrition persist in many countries in the ESCAP region. FAO estimates in table 13 indicate that undernourishment (according to the criterion of having a daily intake of food below critical minimum for subsistence set at 1.2 times the

Table 12. Average annual rates of growth of population and of food, 1961-1965 to 1970 and 1970-1976, selected countries in Asia and the Pacific

Country or area	Average annual percentage growth				Per capita	
	Population		Food production total		1961-1965 to 1970	1970-1976
	1961-1965 to 1970	1970-1976	1961-1965 to 1970	1970-1976		
Asia and Pacific	2.5	2.5	3.5	2.8	0.9	0.2
East Asia						
China	1.7	1.7	2.7	2.5	1.0	0.8
Japan	1.1	1.3	3.2	2.0	2.1	0.7
South East Asia						
Indonesia	2.6	2.6	3.8	3.7	1.2	1.0
Middle South Asia						
Bangladesh	2.9	[a]	3.0	2.4	0.2	[a]
India	2.4	2.5	3.2	2.1	0.8	–0.4
Nepal	2.1	2.3	1.4	1.8	–0.6	–0.4
Pakistan	2.8	3.2	6.2	2.9	3.4	–0.2
Oceania						
Fiji	2.5	2.1	3.2	–2.5	0.7	–4.5
Papua New Guinea	2.3	2.4	2.3	2.3	0.0	–0.1

Source: Table 108 in reference cited in footnote 13.

[a] Reliable estimates not available for this period.

Table 13. Estimated percentages of the population in given countries with food intake below the critical minimum limit, 1969-1972 and 1972-1974, selected countries in Asia

Country	Percentage of the population below 1.2 basic metabolic rate	
	1969-1971	1972-1974
Bangladesh	38	38
Burma	19	22
India	26	30
Indonesia	34	30
Nepal	27	29
Pakistan	24	26
Philippines	35	35
Thailand	18	18

Source: Table 110 in reference cited in footnote 13.

basic metabolic rate) is apparently worsening in several countries.[14] In many of the most populated countries shown, around one third of the population are living below the critical minimum level. Raj has contended that the primary problem is not so much lack of food but lack of equitable distribution and purchasing power.[15] He notes that there have been large regional variations within several Asian countries in the availability of foodgrain *per capita* and between different deciles of the population, as a result of inequality of income and lack of purchasing power among the lower income groups. Thus, there is still considerable deprivation and proverty in several of the countries of the region.

[14] *Ibid.*, table 110.

[15] See K.N. Raj, "Accelerating Asia's growth", *Journal of the United Nations Fund for Population Activities*, vol. 8, No. 3, 1981.

So with some 446 million persons expected to be added to the population living in countries in the ESCAP region in the next decade, and a similar amount in the following decade, there will have to be substantial further real increases in food supplies and availability if minimum food requirements are to be met. Further, the required expansion of food production will have to come from a force of agricultural workers which can be expected to grow less in proportion than the growth of population and food needs, since the relative share of agriculture in the total labour force is expected to continue to contract as urbanization advances.

Households and housing

Demand for housing will grow markedly over the next two decades as the numbers of households increase. The most recent projections of the number of households made by the United Nations shows that on the basis of recent trends in household formation and expected future population growth the number of households in the ESCAP region is likely to rise from 510 million in 1980 to around 678 million in 1990, that is, by 33 per cent.[16] If each of these new households requires separate housing, then 178 million new living quarters will have to be found. This estimate itself takes no account of deficiencies in housing conditions in terms of acceptable standards or existing and prospective housing needs resulting from factors such as delapidation.

Looked at on the basis of a series of statistical indicators which depict the existing number of housing units by type, their structural characteristics, conditions of occupancy such as numbers of persons per room and the provision of essential facilities such as sanitation services, water supply and other basic services, it is apparent that a sizable proportion of the population in developing countries is already living in substandard housing conditions.[17] Rapid population growth exacerbates poor housing conditions, as does one of its symptoms, large influxes of migrants to urban areas with their concomitant of squatter settlements, slums and a demand for urban housing and related services.

Primary health care

There is a close relationship between health and development with better health leading to and at the same time depending on a progressive improvement in conditions and quality of life. Primary health care is now an important component of development with its local-level concentration on such matters as health education, promotion of food supply and proper nutrition, adequate water supply, basic sanitation and infant and child health.[18] This section examines the implications of population growth on primary health care with respect, in particular, to infant mortality.

The infant mortality rate is the key determinant of a country's life expectancy and is generally also considered to be closely associated with a country's fertility level. Table 14 shows that although there has been some decline in the infant mortality rate in every country shown, these declines have occurred at markedly different rates and from markedly different levels. In several of the most populous countries in the region, more than 10 in every 100 babies born die before their first birthday and substantial declines are not expected over the next decade. Countries that have expended the greatest efforts in primary health care, such as China, Malaysia, and Sri Lanka, are also those that have realized substantial mortality declines, despite the fact that these countries are far from the top of the list in terms of *per capita* income. These are the same countries that have experienced the most significant declines in fertility, suggesting strongly that high mortality and high fertility are two aspects of the same process.

Primary health care thus has an important part to play in lowering infant and childhood mortality by helping to change people's attitudes and behaviour through education and the provision of regular health services at the local level, particularly in rural areas. Moreover, given the ever-increasing numbers of pre-school children in the population, primary health care has an important educative and welfare role to play in society to which more resources will have to be devoted.

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[16] See "Estimates and projections of households by country, 1975-2000", (ESA/P/WP.73).

[17] See "World Housing Survey: Report of the Secretary General, 1973" (E/C.6/129).

[18] WHO and UNICEF, *Alma-Ata, 1978: Primary Health Care.*

Table 14. Estimated and projected infant mortality rate (per 1,000 births) and change, 1965-1970, 1975-1980 and 1985-1990, ESCAP region and selected countries

Country or area	1965-1970	1975-1980	1985-1990	Percentage decline	
				1965-1970 to 1975-1980	1975-1980 to 1985-1990
ESCAP region	104	84	70	19	17
East Asia	70	45	33	36	27
China	75	49	35	35	29
Japan	16	9	7	44	22
Republic of Korea	58	37	27	36	27
South East Asia	118	92	69	22	25
Indonesia	130	99	76	24	23
Malaysia	51	33	26	35	21
Middle South Asia	146	131	110	10	16
Afghanistan	217	205	190	6	7
Bangladesh	150	140	122	7	13
India	145	129	106	11	18
Nepal	178	156	132	12	15
Pakistan	146	131	109	10	17
Sri Lanka	61	48	35	21	27
Oceania	51	43	35	16	19
Australia	18	12	10	33	17
Fiji	53	40	29	24	28
Papua New Guinea	141	111	86	21	22

Source: Estimates and projections of infant mortality rates: estimates and projections, 1970-2000", United Nations Population and Social Affairs Division, New York (forthcoming).

Education

Another obvious effect of high population growth is substantial increases in the size of the school-age population, which creates greater demands on the education system. Between 1970 and 1980 the number of persons in countries in the ESCAP region aged 5 to 14 rose from 512 million to 610 million and is expected to continue to grow until the end of the century, particularly in middle south Asia. Rapid population growth increases the magnitude of the task of expanding and upgrading the educational system. Even when developed and developing countries spend the same proportion of GNP on primary education, it is distributed among many more potential school children in developing countries than in developed countries, because they have much higher proportions of the population of school age. Looked at in another way, spending per child in less developed countries is very much lower both because of lower GNP *per capita* and because for a given amount of total spending a typical developing country can support its school-age population only half as well since it has almost twice as high a proportion of its population in that age group.[19]

[19] See G.V. Jones, "Educational planning and population growth", in S.C. Robinson, ed., *Population and Development Planning*. (The Population Council, 1975), and Birdsall, *op. cit.*, p. 16.

Although considerable increases have occurred in the proportion of persons enrolled at both primary (ages 6 to 11) and secondary (ages 12 to 17) levels, the absolute number of children not at school in these age groups has risen because of ever-growing numbers of children at these ages. UNESCO estimates that between 1960 and 1975 South Asia's school enrollment rose by 13 percentage points, while the numbers out of school rose by 11.5 million; the corresponding figures at the secondary level were 11 percentage points and 32 million persons.[20] At the primary level, the enrollment ratio in South Asia was 61 per cent.

When efforts are concentrated on trying to ensure a minimum education for as large a proportion as possible of an expanding group of school-age children, less energy and fewer resources are available for improving quality in such ways as upgrading teachers, improving pupil-teacher ratios, providing better equipment and assisting the least privileged subgroups. There is also a spatial dimension to the problem. Children in rural areas are likely to live relatively further from school than their urban counterparts, which may have a bearing on such matters as school attendance, likelihood of completion of a given grade and even the probability of their attending a school at all.

As fertility declines, there is less constraint on the educational system since the proportion of children of school age declines. Given the same proportion of GNP allocated to education, countries then have the option of increasing the proportion of eligible children in school or spending more on those attending. Thus, given an amount of educational investment, the rate of population growth in the school-age groups largely determines the pace of advance towards national goals for education. In turn, the advance in education is a major determinant of fertility levels and demographic change.

Working-age population

The chronic imbalance that exists in the supply and demand for labour in most of the developing countries is continuously exacerbated as every year ever-increasing cohorts of children reach working age. Table 15 shows that between 1970 and 1980 the number of persons of working age (15 to 64) in countries in the ESCAP region rose from 1.1 billion to 1.5 billion and is expected to reach 1.9 billion in 1990. In proportionate terms, the growth is expected to be most marked in Middle South Asia, which contains many of the most populous and poorest countries of the region. Even when fertility begins to decline there is no immediate slowing down in the growth of the labour force, which at such times will, other things being equal, tend to grow at a faster rate than the population. In almost every developing country, labour force growth has been and continues to be too rapid in relation to the capacity of the economies to generate employment.[21]

Rapid growth in the working-age population does not necessarily lead to increasing unemployment although it makes the attainment of full employment more difficult and costly. Full employment at times of rapid population growth can be achieved either through increased capital accumulation or through the generation of more labour-intensive techniques. But the greater the growth of the working-age population the greater are the needs for additional job opportunities and the demand for investment. Creating sufficient urban industrial jobs to absorb the growing work force appears to be more or less impossible, given the over-all low proportion of urban industrial employment. For example, if the share of industrial employment is 20 per cent and the labour force as a whole is growing at 3 per cent per annum, industrial employment would have to grow at 15 per cent per annum to absorb the growing labour supply. It is unlikely that such rates can be achieved throughout most of Asia. Hence, agriculture will have to absorb most of the new entrants into the labour force, either through an expansion in the land/capital base or through the adoption of labour-intensive technology. The evidence is mixed as to the potential for labour absorption in Asian agriculture. ILO studies suggest that the "success" stories of East and East South Asia (Japan, the Philippines and the Republic of Korea, for example) cannot be readily repeated in the more populous regions of Middle South Asia.[22]

[20] See tables 111 and 112 in source cited in footnote 3.

[21] See G.M. Farooq, "Population growth, manpower and employment", in W.C. Robinson, ed., *Population and Development Planning* (The Population Council, 1975).

[22] See ILO/ARTEP, *Labour Absorption in Agriculture: The East Asian Experience* (Bangkok, July 1980) and A.R. Khan and Eddy Lee, "The expansion of productive employment in agriculture: the relevance of the east Asian experience for developing Asian countries", ILO-ARTEP, Bangkok, Occasional Paper, May 1981.

Table 15. Estimated and projected numbers of persons aged 15-64, 1970, 1980 and 1990, ESCAP region and most populous countries

Country or area	Persons aged 15-64 (in millions)			Percentage change	
	1970	1980	1990	1970-1980	1980-1990
ESCAP region	1 136.3	1 455.1	1 884.9	28	27
East Asia	565.3	712.1	881.7	26	24
China	473.0	605.0	760.5	28	26
Japan	71.9	78.9	86.3	10	9
South East Asia	156.7	203.3	263.5	30	30
Indonesia	66.5	85.2	107.8	28	26
Middle South Asia	402.7	526.6	683.2	31	30
Bangladesh	34.9	45.5	61.6	31	35
India	299.8	389.4	499.6	30	28
Pakistan	33.2	45.3	61.9	36	37
Oceania	11.5	14.1	16.5	22	17

Rapid growth in the labour force also means that a large portion of all workers are young and inexperienced. Unless accompanied by technological innovations and training, inexperienced workers may be less productive and as a result average productivity may be lower. This in turn can depress *per capita* output and reduce the resources available for new investments. Moreover, if there are ever-increasing numbers of unskilled workers coming into the labour force, then there will be a tendency for wages to be depressed and for wages of unskilled workers to fall relative to those for skilled workers, thereby increasing inequality in society.

Family planning

Just as the population of working age has grown and continues to grow rapidly, the same also holds for the female population of reproductive age, that is, aged 15 to 49. Table 16 shows that in the ESCAP region as a whole, the number of women of reproductive age is expected to continue to grow rapidly for the next two decades, increasing by 27 per cent between 1980 and 1990 and by a further 18 per cent in the following 10 years. The increases are expected to be proportionately higher in East South Asia and Middle South Asia. Although this does not, of course, imply that there will be a corresponding growth in the number of births, which depends on the level of future fertility rates, the potential for very large further increases is apparent. This potentiality has clear implications for countries with declared goals of trying to reduce population growth through active family planning programmes.

Most population policy-makers now agree that a practical policy for reducing birth rates, and hence moderating rapid population growth rates, requires both socio-economic change and the provision of family planning services. The former includes development measures designed to spread the level of education, increase employment opportunities and lower infant and childhood mortality. In the adoption of family planning, the emphasis is often on providing services where they are potentially most cost-effective, that is, where social and economic conditions are sufficiently advanced to suggest that a demand for family planning exists. But there is an urgent need to spread family planning services to the rural masses where this has not already occurred. Indeed, family planning programmes have been successful in China and Indonesia, for example, where *per capita* income is low and where the bulk of the population is still rural.

Table 16. Projected number of women of childbearing ages, 15-49, 1980, 1990 and 2000, ESCAP region and most populous countries

Country or area	Women aged 15-49 (in millions)			Percentage change	
	1980	1990	2000	1980-1990	1990-2000
ESCAP region	598.7	759.5	895.2	27	18
East Asia	286.3	357.3	394.0	25	10
China	240.0	311.6	348.2	28	12
Japan	30.7	31.5	29.4	3	−7
South East Asia	87.4	112.6	140.0	29	24
Indonesia	36.5	45.6	54.6	25	20
Middle South Asia	219.5	283.0	353.8	29	25
Bangladesh	19.2	26.1	35.6	36	36
India	162.2	205.5	249.1	27	21
Pakistan	18.9	25.9	35.3	37	36
Oceania	5.5	6.5	7.4	20	13

According to official government statistics, China reduced its birth rate from 34 per 1,000 in 1970 to 18 in 1979, a decline unparalleled in any of the other large and poor developing countries.[23] The main features of the Chinese family planning programmes are (a) the very strong commitment to the programme of the national leadership, (b) a highly organized social structure with strong political control, in which leaders at all levels are held responsible for birth planning activities and families are induced to comply with reproductive norms, (c) continuous education and motivation campaigns and (d) widespread availability of a variety of fertility control methods.

Results from the World Fertility Survey show that there are very wide variations between and within countries in Asia and the Pacific with respect to knowledge of contraceptive methods and in the proportions of women using various types of contraception.[24] For example, among ever married women aged 30-34, the proportion who reported never having practised contraception was 93 per cent in Nepal, 86 per cent in Pakistan and 80 per cent in Bangladesh, compared with corresponding figures below 50 per cent in Fiji, Malaysia, the Philippines, the Republic of Korea, Sri Lanka and Thailand.[25] There are also wide urban and rural differentials in contraceptive knowledge between and within countries.[26]

Table 17 shows that the percentage of government expenditure currently allocated to family planning is only a minute fraction of the total government budget. However, in several of the countries shown expenditure on family planning exceeds 10 per cent of the health budget. A large proportion of expenditure on family planning programmes comes from external aid. Thus, for example, in 1976 about two thirds of Bangladesh's expenditure on family planning came from external assistance.[27] But external assistance is potentially unstable, being influenced by the vicissitudes of the world's economy.

[23] "Population and birth planning in the People's Republic of China", *Population Reports*, Series J, No. 25, January-February 1982, The Johns Hopkins University, Baltimore.

[24] See M. Vaessen, "Knowledge of contraceptive methods", WFS *Comparative Studies*, No. 8, 1980, and E. Carrasco, "Contraceptive practice", WFS *Comparative Studies*, No. 9, 1981.

[25] See table 11 in the second source cited in footnote 24.

[26] R.E. Lightbourne, "Urban-rural differentials in contraceptive use", WFS *Comparative Studies*, No. 10, 1980.

[27] See table 10 in publication cited under table 17.

Table 17. Percentage of government expenditure allocated to family planning and health, 1978, selected countries in the ESCAP region

Country	Family planning as percentage of total		Health as a percentage of total Government budget
	Government budget	Health budget	
Bangladesh[a]	2.4	45.1[b]	5.3[b]
India	0.5	11.1	4.7
Indonesia	0.2	23.2	1.0
Malaysia (Peninsula)	0.1	2.0[b]	5.2[b]
Philippines	0.4	11.8	3.6
Republic of Korea	0.2	16.1	1.1
Singapore[a]	0.1	1.3	5.8
Thailand	0.1	1.7	4.2

Source: Extracted from table 17 in D. Nortman, and E. Hofstatter, "Population and family planning programmes: a compendium of data through 1978", in *Population Council Factbook*, 1980.

[a] 1976 is the latest year for which estimates were available.

[b] The family planning budget is not included in the health ministry budget.

With this in mind and the apparent widespread preference for smaller family size as frequently expressed by younger and older married women in surveys, governments will have to give serious consideration to allocating a higher proportion of national budgets to family planning programmes. There is uncertainty as to the effectiveness of spending on family planning relative to other expenditures that also have both general development and fertility reducing effects. However, family planning programmes have an important role to play in reducing population growth. But, as with health and education, it is the poorest countries, and areas within these countries, that are least well served and it is to these countries and sections of the community that most effort will have to be directed in the future.

The elderly

The elderly, defined as those aged 65 and over, are the fastest growing section of the population. The number of elderly persons in the ESCAP region is expected to grow from 109 million in 1980 to 145 million in 1990 and to reach 194 million by the year 2000, thereby coming to constitute 6 per cent of the total population, compared with 4 per cent at present. There is a large sex disparity among the elderly with females considerably outnumbering males because of their lower death rates at the older ages. Moreover, the elderly are often disproportionately concentrated in rural areas.

The growth of the elderly population has some important development implications as there is a considerable lack of social and welfare services available to them in many developing countries, particularly in rural areas.[28] Elderly persons make a considerable demand on health and social services where these are available because of the illnesses and physical and mental disabilities that accompany aging. As most elderly persons are survivors of generations which had large families, there has perhaps been an over-reliance on the extended family to care for them. However, with changing family system and family size norms, government and voluntary social and welfare services will have to grow if countries are seriously concerned to maintain a given quality of life and alleviate suffering. This will inevitably entail increased government expenditure.

[28] See "Report of the Technical Meeting on Aging for the Asian and Pacific Region" (SD/RPHWAA/1).

Table 18. Estimated and projected proportions of the population living in urban and rural areas, ESCAP region and most populous countries, 1980, 1990 and 2000

Country or area	Urban areas			Rural areas		
	1980	1990	2000	1980	1990	2000
ESCAP region	28	33	40	72	67	60
East Asia	32	38	45	68	62	55
China	25	31	39	75	69	61
Japan	78	83	86	22	17	14
South East Asia	23	28	36	77	72	64
Indonesia	20	25	32	80	75	68
Middle South Asia	23	28	34	77	72	66
Bangladesh	11	16	22	89	84	78
India	22	27	34	78	73	66
Pakistan	28	34	41	72	66	59
Oceania	76	80	82	24	20	18

Population distribution

Major shifts have occurred and continue to occur in the population distribution within countries.[29] The ESCAP region has become increasingly more urbanized. From 1980 onwards, it is expected that the annual increments to the urban population will be larger than those to the rural population, which is a reversal of the earlier situation. Table 18 shows that on the basis of projected trends, the proportion of the population living in urban areas will grow from 28 per cent in 1980 to 33 per cent in 1990 and will reach 40 per cent by the end of this century. The increasing trend in urbanization is projected to occur in all countries in the region, albeit from different levels and at different rates.

These changes over time in the relative distribution of the population between urban and rural areas result from a combination of the effects of rural to urban migration, reclassification of rural areas to urban and to a lesser extent differential rates of natural increase.

[29] See two other background papers prepared by the secretariat for the Conference, namely, "Internal migration in the ESCAP region" (POP/APCC.3/BP/2) and "Urbanization in the ESCAP region" (POP/APCC.3/BP/5).

There is considerable country concern about imbalances in population distributions and the high rates of population growth in urban areas. Urban overconcentration is seen as the dominance of just a few cities. The occurrence of primacy where the largest city is at least twice the size of the second largest city is seen, for example, in Bangladesh, Pakistan, the Philippines, the Republic of Korea and Thailand. The trend towards primacy is also occurring in Indonesia, Malaysia and Sri Lanka. A few large cities in these countries tend to demand a disproportionate share of resources for social and economic development.

In particular, many countries are concerned about the continuous flow of population from rural to urban areas, which is an important contributory factor to the much higher growth rates of urban areas. Increasing urbanization tends to produce a conflict between the objectives of economic development and a geographic distribution which is favourable to full utilization of resources. This phenomenon is termed the urban bias in development, whereby urban areas are often viewed as draining the wealth of rural sectors. Moreover, there is often an absence of effective ties between the urban economy and the rural areas that support it with food and workers.

Rural to urban migration is in part the result of the increasing creation of nuclei of modern-sector activities in primarily rural countries and in part due to the rapid demographic growth of rural areas which are often incapable of absorbing the ever-growing numbers of young agricultural workers. Young people leave their villages in search of jobs in the towns which will help them and their family (through remittances) in economic advancement. Another factor is the lack of adequate educational opportunities in rural areas, which often results in heavy student migration.

However, the large drifts to the big cities often, but not necessarily, aggravate the difficulties of matching population growth with expansion of employment opportunities, housing and other social services. This in turn can have the effect of increasing unemployment, generating squatter settlements, increasing crime, poverty, pollution and congestion and generally lowering the quality of life in urban areas, which, other things being equal, already demand a disproportionate amount of national resources to cope with urban renewal. Further, rural to urban migration often creates imbalances in the sex and age structures of both the sending and the receiving areas.

Summary

In spite of the improvements in the frequency and quality of demographic data collected in recent years, there are still big gaps in our knowledge of the demographic situation in the ESCAP region. The available evidence suggests that the population growth rate of the ESCAP region declined between 1970 and 1980, as compared with the preceding decade, but that its rate of decline was slow. Within this overall picture, there is wide variation, with the most developed countries having annual growth rates around 1per cent and some of the least developed countries having a figure nearer 3 per cent. The main factors associated with the high growth rates are the past high levels of fertility resulting in young age structures and continuing high fertility in some countries, notably in middle south Asia.

The population of countries in the ESCAP region is expected to grow from 2.5 billion in 1980, to 2.9 billion in 1990 and to 3.4 billion persons by the year 2000. This massive growth in numbers, which will be most pronounced in Middle South Asia, will occur despite projected continuing moderation in annual population growth rates. Fertility is expected to continue its downward trend, assuming a more widespread and equitable distribution of health, education and family planning services. Mortality is expected to fall further too from its current levels, where life expectancy is often at or around 50 years. In several countries, more than 10 in every 100 babies born die before their first birthday. Extension of primary health care services is seen as the key to reducing this figure.

Rapid population growth and poverty tend to reinforce each other. Low income, lack of education and high infant and childhood mortality contribute to high fertility, which in turn is associated with high rates of natural increase. High rates of natural increase feed back to depress socio-economic development. High population growth rates and their correlates of young age structures and heavy concentrations of persons in the non-productive ages tend to depress production and burden government expenditure with high costs for social overhead needs.

Rapid population growth is an important factor in the persistence of chronic undernutrition and malnutrition. It increases the magnitude of the task of improving the educational system and is the main factor in the over-rising number of persons not receiving schooling. It also exacerbates the problem of substandard housing that is widely prevalent throughout Asia.

Moreover, as ever-increasing cohorts of children reach working age, the large imbalance that exists in the supply and demand for labour, particularly in rural areas, is worsened. This in turn is associated with the major drift from rural to urban areas, with its concomitants of increased urban unemployment, squatter settlements, poverty, crime and pollution.

In the light of the above it seems to be essential that the population factor is explicitly taken into account in development issues and planning during the foreseeable future.

Annex

Population enumerated in the 1980 round of population censuses in the countries and areas of the ESCAP region

Country or area	Census date	Enumerated population (millions)
East Asia		
China	1 July 1982	1 026.5[a]
Hong Kong	9 March 1981	5.0
Japan	1 October 1980	117.1
Mongolia	5 January 1979	1.6
Republic of Korea	1 October 1980	37.4
South East Asia		
Brunei	26 August 1981	0.2
Indonesia	31 October 1980	147.5
Malaysia	10 June 1980	13.7
Philippines	1 May 1980	47.9
Singapore	24 June 1980	2.4
Thailand	1 April 1980	44.3
Viet Nam	1 October 1979	52.7
South Asia		
Afghanistan	23 June 1979	13.1[b]
Bangladesh	6 March 1981	87.1
India	1 March 1981	683.8
Maldives	31 December 1977	0.1
Nepal	22 June 1981	15.0
Pakistan	15 March 1981	83.8
Sri Lanka	1 March 1981	14.9
Pacific		
Australia	30 June 1981	14.9
New Zealand	24 March 1981	3.2
Papua New Guinea	22 September 1980	3.0

Source: United Nations, *Population and Vital Statistics Report: Data Available as of 1 October 1982.*

Notes: [a] Taken from *China Daily*, 28 October 1982.

[b] Excluding nomads.

1.3 DETERMINANTS OF RECENT DECLINES IN FERTILITY IN THE ESCAP REGION

by

ESCAP Population Division

Introduction

A salient feature of the recent demographic trends in the ESCAP region is the declining annual rate of population growth from 2.2 per cent in 1960-1970 to 2.0 per cent in 1970-1980. A major contributor to this trend is the decline in the crude birth rate in the region in the corresponding period. The birth rate continued to decline in the ESCAP region from an estimated 37 per 1,000 population in 1965-1970 to 29 in 1975-1980, which corresponds to 20 per cent decline in a span of 10 years. The pace of decline has varied among different subregions within the region, as well as among countries within the same subregion. The decline in the birth rate has been spectacular in East Asia, mainly because of China, followed by East South Asia, while the performance has been relatively the least impressive in Middle South Asia excluding India and Sri Lanka. These variations in fertility declines by themselves suggest the need for a detailed examination of the patterns of fertility decline and furnish additional dimensions of interest and scope for the study of the determinants of the recent declines of fertility in the region.

Magnitude and patterns of fertility decline

The 1970s marked the beginning of noticeable fertility declines in the countries of the ESCAP region. As expected, the trends of these declines represent a wide range of variation among the countries as well as subregions. Between 1965-1970 and 1975-1980, the variation ranges from a near-stationary crude birth rate in Papua New Guinea to a 34 per cent decline in China. In terms of the total fertility rate, which is a more sensitive measure of fertility, the change during the same period ranges from the static level of fertility in Afghanistan to a 42.5 per cent decline in Hong Kong. Classifications of the countries according to the range of decline in the levels of fertility are presented in tables 1 and 2.

Table 1. Classification of countries or areas according to percentage decline in crude birth rates, 1965-1970 to 1975-1980

0-4 per cent	5-9 per cent	10-19 per cent	20-29 per cent	30-39 per cent
Afghanistan	Bangladesh	Australia	Indonesia	China
Bhutan	Pakistan	Fiji	New Zealand	Democratic Kampuchea
Burma		Hong Kong	Republic of Korea	Singapore
Iran		India	Thailand	
Lao People's Democratic Republic		Japan		
Nepal		Malaysia		
Papua New Guinea		Philippines		
		Sri Lanka		

Source: In this volume, paper 1.2, table 5.

Table 2. Classification of countries or areas according to percentage decline in total fertility rates, 1965-1970 to 1975-1980[a]

0-4 per cent	5-9 per cent	10-19 per cent	20-29 per cent	30-39 per cent	40-49 per cent
Afghanistan	Iran	India	Australia	China	Hong Kong
Bangladesh	Mongolia	Japan	Fiji	Democratic Kampuchea	Singapore
Bhutan		Pakistan	Indonesia	New Zealand	
Papua New Guinea		Philippines	Malaysia		
Viet Nam		Sri Lanka	Republic of Korea		
			Thailand		

Source: In this volume, paper 1.2, table 6.

[a] There was a negligible increase (0-4 per cent) in the total fertility rate during this period in Burma, the Lao People's Democratic Republic and Nepal.

It is quite evident from tables 1 and 2 that significant declines in fertility have been taking place in the countries of East Asia, Australia, New Zealand and some of the ASEAN countries. Countries of Middle South Asia have experienced some declines, but they are not as fast as those of East Asia. While the monitoring of the magnitude of these changes is interesting and important, the study of the pattern of these changes is in some respects even more important and appears more pertinent to the focus of this paper.

The frequency of childbearing not only varies markedly from one population to the other but also from one age group to another within the same population. In fact, the emerging characteristic pattern of childbearing for each population arises out of the result of many interesting forces. As these forces are mostly related to age, the characteristic pattern is best viewed by examing the age-specific fertility rates, which are defined as the number of births per women-years of exposure of a specified age or age group. This section examines the age pattern of changes in fertility levels.

Reliable data on age-specific fertility rates are not readily available for most countries of the region. Fortunately, some of the countries which participated in the World Fertility Survey (WFS) programme provide the opportunity for such detailed analysis of the pattern of change. Hence, this analysis is being limited to seven countries which fairly represent the different subregions. These are some of the most reliable and comparable data on the pattern of fertility and its changes. An important limitation of these data, however, is that they mostly refer to the mid-1970s and hence do not reflect the current situation; but they are the most recent data available. It needs to be recognized that changes probably occurred at a faster rate in the period 1975-1980, but it is assumed that the pattern of change did not change drastically in this later period. For the purpose of this analysis, the changes in age-specific fertility and age-specific marital fertility rates will be examined. Owing to limitations of the survey data, the comparison will be limited to the two periods 1966-1970 and 1970-1975.

The comparisons of age-specific fertility rates and age-specific marital fertility rates are presented in table 3. From the first panel of table 3, it can be seen that the fertility rates of the age group 10-14 years have dropped significantly to the extent of 46 per cent in Pakistan, 63 per cent in Bangladesh and 67 per cent in Indonesia, while there has been no change in Fiji and Thailand. The over-all shape of the decline shows three distinct patterns: (a) a U-shaped decline with sharp declines in the two extreme age groups – less than 20 and 40-44 years – in Bangladesh, Fiji, Indonesia and Sri Lanka; (b) in Thailand, the decline becomes gradually faster with higher ages with a slight dent in the age group 35-39; (c) in the Republic of Korea, the decline starts from age 25 and increases progressively with age, rather sharply from age 35. Pakistan's data show a unique pattern with a significant decline in younger age groups and an increase in fertility in two higher age groups. There is no apparent reason for such

Table 3. Comparison of fertility rates for two periods, 1966-1970 and 1971-1975

(1) Age-specific fertility rates

	Age group								
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	TFR (15-44)
Bangladesh									
1966-1970	.046	.309	.375	.348	.298	.202	.101	–	8.615
1971-1975	.017	.230	.315	.268	.219	.148	.061	.013	6.205
Percentage change	−63.0	−25.5	−16.0	−23.0	−26.5	−26.7	−39.6	–	−28.0
Fiji									
1966-1970	.001	.076	.269	.247	.179	.117	.073	.012	4.805
1971-1975	.001	.060	.233	.218	.158	.089	.038	.009	3.980
Percentage change	0.0	−21.1	−13.4	−11.7	−11.7	−23.9	−34.2	–	−17.2
Indonesia									
1966-1970	.012	.149	.262	.250	.212	.145	.096	–	5.570
1971-1975	.004	.127	.249	.226	.170	.116	.052	.020	4.700
Percentage change	−66.7	−14.8	−5.0	−9.6	−19.8	−20.0	−45.8	–	−15.6
Pakistan									
1966-1970	.013	.180	.324	.326	.275	.161	.026	–	6.460
1971-1975	.007	.159	.283	.312	.255	.179	.052	.002	6.200
Percentage change	−46.2	−11.7	−12.7	−4.3	−7.3	+11.2	+100.0	–	−4.0
Republic of Korea									
1966-1970	.000	.016	.187	.327	.209	.120	.061	.027	4.600
1971-1975	.000	.016	.200	.316	.195	.087	.037	.006	4.255
Percentage change	0.0	0.0	+7.0	−3.4	−6.7	−27.5	−39.3	–	−7.5
Sri Lanka									
1966-1970	.002	.062	.185	.252	.217	.142	.066	–	4.620
1971-1975	.001	.038	.150	.207	.182	.117	.043	.012	3.685
Percentage change	−50.0	−38.7	−18.9	−17.9	−16.1	−17.6	−34.8	–	−20.2
Thailand									
1966-1970	.001	.083	.260	.286	.235	.192	.118	.055	5.870
1971-1975	.001	.069	.210	.220	.177	.149	.068	.020	4.465
Percentage change	0.0	−16.9	−19.2	−23.1	−24.7	−22.4	−42.4	–	−23.9

Table 3. *(continued)*

(2) Marital age-specific fertility rates

	Age group							
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	TFR (15-44)
Bangladesh								
1966-1970	.143	.350	.385	.364	.318	.226	.110	8,675
1971-1975	.138	.303	.335	.283	.238	.172	.078	7.045
Percentage change	−3.5	−13.4	−13.0	−22.3	−25.2	−22.1	−30.0	−18.8
Fiji								
1966-1970	.105	.340	.354	.271	.192	.125	.076	6.790
1971-1975	.923	.363	.363	.249	.170	.099	.044	6.440
Percentage change	[a]	+6.8	+2.5	−8.1	−11.5	−20.8	−42.1	−5.2
Indonesia								
1966-1970	.154	.280	.309	.276	.236	.164	.111	6.880
1971-1975	.116	.300	.311	.252	.189	.136	.063	6.255
Percentage change	−24.7	+7.1	+0.6	−8.7	−19.9	−17.1	−43.2	−9.1
Pakistan								
1966-1970	.182	.317	.376	.350	.292	.205	.115	8.275
1971-1975	.131	.324	.354	.346	.278	.199	.072	7.865
Percentage change	−28.0	+2.2	−5.9	−1.1	−4.8	−2.9	−37.4	−5.0
Republic of Korea								
1966-1970	.000	.310	.382	.354	.221	.133	.072	7.360
1971-1975	.000	.351	.417	.357	.207	.095	.043	7.350
Percentage change	0.0	+13.2	+9.2	+0.8	−6.8	−28.6	−40.3	−0.1
Sri Lanka								
1966-1970	.234	.369	.361	.321	.252	.160	.071	7.670
1971-1975	.345	.374	.358	.296	.214	.138	.052	7.160
Percentage change	+47.4	+1.4	−0.8	−7.8	−15.1	−13.8	−26.8	−6.6
Thailand								
1966-1970	.233	.374	.392	.342	.264	.218	.133	8.615
1971-1975	.264	.397	.362	.278	.209	.171	.079	7.480
Percentage change	+13.3	+6.1	−7.7	−18.7	−20.8	−21.6	−40.6	−13.2

Source: United Nations printouts for comparative analysis of the World Fertility Survey data.

[a] Owing to small number of women in this case, the figure appears to be unusually high.

a sudden increase in fertility in the two older age groups except for errors in the data. Data from second panel of table 3 show that age-specific marital fertility rates for the age group 15-19 increased during the period 1971-1975 in all countries except Bangladesh; however, the increments were modest in most cases. There is also an increasing trend in the other younger age groups (20-29) in some countries. There is a noticeable decline in marital fertility rates from the age group 30 and over in all countries of the region, although there are wide variations in the magnitude of the changes between the ages within a country and between the countries. The increasing trends in the younger age groups (20-29) in some countries counterbalance the declines in older age groups (30 and over). For example, the increase in marital fertility in the younger three most fertile age groups in the Republic of Korea wipes out the influence of the rapid fertility declines in the older age groups, with the result that the total marital fertility rate remaines unchanged between the two periods, 1966-1970 and 1971-1975. However, the increase in marital fertility in the younger more fertile age groups may be indicative of a new pattern of childbearing of the Korean women whereby the span of childbearing is squeezed into the early part of the reproductive life. The plateau observed in the decline of completed family size in the Republic of Korea after years of steady decline may be an important pointer to the other nations experiencing a decline in fertility in recent years to the effect that a significant drop in the family size cannot be achieved in the absence of a basic change in the values determining family size.[1]

Comparison of the fertility experiences in a given period of time of the real cohort with that of the synthetic cohort in a recent period should lend further support to the contention that there have been fertility declines in recent years. Such a comparison is presented in table 4, which shows the cumulative fertility experiences of the real cohort aged 45-49 in 1971-1975 and that of the synthetic cohort resulting from the experiences in 1971-1975 of the different real cohorts aged 10-14 to 45-49. It can be seen that the total fertility rates of the synthetic cohort are lower than the actual completed family size of the real cohort, which indicates that there have been recent declines in fertility in the countries considered here. The highest decline (38.5 per cent) is observed in Fiji, which is closely followed by Sri Lanka (36.8 per cent). Notable declines are also observed in the Republic of Korea (26.9 per cent) and Thailand (31.8 per cent). In Bangladesh, Indonesia and Pakistan there are marginal declines in the range of 5 to 7 per cent. The pattern of decline observed from this comparison is also very consistent with what has been found earlier.

The observed decline in age-specific fertility rates, for example, can be due to changes in the nuptiality pattern (changes in age at first marriage and proportion married), the incidence of abortion, fecundity and contraceptive use. Changes in fertility for reasons other than the changes in nuptiality pattern can be seen from the data comparing the changes in age-specific fertility rates with that of the age-specific marital fertility rates as presented in table 5.

A notable feature that emerges from the pattern of decline observed in table 5 is that most of the decline in the younger ages is due to change in nuptiality pattern alone and the significant declines in the older ages, as expected, are due to contraception. The net effect of the changes is summarized in the observed changes in total fertility rates, which show that more than half of the change in fertility level is attributable to changes in nuptiality pattern.[2]

Determinants of fertility decline

From the foregoing discussion, it is apparent that fertility has been declining at various rates for a majority of the ESCAP countries. In order to ascertain the future trends of fertility, it is essential to study the determinants of this declining fertility. However, this is an area in which information is not readily available. The WFS data will be used here as an essential basis for the discussion on the determinants of fertility decline in the region.

The determinants of fertility decline can be classified into three categories: demographic, socio-economic and family planning programme

[1] Sawon Hong, Soon Choi, Nam Il Kim and Rae Young Park, *Population Status Report* (Korean Development Institute, 1978), p. 85. "A strong preference for sons has been cited frequently as major cause of high fertility in Korea... Even at present, when both family size norms and infant mortality are lower than in the past, the desire for sons continues to present a major obstacle to reducing fertility".

[2] The data presented in the table do not give the exact magnitude of the contribution, but they are sufficiently indicative of the same.

Table 4. Comparison of age-specific fertility rates of real cohort aged 45-49 and synthetic cohort (SYN) during the period 1971-1975

(Cohort : period rates)

Age	Bangladesh		Fiji		Indonesia		Pakistan		Rep. of Korea		Sri Lanka		Thailand	
	Real (45-49)	SYN	(45-49)	SYN	(45-49)	SYN	(45-49)	SYN	(45-49)	SYN	(45-49)	SYN	(45-49)	SYN
10-14	.023	.002	.020	.000	.013	.000	.005	.000	.000	.000	.009	.000	.001	.001
15-19	.119	.105	.125	.023	.058	.036	.088	.052	.062	.005	.069	.008	.033	.026
20-24	.255	.287	.270	.192	.179	.191	.273	.234	.262	.105	.221	.101	.197	.160
25-29	.284	.294	.306	.229	.231	.248	.302	.298	.264	.298	.281	.187	.326	.223
30-34	.256	.252	.290	.178	.231	.207	.296	.299	.281	.245	.274	.198	.325	.194
35-39	.233	.187	.204	.114	.181	.150	.236	.226	.199	.124	.203	.155	.256	.161
40-44	.152	.107	.079	.048	.115	.091	.137	.133	.072	.056	.097	.075	.141	.108
TFR (15-44)	6.495	6.160	6.370	3.920	4.975	4.615	6.660	6.210	5.700	4.165	5.725	3.620	6.390	4.360
Percentage change in TFR		−5.2		−38.5		−7.2		−6.8		−26.9		−36.8		−31.8

Source: ESCAP, *A Report on Levels and Trends of Fertility in the ESCAP Region: Comparative Analysis of World Fertility Survey Data*, Asian Population Studies Series No. 50, table 14.

Table 5. Comparison of the changes in age-specific fertility rates with those of age-specific marital fertility rates between 1966-1970 and 1970-1975

Age	Bangladesh		Fiji		Indonesia		Pakistan		Rep. of Korea		Sri Lanka		Thailand	
	Percentage change in		Percentage change in		Percentage change in		Percentage change in		Percentage change in		Percentage change in		Percentage change in	
	ASFR	ASMFR	ASFR	ASMFR	ASFR	ASMFR	ASFR	ASMFR	ASFR	ASMFR	ASFR	ASMFR	ASFR	ASMFR
10-14	−63.0	−3.5	0.0	–	−66.7	−24.7	−46.2	−28.0	0.0	0.0	−50.0	−47.4	0.0	+13.3
15-19	−25.6	−13.4	−21.1	+6.8	−14.8	+7.1	−11.7	+2.2	0.0	+13.2	−38.7	−1.4	−16.9	+6.1
20-24	−16.0	−13.0	−13.4	+2.5	−5.0	+0.6	−12.7	−5.9	+7.0	+9.2	−18.9	−0.8	−19.2	−7.7
25-29	−23.0	−22.3	−11.7	−8.1	−9.6	−8.7	−4.3	−1.1	−3.4	+0.8	−17.9	−7.8	−23.1	−18.7
30-34	−26.5	−25.2	−11.7	−11.5	−19.8	−19.9	−7.3	−4.8	−6.7	−6.8	−16.1	−15.1	−24.7	−20.8
35-39	−26.7	−22.1	−23.9	−20.8	−20.0	−17.1	+11.2	−2.9	−27.5	−28.6	−17.6	−13.8	−24.4	−21.6
40-44	−39.6	−30.0	−34.2	−42.1	−45.8	−43.2	+100.0	−37.4	−39.3	−40.3	−34.8	−26.8	−42.4	−40.6
TFR (15-44)	−28.0	−18.8	−17.2	−5.2	−15.6	−9.1	−4.0	−5.0	−7.5	−0.1	−20.2	−6.6	−23.9	−13.2

Source: ESCAP, *A Report on Levels and Trends of Fertility in the ESCAP Region: Comparative Analysis of World Fertility Survey Data,* Asian Population Studies Series No. 50, table 10.

Table 6. Mean number of children ever born by age at first union for ever-married women

Age at first union	Bangladesh	Fiji	Indonesia	Malaysia	Pakistan	Philippines	Republic of Korea	Sri Lanka	Thailand
Under 15	4.21	5.78	3.92	5.46	4.70	6.16	6.20	5.75	4.59
15-17	3.10	4.22	3.33	4.89	4.07	5.44	5.28	4.73	4.38
18-19	2.62	3.27	3.10	4.25	3.75	4.83	4.01	3.97	4.12
20-21	1.97	3.18	3.00	3.36	3.10	4.38	3.18	3.44	3.75
22-24	2.09	2.93	2.64	2.89	2.49	3.79	2.44	2.82	3.28
25-29	1.91[a]	2.53	2.19	2.45	2.18	3.16	1.97	2.24	2.67
30-	9.06[a]	2.10	1.39	1.61	1.93[a]	2.12	1.18[a]	1.62	1.70
Total	3.97	3.82	3.46	4.22	4.17	4.58	3.59	3.94	3.93
Number	6 515	4 928	9 155	6 321	4 952	9 267	5 430	6 810	3 820

Source: ESCAP, "Age at first marital union and fertility", paper prepared for the United Nations Working Group on Comparative Analysis of World Fertility Survey Data, Geneva, 26-29 January 1982, table 4.

[a] Number of cases less than 20.

intervention. In this section of the paper, demographic and socio-economic factors are considered and the the programme effect in the next. The demographic determinants considered here are age. age at marriage and marital status composition. Among the socio-economic determinants considered are wife's education, place of residence, husband's occupation and wife's work pattern.

Age at marriage

The age at marriage is a strong determinant of the number of children borne by women. As the marriage age increases, the number of children ever born to women decreases. The evidence is shown in table 6 for nine countries of the region from the WFS surveys. A clearer picture would be obtained if the current age of the women was controlled, but none the less the table conveys the essential influence of the postponement of the age at marriage in reducing fertility in the countries of the region.

Marital status

In the countries of the ESCAP region where most of the reproduction takes place within marriage, the marital status exerts a dominant influence on childbearing. It is interesting to study the completed family size of ever-married women aged 40-49 according to the current status of their first marriages. This is examined in table 7 for 10 countries of the ESCAP region. It is seen that for most countries the women in stable marriages, that is, who continued in their first marriages, had at least one child more than those whose first marriages were dissolved by the death of the husband or divorce. Among these countries, the highest proportion of widowed among the ever-married women aged 40-44 is 19.7 in Bangladesh and the highest proportion of divorced and separated is 7.5 in Indonesia.[3] Changes is these proportions in the countries of the region can potentially influence the completed family size of the women.

Socio-Economic determinants

When fertility declines, it does not decline uniformly in all segments of the population. It is particularly the more advanced and modernized segments of the population where the decline first begins to appear. Therefore, the appearance of differentials in fertility by socio-economic variables is a good indicator of the early phase of fertility decline in the population. Fertility differentials are also of interest for the information they provide for the projection of changes in the social and economic conditions as a part of the development process. The fertility differentials by some of the socio-economic determinants given below can be interpreted in this framework.

[3] Mohammad Kabir "The Demographic characteristics of household populations", *Comparative Studies*, No. 6 (London, World Fertility Survey, 1980) p. 44, Table 3.10.

Table 7. Mean number of children ever born to ever-married women aged 40-49 by continuity of first marriage and whether remarried

Marital status	Bangladesh	Fiji	Indonesia	Malaysia	Nepal	Pakistan	Philippines	Republic of Korea	Sri Lanka	Thailand
First marriages not dissolved	7.67	6.64	6.31	6.57	5.88	7.29	6.96	5.76	6.00	6.71
Widowed :					4.75					
Remarried	5.58	5.36	4.59	5.85	NA	6.45	6.50	4.69	6.18	6.47
Did not remarry	5.54	5.78	4.75	6.02	NA	5.47	6.42	4.56	5.08	5.59
Divorced or separated :					3.00					
Remarried	5.98	4.90	4.43	4.93	NA	5.33	6.19	4.00	4.71	5.53
Did not remarry	6.61	3.91	2.93	3.61	NA	1.97	4.52	3.24	3.31	3.67
Number	1 121	1 056	2 214	1 757	1 236	1 123	2 610	1 544	2 003	1 040

Source: ESCAP, "Marital status composition and fertility", paper prepared for the United Nations Working Group on Comparative Analysis of World Fertility Survey Data, Geneva, 26-29 January 1982, table 7.

Note: NA = not available.

Wife's education

For the study of fertility differentials by wife's education, the mean number of children ever born to ever-married women by wife's education and broad marital duration groups is given in table 8. The common pattern which emerges from these data is that of an inverse relationship between education and fertility, with just one exception, Indonesia. The differentials usually appear after 10 years of marriage duration. Moreover, the effect of education in reducing fertility appears to begin only after a "more than primary" level of education. In Indonesia, the effect of education on fertility tends to be positive. Indonesia is different from the rest of the countries in respect of the relatively very high incidence of marriage dissolution. The greater marriage stability among the better educated women seems to be reflected in their higher level of fertility.

There are studies to indicate that the education of the husband is an equally significant determinant of the wife's fertility. This is expected in view of the husband's dominant role in decision-making in the countries of this region. From the data from Thailand, for which the tabulation of this information is available, the relationship between husband's education and fertility is similar in direction and strength to that between wife's education and fertility.[4] A part of the explanation for the similar nature of the two relationships is that educated men tend to marry educated women and vice versa. However, the inverse relationship of either wife's or husband's education with fertility holds even when the education of the other is held constant. There is thus evidence that both wife's and husband's education are important determinants acting in the direction of reduction in the level of fertility.

Place of residence

In societies undergoing social and economic transition in the process of development, urban living and life-styles promote the desire for smaller families and a reduction in fertility. This is examined in table 9, which shows the mean number of children ever born to ever-married women by marriage duration and urban-rural place of residence. The data in general show that women residing in urban areas have lower fertility than those living in rural areas. The differentials emerge especially after 10 years of married life. There are two exceptions, however, Indonesia and Pakistan, where urban fertility is slightly higher

[4] *Selected Factors Affecting Fertility and Fertility Preferences in Developing Countries* (ST/ESA/SER.R/37), pp. 19-21.

Table 8. Mean number of children ever born to ever-married women by number of years since first marriage and level of education

Years since first marriage; level of education	Pakistan		Malaysia		Fiji		Thailand		Sri Lanka		Nepal		Indonesia		Republic of Korea	
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$
Less than 10																
No education	1 586	1.5	305	2.2	192	1.9	122	1.8	264	1.9	2 074	1.1	817	1.2	82	2.5
Primary	169	1.4	1 413	2.0	531	2.0	1 221	1.8	814	1.7	154	1.2	1 397	1.4	1 103	2.0
More than primary	120	1.6	554	1.4	1 306	1.6	190	1.3	1 422	1.6	12	(1.1)	862	1.4	1 034	1.7
Total	1 875	1.5	2 350[a]	1.9	2 029	1.8	1 533	1.7	2 499	1.7	2 251	1.1	3 077	1.3	2 219	1.8
10-19																
No education	1 383	4.8	607	4.8	283	4.6	237	4.6	417	4.5	1 858	3.7	1 165	3.6	347	4.6
Primary	96	4.8	1 012	4.8	713	4.6	896	4.4	905	4.4	62	3.8	1 038	3.6	906	4.2
More than primary	47	4.1	148	3.4	592	4.0	56	3.4	779	4.0	4	(3.5)	474	4.2	366	3.3
Total	1 526	4.8	1 831[b]	4.7	1 588	4.4	1 189	4.4	2 102	4.3	1 928	3.7	2 676	3.7	1 620	4.1
20 or more																
No education	1 452	7.1	1 329	6.4	475	6.8	321	6.6	714	6.6	1 736	5.6	2 394	5.1	706	6.0
Primary	66	6.5	652	6:6	573	6.3	699	6.8	874	6.2	20	5.2	799	5.6	704	5.3
More than primary	29	6.3	65	4.9	263	5.5	34	4.3	391	5.6	2	(4.0)	156	5.9	162	4.3
Total	1 547	7.1	2 132[c]	6.4	1 311	6.3	1 054	6.7	1 979	6.2	1 761	5.6	3 350	5.2	1 581	5.6
All																
No education	1 420	4.4	2 241	5.4	950	5.2	680	5.1	1 395	5.1	5 668	3.3	4 376	3.9	1 135	5.3
Primary	196	3.4	3 077	3.9	1 817	4.4	2 816	3.8	2 593	4.2	236	2.2	3 235	3.1	2 713	3.6
More than primary	332	2.9	767	2.1	2 161	2.8	280	2.1	2 592	2.9	18	(1.9)	1 493	2.8	1 562	2.3
Total	4 948	4.3	6 313[d]	4.2	4 928	3.8	3 776	3.9	6 580	3.9	5 940	3.3	9 103	3.5	5 420	3.6

Source: United Nations, *Selected Factors Affecting Fertility and Fertility Preferences in Developing Countries* (ST/ESA/SER.R/37), pp. 17-18.

Note: Figures in parentheses indicate 20 or fewer cases.

[a] Total includes 78 women with religious and non-formal education.

[b] Total includes 64 women with religious and non-formal education.

[c] Total includes 86 women with religious and non-formal education.

[d] Total includes 228 women with religious and non-formal education.

Table 9. Mean number of children ever born by number of years since first marriage and type of place of residence

Years since first marriage; type of place of residence	Pakistan		Malaysia		Fiji		Thailand		Sri Lanka		Indonesia		Republic of Korea	
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$
Less than 10														
Urban	509	1.6	431	1.7	753	1.8	259	1.6	508	1.7	530	1.6	1 390	1.8
Rural	1 366	1.5	1 919	1.9	1 264	1.7	1 274	1.7	1 771	1.7	2 570	1.3	829	1.9
Total	1 875	1.5	2 350	1.9	2 029	1.7	1 533	1.7	2 499[a]	1.7	3 100	1.3	2 219	1.8
10-19														
Urban	407	5.1	279	3.9	531	4.0	158	3.9	405	4.1	429	4.0	779	3.6
Rural	1 119	4.7	1 552	4.8	1 050	4.6	1 031	4.5	1 493	4.4	2 251	3.7	840	4.4
Total	1 526	4.8	1.831	4.7	1 586	4.4	1 189	4.4	2 102[b]	4.3	2 631	3.7	1 620	4.1
20 or more														
Urban	403	7.1	312	6.3	480	5.7	134	5.7	323	5.8	473	5.5	661	4.8
Rural	1 144	7.1	1 820	6.5	832	6.7	920	6.8	1 438	6.4	2 883	5.2	991	6.1
Total	1 547	7.1	2 132	6.4	1 313	6.4	1 054	6.7	1 979[c]	6.2	3 356	5.2	1 581	5.6
All														
Urban	1 319	4.4	1 022	3.7	1 764	3.5	551	3.3	1 236	3.6	1 432	3.6	2 834	3.0
Rural	3 629	4.2	5 291	4.3	3 146	4.0	3 225	4.0	4 702	4.0	7 705	3.4	2 586	4.2
Total	4 948	4.3	6 313	4.2	4 928	3.8	3 776	3.9	6 580[d]	3.9	9 136	3.5	5 420	3.6

Source: Some as table 8.

[a] Total includes 221 women residing in an "estate" place of residence.

[b] Total includes 204 women residing in an "estate" place of residence.

[c] Total includes 217 women residing in an "estate" place of residence.

[d] Total includes 642 women residing in an "estate" place of residence.

than the rural fertility. In Pakistan, this may be because of better health and nutritional conditions and/or more complete reporting of births in urban areas. In Indonesia, it may be due to more complete urban reporting as well as greater stability of marriages in urban areas.

There is evidence from the Republic of Korea that fertility levels are not only influenced by the respondents' current residence, but are also affected by the place of childhood residence.[5] Thus, fertility increases from city to town to village for current place of residence as well as childhood place of residence. Moreover, fertility is the highest among women who grew up in villages and were residing there at the time of the survey and is the lowest among women with place of residence in cities both in childhood and at the time of the survey.

Husband's occupation

The occupation of the husband is often regarded as an index of the socio-economic status of the family. Relatively high fertility is generally associated with occupations in the primary industries, especially agriculture and mining, while lower fertility is associated with professional and technical categories and white-collar workers. Evidence to this effect is observed in table 10 in respect of the countries of the region with available data. The table shows the mean number of children ever born to ever-married women by marriage duration and husband's occupation. The most common feature of these findings is that couples with husbands engaged in agriculture tend to have the largest number of children. In contrast, wives of professionals, technicians, administrators and clerks tend to have the lowest fertility, while the fertility of wives of manual workers tends to be intermediate. Moreover, within the category of manual workers, the wives of skilled workers generally have fewer children than those of unskilled workers.

Wife's work pattern

The analysis of the relationship of wife's work pattern with fertility is available for only three countries in Asia, namely, Indonesia, the Republic of Korea and Sri Lanka. Here the work pattern is classified into three categories: ever worked since marriage, worked before marriage only and never worked. The mean number of children ever born to ever-married women by marriage duration and wife's work pattern is shown in table 11. Two distinct patterns are discernible. In the Republic of Korea and Sri Lanka, the lowest fertility is observed among women who have worked before marriage only, while in Indonesia the lowest fertility is among women who have ever worked since marriage. It is expected that married women with work experience will tend to have fewer children than those who have never worked. However, the exact nature and strength of this relationship is difficult to establish for several reasons. Women who have no children are more likely to take a paid job than those who have several, while some women deliberately restrict their family size to be able to work. However, some women work because the large family makes it necessary. These are some of the complications whereby the cause and effect are not easy to disentangle.

Family planning programme intervention and fertility decline

Most of the countries with large populations have now population policies of varying intensity, primarily focusing on control of population growth through the reduction of fertility. When these policies are translated into programmes, the basic thrust lies in the development of family planning programmes which provide the necessary motivational drive, back up the service delivery system and supply contraceptive materials. Proportionately large investments have been made to develop these programmes which are just starting to "pay off". It is therefore necessary here to examine the effects of family planning programmes on fertility decline.

The effects of family planning programmes in reducing the fertility level had been a point of great controversy among demographers and other professionals engaged in population research or action programmes. There were two contrasting views in this controversy. The cautiously optimistic group led by Donald J. Bogue, in view of the experiences in Sri Lanka in the early 1960s, for example, believed that by planned intervention, family planning programmes can induce a downward change in the birth rate in a high-fertility population.[6]

The other group tended to foresee a gloomy future for the nations with high population growth

[5] *Ibid.*, pp. 23-25.

[6] Donald J. Bogue, *Principles of Demography* (New York, Wiley, 1969), p. 824.

Table 10. Mean number of children ever born to ever-married women by number of years since first marriage and occupational status of husband

Years since first marriage; occupational status of husband	Pakistan		Malaysia		Fiji		Thailand		Sri Lanka		Indonesia		Republic of Korea	
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$
Less than 10														
Professional, managerial, technical, clerical	164	1.5	382	1.6	362	1.5	174	1.2	358	1.6	297	1.7	458	1.8
Sales and services	341	1.5	230	2.0	199	1.6	168	1.6	429	1.7	584	1.4	381	1.8
Agricultural	757	1.6	703	1.9	590	1.9	869	1.8	918	1.7	1 651	1.2	472	2.0
Skilled manual	353	1.5	925	1.9	563	1.8	275	1.7	552	1.6	548	1.5	704	1.8
Unskilled manual	261	1.5	108	2.2	314	1.8	41	1.7	207	1.8			126	2.0
Total	1 876	1.5	2 350	1.9	2 029	1.7	1 534	1.7	2 499	1.7	3 100	1.3	2 219	1.8
10-19														
Professional, managerial, technical, clerical	117	4.5	235	4.0	233	3.9	87	3.5	268	3.6	241	4.1	241	3.5
Sales and service	284	5.0	180	4.4	128	4.1	125	3.8	341	4.2	508	3.9	248	3.7
Agricultural	658	4.7	676	4.8	525	4.7	774	4.6	832	4.5	1 464	3.5	601	4.6
Skilled manual	295	4.9	645	4.8	431	4.3	157	4.2	403	4.2	448	3.8	360	3.8
Unskilled manual	172	4.8	96	5.0	266	4.4	44	4.3	250	4.4			128	4.2
Total	1 526	4.8	1 832	4.7	1 586	4.4	1 191	4.4	2 102	4.3	2 681	3.7	1 620	4.1
20 or more														
Professional, managerial, technical, clerical	105	7.0	179	5.6	179	5.8	92	5.2	151	5.1	179	5.7	199	4.7
Sales and service	270	7.2	259	6.5	72	6.2	100	6.3	307	6.0	635	5.4	192	4.9
Agricultural	712	7.1	985	6.5	531	6.8	719	7.1	961	6.5	2 064	5.1	778	6.2
Skilled manual	260	7.2	626	6.5	329	6.2	101	5.6	343	6.1	458	5.5	275	4.9
Unskilled manual	200	6.7	83	6.7	201	5.9	31	7.4	189	6.2			99	5.5
Total	1 547	7.1	2 132	6.4	1 313	6.4	1 045	6.7	1 979	6.2	3 356	5.2	1 581	5.6
All														
Professional, managerial, technical, clerical	385	3.9	796	3.2	774	3.2	353	2.9	777	3.0	716	3.5	898	2.9
Sales and service	895	4.3	669	4.5	399	3.2	393	3.5	1 077	3.7	1 727	3.6	821	3.1
Agricultural	2 129	4.4	2 364	4.6	1 646	4.4	2 362	4.3	2 711	4.3	5 179	3.4	1 851	4.6
Skilled manual	907	4.2	2 196	4.1	1 323	3.7	533	3.2	1 298	3.6	1 454	3.5	1 339	3.0
Unskilled manual	632	4.1	287	4.4	781	3.7	116	4.2	645	4.1			353	3.8
Total	4 948	4.3	6 314	4.2	4 928	3.8	3 770	3.9	6 580	3.9	9 136	3.5	3 420	3.6

Source: Same as table 8.

Table 11. Mean number of children ever born to ever-married women by number of years since first marriage and wife's pattern of work

Years since first marriage; wife's pattern of work	Sri Lanka		Indonesia		Republic of Korea	
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$
Less than 10						
Ever worked since marriage	869	1.6	1 773	1.3	941	2.0
Before marriage only	343	1.7	265	1.6	747	1.6
Never worked	1 286	1.7	1 062	1.4	529	1.9
Total	2 497	1.7	3 100	1.3	2 217	1.8
10-19						
Ever worked since marriage	954	4.2	1 888	3.5	1 105	4.2
Before marriage only	200	4.1	118	4.1	145	3.6
Never worked	944	4.4	675	4.3	368	3.8
Total	2 098	4.3	2 681	3.7	1 618	4.1
20 or more						
Ever worked since marriage	909	6.3	2 648	5.0	1 235	5.6
Before marriage only	117	5.9	119	6.2	76	5.0
Never worked	942	6.3	589	6.2	269	5.3
Total	1 969	6.3	3 356	5.2	1 580	5.6
All						
Ever worked since marriage	2 732	4.0	6 309	3.5	3 281	4.1
Before marriage only	660	3.1	502	3.3	968	2.2
Never worked	3 172	3.9	2 325	3.5	1 166	3.3
Total	6 564	3.9	9 136	3.5	5 415	3.6

Source: Same as table 8.

rates and they did not believe that population growth rates could be adjusted without concomitant social and economic changes in society. Adocates of this position, such as Judith Blake and Kingsley Davis, suggested that women in the developing countries wanted more children for a rational reason, that is, to balance the high infant and child mortality.[7] In the absence of an accepted theory of fertility change, both schools of thought gained prominence. For the practical consideration that something must be done to stop the runaway population growth, family planning programmes were instituted and at the same time development efforts were pursued in their own right. In the following paragraphs, evidence will therefore be presented of incremental success of the family planning programmes, as well as from the scientific studies that attempt to decompose the relative contribution of family planning programmes and socio-economic development towards the reduction of fertility.

[7] J. Blake, "Demographic science and the redirection of population policy", in M.C. Sheps and J.C. Riley, eds., *Public Health and Population Change*, (Pittsburgh, University of Pittsburgh Press, 1965), p. 41 and K. Davis, "Population policy: will current programmes succeed?", *Science*, 158:730, 1967.

Table 12. Current contraceptive use in year(s) specified among married women of reproductive age (MWRA) and distribution of users by method

Country or area and year	Age group	Percentage of MWRA using contraception	Percentage of current users relying on					
			All methods	IUDS	Pills and injections	Sterilization		Other
						Male	Female	
Bangladesh								
1975	15-49	8	100	6	36	6	4	48
1977	15-44	9	100	12	26	---- 25 ----		37
1979	15-49	13	–	–	–	–	–	–
1981	15-49	19	100	2	21	4	21	52
Fiji								
1974	15-49	40	100	11	20	---- 39 ----		30
1978	15-44	38	100	15	24	---- 44 ----		17
Hong Kong								
1969	15-44	42	100	*	38	*	*	62
1976	15-49	72	100	4	35	---- 26 ----		35
1979	15-44	79	100	3	36	1	22	38
Indonesia								
1967	15-49	16	100	21	57	0	1	21
1979	15-44	24	100	30	63	---- 2 ----		5
Iran								
1969	15-44	3	100	...	...	...	...	u
1978	15-44	23	100	9	86	---- 1 ----		4
Malaysia, Peninsular								
1969	15-44	6	100	2	91	---- 5 ----		2
1974	15-49	35	100	2	44	11	9	34
1979	15-44	36	100	3	69	---- 17 ----		11
Nepal								
1976	15-49	2	100	2	17	2	66	13
Pakistan								
1975	15-49	5	100	12	19	---- 19 ----		50
Philippines								
1972	15-44	8	100	23	61	0	0	16
1979	15-44	37	100	7	15	1	10	67

Table 12. *(continued)*

Country or area and year	Age group	Percentage of MWRA using contraception	Percentage of current users relying on					
			All methods	IUDS	Pills and injections	Sterilization		Other
						Male	Female	
Republic of Korea								
1972	15-44	30	100	41	31	----10----		18
1974	15-49	35	100	23	25	9	5	38
1978	20-44	49	100	20	13	11	22	34
Singapore								
1970	15-44	45	100	*	84	*	*	16
1978	15-44	71	100	4	24	1	30	41
Sri Lanka								
1975	15-49	33	100	15	6	----31----		48
1977	15-44	41	100	*	*	----44----		56
Thailand								
1971	15-44	10	100	30	62	----8----		u
1975	15-49	33	100	18	47	6	18	11
1979	15-44	39	100	12	60	----28----		u

Source: Dorothy L. Nortman and Ellen Hofstatter, *Population and Family Planning Programmes: A Compendium of Data through 1978*, 10th edition (New York, The Population Council, 1980); table 21, pp. 74-75.

Notes: Figures may not add up to 100 because of rounding.

* = included in "Other" category.

Use of contraception

The phenomenal growth of current contraceptive users in the late 1970s among married women of reproductive ages in most of the countries for which data are available is quite evident in table 12. However, there is a wide range of variations in the use of contraception among the countries. Another notable feature of the data presented in this table is the change in the pattern of contraceptive use towards more reliable and/or permanent methods of contraception. The increasing popularity of sterilization, particularly of the female, is quite noticeable. In most of these countries, the main source of information and supply of contraception is the Government-sponsored family planning programmes. It is therefore apparent that government programmes have made distinct contributions towards increased use of contraception.

The use of contraception tapers off at the two extreme age groups of exposed women, as can be seen from table 13. However, the use of contraception increases monotonically with the member of living children (table 14). Very few women with no living children practise contraception, but a sizable proportion (above 25 per cent) of women with one living child practise contraception in 6 out of 10 countries presented in table 14. For rapid reduction of fertility, it is necessary not only to focus on the women with a higher number of living children, but equal emphasis should be given to reaching younger women with fewer living children.

Table 13. Current contraceptive use in year(s) specified among women exposed to the risk of pregnancy in specified age groups

Country or area and year	Percentage of age group using contraception							
	Composite of ages shown	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Bangladesh								
1975	10	5	9	10	14	17	11	8
Fiji								
1974	56	----43----		54	62	63	----62----	
Hong Kong								
1976	72	----57----		73	84	88	80	49
Indonesia								
1976	37	16	33	40	43	42	43	36
Malaysia								
1970	18[a]	*	14	20	20	18	*	*
1974	38	21	38	48	45	42	36	16
Nepal								
1976	3	0	1	3	5	6	4	5
Pakistan								
1975	6[b]	0	3	7	8	11	8	7
Republic of Korea								
1971	24[a]	*	2	15	28	37	*	*
1974	46	18	19	36	51	60	52	45
1976	44	----15----		32	56	62	45	*
Sri Lanka								
1975	41	17	26	37	49	48	48	42
Thailand								
1975	37[b]	23	38	46	47	45	29	13
1978	35[c]	6	27	45	52	56	44	29

Source: Dorothy L. Nortman and Ellen Hofstatter, *Population and Family Planning Programmes. . .*, table 22, p. 76.

Notes: * Excluded from data.

[a] Percentage of currently married women using contraception.

[b] Percentage of married, non-pregnant women currently using contraception.

[c] Percentage of all women using contraception.

Table 14. Percentage of exposed women currently using contraception, by number of living children, for selected WFS countries[a]

Country	Total		Number of living children							
	Unstandardized	Standardized[b]	0	1	2	3	4	5	6	7
Bangladesh	10	10	3	7	8	11	12	13	15	16
Fiji	56	51	10	39	52	56	66	69	72	75
Indonesia	37	36	4	27	40	46	43	48	51	54
Malaysia	42	38	10	37	43	45	47	45	45	46
Nepal	3	4	0	1	2	3	5	9	9	11
Pakistan	7	7	0	2	4	7	9	12	14	16
Philippines	48	42	6	36	49	55	54	52	51	48
Republic of Korea	45	39	16	17	47	54	57	54	49	37
Sri Lanka	41	38	4	26	41	48	53	53	55	47
Thailand	45	42	10	38	47	53	58	52	45	43

Source: United Nations, *Report on Monitoring of Population Trends* (ESA/P/WP.68), table 2.23, p. 168.

[a] Data taken from WFS first country reports and from data tapes.

[b] Standardized on the distribution of exposed Bangladeshi women by number of living children.

Effect of family planning programmes on the decline in fertility

It has been established that significant declines in fertility are already taking place in a number of countries where family planning programmes are in operation. Many of these countries that have implemented family planning programmes, at the same time, have also been undergoing socio-economic changes such as reduction of infant and general mortality, increasing level of female education and changes in age at first marriage. These changes raise the question of partitioning the credit for any decrease in fertility between the programmes and changes in socio-economic conditions. Attempts have been made to isolate the relative contribution of family planning programmes and the changes in socio-economic conditions. One such attempt was made by ESCAP by initiating case studies in Indonesia, the Republic of Korea and Sri Lanka to measure the impact of family planning programmes using multivariate areal analysis. Despite the methodological limitations and non-availability of reasonably good quality data, these studies indicate reasonably good estimates of their relative contributions, although the findings vary from country to country. For the purposes of illustration, the summary findings of the Sri Lankan study are presented below.

For Sri Lanka, six predictor variables representing various aspects of socio-economic development and the programme were carefully selected. The predictor variables were: density, percentage of females aged 10-19 attending school, number of maternity beds per 1,000 women of reproductive age, infant mortality rate, percentage of married women aged 20-24 and cumulative rate of acceptance of contraception from within the programme. The results of the study showed that with regard to the direct effects on fertility, the nuptiality factor, namely, the proportion of women married in the age group 20-24, seems to have had the maximum effect in both 1971 and 1975. Thus, nuptiality turns out to be the most significant factor among those considered in determining the fertility levels in 1971 and 1975 in Sri Lanka.[8] Also, in another study based on the multivariate analysis of the 1975 Sri Lanka fertility survey, the age at marriage emerges as a

[8] Ministry of Colombo Hospitals and Family Health, "An assessment of the factors contributing to variations in fertility levels in Sri Lanka, in 1971 and 1975 through multivariate areal analysis: a preliminary report", paper presented at the Third Study Directors' Meeting on the Study of the Impact of Family Planning Programmes on Fertility: Using Multivariate Areal Analysis.

strong predictor of the mean fertility.[9] Zachariah carried out a similar study for Kerala (India) and concluded that "the official family planning programme has played a significant role in the fertility reduction in Kerala. About 40 per cent of the fertility decline can be attributed to the official family planning programme" [10]

Intercountry analyses have been carried out by Mauldin and Berelson, Tsui and Bogue, Cutright and Kelly and several other authors.[11] The analysis carried out by Cutright and Kelly is the latest one and involved a large number of countries including many from the ESCAP region. They carried out a multivariate analysis examining the changes in birth rates between 1958 and 1977 in 81 countries in relation to changes in socio-economic conditions, family planning efforts and other variables (for example, Islamic culture, low Latin American literacy and legal abortion rates). To avoid some part of the correlation of programme effort with fertility that might be spurious, they used the multiple regression technique called the lagged dependent variable model. In this model, the crude birth rate (CBR) in 1977 is regressed on the CBR in 1958 because treating the 1958 CBR as an independent variable reduces the risk of finding effects on fertility that are actually spurious.

The results of their regression analysis show that the family planning programme effort has the most important effect on the change in birth rates, which is twice the effect of development (beta values of -0.60 and -0.30 respectively). The square of the partial correlation between the family planning programme effort and fertility change, controlling for other variables, is 0.55, while the square of the partial correlation between development and fertility change, controlling for all other factors, is only 0.38. They therefore concluded that "the impact of family planning programme effort on fertility is real, it is large, and it is not a spurious result of the association between programme effort and either development or any of the other variables".[12] However, they did not mean to imply that increased family planning programme effort alone will be sufficient to bring birth rates down to levels that will reduce population growth. They suggest that, in the long run, the reduction of fertility to replacement levels will require strong efforts on behalf of both development and family planning programmes.[13]

Summary, conclusions and policy implications

This paper has attempted to review the prevailing fertility situation in the countries of the region based on the available data from different sources. Data presented here clearly show that there has been a decline in fertility in the countries, although there are great variations in the magnitude of the declines. Significant declines have been taking place in east Asia and Oceania. Declines in middle south Asian countries are not as fast as in east Asia. The majority of the countries have experienced declines in the range of 10-30 per cent, the largest (40-49 per cent) being observed in Hong Kong and Singapore. The pattern of decline varies among the countries following three distinct patterns: (a) a U-shaped decline with sharp declines in the two extreme age groups; (b) a gradual increase in the pace of decline with higher ages; and (c) the decline sets in only after the most fertile age group and accelerates sharply thereafter. Comparison of the previous cumulative fertility experience of the real cohorts with the synthetic cohorts further supports the contention that fertility has declined in recent years in the countries of the region.

An important feature of the declines is that more than half of the change in fertility levels is attributable to changes in the nuptiality pattern. Furthermore, marital fertility is still far above the replacement level even in countries where fertility declines have taken place to a significant extent. In some cases, the total marital fertility rate has not changed in recent years although there have been significant declines in the total fertility rate and some of the age-specific marital fertility

[9] Naohiro Ogawa and J.R. Rele, "Age at marriage and cumulative fertility in Sri Lanka" in *Multivariate Analysis of World Fertility Survey Data for Selected ESCAP Countries*, Asian Population Studies Series No. 49 (ST/ESCAP/151).

[10] K.C. Zachariah, "Anomaly of the fertility decline in Kerala: social change, agrarian reform, or the family planning programme?", World Bank Population and Human Resources Division, Discussion Paper No. 81-17, May 1981, p. 70.

[11] W.P. Mauldin and B. Berelson, "Conditions of fertility decline in developing countries, 1965-75", *Studies in Family Planning*, 9:89, 1978; A.O. Tsui and D.J. Bogue, "Declining world fertility trends, census and implications", *Population Bulletin*, vol. 33, No. 4 (Washington, DC, Population Reference Bureau, 1978); Philipps Cutright and William R. Kelly, "The role of family planning programmes in fertility declines in less developed countries, 1958-1977", *International Family Planning Perspectives*, vol. 7, No. 4, December 1981.

[12] Cutright and Kelly, *op. cit.*, p. 149.

[13] Cutright and Kelly, *op. cit.*, p. 150.

rates. For example, in the Republic of Korea, the total marital fertility rates have remained almost unchanged between the two periods, 1966-1970 and 1971-1975, owing to increase in marital fertility in the younger more fertile age groups which compensate for the sharp decline in the older age groups. An important point to be noted from this observed plateau is that further significant changes in the family size cannot be achieved in the absence of basic changes in the values determining the family size.

The determinants of fertility decline have been classified into three main categories: demographic, socio-economic and family planning programme intervention. Increase of the age at first marriage seems to have a great influence in reducing fertility in the countries of the region. It is seen that, for most countries, the women in stable marriages, who have continued in their first marriages, had at least one child more than those whose first marriages were dissolved by the death of the husband or divorce. It therefore seems that changes in marital status composition in the countries of the region can potentially influence the completed family size.

The common pattern which emerges when fertility differentials are examined with respect to wife's education and duration of marriage is that of an inverse relationship between education and fertility, with the one exception of Indonesia. The differentials usually appear after 10 years of marriage duration and the effect of education in reducing fertility appears to begin only after a "more than primary" level of education. The relationship between husband's education and fertility is similar in direction and strength to that of the wife's. Both husband's and wife's education are important determinants of fertility reduction. Place of residence seems to affect the fertility level; women residing in urban areas have lower fertility than those living in rural areas. There is evidence that fertility levels are not only influenced by the repondent's current residence, but are also affected by the place of childhood residence. With respect to husband's occupation, it is found that couples with husbands engaged in agriculture tend to have the largest number of children. In contrast, wives of professionals, technicians administrators and clerks tend to have the lowest fertility, while the fertility of wives of manual workers tends to be intermediate. Two distinct patterns are discernible with respect to wife's work pattern. In the Republic of Korea and Sri Lanka, the lowest fertility is observed among women who have worked before marriage only, while in Indonesia the lowest fertility is among women who have ever worked since marriage. It is observed that married women with work experience tend to have fewer children than those who have never worked.

In the corresponding period of fertility declines, contraceptive practice levels have also risen in the countries of the region with varying magnitude. At the same time, development efforts have induced changes in socio-economic conditions such as changes in the age at first marriage, reduction in infant mortality, increasing levels of education and greater women's participation in the labour force, which in turn affect the fertility level.

Controversy arises when one attempts to determine the relative contribution of family planning programme efforts as against the changes in socio-economic conditions. Although no conclusive evidence has yet been produced, a substantial number of case studies and intercountry comparisons have shown that family planning programmes have contributed considerably towards the fertility reduction even after controlling for changes in socio-economic conditions. Analyses also seem to show that either development or family planning alone cannot help to achieve the lowering of the fertility level that will halt population growth.

There are several policy implications that can be identified from this analysis. These are:

(a) Marital fertility levels are still quite high in the region and are far above the levels prevalent in the Western countries, which have achieved near zero population growth. In order to achieve further and faster reductions in fertility, a higher proportion of younger women should be induced to practise family planning;

(b) In order to do so, there is a need to bring about the necessary changes in the value system that governs the family size;

(c) Changes in the value system take place with the changes in the socio-economic conditions, which take time. Hence, a long-term perspective is necessary in drawing up population policies and programmes;

(d) It is found that fertility reduction is to a large extent related to the strength of the family planning programme. This indicates that policies to strengthen the existing family planning programmes will greatly assist in lowering fertility.

1.4 DETERMINANTS AND CONSEQUENCES OF LOW FERTILITY IN LOW-FERTILITY COUNTRIES

by

Shigemi Kono*

Introduction

The aim of this paper is to review the low fertility situation in the low fertility countries of the ESCAP region with particular reference to its determinants and consequences. Although such a situation has not yet constituted the major trend in the region, it is now rapidly gaining importance. Since the majority of the developing countries in the region favour low fertility and endeavour fertility control through family planning, the current low fertility countries would provide some useful models for those developing countries in foreseeable future.

It is well known that fertility has been extremely low and mostly below replacement level in Northern and Western Europe and in Northern America. In parallel to this general trend in the developed countries, five countries in the ESCAP region also exhibit low fertility, some being even below replacement level. These countries are: Australia, New Zealand, Japan, Hong Kong[1] ** and Singapore. Table 1 shows the trends in the total fertility rate (TFR) for these countries.

In Australia fertility dropped to the replacement level[2] for the first time in 1930s. Australia and New Zealand are of the European settlement and share a common cultural heritage with Europe and Northern America. Japan started to have fertility decline in the 1920s. However, what is really remarkable here is the emergence of two low fertility countries or areas, Hong Kong and Singapore also with strong Asian cultural background. Already, Japan has been having low fertility around replacement level since 1956. In a considerably different context, though with some similarity in Chinese-oriented culture, Singapore has maintained a subreplacement fertility since 1975. According to the United Nations projections, Hong Kong's gross reproduction rate for 1980-1985 will be 1.05, that is close to replacement level.

Since the majority of the ESCAP countries are now on their way to a substantial fertility decline and since it is estimated by the United Nations that they will attain a fairly low level by the early 21st century, it would be a worthwhile exercise to review and appraise the determinants and consequences of low fertility in the region in the light of experience by European and Northern American countries and to get implications for the countries in Asia and Latin America where fertility shows an incipient to a full-scale decline. In this connexion, it should be emphasized here that the outcome of the sustained low fertility does not necessarily mean Shangrila. It might open another Pandora's Box letting out all sorts of social and economic problems originating from low fertility, the problems which have almost been neglected throughout the discussions on prospective fertility decline in the developing countries. In the low fertility countries, problems are totally different from the context of high fertility and encompass issues of ageing of the society, rise in old-age dependency, erosion of creative vitality, retardation of economy, etc.

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[1] Hong Kong is an "area" according to the definition of the United Nations Statistical Office, but it is included here among the five low fertility countries because of its unique political status and of the predominant Chinese ethnicity.

[2] Lado T. Ruzicka and John C. Caldwell, "Fertility" in *Population of Australia*, ESCAP Population Monograph Series No. 9, Bangkok, 1982.

Table 1. Trends of total fertility rate in selected ESCAP countries

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Australia	2.97	2.88	2.85	2.89	2.88	2.86	2.95	2.74	2.44	2.34	2.17	2.08	2.04	1.98	1.94	
Hong Kong	4.93	4.46	4.23	3.65	3.43	3.31	3.54	3.39	3.29	3.20	2.75	2.53	2.42	2.31		
Japan	2.14	1.58	2.23	2.13	2.13	2.13	2.16	2.14	2.14	2.05	1.91	1.85	1.80	1.79	1.77	1.74
New Zealand	3.55	3.42	3.36	3.34	3.29	3.18	3.18	3.00	2.77	2.59	2.39	2.27	2.23	2.09	2.14	2.05
Singapore	4.70	4.50	4.12	3.70	3.14	3.09	3.04	3.05	2.80	2.36	2.08	2.11	1.82	1.80	1.79	1.74

Sources: Australia: L.T. Ruzicka and C. Y. Choi, "Recent decline in Australian fertility", Australian Bureau of Statistics, *Yearbook Australia* No. 65, 1981. Supplementary data for years not shown in the above Ruzicka-Choi article were obtained from the United Nations Demographic Yearbooks.

Hong Kong: For 1965, through 1968, estimated by Ronald Freedman, D. N. Namboothiri, A. Adlakha, and K. C. Chan, "Hong Kong's fertility decline, 1961-1968", *Population Index*, vol. 36, No. 1 (January-March 1970): For 1969 through 1978, Computed from *the United Nations Demographic Yearbooks* 1975, 1978, 1979.

Japan: Computed by the Institute of Population Problems, Ministry of Health and Welfare, Tokyo.

New Zealand: Provided by Mr. M. A. Khawaja, Department of Statistics, Christchurch, New Zealand in his letter to the author dated 21 April 1982.

Singapore: For 1965 through 1969, computed from the United Nations *Demographic Yearbooks:* for 1970 through 1980, Department of Statistics, Singapore, *Yearbook of Statistics, Singapore,* 1980/81, p. 31.

Recent fertility declines in the developed countries

In the developed countries, the decline in fertility and the decline in population growth are not new phenomena. In the 1930s some European countries, including France, Germany, Belgium, Switzerland, United Kingdom, Sweden, Denmark, Norway, Czechoslovakia, and the United States, were around or below replacement level of fertility, which concurred with the time of the Great Depression.[3] In a way, the recent declines in fertility in the West could be regarded as a resumption of long-term historical downward trend of fertility.[4]

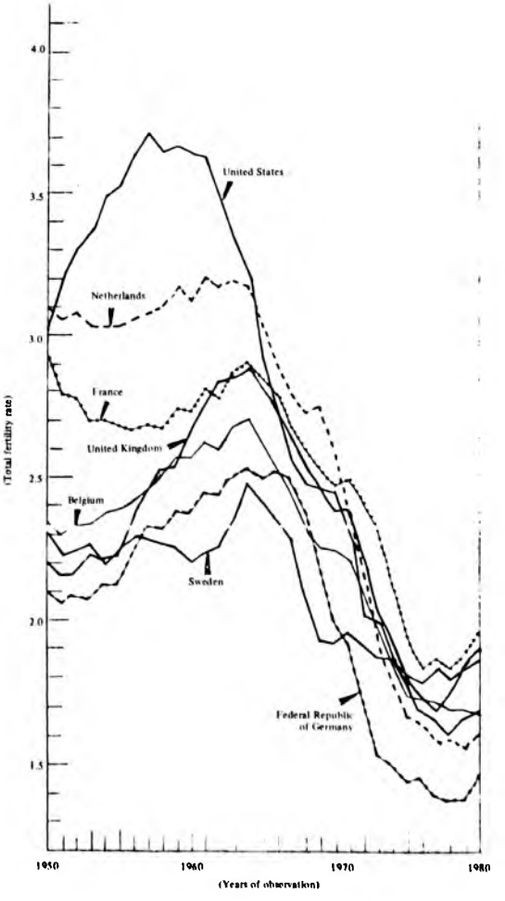
The one exception for such a secular decline in fertility was the postwar baby boom. It was not a return to the large families of 19th century, but it was created by a movement away from spinsterhood, childless marriage and the one-child family, and by a bunching together of births at early stage of reproductive cycle.[5]

Among only 4 of the 24 non-socialist industrialized countries was fertility at or above replacement level in 1978. The exceptions were Spain, Ireland, Greece and Portugal. One of the most striking examples is the Federal Republic of Germany, where the fertility decline has been most dramatic. The Federal Republic of Germany recorded 576,500 births in 1978 as against 1,050,300 births in 1966, dropping by nearly half. The total fertility rate fell to 1.38 in 1978, the lowest level ever recorded by a country in time of peace. It should be considered that the Federal Republic of Germany in 1978 had the lowest unemployment rate in Europe.[6] The decline in fertility started earlier in the United States around 1960 and it underwent one of the most spectacular declines in the demographic history with the total fertility falling from 3.60 in 1960 to 1.77 in 1976 – a more than halving in 16 years.

Everywhere the fertility decline has been particularly characteristic of declines in third and higher order births rather than in first and second order birth. In France and Germany, for example, between 1965 and 1975, first and second order births declined by 20 to 30 per cent whereas third parity births declined by 50 per cent and higher order births by 70 and more. A progressive disappearance of the large family is a definitive trend in the developed countries, with the ideal family size becoming increasingly small. This tendency is not new. It was manifest even during the period of increasing fertility in several European countries between 1953 and 1965.[7]

In spite of such an irreversible long-term trend of decline, what is really striking is the magnitude and universality of fertility decline that has occurred during the last two decades in the developed countries. Figure 1 depicts the

Figure 1. Trends of total fertility rates for selected countries of Europe and the United States of America, 1950-1980.



Source: Gérard Calot and Chantal Blayo, "Recent course of fertility in non-communist European countries", paper presented at the British Society for Population Studies on Recent Developments in the Population of Europe, University of Exeter, 16-18 September 1981.

[3] United Nations, *World Population Prospects as Assessed in 1963*, Population Studies, No, 41, New York, 1966.

[4] Charles F. Westoff, "Fertility decline in the United States and its implications", in Wilbur Cohen and Charles F. Westoff, *Demographic Dynamics in America*. New York, Free Press, 1977, p. 54.

[5] *Ibid.*, pp. 58-59.

[6] Leon Tabah, "World population trends, a stock-taking", *Population and Development Review*, Vol. 6. No. 3 (September 1980), pp. 357-358.

[7] *Ibid.*

trends of TFR for selected European countries and the United States. As seen in this figure, the onset of decline is located with a surprising precision of synchronism in Europe around the year of 1964, which was a year of full employment everywhere, well before the economic disturbance experienced since 1973.[8]

Determinants of low fertility – a global review

Why the developed countries of Europe and Northern America have recently renewed a precipitation of fertility?; why such an inter-country synchronism occurred in Europe? A full account of their causes is beyond the scope of this paper. But, if the present downturn is a resumption of the secular trend of decline, the reasons for the historical decline include a wide range of fairly obvious social changes that have accompanied the transformation of the Western society from a rural setting and agricultural economy to an increasingly urban and metropolitan setting with a highly industrialized and now increasingly service-oriented economy. The transformations encompass decreasing infant and child mortality, universal education, the decline of religious authority, emergence of an ethos of rationality, equality of women and a pervasive consumer-oriented culture.[9] Such changes have decreased both traditional utilities of children and the compatibility of large families with emerging life style in contemporary years.

Cognizant of its historical continuity, however, the current unprecedentedly low fertility should more appropriately be described as reflecting a new social trend and a new life style, spreading throughout non-socialist Europe and Northern America in the late 1960s and the 1970s. According to Schmidt and Höhn, the low fertility syndrome prevails over Europe. Causes of the low fertility can no longer convincingly identified by the classical approach that seeks explanations for conventional economic, social and religious factors. Today, it would be more adequately substituted by changes in life style, by regional peculiarities and by reference group psychology.[10] According to van de Kaa, the progressive attitude in all spheres of life has ineluctably increased in Europe in recent years, toward freedom of choice in behaviour and equity of opportunities. Aspirations for not letting their lives bound to lesser degree of freedom and for enjoying the adult-centred life, have led parents no longer to plan life in terms of child and his personal future,[11] in contrast to the child-oriented life in the nineteenth and early twentieth century Europe as vividly described by Aries.[12] Marriage as an institution providing economic security and as an essentially permanent arrangement aimed at reproduction and rearing, is no longer felt to be necessary. Indeed, increasing number of young couples refrain from childbearing because they do not want to mortgage their future life to children and childrearing.[13]

Demographers, economists and sociologists do never fail to refer determinants of the present low fertility to an increase in the female labour force participation rate, particularly among the married women. For instance, in England and Wales, the labour force participation rate among all married women in 1950 was only 20 per cent but now nearly 50 per cent.[14] In the Federal Republic of Germany in 1950, the participation rates for age groups 20-29 and 30-39 were 29.6 and 31.9 per cent, respectively. In 1979, the same rates increased to 56.6 per cent and 49.6 per cent.[15] Earnings and labour force participation of women have been important causes of significant declines in fertility since 1957 in the United States.[16] In this country, in 1950 the labour force participation rates were 30.5 and 33.7 per cent for age group

[8] *Ibid.*

[9] Westoff, *op. cit.*, p. 55.

[10] Josef Schmidt and Charlotte Höhn, "Socio-cultural change with reference to female employment, educational characteristics and housing conditions in Western countries where fertility is around or below replacement", IUSSP, *International Population Conference, Manila, 1981*, Solicited papers, Vol. 1. 1981, pp. 159-180.

[11] Dirk J. van de Kaa, "Recent trends in fertility in Western Europe", in R. W. Hiorns, editor, *Demographic Patterns in Developed Societies*, London, Taylor and Francis, 1980, p. 77.

[12] Philippe Ariès, *Centuries of Childhood: A Social History of Family Life*. New York, Vintage Books, 1962.

[13] In coversation with Ronald Lesthaeghe at Vrije Universiteit, Brussels, on 25 February 1982.

[14] Gary S. Becker, *A Treatise on the Family*. Cambridge, Mass., Harvard University Press, p. 254.

[15] Karl Schwarz, "Development of labour force participation of married women and reproductive behaviour in the Federal Republic of Germany since 1900', a paper presented to the IUSSP Manila Conference in December 1981.

[16] Michael P. Ward and William P. Butz, "Completed fertility and its timing", *Journal of Political Economy*, vol. 88, No. 5 (October 1980), pp. 917-940.

25-34 and 35-44, respectively. In 1980, they have increased to 63.3 and 62.9 per cent, respectively.[17]

In this connection, one has to mention about hostile environment to childrearing in cities and metropolitan areas in the developed countries. It should also be mentioned to the urban setting, which is characterized by barren monoliths of concrete apartments, by high crime rates and by lacks of green spaces and playgrounds for children, is inhibitive to the very existence of children and something incompatible with childrearing.

Last but not least, emphasis should be laid upon the availability and widespread of highly effective contraceptive technology. The technology of fertility control has improved tremendously in the past 20 years and widely diffused throughout the population and among countries. The introduction of the oral pill and IUD around 1962 throughout non-Socialist Europe is considered to have been highly conducive to the synchronized precipitous declines in natality in Europe in 1964. Together with liberalization of induced abortion and availability of safe sterilization, the advent of contraceptive revolution played an important role in fertility reductions by eliminating virtually unwanted births in the West.[18]

Finally, mention is being made of the recent change in marriage and the family which is also highly related to fertility decline. In recent years, a number of developed countries have been experiencing a revolution in respect of the incidence and timing of legal first marriages. The causes of this revolution are as yet unclear. According to the United Nations 1980 Monitoring Report, however, it seems reasonable to hypothesize that responsible factors include the youth revolution, changes in status and role of women and, not the least important, the radical changes that have occurred in the efficiency of contraceptives, the easier access to them and far wider incidence of their use.[19]

Indeed, in the United States, starting about 1962, the annual rate of divorce rose sharply; it jumped from 9 per 1,000 population in 1960 to 22 per 1,000 in 1979. In Sweden, according to Jan Trost, out of every 100 couples, 15 were unmarried in 1978 and one of the three children was born out of wedlock.[20] In the Federal Republic of Germany, between 1965 and 1978, crude birth rate nearly halved from 17.7 to 9.4 per 1,000. Of this decline, about 40 per cent is attributable to the marked decline in nuptiality and the remaining 60 per cent is accounted for by the phenomenal decrease in marital fertility, particularly among the couples with three or more children.[21]

If the above-mentioned aspirations for freedom and enjoyment of the adult-oriented life, revolution relating to marriage, and low-fertility syndrome and the causes for the current low fertility in the developed countries, then it would be a very difficult effort for the governments to introduce pronatalist policies to increase fertility in the developed countries. It might look a futile effort unless such a philosophical tide and such a life-style change could be thwarted and reversed. It is symbolic that despite the rising concern about the current low fertility situation, France is the only major country in Northern and Western Europe which has been implementing pronatalist population policies.[22]

Determinants of low fertility in low fertility countries of the ESCAP region

One of the most prominent features in the recent demographic trends in the ESCAP region is fertility declines in both the developed and developing countries. It is notable that several countries and areas have already reached very low levels around or below replacement level, including Australia, New Zealand, Japan, Hong Kong and Singapore. According to the United Nations projections, however, the Republic of Korea, Malaysia, Sri Lanka and China will join the group toward the end of this century or early in the next century.

In general, causes of fertility decline in these countries are complex, but in many respects there

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[17] Linda J. Waite, "U.S. women at work", *Population Bulletin* (Population Reference Bureau, Inc.) vol. 36, No. 2 (May 1981), p. 7.

[18] Westoff, *op. cit.*, p. 54.

[19] United Nations, *Report on Monitoring of Population Trends*, ESA/P/PW. 68, 9 December 1980, pp. 190-191.

[20] Jan Trost, "Dissolution of cohabitation and marriage in Sweden", *Journal of Divorce*, vol. 2 (Summer 1979), pp. 415-421.

[21] Council of Europe, *Recent Demographic Developments in the Member States of the Council of Europe*, Strasbourg, 1979, p. 13.

[22] United Nations, *Report on Monitoring of Population Policies*, ESA/P/WP. 69, 5 January 1981. pp. 245-246.

are similarities in basic patterns to Europe and Northern America. Nevertheless, there are some contrasting differences between Australia and New Zealand, on one hand, and Hong Kong and Singapore, on the other. Japan is regarded as in-between. In Japan, fertility started to fall in the 1920s without encouragement and financial help from the Government.[23] This aspect is totally different from the cases of Singapore, Hong Kong, the Republic of Korea, and China where the Governments, from the onset of family planning programmes, have been enthusiastic in spreading family planning over the population. On the other hand, Japan is appreciably different from Australia and New Zealand, in terms of contraceptive methods in use, family structure, cohabitation, proportion of illigitimate children, etc. Out of the five low-fertility countries in the ESCAP region dealt with here, Japan is the only country where prescription is required for oral pills.

As already mentioned, Australia and New Zealand are English-speaking countries of overseas European settlement and their fertility patterns resemble markedly those of the United States, in terms of their trends and determinants. Particularly, Australia has nearly hundred year's history of contraception and declining fertility. On the other hand, the contraceptive history of Hong Kong and Singapore is short, starting only after the Second World War with the government's strong commitment and support, and the onset of fertility decline dates back only to 10 years ago.

Australia had a baby boom and bust and a rapid fertility decline thereafter. The baby boom culminated in a total fertility rate (TFR) of 3.55 in 1961 and continued to be above 2.5 until 1973 (see table 1). It was regarded by Ruzicka and Caldwell as reflecting a lowering age at first marriage and an increase in percentage married, while marital fertility itself had declined partly because of the postponement of the first births within the marriage.[24] In other words, the baby boom was largely a marriage boom and did not exactly imply an increase in completed family size. Ruzicka and Caldwell calculated the disaggregration of the increase in net reproduction rate of the 1931-1936 birth cohorts by 160 children per 1,000 women from the 1901-1906 birth cohort. While marital fertility contributed only negatively, the largest single component contributing to the increase in fertility was the increased proportion married, accounting for 63 per cent of the increase in fertility and adding an equivalent of 329 children per 1,000 women.[25]

In the case of Australia, the present trend towards low fertility may be considered a regression from the baby boom. In recent years median age at marriage of women has been increasing slightly from 21.4 years in 1961-1965 to its 1978 figure at 22.6 years. Interestingly enough, it is relatively low as compared to Japan, Singapore and European countries, and even New Zealand.

The end of the baby boom and a precipitous fall in fertility is a swing back of nuptiality (percentage married in each age group) to a lower level. The downturn trends has also been accelerated by the contraceptive revolution which was facilitated by a spread of oral pills and IUDs and by an easier access to induced abortion and sterilization among the potentially fertile women. It is noted that not only the age at first marriage is increased, but also the age of first birth and second birth became considerably postponed. The contraceptive revolution prevented premarital births and reduced the number of marriages under 20 in the late 1970s that were earlier prompted by such premarital pregnancies.[26]

In Australia, none of surveys suggested major shifts away from marriage and toward childlessness. The change appears to be in the direction of further concentration of preferred family size to two children and the deferment of children after marriage. With efficient contraceptive methods available and the possibility of abortion, it is likely that such small family goals are within the families' realistic expectation.[27]

The demographic trend of New Zealand is traditionally similar to that of Australia, though

[23] Although the Government's attitude was not always the same, it can be said that in general it had not been favourable toward the birth control movement, if not suppressive all the time. Before 1940, however, some sectors of the Government recognized necessities to carry birth control programmes in face of the increasing population pressures in the 1930s. See Rvoichi Ishii. *Population Pressure and Economic Life in Japan.* London, P.S. King and Sons, 1937, pp. 238-241.

[24] Lado T. Ruzicka and John C. Caldwell, *The End of Demographic Transition in Australia,* Australian Family Formation Project Monograph No. 5. Canberra, The Australian National University, 1977, pp. 213-215.

[25] *Ibid.*

[26] L.T. Ruzicka and C.Y. Choi, "Recent decline in Australian Fertility", in Australian Bureau of Statistics, *Yearbook Bulletin,* No. 65, 1981, pp. 12-121.

[27] *Ibid.*, p. 121.

silightly behind it in general. In the case of New Zealand, the total fertility rate has also been falling swiftly since around 1960 and in both 1978 and 1980 the net reproduction rate has been below unity (0.97).[28] This trend is also similar to Australia in the sense that it characterizes the end of baby boom which has been brought about by the bust of marriage boom and has been accelerated by the contraceptive revolution.

Recent studies have also pointed to the fact that the emerging trends is away from the pattern of early marriage which prevailed in New Zealand during the 1950s and 1960s. Between 1971 and 1978, the average age of brides rose by 1.6 years, from 23.4 years to 25.0 years. As was mentioned, these are rather high figures as compared to the European countries and even to Australia. The rise in the proportion of married women at ages 25-34, which had persisted throughout the last four decades, came to a half and there was a reversal in the trend. At the 1976 census, 85 per cent of women aged 25-34 years were married as against 89 per cent at the 1966 census.[29]

As in Australia, however, there are also changes in martial fertility in New Zealand. In more recent years, the unfavourable economic environment has probably influenced many young married couples not to start a family until some economic security has been achieved, while remaining in the labour force. An introduction of modern contraceptives and an availability of more liberalized abortion provide the means of regulating and postponing childbearing, particularly of first births. In New Zealand, the decline has been substantiated in age groups 20-24 and 30-34 years. In the last group the decline was by 53 per cent between 1962 and 1975. The relatively constant rate for age group 25-29 is due probably to the making-up of the births postponed early, thus offsetting any real decline in the fertility rate.[30]

At the same time, ex-nuptial fertility is becoming an important element which could no longer be neglected. In New Zealand, in 1975 already there were 10,942 ex-nuptial births which accounted for 21 per cent of the total births and the ex-nuptial fertility rate has been increasing due to an increase in cohabitation and childbearing outside the normal marital union.[31]

Hong Kong and Singapore have achieved rapid fertility declines since the 1950s. The crude birth rate declined in Hong Kong from 35.0 per 1,000 in 1961 to 18.3 in 1975; in Singapore from 43.6 in 1956 to 17.9 in 1975. In 1975, TFR was 2.75 in Hong Kong and 2.08 in Singapore. An assessment of the contribution by component factors to the reduction in the crude birth rate between 1961 and 1971 was made by Mok.[32] The analysis shows that although the change in nuptiality patterns (change in the proportion of women married) is important, more than half was accounted for by the change in marital fertility.

For Singapore, Chang in 1974 decomposed the change in TFR into the effect of change in the percent of women married and change in marital fertility.[33] He found that during the period 1957-1966, both increasing age at marriage and decline in marital fertility were important factors in fertility change, but the change in age at marriage was more important. Later in 1977, Anderson, Cheng, and Wan prepared a decomposition of the TFR change during the periods 1967-1970, 1970-1972 and 1972-1975.[34] In both 1967-1970 and 1972-1975 periods, they found that changes in marital fertility were more important than those in percentage married.

The spectacular performance achieved by Singapore in the area of fertility decline in the last two decades may be traced to a combination of factors, some of which are interdependent. In the first place, the commencement of fertility decline in 1958 was triggered off by the rising age at first marriage of women and reinforced by the fall in the proportion of women ultimately married. Secondly, there was catalytic role played

[28] Letter from M.A. Khawaja, Department of Statistics, Christchurch, New Zealand, dated 21 April 1982.

[29] M.A. Khawaji and J. Watt, "A cross-sectional analysis of New Zealand Fertility", 1962-1979, New Zealand Department of Statistics, *Demographic Bulletin*, vol. 4, No. 1, 1981.

[30] *Ibid.*

[31] *Ibid.*

[32] Benjamin Mok, "Recent fertility trends in Hong Kong" in Lee-Jay Cho and Kazumasa Kobayashi, editors, *Fertility Transition of the East Asian Populations*. Honolulu, The University Press of Hawaii, 1977, pp. 178-197.

[33] Chen-Tung Chang, *Fertility Transition in Singapore*. Singapore, Singapore University Press, 1974, pp. 32-41.

[34] John E. Anderson, Mark C. E. Cheng and Wan Fook-Kee, "A component analysis of recent fertility decline in Singapore", *Studies in Family Planning*, vol. 8, No. 11 (November 1977), pp. 282-287.

by the private family planning programme which had been providing not only clinical services to new and old acceptors, but also educational and motivational activities to create the general acceptance of family planning for almost ten years prior to the descent of fertility rates in 1958.

Already, Singapore has been credited with having one of the most well-organized and vigorous family planning programmes.[35] At the time the family planning programme was inaugurated in 1966, an estimated 20 per cent of married women aged 15-44 were already using some form of contraception. In 1973, a national survey found that 78 per cent of married women had ever used a family planning method and that 60 per cent were currently using one. By 1977, 86 per cent had ever used a method and 71 per cent were currently practicing contraception.[36]

When the birth rate rose temporarily during 1970-1972, the Government instituted additional policies to encourage family planning limitation to two children. Up to now, a number of incentives and disincentives programmes were implemented to promote small families and discourage large families. They encompass maternal policies with increasing medical and delivery fees according to an increase in family size; the education policies in which priority in choice of school is given to low parity children; the income tax policies which do not give tax reduction to highparity parents among taxpayers; the housing policies which give choice apartments to lower parity families; and the better leave policy given to men and women following sterilization.[37] Atlthough it is difficult to assess quantitative implications of these policies, it is no doubt that they have exerted substantial constraints toward accelerating the fertility decline.

In a similar fashion as done for Australia, Hong Kong and Singapore, an attempt has been made to assess the change in the total fertility rate (TFR) in Japan by decomposing it into a component attributable to the change in the marital status composition (percentage married in each age group) and to that in marital fertility rate for various periods covering 1925-1980. The result is shown in table 2. Through this analysis, several useful findings are obtained which are interpreted in the light of other demographic and social trends.

(1) In the period of incipient fertility decline in Japan, TFR was 5.096 in 1925 and it declined to 4.708 in 1930. Of the difference of 0.388, the reduction in percentage married explains 40 per cent and that in marital fertility accounts for 60 per cent. Secondly, between 1930 and 1940, TFR further decreased from 4.708 to 4.108 by 0.600; 72 per cent of this change was attributed to the reduction in percentage married and the remaining 28 to that in marital fertility. Between 1925 and 1930, the mean age of first marriage for females was virtually the same, but between 1930 and 1940, it increased from 23.2 to 24.6 years.

(2) In the years after the Second World War, in general, the change in TFR was predominantly due to the change in marital fertility. Between 1960 and 1965, Japan had an upturn in TFR, but even that increase was explained by the increase in marital fertility rate.

(3) During the relatively long period between 1925 and 1980, TFR has declined from 5.096 to 1.747 by 3.349, indicating a spectacular decline. While the change in marital status composition accounted for 36 per cent, the reduction in marital fertility explained the remaining 64 per cent of the decline in TFR during this period. Reduction of marital fertility was particularly remarkable at age groups 35-39 and 40-44. Reductions of marital fertility at these age groups were concomitant with declines in third and fourth order birth rates.

(4) It is, however, interesting to note that in the most recent quinquennium, 1975-1980, the decline in TFR was entirely explained by the decline in percentage married while the change in marital fertility would have increased TFR if the marital status composition were kept constant. A substantial change in marital status composition occurred among females at age group 20-24 where the percentage married fell from 30.3 in 1975 to 21.7 in 1980. Accordingly, between 1975 and 1980, age-specific fertility rate for this age group was reduced from 512.8 to 385.9 per 1,000 women. Okazaki attributes this decline of percentage married to an increase in school enrollment

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[35] United Nations Fund for Population Activities, *Singapore*, Population Profiles 1.

[36] James Fawcett and Siew-Ean Khoo, "Singapore: Rapid fertility transition in a compact society", *Population and Development Review*, vol. 6, No. 4 (December 1980), p. 558.

[37] James T. Fawcett. "Singapore's population policies in prespective", in Peter S. J. Chen and James T. Fawcett, editors, *Public Policy and Population Change in Singapore*. New York the Population Council, Inc., 1979, pp. 3-17.

Table 2. Decomposition of the change in total fertility rate in Japan for various periods during 1925-1980

Period of analysis	Beginning of the period	End of the period	Difference in total fertility rate	Decomposition into :	
				Difference attributable to changes in percentage married (percentage)	Difference attributable to changes in age-specific marital fertility rate (percentage)
1925-1930	5.096	4.708	−0.388	−40.0	−60.0
1930-1940	4.708	4.108	−0.600	−72.3	−27.7
1940-1950	4.108	3.657	−0.451	−50.7	−49.3
1950-1955	3.657	2.377	−1.280	−18.3	−81.7
1955-1960	2.377	2.015	−0.361	−4.8	−95.2
1960-1965	2.015	2.150	+0.135	+15.6	+84.4
1965-1970	2.150	2.095	−0.550	−1.4	−98.6
1970-1975	2.095	1.940	−0.155	+5.0	−105.0
1975-1980	1.940	1.747	−0.193	−107.1	+7.1
1925-1980	5.096	1.747	−3.349	−35.6	−64.4
1950-1960	3.657	2.015	−1.642	−15.1	−84.9
1960-1970	2.015	2.095	+0.080	+26.8	+73.2
1970-1980	2.095	1.747	−0.348	−57.7	−42.3

Source: Rates were calculated by the Institute of Population Problems, Ministry of Health and Welfare, Tokyo.

Note: Based on the five-year age-specific fertility rates.

Method: R.D. Retherford and L. J. Cho, "Comparative analysis of recent fertility trends in East Asia", IUSSP, *International Population Conference, Liege 1973*, vol. 2, pp. 163-181.

among females in colleges and universities.[38] Since around 1970, the college enrollment ratio for females has increased rapidly; between 1970 and 1980 the proportion of female graduates from senior high schools who went to colleges and universities increased from 17.8 to 33.3 per cent. Since in Japan more than 90 per cent of the population at senior high school age is actually enrolled in senior high, the figure of 33.3 per cent roughly means that 30 per cent of the college age population is actually enrolled in colleges and universities.

The Japanese experience demonstrates that the decline in fertility down to replacement level took place without a previous background of family nucleation.[39] The Japanese census shows that among the total households, the nuclear family households contain only 60 per cent, even including a type of nuclear family which consists of one parent and his/her children. Of the remaining households, the three-generational and other types of family households comprise 20 per cent and the one-person households take

[38] Yoichi Okazaki, "Koreika shakai eno jokyoku (A prelude to the ageing society), *Sekai to Jinko (World and Population)* (Tokyo) No. 98, January 1982, p. 7.

[39] According to Caldwell, fertility is determined by the net direction of parent-child transfers in wealth, income, and labour. The flow of wealth in primitive and traditional societies is from child to parent and high fertility is rational because children provide labour support for old age and contribute to group security. In transitional and modern societies, the flow reverses and high fertility becomes no longer rational. According to Caldwell, the family nucleation is necessary for a reversal of intergenerational wealth flow and an important condition for the onset of fertility decline in developing countries. John C. Caldwell, *Theory of Fertility Decline*. London, Academic Press, 1982.

another 20 per cent. Since 1920, when the first census was conducted, the proportion of the nuclear family households has increased, but not to a very large extent. Thus, Japan even at the present is not on the same level of nuclearization as European and Northern American countries. The Republic of Korea and Taiwan (a province of the People Republic of China) as well as Hong Kong show similarities in this regard.

In contemporary Japan, low fertility becomes a style of life. It is the people's response to the highly competitive society where severe entrance examination starts even at the time children are getting into primary school, and to the high-density society where there are always shortages of adequate housing space, and the consequent lack of spacious houses and apartments as seen in the United States of Canada. Interestingly enough, according to a recent survey, the majority of the people in Japan felt that the present population size of Japan is too big to support and their economic situation is getting deteriorated on the grounds of Japan's scarcity of space and natural resources, with particular reference to oil resources.[40] Such a rather pessimistic view has always been held after a crisis such as the oil shock in 1973. In addition to such characteristics of high-density society, notable causes for low fertility include an increase in labour force participation rate among the married females and a rise in opportunity cost foregone by childbearing and rearing in the midst of the mass-consumption culture inundated with an enormous volume of advertisement of consumer goods and services.

In Japan, too, none of fertility surveys suggested major shifts away from marriages and toward childlessness. All the surveys indicate that married couples prefer two to three children. Since the college enrollment ratio among the college age women has recently reached a plateau, it has been suggested that there will be no appreciable decline in the percentage married among the females at age groups 20-24 and 25-29. In fact, the recent slight rise in nuptiality at the age group 25-29 between 1975 and 1979 might be interpreted as normalization in nuptiality patterns. If the trend continues, the percentage married for the age group 25-29 would increase slightly, which would in turn be reflected in an increase in TFR.

[40] Institute of Population Problems, Ministry of Health and Welfare, *Perception of Long-term Population Growth and Attitude Towards Living environment*, a Report of the 1978 demographic field survey, Tokyo, 1979.

Perhaps, at this point, it is useful to sum up determinants of low fertility among the five countries and areas already mentioned of the ESCAP region. Although declines in marital fertility contributed substantially to the fertility decline, declines in percentage married played a more important part in explaining the recent decline in TFR in both Australia and New Zealand. On the other hand, in Japan and Singapore, changes in marital status composition were more important than marital fertility at an incipient stage of fertility decline, but at a later stage, changes in marital fertility become more important due to the adoption of fertility control.

To explain changes in marital fertility, several common factors are recognized: (a) substantial increase in gainful employment among the married females is noted practically in every country; (b) spread of the fertility control measures is considered effective in reducing fertility, including especially modern methods of contraception and abortion; (c) population policies, including the "beyond family planning" type, and well-organized family planning programmes have been proved to be important, particularly if combined with a high level of literacy; and (d) low fertility can be achieved without fundamental changes in family structure and family relationships conceived as a prior requirement. The last point was raised by Freedman, in reference to Singapore and Taiwan Province,[41] but it is also relevant to the case of Japan and probably to other countries of East Asia as well.

Demographic and social consequences of low fertility

Demographic implications of continued low fertility are the reduction to zero or less of the growth of population, and secondly, the change in age composition, particularly in this case, ageing of the population. From now on, the five low fertility countries of the ESCAP region will be approaching zero growth early in the next century, if the United Nations projections are correct.

As far as the recent state of very low fertility continues, an inevitable consequence is a process of ageing, first very slow but later rapid, among these countries. Other Asian countries would perhaps be following the same course. Table 3 shows three demographic indicators of ageing. The

[41] Ronald Freedman, "Overview" in Lee-Jay Cho and Kazumasa Kobayashi (editors), *op. cit.* p. 295.

Table 3. Selected indicators of aging for Australia, Hong Kong, Japan, New Zealand, the Republic of Korea and Singapore

Country and year of observation and estimate	Percentage of the total population which is 65 years and over (percentage)	Ratio of the population aged 65 years and over to the population under 15 years (percentage)	Old age dependency ratio: ratio of the population aged 65 and over to the population aged 15 to 64 (percentage)
Australia			
1975	8.7	36.2	13.6
2000	10.9	49.9	16.2
2025	15.7	78.0	24.5
Hong Kong			
1975	5.4	17.8	8.4
2000	9.5	42.3	13.9
2025	16.3	87.0	25.1
Japan			
1975	7.9	32.6	11.7
2000	15.6	88.4	23.3
2025	21.3	123.5	34.6
New Zealand			
1975	8.7	28.9	14.2
2000	9.9	42.0	14.9
2025	14.7	70.2	22.9
Republic of Korea			
1975	3.6	9.6	6.2
2000	6.0	23.1	8.9
2025	11.8	55.9	17.5
Singapore			
1975	3.9	12.0	6.3
2000	7.6	34.4	10.8
2025	17.6	99.0	27.2

Source: United Nations "Demographic Indicators by Countries as Assessed in 1980," New York, March 1981. Projections of the population of Japan is based on the new official projections prepared by the Institute of Population Problems, in November 1981.

first is percentage of the total population which is 65 years and over. The second is the ratio of the population aged 65 and over to that under 15 years. This index signifies a contrast between the populations of old and young. The third is the well-known old-age dependency ratio of population aged 65 and over to the population aged 15 to 64.

The percentage of the total population which is 65 years and over was 8.7 per cent in both Australia and New Zealand. By the year 2000, however, it is projected to increase to 10.9 per cent for Australia and 9.9 per cent for New Zealand. By the year 2025, it would further rise to 15.7 per cent for Australia and to 14.7 per cent for New Zealand. The old-young ratio as well as old-age dependency ratio would increase rapidly.

The process of ageing for Singapore would be more dramatic. In 1975 the percentage of the total population aged 65 and over was only 3.9 per cent. By the year 2000, it would increase to 7.6 per cent and by the year 2025, it would jump to 17.6 per cent. During 50 years, therefore, if the United Nations projections are correct, the percentage of the old-age population would increase spectacularly by 4.5 times. The speed of ageing in Hong Kong is also expected to be fast. It is noted that the old-young ratio would become 87 and 99 per cent respectively in Hong Kong and Singapore by the year 2025, would be higher than in Australia and New Zealand.

The ageing in Japan is also very dramatic. In 1975, the proportion of the old-age population was only 7.9 per cent. According to the most recent official projections as assessed in November 1981,[42] by the year 2000, it would increase to 15.6 per cent, and by the year 2025, it would attain 21.3 per cent. As far as the old-young ratio is concerned, it would become 123.5 by the year 2025, clearly indicating an excess of the old-age over the young population. Indeed, Japan is expected to become one of the most aged populations in the world.

Changes in the age structure of a nation have profound social, economic, and political consequences, many of which are not yet fully understood. The age structure of a nation influences social contacts which affect the process of socialization, the formation of attitudes, values and behaviours, the nature of family structure and functions. The age structure of a nation has a major impact on the goods and services provided, on the composition of the labour force and on the allocation of resources and the functioning of the economy. Finally, the age structure of a nation may influence its political order in affecting the outlook and temperament of its people on a liberal to conservative continuum.

As Coale mentioned, an implication of no growth that will come to pervade whole adult life in the low fertility countries is the lesser opportunities for social and economic mobility.[43] Keyfitz has once calculated that with a growth rate of 2 per cent per annum in the labour force, the attainment of a middle position in the ladder of promotion occurs 4.5 years earlier than the case with no growth in labour force.[44] With a stationary or shrinking population, the structure of age pyramid from entry to retirement is vertical or top heavy. That means that a worker would expect a great deal of difficulties to advance to a higher position of responsibility as he gets older.

The continuation of low fertility would also create a shrinkage of attending pupils in schools, a redundancy of teachers and classrooms, and a backruptcy of toy and stationery industries, but these would be overwhelmed by the acuteness of problems of old-age dependency and the burden of social security as a consequence of ageing. Basic arguement is that as a population ages, the ratio of workers to retired persons will decline, and consequently the burden of support will be heavier on the shoulders of future generations of workers.

More precisely, the forthcoming era will bring heavy welfare burden and expensive cost of health care programmes for old population. Space does not suffice to spell out all the socio-economic issues pertaining to increase in burden of support for the old-age dependents, but using Japan as an example, two most important features will be touched on, that is, prospectively increasing social security burden of the old-age population and skyrocketting increase in expenses of maintaining

[42] Institute of Population Problems, Ministry of Health and Welfare, "Nihon no shorai jinko suikei ni tsuite" ("On the future population projections for Japan"), Tokyo, November 1981.

[43] Ansley J. Coale, "Discussion 1" on David E. C. Eversley, "Social implications on fertility", in Arthor A. Campbell (editor), *Social, Economic and Health Aspects of Low Fertility*. Washington, D.C., United States Department of Health, Education and Welfare, National Institute of Health, 1980, p. 186.

[44] Nathan Keyfiz, *Applied Mathematical Demography*, New York, John Wiley & Sons, 1977, p. 108.

public medical and health insurance schemes. It should be noted here that a decline in the ratio of workers to retired persons is partly dependent on a numerical increase in the aged population because of recent improved mortality in the advanced ages.

The public pension insurance schemes will be in need of far more substantial financial resources, not only because of the increase in the older population, but also because the schemes will have reached maturity. The relative share of pension schemes in social insurance cost will grow at a rapid rate.

As Ogawa shows, depending upon the choice of the benefit levels for these schemes, one can expect the proportion of the national income allocated to them to fall within a range from 14 per cent (low welfare case) to 40 per cent (high welfare case) in the year 2010.[45] Hence, in case of high welfare, the welfare burden in Japan may exceed the current level in Sweden by the early part of the next century.

As for the cost of maintaining public medical and health insurance schemes, Itoh calculated that if the present rate of expansion for medical outlay continues, by the year 2000 the total expenses for medical care in Japan will constitute 17 per cent of the GNP.[46] Needless to say, a predominant proportion of the total medical outlay is spent for the old age population. Since at present the total government expenditures constitute approximately 20 per cent of the GNP, one can size up the enormity of future medical and health care cost in the forthcoming two decades.

Social implications of low fertility are so vast that it is impossible here to discuss each topic. Two additional features of consequences of ageing will be discussed at this juncture pertaining to the low fertility countries of the ESCAP region. One is the likelihood of disproportionately rapid increase in one-person households lived by old women or in two-person households lived by old-age couples, reflecting the substantial increase in life expectancy, the trend toward family nucleation, and the rise in the sense of privacy. If this trend continues, more careful long-range planning is required in regard to financial cost, space allocation, and related goods and services to be catered for mushrooming of small-sized households lived by the old-age people. One of the Japanese solutions is a domestic care of old parents within the private households of sons or daughters. But, it is not sure whether this model can work in other countries where co-living in the same household among three generations is a rare practice. Nevertheless, this model might conceivably be applied to those countries within the perimeter of Chinese culture where filial piety is still a virtue and the concept of the stem family is still strong.

The second issue is related to social fairness around the question of old-age retirement from work. There is much pressure today for older workers to retire early in the developed countries, to make room for younger workers in this age of high levels of unemployment. But, as Coale maintained, if one considers emotional and mental health problems of the aged, exactly the opposite policy seems desirable. What people beyond, say age 65 need is a sense of being wanted and what keeps an older person vigorous is to continue working.[47] Retirement from an active life, even retirement with the greatest comfort in the world, leads to a decline in vigor and the early beginning of senility. Especially with health and physical vigor of the older population increased, some accommodative attempts should be made to find out the ways and means to extend a retirement age instead of bringing up early retirement.

Implications of low fertility in the ESCAP region

With an increasingly greyer picture ahead of us as a consequence of ageing of the population, the reader may recall the metaphor at the beginning of this paper that the outcome of the sustained low fertility does not necessarily mean Shangrila, but as soon as one steps in the kingdom of ageing he would face entirely different dimensions of issues and problems which he could not imagine while he has been in the domain of high fertility.

Perhaps, the highlights of demographic issues of high fertility countries are characterized by heavy youth-dependency burden, rapid population growth, Malthusian trap, serious human waste due to high infant and child mortality which is likely

[45] Naohiro Ogawa, "Economic implications of Japan's ageing population: A macro-economic demographic modelling approach", *International Labour Review*, vol. 121, No. 1 (January 1982), p. 30.

[46] Mitsuharu Itoh, "Gendai iryo keizai no mondaiten" ("Issues in economics of health and medical care") *Sekai*, No. 439 (June 1982), p. 78.

[47] Coale, *op. cit.*, p. 188.

to accompany high fertility. On the other hand, however, if fertility keeps dropping rapidly, and sub-replacement level of fertility continues for sometime, the problems inherent in high fertility may disappear, yet the entirely new kind of issues will emerge. The issues are the zero or minus growth of population and ageing of the society with heavy old-age dependency, retardation of the economy, lack of social mobility and vitality.

Nevertheless, in a country like Singapore where the space limitation is only obvious, low fertility and zero growth through active fertility control will perhaps be the only logical model. It is of no doubt that many other countries in the ESCAP region would also benefit from reducing their fertility levels. When fertility declines to a very low level and is kept there for some decades, the growth rate will largely be reduced and the age composition will become, at least for some considerable years, quite favourable for economic development in terms of a relatively large size of working-age population and a low dependancy ratio such as currently enjoyed by Japan.

Passing through that stage which may last for a few decades, however, a low fertility country will eventually start facing an outcome of ageing, first glacially slow but later rapid, and will have to measure itself up to demographic, social, economic, and political consequences of ageing. Once the ageing process is in full swing, it would be almost impossible to change a course in a short term. Hence, it deems that it is now really a high time for planners in government or private sectors to give careful and long-term thoughts to future prospects of the population and its transformation of age structure, which will definitely arrive at the end of demographic transition.

1.5 ALTERNATIVE POPULATION PROJECTIONS AND THE FOOD AND AGRICULTURE ECONOMY OF THE DEVELOPING COUNTRIES IN ESCAP

by

Food and Agriculture Organization*

Introduction

The three United Nations population projection variants[1] indicate that in the year 2000, population in the developing countries of ESCAP could be between 3,095 and 3,330 million compared with an estimate of 2,334 million in 1980, and a growth rate between 1.4 and 1.8 per cent per annum, compared with the growth rate of 1.9 per cent in 1970-1975. Therefore, the increment in total population over the next two decades could amount to between 760 and 1,000 million. How significant is this difference from the standpoint of the food and agriculture prospects of the region? We can only attempt to give some rough and highly speculative indications.

If we were to consider the region as one single unit we could arrive at some erroneous conclusions. For example, cereal production has been growing at 3.6 per cent per annum over the period 1966-1980 and if this growth rate were to continue it would exceed by a comfortable margin the projected population growth even under the high variant. Total production in 2,000 would be some 965 million tons, sufficient to ensure 100 per cent self-sufficiency (compared with 95 per cent at present) and at the same time increase apparent consumption[2] *per capita* from 212 kg in 1978-1980 to between 290 and 310 kg depending on whether the high or the low population projection materialized. However, this optimistic conclusion can be misleading for a number of reasons.

In the first place, the projected population growth rates are not uniform in all countries. China is projected to have a significant decline in population growth to between 1.0 and 1.3 per cent per annum over the next two decades. By contrast, in the rest of the region the population growth rate is projected to be between 1.7 and 2.1 per cent per annum. These differentials can be of significance in assessing the adequacy of production possibilities to maintain and improve *per capita* food supplies.

Secondly, it is not sufficient to look at the situation from the standpoint of the adequacy of food production growth to keep up with population growth or even to bring about small improvements. In many countries the improvements needed to eliminate or significantly reduce undernutrition are substantial. We shall therefore distinguish three country groups in this analysis: China, a group of three middle-income countries[3] with adequate food supplies in the sense that *per capita* calorie supplies are between 2,650 and 2,950, and a group of the remaining 13 countries[4] which have *per capita* calorie supplies between 1,800 and 2,300. Some of the smaller developing countries of ESCAP are excluded from this analysis, but the countries included account for 99.3 per cent of the region's population.

Thirdly, it cannot be taken for granted that past trends in production growth can be continued

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[1] United Nations, *World Population Prospects as Assessed in 1980* (New York, 1981).

[2] Apparent consumption is obtained as production plus imports minus exports. Therefore it includes all domestic uses of cereals, e.g. food, feed, industrial non-food uses, seed and waste. Total cereals include wheat, rice (milled) and all coarse grains.

[3] Iran, Malaysia, the Republic of Korea (hereafter called "middle-income countries").

[4] Afghanistan, Bangladesh, Burma, Democratic Kampuchea, India, Indonesia, the Lao People's Democratic Republic, Nepal, Pakistan, Sri Lanka, the Philippines, Thailand, Viet Nam (hereafter called "low-income countries", although the Philippines and Thailand are not classified as such by the World Bank).

for another 20 years. On this point we shall report on FAO's evaluation of the agricultural growth possibilities from the study *Agriculture: Toward 2000*[5] which, however, does not include China.

Finally, in countries with rapidly increasing population dependent on agriculture, the key problem may not be the capacity of the sector to produce food for the growing total population but rather its capacity (or lack of it) to ensure increases in the incomes of the agricultural population sufficent to improve nutritional and general living standards.

China

The data on China, both as regards population growth and the food and nutrition situation, paint a picture which puts the country apart from the other low-income countries of the region. Population growth is projected to decelerate from 1.4 per cent in 1975-1980 to between 1.0 and 1.3 per cent per annum for the period 1980-2000. This contrasts sharply with projected growth rates of between 1.7 and 2.1 per cent for the other two country groups.

In parallel, cereals production statistics for the period 1966-1980 show a growth rate of 4.0 per cent per annum, (3.7 per cent per annum over the last decade 1971-1981), perhaps among the highest recorded anywhere in the world on a consistent basis. Apparent cereals consumption grew even faster at 4.2 per cent per annum, with the result that the average (*per capita*) calorie supplies as calculated from the food balance sheets are shown to have increased from 2,112 in 1966-1968 to 2,472 in 1978-1980. This is in stark contrast to developments in other low income countries of the region, many of which registered declines in *per capita* calories over the same period.

The rapid growth in consumption led to a near quadrupling of the net cereals deficit to 13.8 million tons in 1978-1980. Though this continued to represent a small proportion of total consumption, the self-sufficiency rate declined from 97 per cent in 1966-1968 to 94 per cent in 1978-1980.

What do these trends mean for the future? A continuation of production growth at the same rate as in the past in combination with the projected deceleration in population growth would lead to a situation where the country can become 100 per cent self-sufficient and still provide a very substantial increase in *per capita* consumption. It is obvious that the significance of alternative population growth rates is in practice dwarfed by a hypothetical continuation of high production trends.

We should therefore take a closer look at production trends and the possibility of their being sustained in the future. Unfortunately, FAO had not enough knowledge and data that would have permitted a full-scale evaluation of future possibilities in China at the time when such an evaluation was attempted for the other countries in the study "Agriculture: Toward 2000". There is a study by the International Food Policy Research Institute (IFPRI)[6] which estimates a trend production growth rate of grains[7] of 2.4 per cent per annum for the longer period 1952-1977. They also provide alternative projections to the year 2000 based on assumed developments in an index of total factor productivity and of increases in input use (land, labour, capital, current inputs). Their medium or "most probable" projection indicates a growth rate of 2.9 per cent for the period 1977-2000. If we accepted this growth rate and applied it to the 1979-1981 production volume of 238 million tons we can project total cereals output of 420 million tons in 2000.[8] This would be sufficient to raise *per capita* apparent consumption to between 325 kg (high population variant) and 343 kg (low population variant), under 100 per cent self-sufficiency. These levels compare with a present estimate of 252 kg and with 190 kg in 1966-1968.

We would expect (from the experience of other developing countries) that *per capita* cereals consumption of 300-350 kg (including feed and

[5] FAO, *Agriculture: Toward 2000* (Rome, 1981).

[6] A. Tang and B. Stone, *Food Production in the People's Republic of China*, Research Report 15 May 1980 (Washington D.C., International Food Policy Research Institute).

[7] Grains in the IFPRI study include rice in paddy form, pulses, and also roots and tubers in grain equivalent. The growth rate is probably not greatly affected by the discrepancy between our definition of cereals and IFPRI's definition of grains.

[8] The IFPRI estimates assume growth rates of 1.5 per cent for total population and of 1.0 per cent for the agricultural labour force. If, following the total population growth variants used here, we were to reduce proportionally the growth rate of the agricultural labour force to 0.7 or 0.9 per cent, then the resulting growth rate of cereals production would be 2.7 per cent (low population variant) or 2.8 per cent (high variant). The projected total output would be 405 or 413 million tons and *per capita* availability 330 or 320 kg respectively.

seed) would be compatible with average national calorie levels in the range of 2,850-2,950.[9] Therefore, there is a prima facie case that the above indicated production trends would be sufficient to cover fully the needs of the country by the year 2000 if at that time the calorie levels were to reach the above indicated range. A simple linear extrapolation of the calorie data for 1966-1980 results in year 2000 calories of 3,085. However, a straightforward extrapolation is not very appropriate since calorie growth decelerates significantly as higher levels are reached. If we took IFPRI's medium assumption of 4.0 per cent per annum economic growth and adopted a typical value of 0.3 for the income elasticity of the demand for calories (on a semi-logarithmic demand function) we find that year 2000 calories would be between 2,880 (high population variant) and 2,920 (low variant). These values are within the range that could be compatible with the availability of *per capita* cereals from domestic production, if production growth were to be as indicated earlier.

The middle-income countries

This group of countries registered substantial gains in food consumption over the period 1966-1968 to 1978-1980 with the average *per capita* calorie supplies rising from 2,304 to 2,886. This latter figure is among the highest in the developing world. But there the similarity with China ends.

Their population growth was 2.4 per cent in 1975-1980 and it is projected to remain high over the next two decades at between 1.8 and 2.3 per cent per annum under the two projection variants. Moreover, consumption growth at 4.7 per cent per annum for cereals was fuelled by rapidly increasing imports, especially in the Republic of Korea and Iran. The net cereals deficit rose from 2 million tons in 1966-1968 to 9.0 million tons in 1978-1980 and self-sufficiency declined from 86 per cent to 63 per cent. Cereals production growth over the same period was a modest 2.2 per cent per annum.

[9] Examples (average for 1978-1980)

	Calories	*Cereals (kg)*
Iran	2912	278
Japan	2915	300
Republic of Korea	2946	285
Egypt	2940	314
Mexico	2840	335
Syrian Arab Republic	2858	370
(China)	(2472)	(252)

Naturally, these increases in consumption and the widening of the deficit reflected rapidly improving *per capita* incomes sustained by expansion in other sectors. As such, the widening cereals deficit should not be considered an unmitigated evil. However, an extrapolation of these trends to the end of the century could lead to further rapid declines in self-sufficiency (e.g. to 38 per cent!) which are definitely alarming.

Fortunately a simple extrapolation of production and consumption trends would not be realistic. The consumption levels already reached, as indicated by 2,886 calories and 273 kg of cereals in 1978-1980, are sufficiently high to expect a significant deceleration in further growth. Even if economic growth were to continue to be buoyant at 7.5 per cent per annum (it was 8.4 per cent in 1965-1978), the FAO projections indicate a calorie level of 3,180 by 2000 and *per capita* cereals consumption 310 kg. Total cereals demand would then be between 40 and 45 million tons under the two population growth alternatives compared with 24 million in 1978-1980, a growth rate of between 2.5 per cent and 3.0 per cent per annum over the next 20 years.

However, even this significant deceleration in cereals demand growth would not be sufficient to prevent further declines in self-sufficiency (to between 60 and 54 per cent) if production were to grow no faster than the 2.2 per cent per annum of the past.

Can the production growth rate be raised? The FAO evaluation under the study *Agriculture: Toward 2000* concludes that an increase of the growth rate to 2.6 per cent would be feasible with total area under cereals remaining virtually the same as in the mid-1970s at just over 10 million ha (harvested) but with the share of irrigation increasing from 42 per cent to 53 per cent. In practice all production increases would have to come from gains in yields, as follows:

	Average yield (tons/ha)		
	Paddy	**Wheat**	**Coarse grains**
1966-1970	3.44	0.80	1.15
1976-1980	4.70	1.08	1.33
2000	5.60	2.13	2.28

The above indicated yield gains to 2000 are below trend for rice, on trend for wheat and above trend for coarse grains. The deceleration in the

growth of rice yields reflects the very high levels already reached and the fact that 95 per cent of all rice land is already irrigated. By contrast, the acceleration in yield growth of the coarse grains reflects the possibility of shifting and expanding the production of maize and barley to irrigated land.

If the projected cereals growth rate of 2.6 per cent materialized, it would be sufficient to prevent further declines in the self-sufficiency rate but only under the low population growth variant. By contrast a further decline to 58 per cent would be necessary under the high population growth variant. Here we see again the significance of the alternative population growth rates: what we can term a reasonably optimistic production outcome when coupled with the low population variant would contribute to prevent further declines in self-sufficiency. But this objective would prove unattainable if population were to grow as per the high variant.

The low-income countries

This last group of 13 countries is not a very homogeneous one since it includes countries at different stages in the demographic transition as well as food surplus and food deficit ones. By and large, however, countries in this group have the common characteristic of very low or relatively low nutritional standards and the meagre progress registered in this area over the last 15 years. Only four countries (Indonesia, Pakistan, the Philippines, Thailand) have *per capita* calories around 2,300, while another six countries have levels of less than 2,000. Moreover, seven countries are shown as having at present lower levels than 15 years ago. As a group, the 13 countries have *per capita* calories of 2077 compared with 1920 in 1966-1968. Only three countries (Indonesia, Pakistan, the Philippines) registered really substantial gains (increases of 15 per cent or more). *Per capita* apparent consumption of cereals is 174 kg compared with 163 kg in 1966-1968.

Cereals production grew at a reasonable rate of 3.2 per cent per annum but apparent consumption grew less fast at 2.8 per cent per annum and this led to a shrinking of their combined net deficit from 10.9 million tons in 1966-1968 to only 3.0 million tons in 1978-1980. As a consequence the self-sufficiency rate increased from 93 to 99 per cent. However, this outcome is biased by the good export performance of Thailand. Excluding it from the group, the net deficit declined from 13.6 to 7.5 million tons and the self-sufficiency increased from 91 to 96 per cent during the same period.

Naturally, what appears to be a movement in the right direction was bought at the cost of only meagre gains in *per capita* consumption. This development is in sharp contrast with what happened in the group of middle income countries examined earlier. In the end, these developments can be said to reflect a combination of balance of payments constraints and inadequate income growth of the population groups most in need to improve consumption.

In parallel, the population growth prospects do not point to very significant declines. The high variant at 2.1 per cent per annum 1980-2000, would be only a little below the 2.2 per cent growth rate of the recent past (1975-1980). The low variant growth rate is 1.7 per cent.

We start building the picture of possible future developments by allowing past trends in *per capita* calorie levels to continue to the year 2000, but subject to maximum levels which would result from the economic growth assumptions presented later. However, it would be unreasonable to allow past negative trends to continue. As already mentioned above, seven of the 13 countries fall in this category and for these countries we maintain for 2000 the levels of 1978-1980. Under these assumptions, the average calorie level of the group as a whole would be 2200 in 2000 compared with 2077 in 1978-1980, and the average *per capita* apparent consumption of cereals should rise from 174 kg to 195 kg. Consequently, total cereal requirements in 2000 would be between 340 and 370 million tons under the low and the high population growth variants respectively.

Under these circumstances, the production growth requirements for 100 per cent self-sufficiency rate would be between 2.3 and 2.7 per cent, that is in both cases below the past trends of 3.2 per cent. On the face of it, it would be tempting to say that this group of countries could cope with population growth even if the high variant materialized. However, this would be a grossly misleading deduction. For one thing, we have still to evaluate whether cereals production growth at 3.2 per cent could be sustained for another 20 years. For another, under this scenario only two countries reach calorie levels exceeding 2500. But in seven countries calorie levels stagnate at their base year level of between 1800 and 2000 (these are the countries on a declining trend) and the rest would experience only moderate gains.

But let us proceed one step at a time. First, can cereals production growth be sustained at 3.2 per cent per annum? The FAO evaluation in the study *Agriculture: Toward 2000* answers this question in the negative, although the growth rate assessed as feasible is 3.0 per cent, not very far below trends of the past 15 years.

To attain this almost doubling of cereals output from the average level of 1976-1980, area under cereals could be increased by some 20 million ha or 11 per cent, but it should be feasible to increase the proportion irrigated from 31 per cent to 47 per cent. The yield gains thus achievable are as follows:

	Average yields (tons/ha)		
	Paddy	**Wheat**	**Coarse grains**
1966-1970	1.68	1.04	0.66
1976-1980	2.01	1.43	0.80
2000	3.28	2.64	1.54

The projected yields for both paddy and coarse grains are somewhat above trend while those for wheat are somewhat below trend.

Obviously, production growth at 3.0 per cent would provide a significant margin for increasing consumption beyond the trend levels indicated above and which, for most countries, would be no higher than at present. In what follows, therefore, we attempt to estimate what improvements in terms of increased nutritional standards are possible by the potential increase in production. We shall measure improvements in terms of possible reductions in the number of people who are deemed to be undernourished in the sense that their calorie levels are below a given critical limit.

Physiological undernutrition can only be ascertained by individual medical examination of the nutritional status. Such data are, however, extremely scanty. We resort therefore to indirect evidence derived from the data on the distribution of calories over the population. Even here the data are less than satisfactory but, subject to the appropriate reservations, a rough estimate can be made. This shows that 24 per cent of the population of ten out of the 13 countries[10] or 280 million could have calorie levels below a conventional critical limit of 1.2 BMR or around 1,500 calories (BMR = basal metabolic rate, a measure of energy expenditure variable among individuals). There is a high probability that people below this critical limit consume food below their requirements and as such they can be classified as undernourished.

The above indicated growth in *per capita* calories according to trend would be sufficient to reduce the proportion of population below this critical limit to under 5 per cent in only one country. For the group as a whole, the proportion of population in this category would decline to around 18 per cent by 2000, but because of population growth, the absolute numbers would increase to between 300 and 330 million under the two population growth variants. In this situation of endemic low nutritional levels, the realization of the high rather than the low population growth variant would mean, *inter alia,* more people below the critical limit.

Can we evolve a scenario under which the situation would improve? We can only attempt to provide a range of highly speculative indications. At the one extreme, we can assume that undernutrition can be eliminated by completely efficient direct intervention measures, the end result of which would be that each person below the critical limit is given a quantity of cereals just sufficient to bring his/her consumption to exactly the critical limit. The additional quantities of cereals required in 2000 for this purpose would be between 23 million tons (low population alternative) and 26 million tons (high alternative).

Adding these extra quantities to the consumption requirements of these ten countries from the trend projection it results that the required growth rate of cereals production for 100 per cent self-sufficiency is 2.6 per cent for the low population variant and 3.0 per cent for the high one. These rates compare with a projection of production assessed as feasible of 3.0 per cent. The general conclusion is that cereals production growth at 3.0 per cent would be adequate to provide the extra food needed to combat undernutrition with direct intervention measures. However, this rather optimistic conclusion depends on the assumption of totally efficient direct redistribution of 6-7 per cent of total output so that the extra cereals required would be only the quantities just sufficient to fill the calories gap of the population below the critical limit. As such, the assumption is highly unrealistic.

[10] Estimates could not be made for Democratic Kampuchea, the Lao People's Democratic Republic and Viet Nam, which therefore are not included in the subsequent discussions.

At the other extreme we ask the question whether reasonably optimistic economic growth in the future, which would raise average incomes and calorie levels, would reduce the incidence of undernutrition and what this would mean for total food requirements under the two population growth variants. To this effect, we assume that economic growth rates would be as per past trends for countries with above 5 per cent in the past (Indonesia, the Philippines, Sri Lanka, Thailand, over the period 1966-1968 to 1976-1978) and at 5 per cent in all others. For the ten countries as a whole, the growth rates of *per capita* income would be 4.2 or 3.8 per cent per annum, the projected year 2000 calorie levels 2,380 or 2,340,[11] and the proportion of population below the critical limit would be reduced to 10 or 12 per cent, under the low and the high population growth variants, respectively.

In only three (or two) out of the ten countries would the population proportions below the critical limit decline to under 5 per cent. Obviously, overall economic growth at the assumed rates without some improvement in the distribution would not be sufficient to eliminate the incidence of undernutrition or to bring about a drastic reduction. The question is, therefore, whether distribution can be improved. From the standpoint of the population aspects of the problem, there is reason to believe that high population growth may in itself be a factor working in the opposite direction.

The argument goes as follows.[12] About two thirds of the group's population is dependent on agriculture as the principal source of income. Under the two total population growth variants, the agricultural population according to FAO projections would continue to grow at between 0.6 and 1.0 per cent per annum. Now, a reasonably optimistic projection of the growth rate of gross agricultural output would not exceed 3.5 per cent and in terms of income (rather than gross output) it would be nearer 3.0 per cent. If agriculture is actually the almost exclusive source of income of the agricultural population the implication is that the *per capita* incomes of between two thirds and one half of the total population would not grow at more than 2.5 per cent per annum. This is well below the growth rates of *per capita* incomes of between 3.8 and 4.2 that would result from the above economic growth assumptions and which would not, by themselves, be adequate to reduce the population below the critical limit to under 5 per cent in all but two or three countries.

Inevitably, it is seen that population growth at a rate close to 2.0 per cent can be detrimental to the possibilities of significantly reducing undernutrition since it delays the onset of stabilization and eventual decline in the numbers dependent on agriculture. An additional factor working in the same direction could be the higher than average fertility rate often encountered in the low income/rural population groups. Viewed in this light the possibility of producing more food for the growing population may not be the most crucial aspect of the problem, at least not in all countries. Viewing the group of the ten countries examined here as an aggregate, the assessed cereals production growth possibilities of 3.0 per cent per annum to the year 2000 would be sufficient to provide 210 or 225 kg *per capita* at 100 per cent self-sufficiency under the high and the low population growth variants, respectively. These levels of *per capita* apparent consumption of cereals would be approximately compatible with the average level of around 2,350-2,400 calories that would result from the economic growth assumptions presented earlier.

We can now recapitulate. In the 10 countries considered here production growth at 3.0 per cent would provide 210 (high population growth variant) or 225 kg (low variant) of cereals *per capita* in the year 2000 under 100 per cent self-sufficiency. The rough calculations under the assumptions presented above have shown that these levels would be approximately sufficient to either: (a) meet demand resulting from trend growth in *per capita* calories and also provide the necessary quantities (6-7 per cent of total output) required to combat undernutrition under totally efficient direct intervention, or (b) meet demand that would result from given economic growth assumptions and unchanged distribution. In this latter case the share of population with nutritional standards below the critical limit would be reduced only moderately – to 10-12 per cent. An increased share of the total cereals would probably be consumed by the better-off income groups and would include indirect consumption via the feed-livestock chain.

[11] This result is obtained by using income elasticities of demand for calories on a semi-logarithmic function of between 0.1 and 0.5 in the different countries at the present national average level of calories. These estimates are taken from the FAO food demand model and are derived indirectly from the demand functions for the individual commodities.

[12] See also K.N. Raj, "Accelerating Asia's growth", *Populi*, vol. 8, No. 3. 1981.

If this latter scenario were to be expanded to include some re-distributive policies, whether of food or income, the 100 per cent self-sufficiency rate would probably not be feasible particularly if the high population growth variant were to materialize. What is more important, such policies may be essential not only to improve distribution but also to prevent it from worsening.

Conclusions

In this paper we have speculated on the possible significance of alternative population growth rates for developments in *per capita* food supplies and nutrition. We recognized that there exist significant differences among countries and groups of countries.

China's prospects are dominated by the projected significant deceleration in population growth and if this were to materialize the continuation of production trends even at rates below those of the recent past would be sufficient to ensure increasing *per capita* supplies. In practice, the materialization of the high rather than the low population growth variant would mean smaller gains in *per capita* supplies, but such gains would be substantial all the same.

In the middle income countries population growth is projected to be maintained at relatively high levels under both variants. Moreover, the differential in year 2000 population under the two variants is a substantial 10 per cent. However, if trends in overall economic growth and food consumption were to continue, these countries could register gains in *per capita* food supplies such that it can be expected that serious problems of undernutrition will not be present, under both population growth variants. The materialization of the low rather than the high variant combined with some acceleration in production growth would be instrumental in arresting the declining trends in cereals self-sufficiency.

In the group of the low income countries the emerging picture is mixed. In some of them continuation of trends (whether directly of food consumption/production or of economic growth) would bring gains in *per capita* food supplies that, mainly under the low population growth variant, would go a long way towards reducing the incidence of undernutrition. In others, however, food consumption and nutrition situation could deteriorate under both population variants. In this case the high variant would mean, *inter alia*, more people with nutritional standards below the critical limit. For these countries we examined the possible effects of an acceleration of economic growth to 5 per cent and we found that in most cases this should be combined with some measure of redistribution if the population groups below the critical limit were to have income increases sufficient to reduce their numbers to, say, under 5 per cent of total population by 2000. We also indicated that positive action may be required not just to improve income distribution but also to prevent it from deteriorating. This is so because population growth rates of 2 per cent or higher may in themselves contain the seed of a deterioration in income distribution in the typical case of the low income countries examined here. And, naturally, the high population growth variant will make things all that more difficult. We also indicated that cereals production growth at 3.0 per cent would raise *per capita* availabilities to levels which, by and large, would provide some margin for covering requirements for redistribution although this margin would be extremely limited under the high population growth variant.

Now, some of the things we did not do. We have assumed that production growth possibilities can be evaluated independently of the population growth variants, although in the case of China we indicated the alternative production growth rates that would result from alternative growth rates of total population and of the agricultural labour force. The assumption is that agricultural labour supply in many countries is not a binding constraint, though we must admit that this is probably not true in all cases. It also implies that varying levels of population pressure do not by themselves create pressures and conditions that would materially modify production trends. Again, this is probably not true in all cases, but we could not account for this relationship without more in depth studies.

Similar considerations apply to the relationship between overall economic growth and population growth. We have assumed that any given total GDP growth rate can be compatible with either the high or the low population growth variants. There are many theoretical propositions that would support or, alternatively, reject this assumption but there is precious little by way of validated empirical relationships in this area.

Finally, whatever pronouncements we made depended on analyses at the national level. However, the spatial distribution of the population and of its increases within any given country could imply disequilibria vis-à-vis the food supply potential at the regional level which are not captured in an analysis limited to national aggregates.

Developing ESCAP countries - selected data

Country	Population (million)				Calories per capita		Cereals[a] (million tons)									
							1966-1968					1978-1980				
	1975	1980	2000		1966-1968	1978-1980	Production	Net trade[b]	Apparent consumption		SSR[c]	Production	Net trade	Apparent consumption		SSR
			Low	High					Total	Per capita (kg)				Total	Per capita (kg)	
Afghanistan	14	15.9	24.7	27.6	2 173	1 833	3.6	−0.1	3.7	321	97	4.2	−0.1	4.3	277	97
Bangladesh	76.6	88.2	137.1	160.7	1 965	1 877	10.8	−1.0	11.8	188	92	13.9	−1.7	15.6	182	89
Burma	31.2	35.3	51.8	58.4	2 096	2 286	5.1	0.7	4.4	170	116	7.8	0.5	7.3	212	107
Sri Lanka	13.6	14.8	20.5	21.7	2 291	2 249	0.8	−1.0	1.8	154	44	1.4	−1.0	2.4	166	57
India	618.8	684.5	927.6	997.2	1 860	1 998	74.7	−9.1	83.8	163	89	111.7	0.7	111.0	165	101
Indonesia	135.7	148	190.1	206.1	1 841	2 295	13.2	−0.6	13.8	121	96	22.1	−2.9	25.0	179	88
Nepal	12.7	14.3	21.5	23.9	2 028	1 914	2.5	0.3	2.2	206	114	2.8	0.1	2.7	193	102
Pakistan	75.5	86.9	135.1	144.6	2 015	2 300	7.9	−0.8	8.7	145	91	14.4	−0.3	14.7	174	98
Philippines	43.1	49.2	74.4	80.1	1 897	2 315	4.4	−0.8	5.2	151	85	8.1	−0.9	9.0	188	90
Thailand	41.9	47.1	66.1	71.1	2 251	2 301	9.7	2.7	7.0	210	139	14.6	4.5	10.1	220	145
Sub-total (1-10)	**1 063.1**	**1 184.1**	**1 648.9**	**1 791.4**	**1 911**	**2 082**	**132.7**	**−9.7**	**142.4**	**162**	**93**	**201**	**−1.1**	**202.1**	**174**	**99**
Democratic Kampuchea	7.1	6.7	9.7	11.9	2 177	1 795	1.9	0.3	1.6	250	119	0.8	−0.2	1.0	150	81
Lao People's Democratic Republic	3.3	3.7	5.3	6.1	2 096	1 856	0.5	−0.1	0.6	214	83	0.6	−0.1	0.7	194	88
Viet Nam	47.9	53.7	75.7	82.8	2 050	2 029	6.2	−1.4	7.6	187	82	7.7	−1.6	9.3	177	83
Sub-total (1-13)	**1 121.4**	**1 248.3**	**1 739.6**	**1 892.2**	**1 919**	**2 077**	**141.3**	**−10.9**	**152.2**	**163**	**93**	**210.1**	**−3.0**	**213.1**	**174**	**99**
Iran	32.7	38.1	60.7	69.2	2 145	2 912	5.9	−0.2	6.1	234	97	7.6	−2.7	10.3	278	74
Malaysia	12.4	14.1	20.6	22.0	2 423	2 650	0.9	−0.9	1.8	180	50	1.3	−1.8	3.1	226	42
Republic of Korea	35.3	38.5	49.0	52.6	2 404	2 946	5.3	−0.9	6.2	208	85	6.3	−4.5	10.8	286	58
Sub-total (14-16)	**80.4**	**90.7**	**130.3**	**143.8**	**2 304**	**2 886**	**12.1**	**−2.0**	**14.1**	**214**	**86**	**15.2**	**−9.0**	**24.2**	**273**	**63**
China	927.7	994.9	1 225.8	1 294.1	2 112	2 472	146.2	−3.8	150.0	190	97	234	−13.8	247.8	252	94
Grand total	**2 130**	**2 334**	**3 096**	**3 330**	**2 018**	**2 277**	**299.6**	**−16.7**	**316.3**	**177**	**95**	**459.3**	**−25.8**	**485.1**	**212**	**95**

Sources: Population: United Nations, *World Population Prospects as Assessed in 1980*, (New York, 1981); All other data are from the FAO data bank.

[a] Cereals include wheat, rice in milled form (not paddy) and all coarse grains.

[b] Minus sign indicates net imports.

[c] SSR = Self-sufficiency rate = Production/apparent consumption (percentage).

1.6 IMPLICATIONS OF MORTALITY TRENDS AND DIFFERENTIALS IN THE ESCAP REGION

by

Lado T. Ruzicka*

Introduction

In the terms of demographic and development indicators, the ESCAP region is one of sharp contrasts (see table 1): it contains the largest (China, India) as well as the smallest populations (Nauru, Tonga, Maldives): it has very densely populated countries (Bangladesh) but also sparsely populated ones (Mongolia, Australia); some of its populations continue growing at the rates of around 3 per cent a year (Iran, Mongolia, the Philippines, Thailand) while others have reduced the rate of natural growth to well below one per cent (Australia, Japan, New Zealand). Some of the countries and areas are highly urbanized (Australia, Japan, New Zealand) or are virtually "city states" (Hong Kong, Singapore) while in others less than 10 per cent of the national population reside in urban areas (Bhutan, Nepal, Bangladesh). In the highly urbanized countries, levels of *per capita* GNP reached by the mid-1970s, were in excess of $US 3,000; but the region also contains large populations with average *per capita* GNP still less than $US 150 (Bangladesh, Bhutan, Burma, Lao People's Democratic Republic, Nepal). Literacy levels of adults range from under 20 per cent (Afghanistan, Nepal) to virtually 100 per cent (Australia, Japan, New Zealand, Republic of Korea). As could be expected, the indices of fertility also vary within a wide range: total fertility rates as low as 2.0 or below are found in Australia, Japan and New Zealand, while in Afghanistan they probably reach 8.0.[1] The average expectation of life is probably less than 45 years in Afghanistan, Bhutan, Democratic Kampuchea, Lao People's Democratic Republic, Nepal) while in Japan, Australia and New Zealand it is close to or in excess of 70 years. In addition, with respect to the conditions directly affecting health, and hence mortality, physical conditions and climate vary considerably between the countries and, in some instances, even within the same country.

The variations in socio-economic and demographic characteristics are not fortuitous but the results of historical, social, economic, and political developments as well as of cultural diversities. The countries also vary in their systems of administration and adherence to diverse political philosophies under which their past and current developmental efforts have been moulded. Their social and cultural settings facilitate in some instances, and slow down in others, adaptation to changing life styles, development of physical and human resources, adoption and effective utilization of innovative technologies, including those affecting – directly or indirectly – family formation and health. Under these circumstances it is almost impossible and hardly justifiable to attempt generalizations on any single aspect of the changing demographic scene from cross-sectional data.[2]

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[1] James F. Spitler and Nancy B. Frank (*Afghanistan, A Demographic Uncertainty.* International Research Document No. 6., United States Bureau of the Census, September 1978) using the 1972/73 *National Demographic and Family Guidance Survey* estimated total fertility rate (TFR) as between 6.9 (based on the number of children born in the recent past) and 8.9 to 10.2 live births per woman, (based on the number of children ever born adjusted by Brass technique). Tim Dyson, "Infant, child and maternal mortality and associated conditions of health in the Greater Kabul Region of Afghanistan." *WHO Health Statistics Quarterly* 1981, vol. 34, No. 1, pp. 14-43 using the *ad hoc Survey of Infant and Early Childhood Mortality in Relation to Fertility* conducted in Greater Kabul region in 1972-1975 estimated the level of TFR in the urban settled population as 8.1 live births per woman.

[2] Cross-sectional comparisons and complicated multivariate analyses based on them have many limitations, the most severe one being, "...a mechanistic and linear conception of history, a conception which assumes that every society must go through the same stages of 'development' until it reaches the stage in which the economic apparatus continually ensures to the population an income level similar to that of those countries at present considered 'developed'." (J.C. Sanchez Arnau, "The cultural dimensions of development". *Development,* 1981, Nos. 3-4, pp. 3-9).

Table 1. Selected demographic and socio-economic indicators for the countries of the ESCAP region

Table 1. Selected demographic and socio-economic indicators for the countries of the ESCAP region

Countries[a]	Mid-year pop. 1978 (million)	Density (per km^2)	Annual rate of growth 1975-1978	Natural increase (per 1,000)	Life expectation at birth		GNP per capita		Adult literacy 1975	TFR 1978	Percentage urban 1980	Child mortality (ages 1-4 years) per 1,000		Population per physician	
					Male	Female	$US (1978)	Percentage growth 1960-1978				1960	1978	1960	1977
Afghanistan	17.9	28	2.3	24.1[e]	40[d]	41[d]	240	0.4	12	6.9	15	42	27	22 460	19 890
Australia[b]	14.2	2	1.1	8.2	68[q]	74[q]	7 990	2.9	100	2.1	89	1	1	860	650
Bangladesh	84.7	588	2.4	26.9[d]	46	47	90	−0.4	26	6.1	11	29	23	n/a	9 260
Bhutan	1.2	26	2.3	21.4[d]	42[d]	40[d]	100	−0.3	n/a	6.2	4	41	28	n/a	n/a
Burma	32.2	48	2.2	23.6[d]	49[d]	52[d]	150	1.0	67	5.5	27	25	15	9 900	5 120
China	933.0	97	1.4	16.6[d]	61[d]	6[d]	230	3.7	n/a	2.3	25	14	1	n/a	n/a
Democratic Kampuchea	8.6	47	1.9	29.0[d]	44[d]	77[d]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
India	638.4	194	2.1	19.4[f]	46[r]	45[r]	180	1.4	36	5.0	22	28	18	5 800	3 620
Indonesia	145.8[c]	72	2.4	24.8[d]	– 46[t]	–	360	4.1	62	4.9	20	31	20	41 000	14 580
Iran	35.2	21	2.2	31.0[g]	58[g]	57[g]	2 160	7.9	50	5.9	50	24	14	n/a	n/a
Japan[b]	114.9	309	1.0	9.5[h]	72[h]	77[h]	7 280	7.6	99	1.8	78	3	1	920	850
Lao People's Democratic Republic	3.5	15	2.4	21.8[d]	39[d]	42[d]	90	n/a	n/a	6.4	13	29	27	38 000	21 600
Malaysia[b]	13.0	39	2.9	24.4[j]	66[j]	71[j]	1 090	3.9	60	3.9	29	9	3	6 940	4 350
Maldives	0.1	473	2.4	28.7[k]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mongolia	1.6	1	3.0	29.2[d]	59[d]	62[d]	940	1.5	n/a	5.4	50	14	5	1 010	480
Nauru	0.008	381	–	15.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Nepal	13.4	95	2.2	21.9[d]	42[d]	45[d]	120	0.8	19	6.5	5	35	23	72 000	35 210
New Zealand[b]	3.1	12	0.4	9.0[o]	69	75	4 790	1.7	99	2.2	85	1	1	690	740
Pakistan	76.8	95	3.0	24[i]	– 48[u]	–	230	2.8	21	6.7	28	27	17	11 000	3 780
Papua New Guinea	3.0	6	2.9	24.5[d]	47[d]	47[d]	560	3.6	32	6.0	17	32	19	n/a	11 800
Philippines	46.4	155	3.3	30.7[d]	57[d]	60[d]	510	2.6	87	5.0	36	16	7	n/a	2 760
Republic of Korea	37.0	376	1.6	19.9[d]	63[i]	67[i]	1 160	6.9	93	2.8	55	13	5	3 000	1 960
Samoa	0.15	54	0.6	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Singapore[b]	2.3	4 018	1.2	11.8	65[m]	70[m]	3 290	7.4	75	2.1	100	4	1	2 400	1 260
Sri Lanka[b]	14.3	219	2.0	21.8[n]	64[s]	67[s]	190	2.0	78	3.6	27	7	2	4 500	6 270
Thailand	45.1	88	2.5	29.1[d]	– 61[v]	–	490	4.6	84	4.5	14	15	6	7 800	8 170
Tonga	0.09	133	−3.0	11.1[p]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Viet Nam	49.9	151	2.3	21.2[d]	43[d]	46[d]	170	n/a	87	5.5	23	28	6	n/a	5 620

Sources: United Nations Demographic Yearbook 1978 (New York, 1979); World Bank, *World Development Report, 1980.*

[a] Excludes the following Associate Members: Brunei; Cook Islands; Fiji; Gilbert Islands; Hong Kong; Solomon Islands; Trust Territory of the Pacific Islands; Tuvalu.

[b] Countries having complete registration of vital events.

[c] Population size including East Timor.

[d] Estimates for 1970-1975 by United Nations Population Division.

[e] Based on the Afghan Demographic Survey.

[f] Based on the Sample Registration Scheme, 1976.

[g] Based on the results of the Population Growth Survey Project: natural growth for 1974-1975, e_0° for 1973-1976.

[h] Natural growth, 1977; e_0° for 1976.

[i] 1970.

[j] Western (Peninsular) Malaysia-natural growth 1977 e_0° for 1976.

[k] Natural growth 1977.

[l] Based on Pakistan's Population Growth Survey, for 1968.

[m] For 1970.

[n] For 1972.

[o] For 1977; e_0° for 1970-1972.

[p] 1976.

[q] 1970-1972 : Australian Bureau of Statistics, Life Tables 1970-1972.

[r] 1961-1970 : Registrar General, Census of India 1971, Life Tables.

[s] 1970-1972 : Department of Census and Statistics, Colombo Life Tables 1970-1972.

[t] 1975 : United States Bureau of the Census, World Population, 1979.

[u] 1962-1965 : *ibid.*

[v] 1974-1975 : *ibid.*

Furthermore, a comprehensive discussion of demographic change in the region is constrained by the paucity of reliable data for many of the national and, even more so, the sub-national population groups. Direct calculation of mortality indices based on complete registration of deaths and estimates of population size and age/sex distribution is possible for only a few less propulous countries of the region.[3] For most of the other countries, estimates of mortality levels have been available at various points in time, but the reliability of many of them is often doubted. The development of indirect techniques of mortality estimation following Brass' innovative approach[4] increased the scope and data sources, at least with respect to infant and child mortality. In addition, in a few countries birth and death registration systems were introduced (dual record system) on a sample basis or covering selected areas.[5] Demographic surveys conducted largely since the late 1960s and during the 1970s enhance considerably the amount of information now available. Although much has been achieved during the decade separating the Second and Third Asian Population Conferences, large gaps still exist in our knowledge of the health and mortality situation in many countries of the region and even more limited is the information concerning levels and sex/age patterns of mortality of various sub-national groups. Other aspects of mortality that are important for health planning and development of health services and effective strategies for their delivery, as for instance causes of death and morbidity data, are almost non-existent.

In this paper the focus will be on the situation in selected less developed countries of the ESCAP region, for which at least some data are available.[6] The paper will briefly summarize the present state of knowledge about current (around 1975) differences in levels of mortality among the countries, then proceed to the examination of differential mortality among various sub-national population groups defined in terms of geographical regions, type of residence, socio-economic status, and education. To what extent the mortality levels and differentials reflect the health situation of the population will be taken up in the subsequent section of the paper. In the concluding sections we will attempt to point out the social and economic consequences of mortality differentials, paying particularly attention to the implications for the health care systems in the context of the government's commitment to achieve "Health for all by the year 2000" and to the specific targets such as increasing the life expectation at birth to 60 years and reducing infant mortality to 50 deaths per 1,000 live births by the turn of the century.

Mortality differentials between countries

In very general terms it may be affirmed that mortality has declined throughout the ESCAP region during the past 25 years. In a few countries, such as Sri Lanka, Western Malaysia, some parts of the Indian subcontinent, the beginnings of the sustained decline in mortality rates can be traced back to the period between the two World Wars. There are undoubtedly other instances where this happened, for example Indonesia and the Philippines, but there are no reliable statistics to confirm it. For most countries of the region mortality measures cannot be obtained for more than the past two or three decades, and even then, some of the earliest estimates are better interpreted as representing the central point of a range of possible values rather than an exact actual level of mortality.[7]

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[3] *WHO/ESCAP Meeting on Mortality in South and East Asia 1950-1975. Trends, Levels and Differentials* (ed. L.T. Ruzicka) (WHO, 1982): in particular, ESCAP secretariat, "Sources, availability and quality of data for measuring mortality trends and levels in the ESCAP region" (annex), and L.T. Ruzicka and H. Hansluwka, "A review of evidence on levels, trends and differentials in mortality since the 1950s."

[4] William Brass, *Methods for Estimating Fertility and Mortality from Limited and Defective Data* (The University of North Carolina at Chapel Hill, Laboratories for Population Statistics, October 1975).

[5] Registration systems covering only a sample of the national population are operating in India (Sample Registration Scheme), Burma (urban population only) and Indonesia (selected provinces, gradually being expanded).

[6] The countries covered in this study are *Pakistan, India, Nepal, Sri Lanka, Bangladesh, *Burma, Thailand, Indonesia, Philippines, Republic of Korea, *China. Data limitations may preclude full or equal coverage of the countries marked with.*

[7] In may instances estimate within a rather wide range of values may be obtained from the same data set depending upon the methodology of estimation, the extent and type of necessary data adjustments etc. For instance, estimates of the crude death rate for Thailand in 1945 range from 24.0 to 30.9, and for 1955 from 12.6 to 18.0 (ESCAP Country Monograph Series No. 3, *Population of Thailand* (Bangkok, 1976), p. 52). For the Republic of Korea, estimated life expectation at birth for 1955-1960 ranged from 46.9 to 52.8 years for males and from 52.5 to 53.7 for females (ESCAP Country Monograph Series No. 2, *Population of the Republic of Korea*, p. 177/table 17.) Similar examples could be given for other countries, in particular for the 1950s and earlier periods.

These reservations notwithstanding, a recent review[8] of the mortality transition in selected ESCAP countries confirmed that at least in some of them the late 1940s and 1950s were marked by conspicuous rapid improvements of mortality. These improvements were largely attributed to the introduction of comparatively cheap and effective technologies for the control of disease vectors, immunization, and effective disease treatment.[9] Outbreaks of epidemics became rare, and where they did occur, they took a lesser toll in human lives as the national public health administrations now had the tools to cope with them. Large scale famines also disappeared from the scene though localized food shortages and localized famines still pose occasional problems in areas stricken by drought or flood or by other natural or man-inflicted calmities.[10]

By and large, most of the programmes focussing on the control of selected infectious diseases did not require large investment in the health infrastructure and in the long-term training of personnel. Many of the methods of mortality control could be applied (often with the assistance of international agencies or in the form of bi-lateral aid) almost independently of the stage the country has reached in its social and economic development. However, it was suggested as early as the 1960s that health intervention organized along these lines and largely dissociated from the socio-economic conditions of the country cannot achieve but a limited reduction of mortality.[11] On the other hand, it was held by some authors that where adequate health facilities existed or could be developed concurrently to reach a large part of the population, the effect of the "vertical" disease control programmes would be considerably enhanced.[12]

As a result of the diverse approaches to disease control, and hence to mortality, and also as a result of economic and social changes, the pace of mortality decline during the 1950s and 1960s varied considerably from one country to another. In a few instances where the population was heavily concentrated in an urban area (Hong Kong, Singapore) and hence had an easy access to the health facilities, or where such facilities were extended to the rural areas (Sri Lanka, Peninsular Malaysia) mortality eventually reached or approached levels comparable to those prevailing in the more developed low-mortality countries. Obviously, the existence of health infrastructure was not the sole agent in this process: high levels of literacy (which, among other aspects of its complex impact on people's behaviour and life style[13] also prompts awareness of ways of health

[8] Ruzicka and Hansluwka, *op. cit.;* M. Sivamurthy, "The deceleration of mortality decline in Asian countries." *IUSSP International Population Conference, Manila 1981,* vol. 2, pp. 51-76. A more generalized view is expressed in D. Gwatkin, "Indications of change in developing country mortality trends: the end of an era?" *Population and Development Review,* 1980, vol. 6, No. 4, pp. 615-644.

[9] United Nations, *The Determinants and Consequences of Population Trends,* (New York, 1973) vol. I. pp. 152-155. The views expressed there have been gradually modified and a more cautious interpretation is given now to the impact of health programmes and their contribution to decreases in mortality (see H. Hansluwka, "Health, population and socio-economic development" in L. Tabah (ed.) *Population Growth and Economic Development in the Third World* (Liege, Ordina Editions, n.d.), vol. 1., pp. 191-250.

[10] In Bangladesh, the 1971 war of liberation and the devastating cyclone in November 1970 took a heavy toll estimated officially at 3 million lives. During the famine following monsoon flooding in late 1974 the well documented death rates in the field station of the then Cholera Research Laboratory rose sharply from 14.6 (1973/74) to 20.0 (1974/75) per 1,000 population. See ESCAP Country Monograph Series No. 8, *The Population of Bangladesh* (Bangkok, 1981), p. 45.

[11] George Stolnitz, "International mortality trends: some main trends and implications", in United Nations, *The Population Debate: Dimensions and Perspectives,* (New York, 1975), vol. 1, pp. 220-236. E.E. Arriaga, *Mortality Decline and Its Demographic Effects in Latin America,* Population Mongraph Series No. 6 (Berkeley, University of California, 1970).

[12] H. Hansluwka suggested as a working hypothesis that a "take-off" into development is an essential prerequisite at the early stages of mortality decline; only after a certain "threshold" has been reached can health programmes become fully effective and may achieve, within a relatively short period and independently of socio-economic progress a substantial reduction of mortality. There is, however, a ceiling beyond which "...the impact of health measures tapers off and further gains are dependent on a 'catching up' in the social and economic field, including changes in personal behavioural patterns...". (H. Hansluwka, "Health programmes and the prospects for further reductions of mortality in low-mortality countries," in *International Population Conference, Liège 1973* (Liège, IUSSP, 1973), vol. 3, pp. 283-300.

[13] On the role of education, particularly of mothers, in the mortality transitions see J.C. Caldwell, "Education as a factor in mortality decline: an examination of Nigerian data," *Population Studies* (1979), vol 33, No. 3, pp. 395-413, and J.C. Caldwell and P.F. McDonald, "Influence of maternal education on infant and child mortality: levels and causes" in *International Population Conference, Manila 1981,* (Liège, IUSSP, 1982), vol. 2, pp. 79-95.

protection and a high utilization of the services available), social welfare policy, development of adequate housing and water supply, environmental hygiene etc. and the rapid rate of economic growth with its colloraries such as higher employment levels, improved wage structure and more equitable income distribution played a role. This may be one of the reasons why low levels of mortality are now found in countries of such diverse social and economic profiles as the People's Republic of China, Republic of Korea, Sri Lanka, Western Malaysia, Singapore and Hong Kong.

Some of these countries have adopted a path of development in which the initial emphasis has been on social aspects (health, education, better minimum wages) while in other countries the development model emphasized material progress. Benefits from the growth of the economy were, in the latter model, expected to percolate down to other sections of the society, among them the middle-class and organized sections of the industrial work force.[14]

In many countries of the region, the sustained decline of mortality started at first during the 1950s or even as late as the 1960s. In many of them the initial progress could not be sustained for a variety of reasons, or the tempo was rather slow; hence, during the 1970s with more data flowing from various demographic surveys it became obvious that in some populations of the region levels of mortality started showing signs of stagnation or at least considerable retardation of the pace of decline at levels that were far too high not to be amenable to further improvement, given the present state of medical technology and knowledge. This appears to have been the case of the large populations in the region, such as Bangladesh, India, Indonesia and Pakistan.[15] The causes are still not well understood though continuing widespread poverty and illiteracy, and inadequate distribution of the health infrastructure between rural and urban areas and lack of adequate health services in the former appear to be the most commonly recognized ones.[16]

As a result of the variation in the trends of mortality transition, the differences in the levels of mortality among the countries of the region remained as large as 25 years ago or even possibly widened. For 20 LDCs of the ESCAP region, estimates of mortality level (in terms of the life expectation at birth for males) are set out in table 2 for two periods: around 1950 and around 1975. As mentioned earlier, the estimates for the earlier period are often less reliable than for the later ones.

In the late 1940s and early 1950s, in at least 12 countries life expectancy did not exceed 45 years and, in some instances (e.g. Nepal) it was considerably lower. In only three countries life expectation at birth exceeded 55 years. A quarter of a century later, only three countries appear to continue having rather high mortality levels – and even there the levels believed to be currently prevailing may be lower than those 25 years ago. At the other side of the distribution, in at least six countries the life expectation at birth now exceeds 60 years and probably another three are not too far away from that level.

Admittedly, the estimates for national populations do not reveal the whole picture of the regional variations of the life expectancy. In particular they are rather a poor indication of the health conditions in the vast and populous countries such as India and Indonesia where conditions may vary quite considerably among the regions of the country.

Differential mortality

Inequality with respect to mortality exists in all societies irrespective of whether the national level of mortality is high or low.[17] In particular, such differences persist among different social classes – the rural landless and marginal farmers, the less educated or illiterate working in poorly

[14] H. Hansluwka and L.T. Ruzicka, "The health spectrum in South and East Asia: an Overview" in *WHO/ESCAP, Mortality in South and East Asia: Trends, Levels and Differentials, 1950-1975*, (Geneva, WHO, 1982).

[15] WHO/ESCAP, *Mortality in South and East Asia: Trends, Levels and Differentials 1950-1975* (Geneva, WHO, 1982). Also, United Nations, *Levels and Trends of Mortality Since 1950* (New York, 1982) and D. Gwatkin, *loc. cit.*

[16] A.S. Meegama, "The decline in mortality in Sri Lanka in historical perspective, in *International Population Conference, Manila* 1981 (Liège, IUSSP, 1982), vol. 2, pp. 143-164. L.T. Ruzicka, *"Mortality Transition in Asia: Technology Confronts Poverty,"* Asian Studies Association of Australia, Fourth National Conference, Melbourne 1982.

[17] United Nations/World Health Organization, *Proceedings of the Meeting on Socio-Economic Determinants and Consequences of Mortality*, El Colegio Mexico, Mexico City, 19-25 June 1979.

Table 2. Level of life expectation at birth (males) around 1950 and 1975 in selected countries of the ESCAP region

Around 1950	Around 1975					
	Under 45	45-50	50-55	55-60	60-65	65 +
Under 45	Democratic Kampuchea Lao People's Democratic Republic Afghanistan[c]	Sabah[a] Nepal India Pakistan	Indonesia Sarawak[a]	Burma[b] Viet Nam	China	
45-50		Bangladesh[c]		Thailand Philippines		
50-55					Republic of Korea	
55-60					Sri Lanka[d]	Malaysia (Peninsular)[d]
60-65						Singapore[d] Hong Kong[d]

[a] Estimated for 1970.
[b] Urban.
[c] Estimated for 1962-1964.
[d] "complete" registration of deaths.

paid occupations, those living in overcrowded slum areas of the towns or in remote underdeveloped rural areas – are at considerably higher risk of premature death than the better-off, well educated, white collar workers living in prestigious city suburbs. In addition, other selected groups may be disadvantaged for cultural, political or other reasons – such as women or members of certain ethnic groups. In a few countries regional differences in mortality are well documented, and by and large, the causes are associated with the lack of social and economic development in the high mortality regions (see table 3).

One of the best documented sub-national differences in mortality is that between urban and rural areas. The reason for this difference is often attributed to inadequate access to health services by the rural population – because of the concentration of such services in urban areas (partly for good and valid reasons) and underdeveloped and expensive transportation between rural areas and towns.[18] The issues involved are, however, more complex than this. First, general measures of mortality, such as the crude death rate or life expectation at birth, for an aggregated population (rural or urban) conceals what are usually marked mortality differentials within that population. Technically, a level of mortality M is a function of mortality risks specific for a given population sub-group, m_i (defined in terms of sex, age, socio-economic status, level of education, housing conditions etc.) and the proportionate representation of such sub-group in the aggregated population, S_i, so that

$$M = f(m_i, S_i)$$

Urban populations differ from the rural ones not only in their age/sex structure (urban having larger proportions of adult males of working age and higher male/female ratios than rural areas as a result of internal migration) but also a higher than average representation of the better educated, middle and upper middle class population. As most of these groups have lower mortality (m_i) than the national average, the resulting level of mortality M in urban areas is likely to be on the low side, unless it is balanced by proportionately high representation of such groups as for instance, slum dwellers with high m_i risk of mortality.

[18] The effect of the high density of rural health centres and subcentres in Kerala (India) on mortality decline has been emphasized by P.H. Reddy, "Resources not the constraint on health improvement", *Economic and Political Weekly* (1980), vol. 15, No. 3, pp. 123-124.

Table 3. Regional differences in mortality within selected countries of the ESCAP region

Country/region	Source	Year	Mortality measure	Mortality level
India	(1)	1974-1976	IMR	
Kerala – urban		annual		42
– rural		average		57
Uttar Pradesh				
– urban				120
– rural				189
Nepal	(2)	1970-1974	IMR	
Terai (plains)				165
Hills				143
Mountains				188
Philippines	(3)	1973	$1000q_o$	
Central Luzon				50.3
Northern Mindanao				90.3
Thailand	(4)	1964	IMR	
Northern Region				96
North-Eastern				83
Central				94
Southern				48
Bangladesh	(5)	1974	1000q(2)	
Chittagong Division				M.201 F.188
Dhaka				M.206 F.184
Khulna				M.202 F.186
Rajshahi				M.194 F.181

Sources: (1) M. Dutta and P.N. Kapua (1982).

(2) S. Thape and R. Retherford (1982).

(3) ESCAP (1978).

(4) ESCAP (1976).

(5) Bangladesh Census Commission, *Report on the 1974 Bangladesh Retrospective Survey of Fertility and Mortality*, p. 84, Population Bureau, Ministry of Overseas Development, London 1977.

The evidence about mortality differentials at sub-national levels is in many countries of the ESCAP region limited in scope, and where available, it more often than not rests on estimates of infant and child mortality. Such estimates obtained through application of indirect techniques became available comparatively recently and make it possible to disaggregate the urban/rural and other sub-national division for examination of the risks associated with socio-economic status.

In most countries of the ESCAP region rural levels of mortality were found to be higher than those in the urban areas. There are, however, exceptions to this general case. For instance, in Sri Lanka infant mortality rates (IMR) declined

between 1948-1958 and 1959-1974 in the urban areas from 63 to 56 and in the rural areas from 61 to 51. In both instances IMRs were lower in the latter than in the former and remained so over time. Child mortality (at ages 1-4 years) has been marginally higher in rural than urban areas: it declined from 47 to 25 in the former and from 35 to 22 in the latter during the above period. However, in the rubber and tea plantations (estates) infant and child mortality rates remained almost unchanged or possibly even increased in the 1970s. IMR was 130 and 134 and child mortality 31 and 38 in the above two periods, respectively.[19] The levels of infant and child mortality in the estates may be indicative of the conditions applying of the rural poor in Sri Lanka generally (see table 4).

The gap between urban and rural mortality varies from country to country as well as over time. In some instances it has been so small that it is difficult to conclude which direction the differential assumes or whether there is in fact a real difference. Kabir,[20] for instance, found only a marginal difference between the IMRs in rural and urban areas of Bangladesh in the early 1970s (148-153 in urban and 155-159 in rural areas). Considering the uncertainties about differential under-reporting of infant deaths and live births in retrospective surveys, it would be rather hazardous to draw firm conclusions from such marginal differences.

In the more populous countries, national figures mask a wide range of sub-national variations in differential mortality. In India, the Sample Registration Scheme figures for 1971-1973 show the lowest urban IMR for Kerala (43-48) and the highest for Uttar Pradesh (119-132). By comparison, in rural Kerala IMRs were between 57 and 66 in the same period; though higher than the urban rates in that State, they were considerably lower than the levels of urban IMR in most other States.[21]

In Peninsular Malaysia, infant mortality rates were available for 1964-1968 for three categories of residence: metropolitan, other urban and rural. The rates shown in table 5 suggest a possibility that the IMR is lower in 'other urban' areas than in the metropolitan cities (the rural infants having the highest IMR). But the same set of figures also reveals a rather narrow difference in IMRs between

Table 4. Urban-rural differences in mortality in selected countries of the ESCAP region

Country	Source	Period	Infant mortality rate	
			Urban	Rural
Bangladesh	(1)	1970-1974	115	137
China	(3)	1975	m10.2	20.5
			f 9.7	19.8
India	(2)	1978	70	136
Indonesia	(1)	1970-1974	60	96
Nepal	(4)	1970-1974	112	157
Pakistan	(1)	1969-1973	118	147
Philippines	(6)	1973	49-64[a]	61-78[a]
Sri Lanka	(1)	1969-1973	52	49[b]
Thailand	(5)	1964-1965	68[c]	86[c]

Sources: (1) E.E. Arriaga and F. Hobbs, "Infant mortality differentials in selected East and South Asian countries", in WHO/ESCAP, *Mortality in Asia: A Review of Changing Trends and Patterns, 1950-1975.* (WHO/ESCAP, 1982).

(2) M. Dutta and P.N. Karur, "Trends and differentials in infant mortality in India, 1950-1978", in WHO/ESCAP, 1982, *op. cit.*

(3) Ling Rui-Zhn, "A brief account of 30 years' mortality in Chinese population", in WHO/ESCAP, *op. cit.*

(4) S. Thapa and R. Retherford, "Infant mortality estimates Based on the 1976 Nepal fertility survey", *Population Studies* (1982), vol. 36, No. 1, pp. 61-80.

(5) ESCAP, *Population of Thailand,* ESCAP Country Monograph Series, No. 3 (Bangkok, 1976), p. 60.

(6) ESCAP, *Population of the Philippines,* ESCAP Monograph Series No. 5 (Bangkok, 1978), p. 111.

[a] Depending upon which estimation procedure is applied to the retrospective data on children ever born and surviving.

[b] Excludes population living on the estates. IMR of the latter was estimated at 120 deaths per 1,000 live births.

[c] Municipal and non-municipal areas perspectively.

[19] S.E. Meegama, "Obstacles to the further decline of mortality in Sri Lanka – the experience of the last two decades," in WHO/ESCAP, *op. cit.* (footnote 3).

[20] M. Kabir, "Levels and partterns of infant and child mortality in Bangladesh," *Social Biology* (1977), vol. 24, No. 2, pp. 158-165.

[21] Registrar General, (India) *Sample Registration Bulletin* (1979) vol. 13, No. 2, table 4.

Table 5. Infant mortality in Peninsular Malaysia, 1964-1968, by place of residence and ethnic group

Ethnic group	Infant deaths per 1,000 live birth		
	Metropolitan	Other urban	Rural
Malays	39	40	62
Chinese	31	26	33
Indians	47	40	57

Source: Department of Statistics, *Evaluation of Mortality Data in Vital Statistics of West Malaysia,* Research Paper No. 5, (Kuala Lumpur, December 1971).

various residential areas among the Chinese population in contrast to the other two ethnic groups. As the Chinese in Malaya were, in the mid-1960s, generally the better-off and better educated group, it may be conjectured that higher socio-economic status alleviates the effects of the residual disadvantages the rural areas have such as inadequate sanitation, more difficult access to health services, supply of safe drinking wate etc.

Availability of basic amenities resulting from and contributing to social and economic progress in a given area and changing the life style of the people in both rural and urban areas is another indicator of the complexity of determinants of mortality levels within the urban-rural division. A rare set of data from an Indian survey (1979) shows that both rural and urban areas lacking certain social amenities have higher IMRs than the respective areas provided with them (see table 6).

Very few studies of differential mortality have attempted to separate the effects of individual components of the socio-economic status (such as education of mother or parents, living conditions of the family, living standards, availability of safe drinking water and sanitation). Usually the relatively small sample size prevents disaggregation by more than two characteristics. Where such attempts were made,[22] however, they show that mother's education is a component that has an independent and strong effect reducing the risk of infant and child death apart from being a proxy variable for general socio-economic status of the family (see tables 7 and 8). Caldwell attempted to

[22] E.E. Arriaga and Frank Hobbs, "Infant mortality differentials in selected East and South Asian countries" in WHO/ESCAP *op. cit.*

Table 6. Infant mortality by availability of social amenities in urban and rural areas, India, 1978.

Amenities	Urban		Rural	
	With	Without	With	Without
Water supply	66	94	108	134
Driveable road	62	82	110	139
Bus stand	51	73	105	138
Railway station	65	69	56	131
Primary school	65	71	126	145
Medical facilities	57	79	102	136

Source: Registrar General of India, *Preliminary Report on Survey of Infant and Child Mortality,* New Delhi, 1979.

Table 7. Infant mortality by region, place of residence and socio-economic status of the family, Indonesia, birth cohorts 1970/71.

Region	Socio-economic status		
	Low	Medium	High
Urban:			
West Java	114	76	28
Central Java	124	45	27
East Java	97	57	41
Sulawesi	79	91	17
Rural:			
West Java	102	81	77
Central Java	103	80	93[a]
East Java	79	80	n/a
Bali	94	67	48
Sumatra	113	92	44
Sulawesi	115	122	104

Source: Budi Utomo, "Mortality trends and differentials in Indonesia, 1950-1975", in WHO/ESCAP, *op. cit.*

[a] N<50.

Table 8. Child mortality estimates by parents' literacy and economic status of families[a]

Parent's literacy	Economic status of families		
	Poor	Middle	Rich
		q(2)	
Both illiterate	.214	236	[b]
	(1 180)	(228)	
One literate and other illiterate	.193	.174	.171
	(553)	(283)	(79)
Both literate	.189	.151	.122
	(186)	(246)	(271)
		q(3)	
Both illiterate	.253	.247	[b]
	(1 909)	(284)	
One literate and other illiterate	.223	.177	.142
	(959)	(307)	(142)
Both literate	.146	.168	.117
	(286)	(296)	(383)

Source: Mitra, *op. cit.*, p. 90.

Notes: [a] Figures within the brackets are the numbers of children ever born to respondents in each category.

[b] Less than 30 respondents in this category.

explain the mechanism through which mother's education operates:

> "...explanation must be sought in the nature of the household and family and in terms of reactions to illness and of decision-making during illness...education (in the Third World) serves two roles: it increases skills and knowledge as well as the ability to deal with new ideas provides a vehicle for the impact of a different culture..."[23]

Not less important, however, is that woman's education may be also an indicator of a change in the traditional balance of familial relationships through which the effect on child care may be mediated. In a recent extension of this investigation using WFS data for 10 countries, Caldwell and McDonald found that, ranking at the country level, mother's education was more strongly correlated with child mortality (q(5) estimates by Preston-Palloni method) than with national *per capita* income. (The highest correlation coefficient was obtained when the proportion of women aged 20-24 with some education, or with at least secondary education, was used as the index of education.) The impact on mortality of parental education is probably greater than both income factors and access to health facilities combined. Of the parents education, maternal education is probably more influential. Furthermore, the step from primary to secondary schooling reduces child mortality more than the step from illiteracy to primary schooling. However, the achievement of complete primary schooling may be the lowest educational threshold.[24]

We know, unfortunately, very little about the age patterns of mortality by socio-economic groups. Most of our information pertains to infant and child mortality because of the type of data we are constrained to use. Biological factors play a more decisive role than the socio-cultural and economic factors in earlier life; hence, one may expect to find moderate differences in neo-natal mortality among various social subgroups widening in the post-neonatal period and early childhood. One particular point in the child's life at which the risk of premature death changes (and, hence, the room for variations related to social class differences widens) is the discontinuation of breastfeeding. Early weaning for instance, may more adversely affect the survival chances of an infant in a low income an opposed to a high income family.

Some recent statistics to support this general conjecture may be mentioned. In Thailand, the Would Fertility Survey (WFS, 1975) results provide some information on this point. In both groups of birth cohorts shown in table 9 the relative difference between urban and rural levels of mortality was more pronounced for children 1-4 years old than for infants. A study of differential mortality in a rural area of Bangladesh[25]

[23] J.C. Caldwell, *loc. cit.*

[24] J.C. Caldwell and P.F. McDonald, "Influence of maternal education on infant and child mortality: levels and causes", in *IUSSP International Population Conference*, Manila, 1981 (Liège, IUSSP, 1982), vol. 2, pp. 79-95. The 10 countries for which data were examined were: Bangladesh, Colombia, Indonesia, Jamaica, Jordan, Kenya, Panama, Peru, Republic of Korea and Sri Lanka.

[25] S. D'Souza, A. Bhuiya and M. Rahman, "Socio-economic differentials in mortality in a rural area of Bangladesh," in WHO/ESCAP *op. cit.* One reason for the lack of a more consistent pattern might have been the random variation due to the comparatively small number of deaths in certain age/sex subgroups.

Table 9. Probability of infant and child death, Thailand, urban and rural residents

Year of birth	$1{,}000.q_0$			$1{,}000._4q_1$		
	Urban (U)	Rural (R)	R/U	Urban (U)	Rural (R)	R/U
1960-1965	57.6	94.7	1.6	19.4	41.5	2.1
1965-1970	50.4	85.1	1.7	11.5	30.5	2.7

Source: S. Vibulsresth, "Child Mortality in Thailand" (PhD thesis), Department of Demography, ANU, Canberra (in progress).

has shown somewhat inconsistent pattern of differences in mortality by age and socio-economic status (SES) categories. By and large, in most instances the ratios of age-specific mortality rates for the lowest and the highest SES categories declined with rising age. In other words, the mortality of children aged 1-4 years was affected more than that of older children (5-14) by the parents' adverse SES; and adults (aged 15-44 years) suffered comparatively less than young children.

The importance of biological and genetic factors – as compared to socio-economic, cultural, and behavioural aspects – affecting mortality differentials has been probably most pronounced in the debate about the causes of sex differentials in mortality.[26] In almost all societies the longevity of females exceeds that of males, and mortality rates are lower for females at all, or almost all, ages. In the low mortality ESCAP countries, male mortality rates in early adulthood exceed those of females often as much as three times, and the female life expectancy exceeds that of males by six years or more. The advantage of lower mortality and prolonged duration of life which women now enjoy over men neither applies universally, nor has it been observed in all societies at all times. Even in what are now low mortality countries, some 40 to 50 years ago female mortality at child-bearing ages occasionally exceeded that of males.[27]

In the ESCAP region, most of the current instances of higher female than male mortality are limited to a narrow range of ages, and the gap between the age-specific death rates is generally a narrow one. As a consequence, the differentials are not pronounced enough to become apparent in an overall index such as the life expectation at birth. In a few instances, however, the differences at various ages are large enough or extending over enough years to show higher life expectation at birth of males than females: India, Bangladesh, Sabah (Malaysia) are in this latter category, but there may be other such instances.[28] In many countries where in the past female mortality was lower than that of males, the advantage of the females further increased with the general decline in mortality. Thus, for instance, the difference in the average expectation of life between females and males increased in Hong Kong from 6.9 to 7.4 years between 1961 and 1971; from about 2.6 years to 4.0 years in the Republic of Korea between 1955-1960 and 1970; from 2.4 to 4.6 years in Peninsular Malaysia between 1957 and 1972; and from 3.3 to 5.9 years in Thailand between 1947 and 1974-1975. In Sri Lanka, where women were earlier at a disadvantage (the difference being 1.5 years in favour of males in 1950) mortality decline has reversed the situation and by 1970-1972 females had a life expectation at birth 2.8 years higher than males.

The segments of the life span at which females are often at a higher risk of death than males are ages 1-4 (but in a few exceptional cases the post-neonatal period of infancy), the reproductive ages and, in some populations, old age (see table 10). Excessive female mortality during childhood is often attributed to differential care or lack of it associated with strong preference for male progeny. This becomes even more pronounced in times of crises and food shortages.[29]

[26] A. Lopez and L.T. Ruzicka, eds. *Sex Differentials in Mortality: Trends, Determinants and Consequences.* Proceedings of an ANU/United Nations/WHO Meeting held at Canberra, 1-7 December 1981, (Canberra, ANU Press, 1982) (in press).

[27] D. Tabutin, La surmortalité feminine en Europe avant 1940, *Population*, (1978) vol. 33, No. 1, pp. 121-148.

[28] Life expectation at birth was shorter for females than males in Sri Lanka until about the early 1960s. Male life expectation was also found to be higher than female in Pakistan (1962-1965), Democratic Kampuchea (rural, 1958/59) and among the Indian population of Peninsular Malaysia (1957).

[29] L.T. Ruzicka and A.K.M.A. Chowdhury, *Demographic Surveilance System – Matlab. Vital Events and Migration*, vols. 3-5, (1974-1976), Cholera Research Laboratory, Dhaka, Scientific Report Series Nos. 11-13, Dhaka 1978. S.C.M. Scrimshaw, "Infant mortality and behaviour in the regulation of family size", *Population and Development Riview*, (1978), vol. 4. No. 3, pp. 383-404. S. Bhatia, "Traditional practices affecting female health and survival: evidence from countries of South Asia", in A. Lopez and L.T. Ruzicka, eds., *op. cit.*

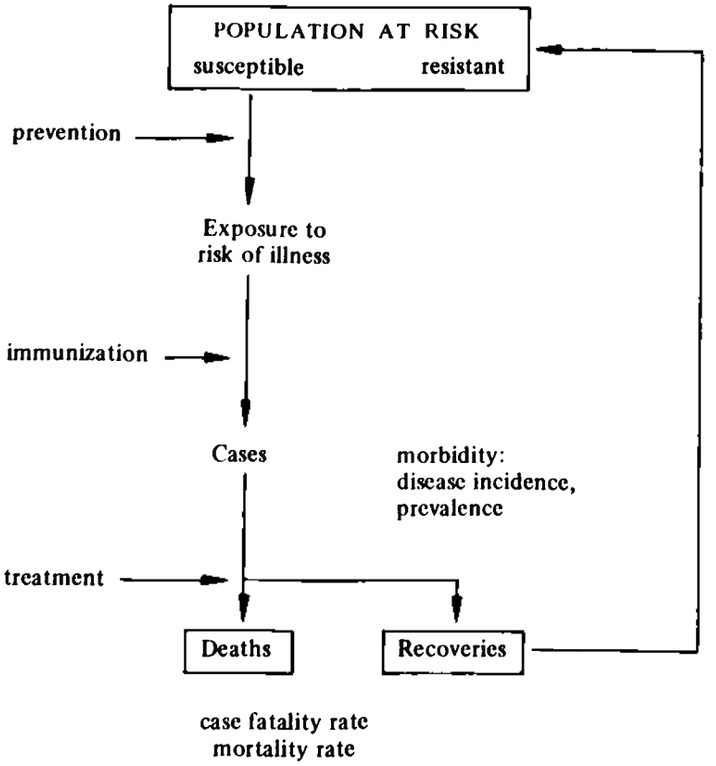
Table 10. Age groups in which female life table mortality rates were higher than those of males.

Country	Period of the life table	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Bangladesh	1962/63		*		*	*	*	*	*	*	*	*		
	1974									*	*	*	*	*
Burma (urban)	1971		*	*				*						
India	1961-1970		*	*	*			*	*	*	*	*		
Sri Lanka	1970-1972		*	*										
Thailand	1973/74		*									*		
Malaysia														
Sabah	1970	*	*	*	*	*	*	*	*	*	*	*	*	*
Sarawak	1970		*	*		*	*	*	*	*				

Source: L.T. Ruzicka and H. Hansluwka, in WHO/ESCAP, *op. cit.*, p. 113.

Major health problems in the selected countries of the ESCAP region.

A given level of mortality (as expressed, for instance, in terms of the life expectation at birth) is necessarily linked with the structure of the causes of death and, by implication, with the levels of morbidity and health status of the population. A simple scheme given below may help to clarify the point:



Decline in mortality may be due to either of the following processes: (a) Reduction of exposure to risk and/or increased proportion of the population protected from the risk by immunization or other preventive measures; this will lead to a reduced incidence of the disease in the population. For instance, an epidemic disease becomes endemic and eventually may disappear almost completely, not posing any significant risk (complete eradication has been so far achieved only with respect to small-pox). (b) Introduction of effective treatment may result in considerable reduction of case fatality, and hence of mortality, from a given disease, though its incidence may remain virtually unaffected (as instance, the effect of oral rehydration therapy on many diarrhoeal diseases). (c) Intervention along both lines. The above example is an oversimplification of the very complicated network of factors involved in the health impairment processes and their control. At all stages, other factors pertinent to individuals and families, such as nutritional status, social and economic conditions including education, as well as national or regional situation with respect to the availability of the health care services and public health provisions could be added to the overall picture. In some instances they operate as moderating, in others as aggravating, factors upon what are primarily biological processes. Almost a century ago, Pearson described man's journey through life as a march during which he is exposed to a succession of marksmen, each aiming at him at a

particular stage of the journey and having a characteristic spread of hits. The weapons used by the marksmen are the causes of death. This illustration demonstrates not only the age dependence of various causes of death but also the fact of interdependence of the general level of mortality and the cause of death structure. In one of the most comprehensive studies of mortality patterns thus far carried out, Preston[30] attempted to establish such association by linking various levels of the life expectation at birth with the probabilities of dying from a specified cause of death. His conclusions are worth noting in some detail:

> "at a level of life expectancy at birth of about 50 years, the elimination of maternal mortality would extend the female life span by half a year only;
>
> conquest and elimination of the whole group of 'infective and parasitic diseases' would add five years to the life expectancy of men and women alike;
>
> elimination of the aggregate of 'influenza, pneumonia and bronchitis' and of diarrhoeal diseases as causes of death would bring a gain of about six years;
>
> the simultaneous elimination of all the causes of death listed above would raise life expectation at birth to 72.5 years for females and 69.7 years for males in this model."

The example shows that effective control of "preventable deaths" (at the present stage of medical technology and knowledge) is the path to the achievement of the modern low mortality levels.

The "modernization" of the cause of death structure can be documented in only a few countries of the ESCAP region, namely those that have had reasonably accurate cause-of-death statistics. For the majority of the countries only limited data (often highly selective, such as data on causes of death that occurred in hospitals) are available. Even then, however, it is sometimes possible to demonstrate the effect on mortality level of the successful control of deaths due to infective and other preventable diseases.

In table 11, the regions of the Philippines are listed in the order of their estimated 1970 mortality levels together with the porportions of their 1976 registered deaths that were attributed to the most prevalent types of infectious and parasitic diseases and cancer. In spite of the limitations and deficiencies of the data one finds

[30] S.H. Preston, *Mortality Patterns in National Populations*, (New York, Academic Press, 1976), pp. 56-59.

Table 11. Association between the level of mortality and cause of death structure : the Philippines, 1970

Region	Life expectation at birth (both sexes combined)	Percentage of all registered deaths attributed to	
		Infective and parasitic diseases	Cancer
All regions	55.8	20.9	4.4
Western Mindanao	47.6	22.3	3.4
Southern Mindanao	49.8	26.0	4.1
Northern Mindanao	50.0	23.4	3.3
Cagayan Valley	53.0	19.8	2.5
Eastern Visayas	53.0	22.5	2.8
Bicol	55.7	22.4	2.8
Western Visayas	57.4	19.5	4.4
Ilocos and Mt. Provinces	57.6	19.4	6.6
Central Visayas	59.1	16.2	4.4
Southern Tagalog	59.3	16.2	5.7
Central Luzon	60.3	15.9	5.7

Source: W. Flieger, "Philippine mortality: levels, trends and areal differentials", in WHO/ESCAP, *op. cit.*

that deaths resulting from causes of the first kind have a tendency to decline with the increasing life expectation and that deaths caused by cancer display the opposite trend.

For a general assessment of the health problems facing the health authorities, the reports to the WHO by the national governments provide a substitute for cause of death and morbidity data of some importance.[31] This wider spectrum of the health problems of a given country may not only assist in the interpretation of mortality change and pattern from the public health point of view, but it also raises two points of importance for the current debate on development strategies, health policy and organization of health services. First, how far do the declines in death rates under the specific conditions of the LDCs reflect improvements in what may be generally described as the standards of living and, second, how far do they signal improvements in the health status of the population?

The impression one obtains from the data in table 12 is of relatively little change over about the past 20 years. In most countries the infectious and parasitic diseases and tuberculosis still dominate the picture; malaria, acute diarrhoeal diseases and leprosy retained their importance. The disappearance of smallpox from the list was the result of the successful worldwide eradication programme. Some of the diseases listed in this table undoubtedly have been reduced in their incidence and prevalence – from what used to be epidemic outbreaks to an endemic status. Comparatively new is the recognition of malnutrition as a major health concern in some countries. It is worth mentioning that in four of the 15 countries reviewed, neoplasms and cardiovascular diseases emerged in the 1970s as a health problem while only one such country admitted to it 20 years earlier.[32]

[31] World Health Organization, *Sixth Report on the World Health Situation*, Part One: Global Analysis (Geneva, 1980).

[32] In a study of the relationship between the level of *per capita* income, total mortality and death rates by selected groups of causes of death, Sieber found positive elasticities of income for neoplasms, cardiovascular diseases and motor accidents – all three groups of causes typical for high-income, low-mortality societies. In contrast, the highest negative income elasticities corresponded to diarrhoeal, infective and respiratory diseases, the three groups of causes of death typical for low-income, high-mortality countries. (Jacques Silber, "On measuring the effect of income on mortality", United States/WHO, 1980, *op. cit.*, pp. 423-452.

Implications for mortality of social and economic inequality

Underlying many of the health concerns listed above are the vicious circle of poverty, chronic undernutrition and malnutrition, and their synergistic interaction with infections that affect the lives of considerable number of families in the ESCAP region. It is also this complex mechanism that is responsible to a large extent for the differences in the health status among various socio-economic groups within a given country. Despite successful control of many infectious diseases through public health programmes and expansion of the health care services, it is not at all certain that the decline in the national levels of mortality also implies a reduction of the gaps existing between chances of survival among various sub-groups of the population. Although so far there have been hardly any data available to support it, one may assume, even if only from inference, that the opposite may well have been the case in many Asian countries. The benefits of development in general, and of the health care services in particular, have been inequitably distributed. The privileged classes – be they privileged in terms of education, socio-economic status, caste or political power or residence or – most often – a combination of all these characteristics benefited disproportionately from these advantages. In practice most of the underprivileged remained so, and in some instances their ranks perhaps increased in numbers and, maybe, even in proportion. Any amelioration of their position and improvement in living conditions achieved so far still would leave them far behind the more privileged groups. Thus, it is most likely that improvements in the health status, and hence mortality, of the majority of the poor were outpaced by those accrued by the rich, thus widening the gap in differential mortality between them.

Decline of mortality at the national level which, in some instances represented an impressive achievement of control of epidemics and even suppression of the endemicity of many debilitating diseases (such as malaria) was likely to produce an improvement in the health status of large segments of the population and apart from saving lives may have even improved their material living conditions by raising productivity previously reduced by recurrent spells of sickness. Living standards, however, are not only affected by sickness but also by other conditions as well: employment opportunities, personal endowments

in terms of skills and education, in the predominantly agricultural economies of the LDCs access to land, market conditions, prices of the agricultural products, etc. Health is undermined not only by recurrent sickness but also by chronic malnutrition and undernutrition. Repeatedly falling ill makes the person more likely to become undernourished and hence more likely to fall victim to an infection in a disease-ridden environment. Nutritional status and standards of living are, once again, closely related to each other.

Thus the answers to the questions posed earlier cannot be given unequivocally and with general validity. Admittedly, improved conditions of living and rising health status (if we could measure it in positive rather than negative terms) result in a reduction of mortality, but generally the opposite direction of the relationship may not be valid. Rising expectation of life at birth cannot, by itself, be an index of improving living conditions of the population at large and even of its better health status. The indices of mortality provide supporting and circumstantial evidence to that effect, but to be convincing they need to be supported by other evidence as well: of improving income distribution, declining poverty, improving nutritional and housing standards, rising levels of education (or declining levels of illiteracy) and, last but not the least, of declining disparities in mortality among the social, economic, regional and other sub-national groups of the population.[33]

In many LDCs all over the world and in Asia in particular the persistence of comparatively high national levels of mortality and of wide socio-economic and regional differences is probably due to a combination of factors rather than to a single cause. Four rather broad categories of circumstances appear to be associated both at national and sub-national levels with both aspects of the recent mortality trends:[34] (a) slow economic development curtailing the national governments' expenditure on welfare programmes coupled with socially inequitable distribution of the benefits of development; (b) persistently high, if not increasing, levels of poverty among the population in particular in rural areas; (c) slow social development with continuing high levels of adult illiteracy, low school enrollment and high drop-out rates (in particular among girls); widespread chronic undernutrition (in particular among children); continuing low status of women; rural development lagging far behind urban; (d) inadequate provision of health care services and their geographic distribution; dominant orientation of health care toward urban population; hospital based treatment oriented services; under-utilization of available services for cultural and social reasons.[35]

Changes in the level of mortality and, by extension of the same argument, persistence of social and economic differentials in mortality result from the actions of governments and other official agencies as well as from the actions of individuals responding to the changes in their personal economic and social circumstances. Governments through the orientation of their development programmes and policies in general, and their public health measures and health care services in particular, provide for the improvement of the healthfulness of the physical and social environment in which people live. The actions of governments may also increase the skills and capabilities of individuals and their families to make better use of the facilities available free of charge or obtainable on the open market. Minimum wage policy, education, job creation (including emergency programmes such as "Food for Work"), regulation of price of foodstuffs or provision of foodstuffs at controlled prices are examples of the actions falling into the categories.

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[33] Chao examined the effect of total resources available in a society and the way they are distributed among the people on the societal level of mortality (measured as expectation of life at birth). He found that mortality differentials among the countries are largely determined by the amount of resources available (both material and human) and the distributional pattern. In Asia (and in Africa) reduction of income inequalities (reduction of poverty) and increase in government spending (as percentage of GNP) would achieve a reduction of mortality differentials among countries of the same order of magnitude as an increase of income *per capita* by itself. (Dennis N.W. Chao, "National resources and life expectation," in United Nations/WHO 1980, *op. cit.*, pp. 453-482.)

[34] L.T. Ruzicka and H. Hansluwka, "Mortality transition in South and East Asia: technology confronts poverty," *Population and Development Review* (1982), vol. 8, No. 3, pp. 567-588.

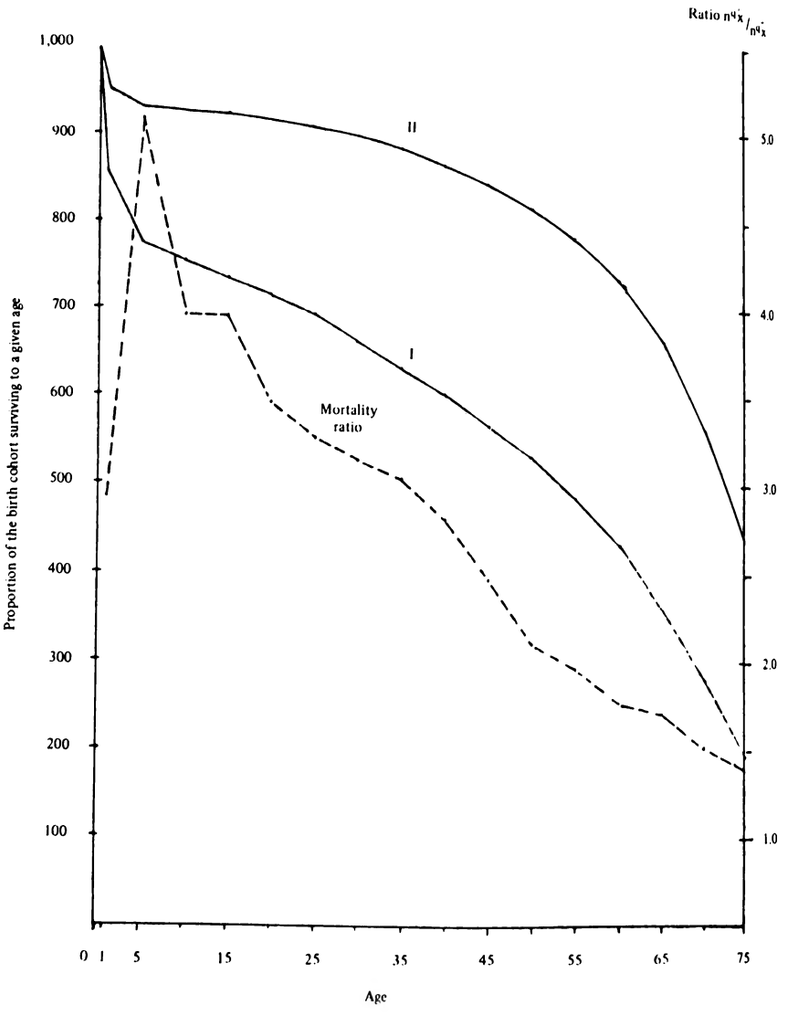
[35] S. D'Souza and L.C. Chen, "Sex differentials in mortality in rural Bangladesh," *Population and Development Review*, (1980) vol. 7, No. 2, pp. 257-270. World Bank, *Poverty and the Development of Human Resources: Regional Perspectives*, World Bank Staff Working Paper No. 406 (Washington D.C., July 1980). J.C. Caldwell, P.H. Reddy and Pat Caldwell, "The social component of mortarity decline: an investigation in South India employing alternative methodologies," *Population Studies*, (1983) vol. 37, No. 2, pp. 185-206.

Equally important is the action of individuals in the protection of their personal health and that of their dependents. Caldwell (cited earlier) has shown the mechanisms through which improved schooling of parents (and of the mother in particular) affects their children's health and chances of survival, and, presumably, the chances of the parents' themselves as well. To have a better paid and more secure job (itself a function of education) can buy better health not only directly by allowing one to pay for curative health services in case of need but also largely indirectly – through expenditure on food and clothing and through living in a better house in an area well services by public amenities (water supply, sewerage, transportation, parks and gardens in the vicinity etc.)

Differential mortality is an indicator of the extent of social and economic inequalities in a given society as they affect health status. To reduce these differentials significantly entails attacking the social and economic causes of their persistence. The lack or inadequacy of health care facilities, particularly in rural areas, aggravate the health problems and complicate attempts toward their solution; however, providing or improving such facilities cannot, by itself, achieve much if the other causes of poor health are not alleviated.

The demographic implications of differential levels and trends of mortality are obvious, though not altogether trivial. Of two birth cohorts exposed to different levels of mortality, one will diminish at a faster pace than the other as is shown in figure 1. The two levels of mortality shown in the graph are rather typical for the differences between the survival chances of the poor and of the rich in many LDCs in South Asia. The major inroads on the cohort size occur during infancy and early childhood, and comparatively less during adulthood (see the ratios of age-specific mortality rates ${}_nq'_x/{}_nq''_x$ in the graph). Assuming the same level of fertility, one may say that the relative representation of the middle and upper-middle groups in a society (depleted at a slower pace because of their lighter mortality) is bound to increase over time, other things being equal. One may also see in this comparison the justification for the continuation of high fertility (and hesitation to use fertility control methods) among the poor: these are the so-called 'insurance' and 'replacement' effects alluded to in the conceptual models of child mortality – fertility relationship. Extensive literature has documented the positive

Figure 1. Proportion of survivors by age in two birth cohorts exposed to mortality rates equivalent to life expectations at birth of 45 (I) and 65 (II) years. (Coale-Demeny Model Life Tables, WEST).



association between child mortality and fertility, both at the level of cross-national data and at the individual family level.[36]

One aspect of differential mortality, the social implications of which are more often discussed than those of any other differentials, is the gap between male and female chances of survival. High female mortality often encountered in South Asian populations results in high masculinity ratios revealed by the censuses since the late nineteenth century for total populations as well as for individual age groups. Under the "normal"

[36] CICRED, Seminar on Infant Mortality in Relation to the Level of Fertility, Bangkok, 6-12 May 1975. Some part of this association is attributable to the reverse causal sequence: high fertility and short birth intervals increase the chances of infant death.

regime of lower female mortality and given a sex ratio at birth (normally 105-106 males: 100 females) the masculinity ratios would diminish with increasing age, reaching about unity in early or mid-years of adulthood and falling rapidly below unity thereafter. In contrast, excessive female mortality will maintain masculinity ratios higher than unity throughout the whole age span.[37]

Such anomalous masculinity patterns of the population have undoubtedly some social implications, in particular, for family formation and composition. Differential mortality may create a "shortage" of brides on the marriage market and adjustment to this situation may call for changing (usually increasing) age difference between grooms and brides or result in an increased proportion of never-married males in the population. Joint survival of husband and wife and the probability of their children being orphaned may also be affected by sex differences in mortality. In both instances, however, it is likely that other than demographic factors have had a more pronounced role in determining both the culturally and socially accepted patterns of marriage formation as well as the chances of joint survival of the spouses. In the latter instance, it has been shown that the age difference between husband and wife is the dominant factor even in the societies where sex differences in mortality are quite pronounced.[38] Social norms themselves may be a societal response to the demographic exigency. Similarly, social norms regulating re-marriage of widows and widowers, rather than sex differences in mortality, account for the much higher proportion of widows found in most South Asian populations.[39]

[37] Admittedly, some part of the high masculinity ratios may be due to higher female than male underenumeration. (The percentage undercount was 1.53 and 1.83 for males and females respectively in the 1971 Census of India. See CICRED Series, *The Population of India* (New Delhi, 1974) p. 49). International migration is another potential source of the anomalies in the sex ratio of the population. However, its size was insignificant to account for the 1971 Indian sex ratios (*ibid.*, p. 50).

[38] H. le Bras, "Some social and demographic consequences of widening sex differentials in mortality," in A. Lopez and L. Ruzicka, eds., *op. cit.* L.T. Ruzicka and H. Hansluwka. "Sex differences in mortality: effects on the family life cycle and fertility, *ibid.*

[39] In 1971 in rural India of those aged 60-64 years, 18.1 per cent of males were widowers in contrast to 62.2 females being widows. The proportions in urban areas were 14.7 and 61.1 per cent respectively. (Registrar General, The Population of India, CICRED Series (1977), p. 54.

Conclusions

To recapitulate, the most prevalent health problems throughout the LDCs of the ESCAP region (except for the middle- and upper-income groups of the urban population) are caused by water and air-borne infectious diseases and malnutrition and undernutrition. These elements interact synergistically. They are also the immediate, direct causes of the morbidity and mortality differences between various social groups whether identified in terms of educational level, economic status, or place or area of residence. The health of children suffers more than that of their parents from any type of socio-economic disadvantages of the family.

By and large at the root of mortality differentials among countries, and among socio-economic groups within a given country, are problems associated with the differential pace of economic and social development, the distribution of the benefits of development, and inadequacy – at least in some countries – of the health care systems to cope with the tasks within their particular area of responsibility. The actual role of any of the factors listed above in determining the levels and patterns of morbidity and mortality may differ from one country to another, but also between rural and urban areas within a given country. Hence, the policies to remedy an unsatisfactory situation may not follow the same prescription everywhere; the system of government and the administrative structure in an individual country may also require a different approach to the solution of a general problem. In principle, however, it is rather obvious that health services alone may alleviate only some of the major health problems and reduce mortality by only a limited margin. In particular, the sophisticated health approaches of modern Western medicine may be inappropriate unless they are developed as a part of a wider more general system, that is, unless they are supported by a network of basic health care services reaching down virtually to the doorsteps of the individual families. Preventive services and public health may have a substantial impact on mortality and reduce the differentials among various groups. Treatment, although it often brings an immediate relief and even an eventual cure, may not have a lasting effect on the health of persons who must return to the disease-ridden environment into which their socio-economic conditions have placed them. Even under favourable circumstances, curative health care can do remarkably little to alter the incidence of many diseases,

though it may in many instances reduce their harmful effects.

Health care programmes and public health plans have an obvious political appeal. The expenditure on them of public funds can be easily justified on moral, humanitarian and economic grounds; they are the type of welfare policies likely to be endorsed in principle by parties of all political persuasions. Health care satisfies a felt human need – one to which people have been prepared to allocate substantial resources probably in all societies at all times. However, the lasting effect of health care, and in particular of curative services, in depressing levels of and reducing differentials in mortality may be only a limited one if they are out of step with other forms of development of human resources. For example in the case of education, wide cultural gaps often exist between health personnel and tradition-bound people they are supposed to serve. Poverty and unsanitary environment and inadequate housing are another case in point; a child cured of an attack of diarrhoea will return to the same conditions from which his disease originated. In the context of many LDCs, and in particular in their poor rural and urban populations, prevention must encompass other than narrowly defined medical intervention: employment, standards of living and nutrition, cultural habits, level of fertility and patterns of family formation and reproduction are all parts of the complex web of inter-related factors which, in most societies, are associated with peoples' ill health and mortality. Improvements in health may not be achieved by a single course of action which may have only limited effects. The concepts of the "primary health care" adopted at Alma Ata in 1978 clearly and rightly emphasized the need for the implementation of balanced development in which health care would be one of the parts. Last but not the least, the actions needed to improve the current imbalances and inequalities must involve the people themselves; this is easier said than implemented, though examples of a successful community involvement in development exist, not only in limited scale pilot projects but also in nation-wide programmes.

Topic 2.

FORMULATION AND IMPLEMENTATION OF INTEGRATED POPULATION AND DEVELOPMENT POLICIES

2.1 WORKING PAPER

By

P.B. Desai*

The concept of integrated population and development which surfaced with considerable force from the United Nations World Population Conference held at Bucharest in 1974, is indeed quite difficult to handle in the historical context of the evolution of population policies and development strategies in most countries of the region. Some clarity obtains about the scope and goals of population policies but about development strategy a great variety of interpretations and approaches prevail even when the goals of development have commonly been assumed to be economic growth, equity, alleviation of economic deprivation and misery.

The Asian region rightly claims to impart to the concept a connotation suited to its distinctive stage in the process of social and economic development. But it must also be realised that the solution of the problem must be obtained in a broader world context from which Asia cannot extricate itself.

When we consider this broader context it is evident to many that in respect of the twin conditions of world peace and the urgent need of reforming international economic relations the position has not improved since Bucharest. In fact, the prospect of enduring peace in the world have actually worsened. It needs to be recognized, therefore, that realisation of these two conditions can greatly facilitate the development processes in Asia and so also the prospects of integrating population policies into the on-going development process.

Under the circumstances, it remains for the Asian countries to generate within themselves co-operative action to counter, if not overcome, the constraints imposed by the absence of these two conditions. Asian solidarity, within that of the Third World, is a precondition for securing development in a manner that effectively deals with the intra-region and intra-nation demographic problems.

Confining attention to the Asian region, it may be admitted that the countries of the region have tried in their own individual ways to follow the prescriptions of the World Population Plan of Action adopted at the Bucharest Conference, about population-development integration. As noted in a background paper of the present Conference, "Progress has certainly been made in integrating population planning into development planning as an on-going activity of planning agencies. But, by and large, one would have to judge that the progress has been disappointingly slow. The importance and complexity of the interrelationships between population and development planning are inadequately appreciated."

It is possible to blame in this regard the weaknesses of the knowledge base relating to diverse population processes. But, it is also not unlikely that planning structures and approaches have acquired regidities that render them incapable of taking into account the needs of population planning.

On the positive side, the post-Bucharest period has witnessed in many countries more vigorous attempts to co-ordinate family planning with maternal and child care, nutrition, social welfare and rural development and also the creation of high-powered agencies for formulating and monitoring population control policies. But there is not much evidence of any departure in policies or programmes with regard to problems of mortality and morbidity or to internal migration.

In several countries, mortality decline has slowed down since the 1960s. In their case, further progress towards positive health seems to

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call for the same kind of social change affecting socially or culturally conditioned behaviour patterns that are relevant for fertility transition. Both fertility and mortality interventions seem to depend for their success on how effectively they are supported by the process of general social and economic development.

Then, there is the problem of rapid urban growth associated with population growth, which calls for intervention. In this case, the blame attaches more directly to the logistics of economic development which has been highly selective in spatial terms.

Perhaps more important is the problem of unemployment which is felt in varying degrees in most Asian countries. For the resolution of this problem it is the development and not the population policy that needs a well-grounded reorientation on an urgent basis.

A reappraisal of the development policies seems to be necessary if the scope for a viable integration of population variables into the development process is desired. Development performance has varied greatly from country to country. Development's impact on the different components of population change too differs greatly. Development in the past contributed greatly to mortality decline in several countries but in several of them it is failing to complete the mortality transition.

The impact of development on fertility trends has shown greater variation and uncertainty. In some countries, it has been of the desired kind, even though its magnitude has not been large. In others, it has not been so helpful.

With regard to internal migration and the associated process of rapid urbanization, there is a general feeling that development has brought to surface some very intractable problems. Particularly visible has been the growth of several unwieldy metropolitan centres, calling now for huge investments in the creation of amenities and services of healthy living.

Even when judged independently of its interaction with demographic policies, the development process in many countries has attracted criticism on a variety of grounds.

(a) It has remained slow, partial and tardy.

(b) It has tended to bypass the people.

(c) It has increasingly failed to absorb the growing labour force.

(d) It tolerates waste in the form of high levels of underutilization of productive capacities.

(e) It has resulted in a series of intersectoral and interregional imbalances, and

(f) It has failed to alleviate economic inequalities and social injustice.

It is not, therefore, surprising that the cumulative outcome of development has been to so compound demographic situations as to call for a serious reconsideration of both the content and the manner of generating development. The success of population development integration may thus depend as much on the reorientation of the development process as on the formulation of feasible population policies.

The crucial questions before the conference may be simply stated. What is the scope, in differing national situations, of modifying the content of development? What is the feasibility of reorienting development strategies in order to take more fully into account both the determinants and consequences of population change? In other words, how can development be fashioned to deal with the consequences of population changes that have already occurred and to simultaneously influence the determinants of those changes in the desired direction?

These are large questions and their resolution must be achieved by each country in the light of its own specific circumstances. A few general propositions may be advanced here as meritting attention in this connection.

(a) Growth of national product must retain its importance, so must the measures of containing population growth. What is important is that the manner of securing growth of GNP should avoid imbalances, perpectuating waste and accentuating inequalities and create conditions in which measures of dealing with population growth have a much better chance to succeed.

(b) Economic growth need not be made to rest so heavily on the natural and material resources as to involve a large scale neglect of human resources. The justification for the fullest possible utilization of human resources rests on the view that economic productivity, fertility behaviour and geographical mobility of individuals are different but interrelated components of the process of change generated in changing social structures and organizations.

(c) If the varied aspects of the unceasing processes of population change have to be taken into account, planning would need to pursue a much longer range perspective than demographic momentum warrants. Such a long turn perspective subsumes an economic system which is cleansed of the inefficiencies and inequities which have been identified today as well as a demographic regime of stability in the size and structure of population.

(d) In the process of moving toward such an economic-demographic regime, three important issues will need to be resolved; namely, the imperative of accommodating the structural consequences of rapid population growth already experienced; the continuing need to restrain population growth through control of fertility; and the process of counterproductive redistribution of population.

(e) Development planning may extend its scope, where it does not include them, to encompass policies simultaneously focussed on employment generation, fertility regulation and spatial distribution of population. Planning may pay greater attention to such components of social development as education, employment oriented vocational training, improvement in the status of women within families and in society, social welfare, health and family planning and rural reconstruction.

(f) In order to achieve success in operating such an expanded policy package, it might be necessary to develop a planning strategy which enlarges the scope for participation of the people in the development process. It is possible that for this, it may be necessary to undertake educational programmes designed to generate among the common people adequate understanding of both their rights and responsibilities.

(g) What may enable planning to take due account of the demographic issues in operational terms is a system of multi-level planning that accords primary to the lowest level and develops planning and implementation capabilities of the people at grass-roots. Central planning assumes in this strategy a more important role of building up the capabilities of the local communities for the modernization of styles of life conducive to a successful completion of the demographic transition that ushers in a stable demographic situation characterised by the lowest possible levels of the vital rates.

2.2 REVIEW OF THE INTEGRATION OF POPULATION AND DEVELOPMENT POLICIES AND PROGRAMMES IN ASIA

by

Gavin W. Jones*

Introduction

One common feature of developing countries in Asia, be they socialist, mixed economy or more oriented to free market forces, is the primacy given to centralized socio-economic development planning. The stated aims of development plans (normally five-year plans) throughout the region have many features in common. The underlying aim is to improve the welfare of the population; because of poverty, improvements in material welfare are central to this aim, though preservation and enhancement of the cultural and spiritual foundations of the nation are usually emphasized as well. During the past decade, there have been many calls for the integration of population planning in development planning in Asian countries. The Declaration of Population Strategy for Development which was adopted at the Second Asian Population Conference in Tokyo in November 1972 was the first clearly articulated statement of this position adopted at a forum of Asian countries. The emphasis was repeated in the World Population Plan of Action adopted by the World Population Conference at Bucharest in 1974, and by the Population Strategy for Development formulated at the Post-World Population Conference consultation in Bangkok at 1975. One purpose of the present paper will be to review the extent to which such declarations have led to effective integration of population planning with development planning at the country level, and to attempt to identify what else remains to be done.

A basic assumption justifying the inclusion of population considerations in development policy and planning is that population variables such as size, growth rates, age and sex composition, fertility and mortality levels and differentials, and geographic movements and distribution are interrelated with processes, rates, and levels of social and economic development, both at national and sub-national levels. In these relationships, population variables function as both independent and dependent variables and are open to planned modification through development policies and programmes.

Population-development interrelationships

Unfortunately, though there is general agreement that population trends and structure are intimately bound up with many of the development processes involved in raising the welfare of those selfsame populations, there is less consensus about just what the interactions are or the extent to which interventions to influence them are either desirable or feasible. Part of the problem is that the interactions are so many and varied that the only way they could be fully understood would be through the construction of a massive econometric model in which population trends were integrated as endogenous factors influencing and in turn influenced by socio-economic development, with extended chains of causation, appropriate feedback loops, "spin-off" effects, and lag effects. Although valiant attempts have been made to do just this, and "Tempo", "LRPM" and "Bachue" are household words among the small fraternity of economic demographers, the theoretical under-pinning for specifying the functional relationships between various aspects of development and fertility, in particular, remain weak.[1]

Further refinement of the capacity of these models to trace out the impact of population

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[1] For further discussion of these issues, see Arthur and McNicoll, (1975); Rodgers, Wery and Hopkins, 1976; ESCAP, 1977; Simon and da Vanzo, 1980.

growth on development is not a high priority for planners in the major Asian countries, because population growth is so clearly recognized as a serious problem. The planners, as a whole, are more concerned with sectoral issues. They would also like to understand more clearly the determinants of fertility decline, a subject on which these models can offer them little assistance.

Space problems prevent this paper from elaborating the issues faced in analyzing the relations between population and development, either in a comprehensive general equilibrium model or in somewhat less ambitious sectoral studies.[2] However, to draw attention to the central importance of some of the relationships for the development planning process, a few examples will be very briefly noted.

Population change, resources and the environment

From a global perspective, the role of population growth in projections of resource sufficiency in the medium-term future is not especially large – less than that of projected changes in *per capita* incomes, which in turn is less than the role of technological changes, changes in availability of resources, the extent of recycling, and policies aimed directly at reducing the consumption of a specific resource. However, within the Asian region, a number of studies on population, resource and environmental issues have recently been completed. Prominent among these are the "Population, Resources, Environment and the Philippines Future" project, and the series of reports known as the "Second India Studies". On the whole, these studies have not reached alarmist conclusions. "Continued population growth also means more local conflicts over land and water use, the need to live with even greater uncertainties and risks of major ecological or nuclear disasters, more dependence on rapid scientific and technological development to reduce these uncertainties and risks, fewer social options, and the continued postponement of the resolution of other problems, including those resulting from past growth" (Ridker, 1979, p.121).

There do not appear to be insuperable problems in increasing food production to meet likely demands during the next half century. The problem is more one of the regional disparity in the population/food production potentiality relationship, with the result that international movements in food will have to grow if *per capita* consumption in some regions is not to decline. With respect to forestry and fisheries, "the current level of exploitation is probably excessive in the sense that, with current technology, yields cannot be sustained" (Ridker, 1979, p.111). "Slaughter" exploitation of forest resources is certainly occurring in countries such as the Philippines, Thailand and Indonesia. However, as Ridker notes, these industries are still in the hunting and gathering stages, and once fish and trees are routinely cultivated, sustainable yields could be substantially increased.

The problem of analyzing environmental constraints have proven to be the most intractable, and few hard conclusions about ecological deterioration appear to have been reached. Great concern has been expressed by a number of writers about ecological deterioration on the island of Jave (Soemarwoto, 1979), and in the hill regions of Nepal (Eckholm, 1976, pp. 76-82), and similar worries could be expressed for the Philippines, Viet Nam, and other, countries. A key uncertainty is whether there may be a point at which ecological deterioration in the fragile environment of densely-populated mountain and hill zones becomes irreversible: deforestation leads to erosion and to siltation and flooding downstream, which lowers living standards, which puts further demands on the hills as sources of fuel and of arable land, which further exacerbates the erosion crisis. Continuing rapid population growth adds to the crisis. Not enough is really known about the "irreversibility" question, and demographers have perhaps been prone to underestimate the resilience of ecosystems.

Population change, education and manpower planning

The burden of rapid population growth on educational development is clear enough (Jones, 1975). However, the "payoff" from a decline in fertility is a long-term rather than a short-term one. The key policy questions have to do with justifiable levels of expenditure on education and on efforts to control fertility, and to answer these questions brings us back to the broader context within which the population-education interaction must be set. The close interrelations between population on the one hand and education, work and income – the latter representing three of the key goals of development – are obvious. What is

[2] For comprehensive reviews of the interrelationships between population and development, see Birdsall, 1977 and Cassen, 1976. For a review of some of the issues with reference to Asia, see Jones, 1982.

less obvious is how best to isolate the role of population growth in influencing the other three variables in different sets of circumstances, and further, how much effort and resources should as a result be devoted to the task of modifying population trends.

The population-education-manpower set of relationships – the key set of relationships through which the population-education interaction is translated into an effect on economic growth – must be viewed in the context of the widely-accepted goals of optimizing income distribution and minimizing unemployment. But provision of education for the not-directly productive ends of consumption, creation of national unity, and fostering fertility reduction, must enter into the picture too. Thus the optimal path of educational expansion is very hard to determine, and in theory can only adequately be determined within a general equilibrium framework within which not only all the determinants of economic growth are integrated but the social goals of education are also given their due weight. One can hardly envisage such a framework being effectively constructed, and as usual we are forced back to partial analyses which leave to the shrewdness of the planner or the intuition of the politician the weight to be given the factors not covered.

One area of "partial" analysis in which the modelling of population-education-employment analysis could make a real contribution is the examination of alternative sets of projections combining some possible paths of demographic evolution, some alternative strategies for educational development with a real interest to planners, and the implications of different combinations of these demographic and educational trends for labour force evolution. The issues here are complex (Jones, 1976). Important aspects to be considered would include changes in age, sex and educational structure of the labour force, which in turn could be related to projections of employment structure and manpower needs based on some model of the manpower implications of projected economic trends.

Population change and income distribution

Most governments in developing countries claim that a major goal is increased equity, one manifestation of which should be a more equal distribution of income. Portuitously, much of the research on the effects of income distribution on fertility (Kocher, 1973; Rich, 1973; Repetto, 1979) concluded that a more equal income distribution will contribute to a faster fertility decline. However, there are many defects in these studies, and Repetto's cross-country regression analysis does not provide adequate evidence that a casual relationship exists (Boulier, 1981). It would appear reasonable to expect that the mechanism by which income transfers were accomplished (e.g. direct income transfers, land reform, subsidization of basic needs, price supports to farmers) would play a crucial role in determining the fertility impacts of such transfers. Rosenzweig (1981) argues that "subsidies to family planning, health and educational services together or separately induce reductions in family size and promote economic growth through human capital investment" (p. 64).

By contrast with the prominence accorded studies of the fertility consequences of distributional changes, there has been little attention until quite recently to the effects of population change on distribution problems. Possibly the most severe limitation of many of the existing analyses of the effect of population change on economic development is their failure to distinguish between different groups within the population, and their implicit assumption that fertility would decline in a homogeneous manner across all sectors of the society. Yet fertility declines in many developing countries have been quite uneven, with a tendency for fertility to fall further and faster among the rich and well educated. The opening up (and eventual closing) of fertility differentials could have important implications for the mechanisms by which population change affects income *per capita;* for sectoral studies of, say, education; and perhaps more importantly from the point of view of policy makers, for several of the various "intermediate" variables that are thought of as important determinants of the distribution of income.

At least some of the distributional consequences of the "transition" in fertility differentials are straightforward. The most immediate and direct consequence is by way of the greater amelioration of the dependency burden of households at the upper end of the income scale. But what is undoubtedly more impressive, both because of its immediate welfare implications and because of its likely importance in the longer term is the increase in the proportion of children born into poor households. Adverse (and also controversial) long-run consequences may arise in relation to the formation and distribution of the "human capital"

of the next generation. On the one hand, birth cohorts will be smaller, thereby increasing the per child availability of resources for schooling. Yet, on the other hand, a greater percentage of each cohort will be born into those households where there is a smaller chance of their ever going to school, of staying in school once they are enrolled, or of learning whatever the school is supposed to teach (see Selowsky (1976), p. 708). Educational policies should be geared to counteract these problems.

Socio-economic development and fertility decline

Possible points of intervention to hasten the process of fertility decline are of particular interest to Asian planners. A better understanding of the process and its determinants is a precondition of well-focused intervention.

There is general agreement that fertility will decline from traditional high levels when the costs and benefits of children to parents change in ways that would favour a smaller number of children. Demographic transition theory argued that such changes take place as mortality declines and populations become more industrialized and urbanized. More recently, the general case has been argued in terms of micro-economic theory, stressing the opportunity costs of mother's time in different situations (Becker and Tomes, 1976; Schultz, 1974), in terms of the "transition in the value of children", stressing psycho-social as well as economic aspects of children's role (Bulatao, 1979 (a); 1979 (b)) and in terms of "wealth flow" theory, which stresses the complex ways in which children's role changes in the process of Westernization, changes which can only be understood in relation to the kinds of family structure in effect (Caldwell, 1982). Caldwell's theory helps us to understand why fertility appears much more "sticky" in the face of socio-economic change in some societies (e.g. Muslim West Asian countries) than in others (e.g. East and South-East Asia), the difference largely coming down to a patriarchal family structure with great reluctance to broaden women's traditional role, compared with the family structures in which women are much more economically and socially independent.

Is it possible to reach any generalizations about recent fertility declines in Asia in relation to trends in economic and social development? In examining this question, it may help to categorize the countries or areas where fertility has declined into two groups:

(a) Those where the decline, but not its speed, was predictable from demographic transition theory. In these countries, rapid economic and social development has been taking place – industrialization, great progress toward universal education, widened employment opportunities for women, rising real family incomes, not to mention the improved chance of survival of infants. Examples are Taiwan, Peninsular Malaysia, Singapore, Hong Kong and the Republic of Korea. Increases in the average age at marriage of females contributed significantly to the decline in fertility in these countries. It is only the speed of the decline which cannot satisfactorily be explained by demographic transition theory.[3]

(b) Those where levels of real income remained low, and the explanation of rapid fertility decline must range well beyond the confines of demographic transition theory. One of the first Asian countries to experience a sustained, though not especially rapid, decline in fertility (beginning in the 1950s) was Sri Lanka – a poor, mainly rural country with a stagnant economy. This has been followed by some precipitous fertility declines among poor rural populations. Thus evidence out of China indicates a decline of 50 per cent in just 5 years in Anhui province and (just as remarkably) a decline of 47 per cent in 9 years in China as a whole (Liu Zheng, *et al.*, 1981, p. 156); from Thailand a decline of almost 50 per cent in 15 years in the northern province of Chiangmai (Pardthaisong, 1978; Shevasunt and Hogan, 1979) and a decline of almost 40 per cent in the 1970s in Thailand as a whole (Knodel *et al.*, no date); from India a decline of 30 per cent in the birth rate in rural Kerala between 1966 and 1978 (Ratcliffe, 1978; Mauldin, 1981, p. 18); from Indonesia a decline of perhaps 26 to 36 per cent in less than a decade in Bali; and a 30 per cent decline in two decades in North Viet Nam (Jones, forthcoming). These are all very particular cases, and plausible arguments can be made to explain the decline in each case. However, unless we are to be left with the conclusion that the process is *ad hoc* and unpredictable, it is important to find common elements in these explanations.

Freedman (1979) notes that in the case of Sri Lanka, Kerala and China there have been concrete, if limited, changes which may have directly affected the perceived costs and benefits

[3] Kirk (1971) found that countries entering the fertility transition in more recent times have tended to move through it much more rapidly than was the case in the European experience.

of children: lowered mortality, high levels of education of both boys and girls, provision of basic levels of welfare, and reasonable communication and transportation facilities. However, there must be something more than these changes in the objective conditions to explain the speed of fertility decline in these places. Knodel (1977, pp. 244-8) views family limitation as innovative behaviour, which cannot only diffuse rapidly throughout a population, but may also itself serve as a catalyst to change fertility desires, especially if it is set in a context of sociocultural and economic change. Hull (1978) and others have stressed that mass communication along with more ready availability of improved birth control can facilitate rapid fertility declines without waiting on great improvements in the traditional indicators of socio-economic development. Caldwell (1976) and Freedman (1979) have stressed that modern communications systems, and the school system itself, can quickly bring potent changes in aspirations and in the accepted familial structure.

What of the role of family planning programmes or, more generally, government programmes aimed at lowering birth rates, in precipitating or accellerating fertility declines in Asian countries? There is increasingly clear evidence that family planning programmes have had an independent effect in lowering fertility rates in many countries, though their impact tends to be greater in situations where socio-economic development trends are also conducive to fertility decline (Mauldin and Berelson, 1978; Khoo and Park, 1978; Mauldin, 1981), and their role has tended to be to accelerate a decline already under way rather than to initiate it. In all of the recent, sharp declines in fertility among rural populations of Asia, family planning and other government programmes would appear to have played a major role. This indicates that many couples were sufficiently motivated to control fertility so that they did so when effective contraceptive methods were made readily available; or alternatively that the family planning programmes themselves had a major impact on the motivation to practice contraception. Either way, the relative costs and fertility impacts of family planning programmes and other development programmes appear to be such that family planning would be an automatic first choice among policies designed to lower birth rates. However, the question which has long exercised the minds of population and economic planners – how much emphasis (and budgetary support) to give to family planning programmes and how much to other development programmes in efforts to lower fertility rates – remains. So does the question of possible support for incentive programmes for lowered fertility.

Effect of development programmes on fertility

While there is truth in the claim the "development will lower fertility", it would be fatuous to assume that this vaguely-defined "development" will lead to fertility levels that are "just right" for the society without any need for specific policy measures to influence birth rates (see, e.g. Anker and Farooq, 1978). Moreover, if high birth rates are in themselves a hindrance to achieving development, then direct efforts to lower fertility will be justified. Thus the case can clearly be made, not only for programmes directly designed to influence fertility rates, but also for weighting the influence on fertility of programmes adopted mainly for other reasons in deciding on the "mix" of development programmes. The most promising programmes in this regard are those which, as well as meeting other development goals, can be expected to change "the environment within which marital and parental decisions are made so as to increase the costs and decrease the benefits, broadly defined, that are perceived to be associated with the bearing and rearing of children" (Ridker, 1976, p. 2).

However, once it is recognized that a stronger impact on fertility might require a different "mix" of development policies than would otherwise be indicated, the problems of treating development policy as fertility policy become evident. As Demeny (1975, p. 158) puts it,

> Given the existing state of the art of development planning and... the inadequate conceptual framework for analysing population problems, it is...doubtful whether arguments based on fertility effects of development policies are ever strong enough appreciably to modify the mix of development policy measures that planners would otherwise propose.

The search in recent years for specific developmental policies that can be expected to influence population growth rates has yet to produce a very actionable list of policies. Those which are generally seen as having a long-term effect in depressing fertility include widening educational opportunities, especially for women; bringing more women into the workforce, especially in the modern sector; fostering urbanization; improvement of social security and welfare policies – in

short the kind of policies which no self-respecting developing country has been without for the past two decades. Other policies such as the widening of mass communications, making the transistor and the T.V. an intimate part of villagers' lives can, it is argued, have a profound impact. Rural electrification can have a major effect on village-level production and investment possibilities, work opportunities, demand for consumer goods, cost and benefits of children, and hence on fertility, as argued in a thoughtful analysis by Herrin (1979). With regard to income redistribution, the assessment must focus on the fertility reducing effects of specific policies adopted with this goal in mind. It appears doubtful that their presumed effects on fertility would have a major influence in their adoption.

The problem is not only to estimate in any procise way the impact of the particular development programme on fertility in order to know how much extra weight to give to the programme for this reason. It is also the likelihood that the impact will not be consistent across countries or even across regions within a country. The effects of electrification in Misamis Oriental, the Philippines are unlikely to hold in rural Java where McCawley (1978) argues that most poor villagers simply could not afford to be connected to electricity unless subsidized.

Population growth, migration and urbanization

Regional development planning is commonly considered by a separate division in planning agencies. Yet despite the importance accorded the aim of rationalizing the location of industry and population, demographic considerations are not integrated at all effectively in regional planning in Asia. Nor is the increasing volume of research on migration – its determinants and consequences – particularly useful in answering the key questions facing the planners. For much of it has been directed to identifying and measuring flows (a necessary first step, but only that) without attempting to explain them in terms of determinants (either at the individual or structural level) which may be amenable to policy manipulation. Too much of it has emphasized the costs and benefits to the migrants themselves without addressing the equally important questions of the effects of their move on the rest of the population at the place of origin and place of destination. Too little attention has been given to optimal patterns of regional and urban development, and ways in which such patterns could more effectively be fostered. It is not sufficiently recognized that urban growth in most Asian countries results primarily from the natural increase of urban populations, and that it is therefore inappropriate to direct policies to counter rapid city growth toward migration without an equally strong attempt to lower birth rates. There has, finally, been an emphasis on the effects of government policies designed to influence migration and urbanization and a neglect of the unintended consequences of policies designed to meet other ends, which are often far more important in their total impact.

Until the goals toward which population redistribution policies are to be directed are clearly defined, the appropriate policy instruments can hardly be determined. Yet the appropriate goals are by no means self-evident, in most cases (see Findlay, 1977).

Some of the unanswered questions facing planners in the areas of migration and urbanization are daunting in their complexity. Given that the largest Asian cities are projected soon to reach populations well beyond those of the largest cities in the world today, prescriptions for urban policy based on historical analogy are clearly worthless. There is sharp disagreement over the balance of agglomerative economies and diseconomies as cities grow larger (Jones and Richter, 1981, p.4; United Nations (1981). Even in the more mundane matter of estimating the probable migration effects of specific government policies (do rural development programmes really hold people in rural areas? Does improvement of living conditions for the urban poor only serve to accelerate the cityward flow of poor rural dwellers?) or pinpointing the most effective instruments for changing migration flows, "the literature provides little specific guidance" (Yap, 1977, p. 257).

Implications of the state of knowledge for development planning

Our understanding of the interrelationships between population and development is clearly deficient in many respects. It is equally clear that the linkages are important – perhaps crucial – to the success of the whole development planning enterprise. There is a general consensus among Asian leaders and planners that they are important and consensus about a number of important, if rather general, propositions, in particular:

(a) Lowering mortality has strong and positive effects on welfare, though when population dynamics are considered, it must be linked with the aim of

(b) Lowering fertility, which will contribute directly to the health and wellbeing of mothers and children and more generally to faster socio-economic development;

(c) Population distribution is generally unsatisfactory and development and welfare could be enhanced by redistribution. The needs envisaged vary by country but most would favour the slower growth of the largest cities;

(d) Various development policies and programmes can influence demographic trends in desired ways as well as fulfilling other objectives;

(e) In cases where population and other development policies have common objectives, or are interrelated in their use of facilities, or personnel, or are seen by the affected populations as part of the same set of services, a strong case can be made for integrating the services supplied.

Given a reasonable degree of consensus on these points, one may then ask how effectively Asian countries are going about designing policies and programmes to foster the population-development trends they see as desirable, and researching the population-development interactions whose implications for policy are not yet clear. A possible first step is to examine the extent to which population policies are integrated into the 5-year plans – the basic planning documents. Another step is to examine the extent to which provision has been made in the bureaucratic machinery of planning for population planning to be integrated with other aspects of development planning. A third step is to examine to what extent population programmes have been integrated with other development programmes at the implementational level.

Integration of population in development plans

The extent to which population planning is integrated into the development plans varies a great deal. Countries which lack a specific population policy obviously have no stated intention to influence rates of population growth. Their policies are adaptive, or accommodationist. Some countries which do not have a policy to influence overall growth rates nevertheless do have population distribution policies, perhaps with regard to settlement of virgin land or with regard to slowing the growth of primate cities and diverting part of it to smaller cities.

Other plans go much beyond this, at least in terms of discussion of population – development linkages, though not necessarily in the adoption of policies for their demographic effects which would not have been adopted for other reasons anyway. Development plans in the 1970s in a number of major countries of Asia – Bangladesh, India, Pakistan, Philippines, and Thailand – mention a wide range of problems linked to population growth (Stamper, 1977, table 7). Others mention somewhat fewer, although the number of linkages mentioned in development plans should not be taken as a clear indicator of the importance accorded to population-development relationships, because plans differ in their degree of sophistication, detailed arguments underlying given policies are not always spelled out in the plan document, and the size of the section devoted to population issues does not necessarily reflect the importance accorded these issues in practice. It is interesting, however, that the five countries mentioned above view population as *the* critical obstacle to development (Stamper, 1977, p. 36).

There is not space here to evaluate the treatment of population-development relationships in five-year plans on a country by country basis. Suffice it to note that in a number of countries – for example, Thailand, Malaysia and Indonesia – an increasing sophistication is evident from plan to plan in dealing with these relationships. However, in general, one must conclude that there is a long way to go before population is fully integrated into development planning in the region if "full integration" is taken to mean that effects of economic policies and trends on population trends (and vice versa) are given close consideration. Particularly deficient is treatment of the possible deleterious demographic consequences of policies adopted for other purposes. Often, especially in the area of population distribution, these unplanned consequences may overwhelm the limited effects of policies consciously designed to influence population distribution. For example, the rice export tax in Thailand has encouraged rural-urban migration by turning the rural-urban terms of trade against the countryside (Robinson, 1977). In the Philippines, a range of policies serving the import-substitution strategy of industrialization adopted in the 1950s focused development heavily on Manila, as did the heavy concentration of urban infrastructure investments in Manila. The government's efforts toward regional dispersal in the 1970s appear to have had a neglible effect in redressing the balance (Pernia and Paderanga, 1981, pp. 32-40).

Aside from these deficiences, the basic demographic inputs into the planning process are not

always accurate. For example, Indonesian population projections based on the 1976 Intercensal Population Survey (SUPAS) were later shown to be well short of the mark, leading to underestimation of food requirements, school places required, and so forth. In Korea, lack of co-ordination between different branches of government led to an announced policy of the Seoul City administration (that of redistributing the population to the south of the Han River) being ignored in the building of new schools, and in 1976 there were more than the optimum number of middle and high schools north of the Han River and only half as many as needed south of the river (Nam and Ro, 1981, p. 657). Integration of teacher training programmes with education targets was also deficient (*Ibid*, pp. 663-4).

Integration of population planning into the development planning machinery

Content analysis of development plans goes only part way towards identifying the extent to which population and development planning are becoming more closely integrated. The real test is the extent to which these interrelationships are taken into account in the formulation of policies and programmes. Failure to do so adequately, of course, might not reflect a lack of will as much as an uncertainty over how to proceed on the basis of inadequate evidence. But for evidence of serious intent, it would be necessary that the issues are at least addressed. An important manifestation could be the establishment of a cell, unit, or division within the national planning agency, and the establishment of close linkages between this unit and national and/or foreign sources of expertise in the area of population and development planning. The Population Strategy for Development adopted at the Post-World Population Conference Consultation at Bangkok in January 1975 called on governments in the Asian region to

> "set up at a high level, a multidisciplinary unit to deal with population aspects. Its duties should be clearly defined with reference to advisory, co-ordinative or executive functions and steps should be taken to ensure that all agencies concerned are fully aware of the need to integrate population into the development process."

Asian countries differ widely in the extent to which they attempt to integrate population planning into the development planning process. Thailand was one of the first to see the need for the establishment of a population cell within the planning agency; a Population Sector was established within the Manpower Planning Division (later re-named the Population and Manpower Division) of the National Economic and Social Development Board in 1969. Sri Lanka has a Population Division of the Ministry of Plan Implementation and the Republic of Korea has established a Population Policy and Planning Secretariat in the Korea Development Institute. The Philippines started in 1980 to set up Population/Development Planning Units at the central and regional offices of the National Economic Development Authority (NEDA). In Bangladesh, Indonesia, and Malaysia, the integration of population planning in the planning agency is more embryonic.

Progress has certainly been made since the last Asian Population Conference in 1972 in integrating population planning into development planning as an ongoing activity of planning agencies. But by and large, one would have to judge that progress has been disappointingly slow. In the competition for the limited manpower resources available within the development planning agencies for the entire development planning effort, population planning has not done notably well. There may be a number of different explanations for this:–

(a) Population policy may be perceived to be clear (e.g. to lower growth rates), the means to achieve it already in operation (e.g. a family planning programme) and under the control of another planning agency (e.g. National Family Planning Board or Ministry of Health). There is little more, it may be felt, for the planning agency to do. Population projections and other demographic analysis required for the five-year plan can be prepared by an *ad hoc* committee when the time comes.

(b) The need for a broader perspective on population planning may be apparent but the whole area may appear too "woolly" to devote the time of planners to it. It may be considered better for the issues to be addressed in universities and research institutes.

(c) It may be considered that aspects of population, to the extent that they impinge on sectoral planning, can be dealt with by the staff responsible for sectoral planning.

However, all these explanations suggest that the importance and complexity of the interrelationships between population and development

planning is inadequately appreciated. Though university research, *ad hoc* committees to consider various population issues, and demographic work on sectoral planning in the various ministries can all play a very important role, they cannot substitute fully for serious and continuous work on the issues within the development planning agency.

Some issues in the integration of population and development policies and programmes

Some of the key issues in the integration of population and development policies and programmes would seem to relate to (a) the appropriate location of a population policy and development planning unit within the structure of the central planning authority; (b) the relative weight to be given to establishment of a population policy and development planning unit within the central planning authority compared to fostering the planning capacity of the sectoral ministries in this field; (c) the degree of decentralization of population planning appropriate in cases where the central planning authority has regional units; (d) the relative position of the national family planning co-ordinating board and the central planning agency in cases where (as in Indonesia and Malaysia, for example) the mandate given to the family planning board is in fact broader than the planning and oversight of the national family planning programmes; and (e) the role of high-level Population Policy Co-ordinating Committees such as those established in the Republic of Korea and Thailand.

On the first issue, a number of choices are possible, and many different ones have already been made in Asian countries. One possibility is to establish a separate population planning division, thus giving population planning considerable prominence in the activities of the central planning agency. This has been done in Sri Lanka. Another is to link it with the work of the division in which it is perceived to have most relevance. Another option is to set up a population unit outside the divisional structure to emphasize its task of servicing all the divisions as required.[4] Another is to set up a unit or section within the division responsible for perspective (longer-term) planning.

In most countries, a separate Population Planning Division would be seen as giving too much prominence to population. The disadvantage of building population into a division such as the Manpower Planning Division is that other divisions may then view it as simply a component of manpower planning and thus be tempted to ignore its work. A potential disadvantage of a unit outside the divisional structure is that it will be seen by all divisions as a "dogsbody", useful only insofar as it can service their needs, and will lack a strong voice in general planning meetings. Building a unit as part of perspective planning or macro-economic planning divisions should ensure a broad perspective on population planning, though it is important in such a case that the role of a population unit in servicing other divisions with demographic data and analysis relevant to their needs is not ignored.

On the second issue, as well as establishing a population policy and development planning unit in the central planning agency, capacity to tackle population aspects of planning should also be built into some of the ministries such as education, health, social welfare, agricultural and urban and regional development. It is theoretically possible that the needs of these ministries for demographic analysis could be provided by a strong population unit in the central planning agency, but most unlikely in practice that such a unit could respond as promptly to their needs as an in-house unit. However, where such units are developed in the ministries, it is important that close liaison be maintained with the population planners in the central planning agency. It can be very confusing, for example, if different ministries each prepare their own set of population projections and much better if they can be represented on a committee which oversees the preparation of one "official" set of projections which is used for all planning purposes. Moreover, units within ministries would normally be very small, and would need the "back-up" available from the more specialized expertise which ideally should be available in the population unit of the central planning agency.

The third issue raises the question of the appropriate degree of decentralization of population planning activities. The Philippines has been actively engaged, during the past two years, in building population planning links with development planning by establishing not only a Population/Development Planning unit at the central level of the National Economic Development Administration (NEDA) but also corresponding or

[4] When a population unit is set up with a division, it is also possible to isolate it from the normal section structure so that it can co-ordinate more freely with the existing sections. This has been done in NEDA in the Philippines.

equivalent "units" at the regional level.[5] The argument in favour of such regionalization is that planning at the regional level can be more sensitive to local needs and circumstances. The main reason for caution about such developments is that, given the small scale of regional NEDA offices (about 16 technical staff in each), population planning is unlikely to be allocated more than two or three professional staff members per office, and because of the shortage of qualified personnel in the field of demography, the professional competence of such employees might not be very high. Therefore there is a need to devise a system whereby most of the technical analysis and planning is conducted in the central office, and the task of the regional offices is more in the area of liaison and "consciousness raising", drawing the attention of the Central office to regional concerns and transmitting the results of analysis and policy making at the central office to appropriate regional government agencies.

In some countries, although overall development planning (which should automatically include population planning) is the responsibility of the central planning authority, an independent agency set up to implement the national family planning programme has been given a mandate broad enough to include more general aspects of population policy formulation and implementation. For example, in Indonesia the Presidential decree outlining the functions of the National Family Planning Co-ordinating Board (BKKBN) noted an overall responsibility in the field of population policy that was considerably broader than the planning and implementation of the family planning programme.

Such a situation raises the possibility that the division of planning responsibility will not be clear, and a more precise delineation of responsibilities seems desirable. In the Philippines, this has been emerging, with POPCOM responsible for the formulation and co-ordination of the fertility aspects of population policy, mainly family planning; and NEDA for the formulation and co-ordination of the broader aspects of population policy and their integration into socio-economic plans and policies (Population Council, 1980, p. 74).

In countries and areas (e.g., Thailand, Hong Kong) where the family planning programme is placed directly under the Ministry of Health and is integrated with health activities, such problems do not arise, since the Ministry of Health is clearly not in a position to take a policy position on migration policy and other broader aspects of population policy.

This is not to argue for any particular organizational arrangement for the family planning programme, but only to note that where a separate agency is established, its overall role in population policy formulation and implementation needs to be clearly defined.

The fifth key issue raised earlier is the role of a high-level Population Policy Co-ordinating Committee in countries (such as the Republic of Korea and Thailand) where such a committee has been established. The role of such a committee is normally seen as that of giving a high-level imprimatur (or alternatively, the red light) to policies proposed by the planning office or other agencies before they go for Cabinet approval; and that of ensuring appropriate co-ordination between various government departments and agencies and private agencies in the implementation of agreed policy. To fulfill these roles adequately, such a committee needs high-level representation (sometimes Department Head or even Ministerial representation) from a considerable number of departments or agencies in order to give it the required authority. The dilemma is that a committee with this kind of representation is almost never able to meet because of the very tight schedules of most of its members. Three alternatives present themselves:

(a) To lower the level of representation (with the danger of lowering the authority of the committee);

(b) To convene the committee only on those rare occasions when a major policy decision is in the offering;

(c) To appoint a sub-committee (perhaps a technical sub-committee) which can meet more frequently and discuss population policy issues in more detail. This alternative can, of course, be combined quite satisfactorily with alternative (b).

The functions of a population policy and development planning unit

Generalizations here are difficult to make, because individual country situations differ so much with respect to the organizational structure of planning agencies, the research capacities of

[5] Only two of the regional units have yet been set up, on a pilot basis.

universities and other research institutes in the field of population, and the role of population commissions or other equivalent agencies outside the central planning structure. Nevertheless, a number of functions can be listed for consideration:

(a) Institutionalizing the process of reviewing population policy in the light of new and old research findings and new developmental aims;

(b) Undertaking a coordinating role to ensure that policy-relevant research is a continuous, cumulative, and hence parsimonious process rather than a series of eclectic and *ad hoc* studies; and that research findings are considered in policy and planning decisions;

(c) Broadening the focus of research and policy interest to include previously ignored or misunderstood relationships between population and other development variables and initiate research in these areas;

(d) Playing an educational role in briefing key officials in the planning agency and outside it about current understanding of various population development relationships, and their implications for the planning process. This role is crucial in view of the rather cavalier treatment of population growth as an exogenous factor, a parameter setting limits on what the plan can accomplish, in many planning agencies;

(e) Providing quick responses to policy questions;

(f) In more general terms, generate, analyze, and organize knowledge about population variables as they relate to other development variables, and, in collaboration with other divisions of the national planning agency, use that knowledge to forecast future trends and conditions helpful in formulating alternative development policy and programme options.

These tasks call for the skills of senior social scientists who (preferably) have had experience in policy research,[6] and who have sufficient knowledge and authority to know how the world looks to planners and policy makers and to deal with their questions and needs. Given the urgency of population issues, they will frequently have to make assessments of alternatives and recommendations for action without waiting for full documentation or ultimate 'proof' from research findings, using the best available knowledge while recognizing the deficiencies of that knowledge.

One dilemma facing population planning units in development planning agencies is that such agencies rarely give really serious attention to long-run (perspective) planning. The implications of demographic trends and processes assume major importance over the perspective plan period; yet they will never become apparent if planning is viewed as an endless succession of short periods. To the extent that politically costly decisions may be needed now to yield benefits (or avoid catastrophe) in the relatively distant future, the population planner is in a rather invidious position. To base planning only on those benefits that would be realized within a five-year plan period will lead to serious biases: longer-term benefits, suitably discounted, must be considered in national planning.

There is likely, therefore, to be something of a credibility problem for a population planning unit. This problem can be lessened by careful research and documentation of the issues. It can also be lessened if the unit performs well the functions which are arguably its second main line of work – that is, supply of appropriate basic demographic analysis to other parts of the planning agency. The basis for this should be a detailed set of population projections, periodically revised and updated; disaggregated to regional and, where requested, sub-regional level. The unit should be in a position to provide information to educational planners, health planners, and urban planners about the sub-groups of the population they are interested in, at the sub-regional level. It should be working closely with the manpower planners in analysing structural change in the workforce, productivity change, and labour mobility, so that the manpower implications of different agricultural or industrial development strategies can be quickly assessed.

Central to this task is the need to ensure that the basic demographic time series which can be calculated from vital registration, census and survey data and routine data collections by government agencies are prepared routinely. If data to permit these calculations are not rountinely collected, a major task of the population planning unit is to convince the planning hierarchy that collection of such data should receive high priority.

[6] The principal purpose of policy research is to aid in the solution to empirical problems and the advancement of development programme. As such it should be concerned with generating new knowledge that leads to suggestions for alternative options, with providing probability estimates of various outcomes, with assessing the population effects of existing policies and programmes, and with forecasting future trends and conditions.

Beyond this, but related to the basic demographic "information supply" there should be serious attention to measuring trends in welfare, particularly through work on social indicators (including indicators of trends in inequality in the access to income and other goods). A population policy unit could also be involved in studies to test the demographically-related impacts (and most impacts are demographically-related) of various development programmes, including land reform, land settlement, educational projects, highway construction, and so forth.

Integration of population programmes with other development programmes at the implementational level

At a slightly different level from the integration of population with other development concerns in macro planning is the possibility of integration in the implementation of some programmes. One of the areas where such integration has been attempted is in the provision of a package of rural development inputs as an "integrated rural development programme". It is normally assumed that such programmes will tend to deter rural-urban migration by raising rural incomes and increasing the quality of life in rural areas. At the same time, health and family planning services are often built into the rural development package, since they are seen as an important element of increasing welfare. There are many unanswered questions about integrated rural development programmes, including the important question of whether one fieldworker can be expected to cover all aspects of the programme or whether more specialized fieldworkers should be used.

Women's development programmes are another area in which population can be integrated with other development concerns. Formation of women's clubs, women's producer and consumer co-operatives and other kinds of women's organizations are generally based on the objective of integrating women more fully in the development process, and at the same time providing them with various services. Various learning activities are usually included in the programmes of such groups, often including discussions about health care, child rearing and family planning.[7] Activities of such women's groups tend to be particularly important in countries where women's activities are highly circumscribed, since they provide a socially acceptable mechanism for circumventing some of the structures customarily placed on these activities.

The fields of health, population and nutrition are increasingly being planned together because of the many interrelationships among them. For example, nutrition has an effect on health and fertility, and health and fertility influence nutrition. The interrelationships are multiple, complex and imperfectly understood. Similarly, health and population concerns are closely interrelated.[8] These variables also have both simple and complex links with other development variables. One point of particular policy concern is the need to reduce the number of high-risk pregnancies, thus lowering rates of fertility and population growth and improving health through the reduction of morbidity and mortality associated with these pregnancies. Older and higher-parity women (and their babies) are a major high risk group, as are very young women. Elimination of fertility outside the central age range of 20 to 34 years would decrease world fertility by about one quarter, would decrease overall mortality rates by about 15 per cent, and despite the lowered mortality, would decrease world population growth by about 30 per cent.

It does not necessarily follow that health, family planning and nutrition programmes should be integrated at the implementational level, although the view has been strongly advocated by powerful voices such as the WHO and the case is quite persuasive. As in the case of integrated rural development programmes, the main problems with integration are the

> "practical complexities of retraining, implementing, and managing integrated family planning, maternal and child health, and other health programmes, and whether integrated programmes can mobilize sufficient personnel, funding, expertise, and commitment with enough speed to generate successes equal to or exceeding those of "undiluted" single-purpose programmes, remain to be seen." (Watson *et. al.*, 1979, p. 162)

[7] Four ASEAN countries are co-operating in the development of women's centres under the "Women in Development" project of the ASEAN Population Programme. For details on the range of women's group activities in Bangladesh, see Women for Women, 1978, Part III.

[8] For an extensive review of the literature, see Watson *et al.*, 1979, and the works cited on p. 146, fn.3 of that study.

The urgent need to overhaul health care systems in developing countries to provide more effective levels of "primary health care" has been a persistent theme in recent years, though it has been honoured more in the breach than in the observance. Innovative attempts to integrate family planning with primary health care and to move the programme from the clinic to the community can be noted in Java and Bali (Suyono, *et.al.*, 1976), in programmes of Community-Based Family Planning Services in Thailand (Watson, *et.al.*, 1979, pp. 171-2), in the two programmes in Sri Lanka (ESCAP, 1979, p. 23); and in a field project in Matlab Thana, Bangladesh (Philips *et.al.*, 1981). Projects emphasizing the links between nutrition programmes and other programmes include the Tamil Nadu Nutrition Project (ESCAP, 1979, p. 19).

Summary and conclusions

This report has summarized a few of the areas in which demographic trends are intimately bound up, in both a causal and a consequential way, with social and economic development. Our understanding of the interrelationships is incomplete, and there is need both for more research and for careful consideration of the available knowledge base in order to draw out those policy prescriptions which are already implicit in the data.

There is a growing conviction in planning circles in Asian countries that population concerns should be integrated in an ongoing way into the work of planning agencies. A number of different models are available within Asian countries, but general prescriptions are difficult because of the wide variation in the structure and functions of planning agencies and the ways in which population planning has been undertaken to date. The paper has summarized the functions which should ideally be performed by a population unit.

Finally, the paper deals with another possible level of integration of population and development programmes – in their implementation at the field level – and cites a number of examples where this has been done.

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2.3 POPULATION SITUATION AND POLICIES IN COUNTRIES OF THE ASIA AND PACIFIC REGION

by

United Nations Population Division

Introduction

Ever since the Second Asian Population Conference in Tokyo in 1972 and the World Population Conference at Bucharest in 1974 the formulation of population policies in most countries of the ESCAP region has not only continued to receive high priority, but more importantly, has broadened the approach taken towards population issues. Whereas in earlier times the major focus of population concerns was primarily fertility and mortality, the considerations by now have expanded to include, with equal and sometimes greater emphasis, international migration and the spatial redistribution of the population within the national territory. This appears to have been, to some extent a response to the World Population Plan of Action[1] and attempts to implement this Plan. In addition, of course, this broadening has also been a reaction to the unexpected changes in the international economic situation and its effects at the individual country level. As Governments increasingly come to recognize the link between population and development, the formulation of their population policies are affected.

In order to adequately address the subject under review it is necessary to report not only on the population policies themselves, but also on the existing situation as well as government's perceptions in regard to the issues involved. Thus, the paper includes subsections on population size and growth, mortality, fertility, international migration and spatial distribution, and within each subsection presentation of basic data, perceptions and policies of Governments. Attempts are also made, for comparative purposes, to assess changes over the past decade, as well as where feasible, differences between sub-regions.

[1] United Nations. *Report of the United Nations World Population Conference, 1974,* Bucharest, 19-30 August 1974 (E/CONF. 60/19), pp. 3-25.

The countries covered under this review include the regional members of the Economic and Social Commission for Asia and the Pacific (ESCAP): The major sources used are drawn from the continuing work of the Population Division in the area of population policy and include: the Population Inquiries, the World Population Trends and Policies: Monitoring Reports, the Population Policy Compendia, the Population Policy Briefs and the Population Policy Digest.[2]

Population size and growth

The population of the entire region and in almost all individual countries of East and South Asia and Oceania increased considerably in the decade 1970 to 1980 and the rates of growth varied significantly between countries as well as within countries. while some countries experienced increases in average annual rates of growth during this period, many countries in the region either maintained their rates of growth over the decade or experienced a decline in these rates (see table 1). Many of the countries with increased rates in this decade had relatively smaller populations. The overall average annual rate of

[2] United Nations, "Report on monitoring of population policies", 5 January 1981, (ESA/P/WP.69); United Nations, *Population Policy Compendium,* a joint publication of the Population Division of the United Nations Department of International Economic and Social Affairs and the United Nations Fund for Population Activities for the following countries: *Burma* (Jan. 1979), *China* (May 1981), *India* (Jan. 1982), *Indonesia* (May 1979), *Mongolia* (June 1979), *Republic of Korea* (Nov. 1980), *Sri Lanka* (Jan. 1979), and *Thailand* (Jan. 1979); United Nations, *Population Policy Briefs: Current Situation in Developing Countries and Selected Territories, 1979* (ESA/P/WP.67); United Nations, *Population Policy Briefs: Current Situation in Developed Countries, 1980* (ESA/P/WP.72); United Nations, "Population policy digest; indicators, perceptions and policies in countries of the Economic Commission for Asia and the Pacific", (Working paper, in press).

Table 1. Population size and growth: rates, perception and policies

	Population size[a] (thousands)		Rate of growth[a]		Current perception of rate[b]			Current policy[b, c]		
	1970	1980	1970-1975	1975-1980	Too high	Acceptable	Too low	Full intervention to increase/ decrease/maintain	Some support to increase decrease/maintain	No. inter- vention
East Asia										
China	838 396	994 913	2.02	1.40	x			x		
Democratic People's Republic of Korea	13 892	17 892	2.64	2.42			x	x		
Hong Kong	3 942	5 106	2.18	3.00		x			x	
Japan	104 331	116 551	1.33	0.88		x			x	
Mongolia	1 248	1 669	2.93	2.89			x	x		
Republic of Korea	31 923	38 455	2.00	1.72	x			x		
Eastern South Asia										
Brunei	133	228	3.94	6.84	..	..	..	..	..	..
Burma	27 748	35 289	2.37	2.44		x			x	
Democratic Kampuchea	6 938	6 747	0.46	-1.01			x	x		
Indonesia	122 211	148 033	2.09	1.74	x			x		
Lao People's Democratic Republic	2 962	3 721	2.18	2.39			x	x		
Malaysia	10 863	14 068	2.53	2.37		x			x	
Philippines	37 540	49 211	2.74	2.67	x			x		
Singapore	2 075	2 390	1.62	1.21		x			x	
Thailand	36 499	47 063	2.75	2.34	x			x		
Viet Nam	43 128	53 740	2.10	2.30	x			x		
Middle South Asia										
Afghanistan	12 342	15 940	2.58	2.54		x			x	
Bangladesh	68 278	88 164	2.30	2.82	x			x		
Bhutan	1 045	1 296	2.09	2.21			x		x	
India	552 469	684 460	2.27	2.02	x			x		
Iran	28 359	38 126	2.88	3.04	x			x		
Maldives	114	154	2.95	3.00		x				x
Nepal	11 416	14 288	2.19	2.30	x			x		
Pakistan	65 706	86 899	2.78	2.81	x			x		
Sri Lanka	12 514	14 815	1.67	1.71	x			x		
Oceania										
Australia	12 552	14 488	1.64	1.23		x			x	
Cook Islands	21	19	-2.85	0.73	x			x		
Fiji	520	630	2.03	1.78	x			x		
Kiribati	49	58	1.76	1.53	x			x		
Nauru	7	7	1.16	0.81			x	x		
New Zealand	2 820	3 268	1.81	1.14		x			x	
Papua New Guinea	2 419	3 154	2.62	2.69	x			x		
Samoa	143	157	0.93	0.86	x			x		
Solomon Islands	163	229	3.37	3.45	x				x	
Tonga	85	97	0.76	2.01	x			x		
Trust Territory of the Pacific Islands	103	137	3.30	2.36	..	..	..	..	..	..
Tuvalu	6	7	0.68	4.45	x				x	

Sources: [a] United Nations publication, *World Population Prospects as Assessed in 1980.* (Sales No. E.81.XIII.8).

[b] United Nations, "Population policy digest: indicators, perceptions and policies in countries of the Economic and Social Commission for Asia and the Pacific," prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat. (Working paper, in press).

[c] The nature of intervention is in every case consistent with the perception: countries that perceive the rate of growth as too high intervene to decrease it, and so forth.

(. .): Not available.

growth for the East Asia region fell from 1.96 during 1970-1975 to 1.24 during 1975-1980, according to the most recent United Nations estimates.[3] In Eastern South Asia the rate fell from 2.27 to 2.08 at this time, and in Middle South Asia from 2.33 to 2.21. In the Oceania region the overall rate also declined from 1.85 to 1.47.

Governments' perceptions with regard to the size of the population and the rates of growth have also changed over the past decade, again to varying degrees, between countries. It is apparent that this has been a result of changing economic conditions both within the region as well as in the international sphere. For instance, countries which are now better able to support their populations in terms of provision of employment may now consider their rates of growth as acceptable. Briefly reviewing the situation, one observes that in the early 1970s, of the 29 countries in the then ECAFE[4] region, 9 considered their rates of population growth as acceptable, 18 considered the rates too high and two countries felt that the rates were too low.[5] Of the 37 countries reviewed in the ESCAP region in 1980, the number of countries considering their rates as acceptable fell to 8, the number considering the rates too high remained relatively the same at 19 and the number considering their rates as too low increased to 6. It is necessary to note, however, that even though these figures are not strictly comparable since the total number of countries in the region increased in the decade, one could remark on a perceptible shift in the countries that now perceive their population size as being too low: an increase from less than one in 10 to nearly one in five. Nevertheless, in the region as a whole, and in terms of total population size, the major proportion still live in countries whose Governments perceive the rate of growth as too high.

One can single out certain countries in which there was a marked shift in perception over the last decade. For instance, Malaysia and Singapore, which earlier in the decade considered their rates as too high, now found them acceptable. Other, countries such as China and the Republic of Korea, which even though experiencing significant declines in their rates of population growth, continued to perceive them as still too high. The countries which currently perceive their rates of growth as too low are Bhutan, Democratic Kampuchea, the Democratic People's Republic of Korea, the Lao People's Democratic Republic, Mongolia, and Nauru.

Policies of intervention to modify the rates of growth have been in force in almost all countries through the decade. According to the most recent policy statements only Burma and Maldives report no policies of intervention to affect their rate of growth, which they consider acceptable. (However, policies to modify the spatial distribution of the population are in effect in these two countries but are not directed at growth.) Most of those nations which would like to increase their rates of population growth report policy intervention primarily at the level of spatial redistribution and technological modernization and organization. In addition three countries, Bhutan, Democratic Kampuchea and Nauru report intervention at the level of international migration to increase their rates of growth. Only Democratic Kampuchea and the Lao People's Democratic Republic have specific policies to increase the rates through attempting to increase fertility levels. The other countries in the region, which consider their rates of population growth as too high, mostly support full intervention at the level of either decreasing or maintaining fertility levels, adjusting spatial distribution and international migration and technological modernization and organization. The countries in this category, which do not report intervention in international migration in relation to the rate of population growth are Bangladesh, China, India, Indonesia, Kiribati, Maldives, Papua New Guinea, the Philippines, Singapore, Solomon Islands and Tuvalu. Furthermore, it is only in Maldives, Solomon Islands and Tuvalu that Governments, although desiring lower rates of population growth, report no intervention at the level of fertility.

As expected, the developed countries in the region, Australia, Japan and New Zealand, have attained relatively low to moderate rates of population growth and consider them as acceptable; they report intervention primarily to maintain the rates either through technological modernization and organization, and, to some extent through international migration. It is mostly the countries having centrally planned economies which, although reporting moderate to high growth, still perceive

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[3] United Nations. *World Population Prospects as Assessed in 1980* (New York, 1981), pp. 18-20, 24-26.

[4] Economic Commission for Asia and the Far East, now ESCAP.

[5] "Population policies and programmes", World Population Conference. Bucharest, Romania, 19-30 August 1974. (E/CONF.60/CBP/21).

them as too low and report policies of intervention to change the situation. Among the remaining developing countries in the region, those whose economies have modernized in more recent years, such as in some countries of South-East Asia, have indicated declines in population growth rates. However, many of these countries continue to desire yet lower rates, or at least to maintain the rates, and likewise report active policy intervention. There are few countries which, as a result of reduced rates, actually significantly changed their policy options over the decade. The relatively low income developing countries typically report persistently high rates of growth, which they consistently consider as too high and thus attempt policy intervention to the fullest extent possible. More details on actual policy measures follow in subsequent sections.

Mortality and morbidity

The levels of mortality continued their downward trend in the decade 1970-1980, as in the previous decades although at a slower pace. Life expectancy at birth showed an improvement over the years in almost all countries of the region. In the developed countries, life expectancies at birth for both sexes were among the highest of the region: 75.6 years for Japan in 1975-1980, 73.1 in Australia and 72.8 in New Zealand. However, the area with the highest life expectancy in the region was Hong Kong with 76.0 years in 1975-1980. Other developing countries with levels of over 70 years were Fiji and Singapore. The countries of East and Eastern South Asia and Micronesia-Polynesia were in the range of life expectancies of between 60 and 65 years. A few countries such as Burma, Iran, Pakistan and Viet Nam had levels ranging from 50-52.5 years. Countries in the region with levels below 45 years were Afghanistan, Bhutan, the Lao People's Democratic Republic and Nepal. Comparing life expectancy between sexes, one notes that, in general, life expectancy at birth for females is higher by three to five years over that of males. There are five notable exceptions, however, all in South Asia: Bangladesh, Bhutan, India, Nepal and Pakistan, where life expectancy at birth for females is consistently lower than that for males, and has been so for some decades. The only other exception is Papua New Guinea where the levels for females had been consistently lower and at the present time are just marginally lower than that of males.[6]

According to most recent United Nations estimates, the infant mortality rate has also declined over the past decade, the only exception being Democratic Kampuchea where marked increases in the rate were observed, although these need to be interpreted with caution because of the unusual circumstances of recent times. The country with the most significant decline in the infant mortality rate has been China where the rate fell from 60 per thousand in 1970-1975 to 48.7 per thousand during 1975-1980. In general, the more developed countries had considerably lower levels of infant mortality than the developing countries with as low a rate as 8.8 per thousand in Japan during 1975-1980 to 13.7 in New Zealand. The only developing country that fell in this range was Singapore with a rate of 12.5 per thousand. Three other less developed countries fell in the next higher range of under 50 per thousand (Fiji, Malaysia and Sri Lanka): the majority of countries, however, fell in the highest category with rates ranging generally between 100-150 per thousand.[7]

Governments have generally expressed great concern with regard to the situation of mortality in their countries. Although the extent of concern may have remained relatively steady in most countries of the region, the specific issues of concern have varied to some extent. For instance, the eradication of certain diseases such as smallpox in the last decade are no longer a cause for serious concern in most countries. On the other hand, increased concern is now expressed for a more equitable distribution of health care services and facilities within the national territory, particularly in reference to issues such as disparities between urban and rural areas, male-female differentials and mortality by age. Some areas of concern which have continued to remain relatively unchanged, at the same time, are in regard to maternal and child health and mortality, and more particularly, to infant mortality. At the present time, most countries in the region perceive their levels of the expectation of life at birth to be unacceptable, given their prevailing economic and social circumstances. The countries that indicate that their level of mortality is acceptable are the more developed, Australia, Japan and New Zealand, and in addition Fiji and Nauru. This presumably reflects their view that any substantial further improvement in mortality levels would depend

[6] United Nations, *World Population Prospects as Assessed in 1980, op. cit.*, pp. 90-94, 100.

[7] United Nations, "Estimates and projections of infant mortality", prepared by the Population Division, Department of International Economic and Social Affairs (Working paper, forthcoming).

upon further progress at the frontiers of medical science. More recently, Malaysia, the Philippines, the Republic of Korea, Singapore and Sri Lanka are also reported to perceive their current levels of life expectancy as acceptable, in the prevailing economic and social circumstances.[8]

Policies in regard to mortality have undergone some evolution in the past decade, in line with the changes in the perception of the problem of the health situation itself. Many of the developing countries in the region had inherited health systems from colonial systems wherein services had been concentrated mainly in urban and metropolitan areas and the health care itself was primarily curative, with services centred on hospitals and health centres. This pattern was initially continued by most Governments after achieving independence. However, its inadequacies in meeting the needs of the region were all too apparent and attempts to better adapt the system was begun. In the initial stages, during the 1950s and into the 1960s, efforts were focussed on combating certain diseases critical to the region such as malaria, smallpox and tuberculosis. Most of these were programmes in the form of nationwide campaigns making use of temporary, mobile teams fanning out from the urban into the rural areas. Although many of these diseases were brought under control, there was only a minimum development of health infrastructure at the rural level, where the great majority of the population lived in most countries. By the mid to late 1960s active attempts were made to decentralize the health system and to establish some form of a broader health infrastructure. During the 1970s, the necessity to coordinate and integrate health services with other developmental programmes, especially in the rural areas, was emphasized. This included such elements as coordination with family planning activities, emphasis on nutrition and nutrition education, and medical training not only at the professional level but especially also at the paraprofessional and local health care worker levels. A significant trend during the past five years has been the interest focused on primary health care and utilizing community health workers with the objective of reaching populations in the remotest and under-privileged regions.

All countries in the region at the present time have policies aimed at reducing morbidity and mortality rates. Most countries have formal health plans, generally a component of the national development plans. Although the proportion of the budget and priority given to health in the national plans has generally been not very high, in recent years efforts to change the situation have appeared.

In the more developed countries of the region, Australia, Japan and New Zealand where certain communicable and infectious diseases had already been brought under control, the incidence of degenerative diseases such as cancer, cerebrovascular and heart diseases was on the increase and was a matter of major concern. In addition, active attention was given to occupational health, environmental pollution control, radiation protection and so forth. As a result of the remarkable decrease in the birth rates and general death rates in Japan, the aging of the population has accelerated. The problem of the aged population is now one of the most serious social concerns in Japan.[9] It is likely that this will increasingly become a major concern for the region as a whole in decades to come.

In the developing countries in the East Asia and in the Eastern South and Middle South Asia regions, priority has been increasingly given to the establishment and distribution of services in rural areas. Thus at the present time almost all countries in these regions have policies directed at the establishment and expansion of rural health services, including increased use of community level health workers. China, for instance, has had one of the earliest and most effective rural health care systems with the orientation of services towards the workers, peasants and soldiers. The country still stresses work in the rural areas with a continuing effort to readjust, consolidate and improve the "grass-roots" health structure in rural areas and to further train barefoot doctors so as to raise their technical level. Efforts are also now being made to elevate medical science and technology, to modernize equipment and to advance training.[10] In Bangladesh, Burma, India, Indonesia, Malaysia, Maldives, Mongolia, Nepal, the Republic of Korea, Sri Lanka and Thailand, some form of community health workers exist

[8] United Nations, *Report on Monitoring of Population Policies*, New York, 5 January 1981 (ESA/P/WP.69), pp. 241, 242.

[9] World Health Organization, Sixth Report on the World Health Situation, 1973-1977, Geneva, 1980, pp. 319-323, 345-347, 358-363; "Country Report: Japan" presented at the Asian Conference of Parliamentarians on Population and Development, Beijing, 27-30 October 1981.

[10] *Ibid.*, pp. 323-325; and *Population Policy Compendium: China, op. cit.*

and are actively utilized as an integral part of the health system. Some of these are employed by the government health services while others may be volunteers administered by the village council. Another emphasis in some of these countries has been to give recognition to and to encourage research on the traditional indigeneous medical system. Following the Alma Ata International Conference on Primary Health Care in 1978 this aspect was considered an integral part of the primary health care programme along with the training of local personnel. Most of the countries in the region now also lay stress on low cost health delivery systems, on prevention of disease, provision of potable water, environmental sanitation (for instance, in Indonesia, Sri Lanka and Thailand) and on rural health co-operatives and a network of clinics and polyclinics at various levels (in Burma, Mongolia and Viet Nam). Active efforts to improve nutrition have increased priority for some countries such as India and Indonesia. Maternal and child health services are important components of health programmes for all countries.[11]

Among countries in the Micronesia-Polynesia region some, such as Fiji, have a specific health policy developed in the 1970s which gives emphasis to controlling still prevalent communicable diseases, to environmental health and sanitation and to education, training and research. The issue of family health also receives priority among certain countries.[12]

It is relatively difficult to distinguish between health policies as all Governments have the same objective of improving the mortality and morbidity situation. Therefore it may be of use to examine an outcome of official health policy such as the population per midwife or nurse. It is seen in table 2 that the population per midwife or nurse is considerably higher in the developing countries, the very highest being almost 40,000 in Bangladesh, followed by Afghanistan and Nepal (approximately 21,000 and 13,000 respectively). The range in the developing countries of Middle and Eastern South Asia is generally between 1,000-2,500, the exception on the high side being Pakistan (4,952) and on the low side Singapore (331). With the exception of Papua New Guinea, the countries of Oceania had a relatively low ratio which may be partly due to the small size of the population itself in some of these countries. The only developing countries which have a ratio close to or lower than the developed countries in the region are Mongolia, Nauru and Tonga (223, 115 and 167 respectively) as compared to Japan (269) and Australia (116). These ratios could be interpreted as being reflective of the end product of health policies. Other indicators, for instance government expenditure on health, could also be interesting to examine; however such an indicator is not easily comparable between countries and thus is not discussed in this context.

Fertility

Fertility levels have in general declined in all countries of the region in the past decade, with significant increases occurring only in relatively fewer cases. According to recent estimates made by the Population Division, declines in total fertility rate occurred in developed and developing countries alike, as is evident from table 3. In the East Asia region the rate declined in almost all countries, the more significant declines being in the Democratic People's Republic of Korea and the Republic of Korea, from 5.21 and 4.09 children per woman aged 15-49 years in 1970-1975 to 4.53 and 3.38 respectively, and especially in China where the rate fell from an estimated 4.51 in 1970-1975 to 3.11 during 1975-1980. In the Eastern South Asia and Middle South Asia regions the countries with significant declines in the rate were Democratic Kampuchea, Malaysia, Singapore, Thailand and to a lesser extent India and Sri Lanka. In the remaining countries the rates were only marginally reduced or relatively unchanged. Among countries of the Oceania sub-region marginal declines took place in Australia and New Zealand while relatively small increases occurred in Papua New Guinea and Fiji.

The governments of most countries in this region have been actively concerned with their fertility levels since the 1960s[13]; the region was effectively the pioneer in this area of population

[11] World Health Organization and United Nations Children's Funds, *International Conference on Primary Health Care, 6-12 September 1978, Alma Ata, USSR: Statements by participants in the Plenary Meetings*, Geneva, 1979; United Nations, *Population Policy Compendium: Mongolia*, New York, 1979; International Conference on Primary Health Care, *op. cit., Report of the Regional Director for South-East Asia.* 1 April 1978 (ICPRC/ALA/78.8).

[12] *Sixth Report on the World Health Situation, op. cit.*

[13] See report of First United Nations Population Inquiry; United Nations Economic and Social Council Official Records. Population Growth and Economic and Social Development. Thirty-seventh Session. Geneva, 1964 (E/3895/Rev. 1), pp. 8-12.

Table 2. Mortality: rates, perception and indicator

Countries	Life expectancy at birth (both sexes)[a]		Current perception[b]		Population per midwife or nurse[c]
	(in years) 1970-1975	1975-1980	Acceptable	Not acceptable	
East Asia					
China	63.2	67.3		x	1 418
Democratic People's Republic of Korea	60.6	62.5		x	
Hong Kong	70.0	76.0	..	..	417
Japan	73.3	75.6	x		269
Mongolia	60.7	62.5		x	223
Republic of Korea	60.6	62.5	x		514
Eastern South Asia					
Brunei				x	393
Burma	50.0	52.5		x	1 703
Democratic Kampuchea	40.3	30.2		x	1 376
Indonesia	45.0	47.5		x	2 311
Lao People's Democratic Republic	40.4	43.5		x	2 428
Malaysia	61.3	63.3	x		
Philippines	58.4	60.7	x		852
Singapore	69.5	70.8	x		331
Thailand	58.0	60.2		x	1 169
Viet Nam	44.5	52.7		x	2 349
Middle South Asia					
Afghanistan	40.3	40.5		x	21 501
Bangladesh	35.8	45.8		x	39 489
Bhutan	41.3	43.3		x	
India	48.4	49.4		x	3 799
Iran	51.0	53.5		x	1 632
Maldives	--	--		x	664
Nepal	41.3	43.3		x	13 054
Pakistan	49.2	50.8		x	4 952
Sri Lanka	63.0	65.0	x		1 422
Oceania					
Australia	72.4	73.1	x		116
Cook Islands	--	--	..	..	351
Fiji	70.0	71.3	x		491
Kiribati	--	--		x	107
Nauru	--	--	x		115
New Zealand	71.9	72.8	x		172
Papua New Guinea	47.7	50.3		x	1 640
Samoa	--	--		x	574
Solomon Islands	--	--		x	806
Tonga	--	--		x	167
Trust Territory of Pacific Islands	--	--		x	359
Tuvalu	--	--	..	x	431

Sources: [a] United Nations. *World Population Prospects as Assessed in 1980* (New York, 1981).

[b] United Nations. "Population policy digest: indicators, perceptions and policies in countries of the Economic Commission for Asia and the Pacific", prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat. (Working paper, in press).

[c] World Health Organization. *World Health Statistics Annual, 1980; Health Personnel and Hospital Establishments* (Geneva, 1980).

(--): No consistent estimates and projections available for these countries.

(..): Not available.

Table 3. Fertility: rates, perception and policies

	Total fertility rate[a]		Current perception[b]			Current policies[c]			
								Access to contraception	
	1970-1975	1975-1980	Not satisfactory, too low	Satisfactory	Not satisfactory, too high	Intervention to increase/decrease/maintain	No intervention	Not limited	Limited
East Asia									
China	4.51	3.11			x	x		DS	
Democratic People's Republic of Korea	5.21	4.53		x		x		DS	
Hong Kong	2.90	2.30		x		x		DS	
Japan	2.07	1.82		x			x	DS	
Mongolia	5.56	5.35		x		x		DS	
Republic of Korea	4.09	3.38			x	x		DS	
Eastern South Asia									
Brunei	--	--	..	..	..	..	..	..	..
Burma	5.54	5.53		x			x	NS	
Democratic Kampuchea	5.53	4.10	x			x			x
Indonesia	5.69	4.71			x	x		DS	
Lao People's Democratic Republic	6.15	6.15	x			x			x
Malaysia	5.23	4.61		x		x		DS	
Philippines	5.49	5.00			x	x		DS	
Singapore	2.61	1.84		x		x		DS	
Thailand	5.56	4.51			x	x		DS	
Viet Nam	5.72	5.57			x	x		DS	
Middle South Asia									
Afghanistan	6.90	6.90			x		x	DS	
Bangladesh	6.87	6.66			x	x		DS	
Bhutan	6.15	6.16		x			x	DS	
India	5.64	5.02			x	x		DS	
Iran	6.54	6.35			x	x		DS	
Maldives				x			x	NS	
Nepal	6.37	6.46			x	x		DS	
Pakistan	6.74	6.40			x	x		DS	
Sri Lanka	4.19	3.87			x	x		DS	
Oceania									
Australia	2.54	2.10		x			x	IS	
Cook Islands	--	--			x	x		DS	
Fiji	3.34	3.59			x	x		DS	
Kiribati	--	--		x		x			
Nauru	--	--		x		x		DS	
New Zealand	2.79	2.21		x			x	DS	
Papua New Guinea	5.92	6.25			x	x		DS	
Samoa	--	--			x	x		DS	
Solomon Islands	--	--			x		x	DS	
Tonga	--	--			x	x		DS	
Trust Territory of Pacific Islands	--	--		..	..	..	..	..	
Tuvalu					x		x	DS	

Sources: [a] United Nations, *Population Projections as estimated in 1980.* The interquinquennial differences reflect revised estimates of total population size, in addition to actual fertility declines.

[b, c] United Nations. "Population policy digest: indicators, perceptions and policies in countries of the Economic and Social Commission for Asia and the Pacific," prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat (working paper, in press).

(--): No consistent estimates and projections available for these countries.

(..): Not available.

DS = direct government support.

IS = indirect government support.

NS = no government support.

policy. Moreover, the concern has continued even though in the interim the fertility levels have tended to decline. Thus, the perception of the problem remains relatively unchanged since the early 1970s. At the present time the only countries in the region desiring to increase their fertility levels are Democratic Kampuchea and the Lao People's Democratic Republic. The developed countries in the region generally perceive their rates as satisfactory. In addition, among the developing countries, Burma, Bhutan, the Democratic People's Republic of Korea, Kiribati, Malaysia, Maldives, Mongolia, Nauru and Singapore, also fall in the category of considering their fertility rates as satisfactory. All of the other countries perceive their rates as unsatisfactory because they are too high.

Intervention to modify fertility levels had been undertaken by many countries; during the First United Nations Development Decade, 1961-1970, two-thirds of all those of the region at that time had adopted family planning as a national policy. As of 1971, the governments

which had no stated policy but supported or permitted family planning activities included Australia, Japan and New Zealand (among low fertility countries), Hong Kong (declining fertility), Afghanistan, Cook Islands, the Lao People's Democratic Republic, Papua New Guinea, Solomon Islands and the Democratic Republic of Viet Nam (high fertility countries). The countries that had no stated policy nor Government supported activity were Bhutan, Brunei, Burma, the Democratic Khmer Republic, Mongolia and Nauru, all high fertility countries.[14] All the remaining countries in the region, mostly in South Asia, favoured active intervention for population control, as shown by the results of the second United Nations Population Inquiry conducted during 1972-1973.[15] At the present time, almost the same list of countries remains for those with no specific policies of intervention and those with some intervention. However, changes in policy over this decade have occurred in the following cases: the Democratic People's Republic of Korea, Kiribati, Malaysia, Mongolia, Nauru and Singapore, where there is now no active policy to reduce or increase rates but where incentives and disincentives exist to at least maintain fertility rates at their current levels; Democratic Kampuchea and the Lao People's Democratic Republic which now have official policies to raise fertility levels; and Papua New Guinea which now reports a policy to intervene in order to reduce its fertility level. Also, at the present time almost all countries do not limit access to contraception, the only exceptions being Democratic Kampuchea and the Lao People's Democratic Republic. Furthermore, most governments give direct support for contraceptive services (see table 3).

The nature of policy intervention varies only moderately between countries, the differences being primarily in the specific measures. The policies typically cover a broad range from direct family planning activities, such as provision of a variety of contraceptive services, in some cases sterilization and abortion facilities, and information, education and communication programmes, to quite indirect programmes which are expected to affect fertility rates, such as maternal-child health, and incentives/disincentives in regard to adoption. By the early 1970s, Governments of 24 of the 29 countries in the region at that time sponsored family planning activities in public programmes, four governments accepted family planning activities of private organizations and local authorities and one Government supported the family planning activities of other organizations. No Government in the region restricted the production or distribution of modern contraceptives.[16] By the early 1980s, however, two countries in the region, Democratic Kampuchea and Lao People's Democratic Republic, limited the access to modern methods of fertility regulation; Burma and Maldives, although not limiting access, did not provide direct support for these activities; Australia provided indirect support; and Governments of all the other countries provided direct support for access to these methods.

By the 1970s most countries had been using modern methods of contraception such as the IUD, pills and sterilization, along with other methods such as condoms and foam tables; the former services were generally provided through hospitals or health centres, and the latter were also available in many countries through channels such as mail distribution, home delivery, subsidized sales and through village organizations and cooperatives. Although much of the delivery infrastructure has remained the same over time and with little variance between countries, the observed differences relate chiefly to regulations regarding specific contraceptive practices and to the extent of usage of certain methods.

One such important difference has been in the use of sterilization as a programme element. Bangladesh, China, India, the Republic of Korea, Pakistan, Singapore and Sri Lanka have relied more heavily on sterilization as a means of birth control than other countries in the region. For example, male and female sterilization are reported to account for about 30 per cent of contraceptive practice in China. Specific laws permitting sterilization are in effect in some countries, and in some others, even though there is no official legal provision, sterilization is permitted. Those countries in which new laws were instituted, or old ones amended to permit sterilization in the 1970s include the Republic of Korea in 1973, Singapore in 1974, Bangladesh, Iran and the Philippines in 1976 and New Zealand in 1977. In India in 1977 compulsion for sterilization or any other contraceptive practice was explicitly eliminated. Countries in which voluntary sterilization continued to be illegal were Afghanistan, Burma,

[14] *Population Strategy in Asia, op. cit.*, p. 235.

[15] United Nations. *Report on the Second Inquiry among Governments on Population and Development.* World Population Conference, Bucharest, Romania, 19-30 August 1974 (E/CONF.60/CBP/32).

[16] *Population Strategy in Asia, op. cit.*

the Democratic People's Republic of Korea and Mongolia.

Laws regarding abortion are more stringent than those on sterilization. The only countries where abortion is permitted on request are China, Singapore and in the Northern Territory of Australia. In most other countries abortion was permitted on specific socio-economic, medical, eugenic or juridical grounds. In Afghanistan, Bangladesh, Burma, Indonesia, Kiribati, Lao People's Democratic Republic, Mongolia, Nauru, Pakistan, the Philippines, Sri Lanka and Tonga, abortion is permitted only to save the life of the mother, with a variety of penalties for breaking the law in any way. It is significant to observe that there has been a trend toward liberalization of access to abortion during the 1970s; this was the case in the Republic of Korea in 1973, Singapore in 1974 and again in 1976, Afghanistan, Fiji, Malaysia and India in 1971/72 and again in 1975, Nepal in 1976, New Zealand in 1977/78 and China in 1979. However some countries such as Bangladesh, Indonesia and Pakistan did not attempt to liberalise their laws, even though they were anti-natalist.[17]

Among other related laws formulated at this time, some countries also amended laws to increase the minimum age at first marriage. These include Nepal which increased to minimum age to 16 years for females and 18 years for males in 1975 and Sri Lanka the same in 1978; India to 18 years for females and 21 years for males in 1976; and more recently China has proposed 22 years for females and 23 for males.

As a complement to family planning activities most governments also carried out extensive information, education and communication programmes designed to increase knowledge and promote adoption of family planning methods. Foremost in giving attention to this area were China and India. In addition, some governments also formulated incentive and/or disincentive programmes to encourage increased contraceptive use. During the late 1960s and early 1970s a few countries offered monetary incentives to acceptors. The first countries to do so at that time were India, Pakistan and the Republic of Korea, and they gave cash grants to individuals to compensate for their loss of earnings resulting from a vasectomy operation or the side effects of other methods. India also gave monetary incentives as well as gift incentives to acceptors and to the referral agents. At the present time many countries have economic incentives or disincentives and these are in effect in pro-natalist countries such as Mongolia and the Lao People's Democratic Republic as well as in anti-natalist countries. For instance in Mongolia, according to the Fifth and Sixth Development Plans (1971-1975 and 1976-1980) incentives were proposed to encourage large families by offering staggered annual cash allowances for each child, the maximum being for the ninth child or more, and the allowances being provided until the children reached 16 years of age. Disincentives are also in effect such as collection of a 2 per cent of monthly income as tax if an individual is not married by age 16.[18]

Among the anti-natalist countries the first type of incentive is in the form of provision of free or subsidized contraceptives and services. For instance sterilization, IUDs, pills, condoms and other methods are provided free of cost in most cases. In Singapore all the services are subsidized while in Fiji, Malaysia, Pakistan, the Republic of Korea and Sri Lanka, pills are subsidized; sterilizations, where permitted, are usually entirely free except for Singapore and Thailand where they are subsidized. Bangladesh, India, Nepal and the Republic of Korea presently offer cash incentives, as well as other forms of incentives. For instance, in the Republic of Korea, families with a limit of two children receive priority in obtaining government housing. The Indian Government offers additional retirement benefits for families having a limited number of children. Some other Governments, particularly those of countries that have more recently reached a higher level of development, have introduced a variety of disincentives. Essentially these measures aim at financially and socially penalising families that do not conform through measures such as imposition of an extra tax, limiting paid maternity leave, or adjusting priority in obtaining employment or housing. For instance in Singapore, costs in Government hospitals increase with each birth unless a woman requests sterilization thereafter, in which case it is free. In the Philippines maternity leave is granted only for the first four children; the Republic of Korea permits tax exemptions only for the first two children; in Nepal also according to a 1975 law, tax exemptions are based on the number of children; and in China tax exemptions are eliminated with the fourth child and furthermore various strong measures are in effect such as

[17] *Monitoring of Population Policies, op.cit.*, pp. 252-341.

[18] *Population Policy Compendium: Mongolia, op. cit.*, p. 3.

imposition of economic sanctions against those producing a third child.

Some countries also give importance to various socio-economic measures which are believed to effect fertility over the long run. These include policies to expand educational opportunities, raise the status of women, improve nutrition, as well as to strive for a more equitable income distribution and for removal of poverty. The countries which report that they give emphasis and importance to some or many of these areas in order to influence fertility include India, the Philippines, the Republic of Korea, Sri Lanka and Thailand. Most of these countries also make active efforts to integrate family planning with other developmental programmes. Integration of family planning with maternal child health has become an integral part of the policies of almost all Governments over the decade.

Ever since the concern with population growth and fertility issues arose, Governments have formulated targets for desired rates of growth and fertility levels to be achieved in the future. As can be expected, many of the targets have been revised over the decade in response to social, economic or political changes in a country (see table 4). For

Table 4. Demographic targets in selected countries

	Early 1970s[a]	Late 1970s[b]	Most recent[c]
India	Decrease CBR from an estimated 39 per thousand in 1968 to 32 per thousand by 1973/74 and 25 per thousand in another 5 to 7 years (1972)	CBR of 30 per thousand by 1983 and 27 per thousand by 1986-1991 (1979)	NRR of 1 by 2000 and CBR of 21 per thousand by 2000 (1981)
Indonesia	Decrease CBR from an unspecified level (1970)	GR of 2 per thousand by 1979-1984 and CBR of 34 per thousand by 1984 (already reached in 1981) (DP 1979-1984)	
Iran	Decrease NI from 3 per cent in 1967 to 2 per cent (year unspecified) (1970)	GR of 1.9 per cent by 1982 and CBR of 30 per thousand by 1982 (1978)	
Malaysia	Decrease NI to 2 per cent by 1985 and CBR from 38 per thousand in 1965 to 26 per thousand by 1985 (1972)	CBR of 28.2 per thousand by 1980 (DP 1976-1980)	CBR of 22 per thousand by 1990 (1981)
Nepal	Decrease NI to 2 per cent (year unspecified) (1970)	GR of 1 per cent by 1985 and CBR of 38 per thousand by 1979/80 (DP 1975-1979)	
Pakistan	Decrease CBR from 41 to 43 per thousand in 1970 to 33.2 per thousand by 1975 (1970)	GR of 2.5 per cent by 1982/83 and CBR of 35.5 per thousand by 1982/83 (DP 1978-1983)	GR of 2.7 per cent by 1983 and CBR of 37.5 per thousand by 1983 (1981)
Philippines	Decrease NI from an estimated over 3 per cent in 1971 to 2 per cent in 1976 (1972)	GR of 2.3 per cent by 1980 and 2 per cent by 1985 and NRR of 1 by 2000 (DP 1978-1982)	GR of 1.6 per cent by 2000 Population no more than 53 million by 1985 and about 70 million by 2000 (1981)
Republic of Korea	Decrease NI to 2 per cent by end 1971 (1970)	NI under 1.5 per cent by 1980s and GR of 1.6 per cent by 1981 (DP 1977-1981)	NI of 0 by 2050 (1981)
Singapore	Decrease CBR from 32 per thousand in 1964 to 20 per thousand in 1970 (1970)	GR of 0 per cent by 2000 and NRR to be maintained at 1 (1980)	
Thailand	Decrease NI to 2.5 per cent by 1976 and CBR from an estimated 41 per thousand in 1972 to 33 per thousand in 1976 (1972)	GR of 2.1 per cent by 1981 (DP 1977-1981)	GR of 1.5 per cent by 1986 (1981)

Sources: [a] United Nations, *Population Strategy in Asia, The Second Asian Population Conference, Tokyo, November 1972: Report, declaration and selected papers*, Asian Population Study Series, No. 28 [n.d.] (E/C.N.11/1152).

[b] United Nations, "Report on monitoring of population policies", 5 January 1981. (ESA/P/ WP. 69).

[c] United Nations, Population Division, Population Policy Section Data Bank.

Note: Date in parenthesis refers to the date of formulation of the targets.

CR = Rate of growth
NI = Rate of natural increase
CBR = Crude birth rate
NBR = Net reproduction rate
DP = Development plan and date

instance, some countries such as India and Pakistan have had to revise certain targets in an upward direction over time, whereas a country such as Indonesia achieved its target in advance.

International migration

Considerable changes have taken place in regard to international migration, particularly in response to the changing international economic climate over the past decade. In the 1950s and the 1960s relatively little migration had taken place between Asian countries. countries that had previously attracted migrants imposed restrictions on further immigration and in some cases minority groups resulting from previous immigrations were repatriated. The major movements within Asia at this time were refugee movements. At the intercontinental level, there was increasing emigration from many countries of the region toward the more industrialized parts of the world. During these decades the major and sizable movements were from China, Hong Kong, Japan, the Philippines and the Republic of Korea to the United Kingdom and to a lesser, though increasing extent, to the United States of America as well. Other countries that sent fewer, though not negligible numbers of migrants outside Asia included Malaysia, Singapore and Sri Lanka. In addition to the United States and the United Kingdom, Asian emigrants also moved in substantial numbers to Canada, Australia and to a lesser extent to the Federal Republic of Germany, New Zealand and Brazil. Finally, there was noteworthy migration between the islands of Oceania, from the smaller islands to New Zealand, as well as between Australia and New Zealand.

In the 1970s the nature of international movements between countries underwent a significant change. The recession faced by countries of Western Europe reduced to some extent emigration in that direction while the oil boom and resulting economic expansion in countries of the Middle East greatly increased immigration into the area. A large number of migrants to the Arab countries were from the Asian countries, primarily from India and Pakistan and in smaller numbers from the Philippines, the Republic of Korea and Thailand. In addition migration to other regions such as North America and Australia continued through the 1970s.

Although the pattern of migratory movements underwent a change in the 1970s, the perceptions of governments with regard to the international migration situation evolved to a lesser extent. At the time of the Second Population Inquiry, almost all of the countries in the region permitted temporary or permanent emigration. only four discouraged this movement and only one country actively encouraged it. All but two or three countries at any given time during the decade restricted temporary or permanent immigration.[19]

At the present time also, a large majority of the countries are satisfied with the level of emigration they experience and, perceive it to be not demographically significant. However, an increasing number of countries consider the situation as it exists to be unsatisfactory: the Republic of Korea perceives the level as being too low and would like to increase it; Afghanistan, Cook Islands, Fiji and New Zealand, perceive the levels of emigration as too high and would like to reduce them. At the present time those countries desiring to maintain the levels of emigration include Nepal, Pakistan, Sri Lanka, Tonga and Viet Nam. The remaining countries reported no active intervention to encourage or discourage emigration. As regards immigration, a large majority of the countries in the region are also satisfied with the levels, and only one country, Australia, perceives the level as too low and wants to increase it. A few other countries, however, perceive the levels as too high, but are not taking steps to modify them: Fiji, Malaysia, Nepal, Pakistan and Thailand. Hong Kong and Samoa also perceive the levels as too high but the former reports policies to maintain these levels, and the latter has reached an accord with China to curtail the flow of illegal migrants into Hong Kong. Only Bhutan and Nauru had policies aimed at maintaining their current levels of immigration. In some cases, in the absence of explicit policies to maintain, reduce or increase the levels of international migration, there were policies in force which did not have a significant demographic effect but had an important social or political impact. For instance, China has in the past sent its workers to Zambia and the United Republic of Tanzania for railroad construction work; in 1979 it signed its first accord with a developed market economy, an Italian based construction company, for the export of Chinese manpower; and in 1980 it was agreed to send Chinese workers, through Japanese firms, for highway and hospital construction projects in Iraq. China has, however, recently imposed strict controls on unauthorized migration to Hong Kong. In reference to immigration, in mid-1978 China

[19] "Population policies and programmes", *op. cit.*, pp. 50-53.

Table 5. International migration: perception and policies

Current perception	Immigration			
	Significant			Not significant
	Too low	Satisfactory	Too high	Situation satisfactory
	Australia	Bhutan Nauru	Fiji Hong Kong Malaysia Nepal Pakistan Samoa Thailand	*East Asia* China Democratic People's Republic of Korea Japan Mongolia Republic of Korea *Eastern South Asia* Burma Democratic Kampuchea Indonesia Lao People's Democratic Republic Philippines Singapore Viet Nam *Middle South Asia* Afghanistan Bangladesh India Iran Maldives Sri Lanka *Oceania* Kiribati New Zealand Papua New Guinea Solomon Islands Tonga Tuvalu
Current policies	**Increase**	**Maintain**	**Curb in future**	**No intervention**
	Australia	Bhutan Iran Nauru Samoa	Fiji Hong Kong Malaysia Nepal Pakistan Thailand	*East Asia* China Democratic People's Republic of Korea Japan Mongolia Republic of Korea *Eastern South Asia* Burma Democratic Kampuchea Indonesia Lao People's Democratic Republic Philippines Singapore Viet Nam *Middle South Asia* Afghanistan Bangladesh India Maldives Sri Lanka *Oceania* Kiribati New Zealand Papua New Guinea Solomon Islands Tonga Tuvalu

Table 5. *(continued)*

Current perception	Emigration			
	Significant			Not significant
	Too low	Satisfactory	Too high	Situation satisfactory
	Republic of Korea	Democratic Kampuchea Nepal Pakistan Sri Lanka Tonga Viet Nam	Afghanistan Cook Islands Fiji New Zealand	*East Asia* China Democratic People's Republic of Korea Japan Mongolia *Eastern South Asia* Burma Indonesia Lao People's Democratic Republic Malaysia (but emigration desired) Philippines Singapore Thailand *Middle South Asia* Bangladesh Bhutan India Iran Maldives *Oceania* Australia Kiribati Nauru Papua New Guinea Samoa Solomon Islands Tuvalu
Current policies	**Increase**	**Maintain**	**Curb in future**	**No intervention**
	Republic of Korea	Nepal Pakistan Sri Lanka Tonga Viet Nam	Afghanistan Cook Islands Democratic Kampuchea Fiji New Zealand	*East Asia* China Democratic People's Republic of Korea Japan Mongolia *Eastern South Asia* Burma Indonesia Lao People's Democratic Republic Malaysia Philippines Singapore Thailand *Middle South Asia* Bangladesh Bhutan India Iran Maldives *Oceania* Australia Kiribati Nauru Papua New Guinea Samoa Solomon Islands Tuvalu

Source: United Nations. "Population policy digest: indicators, perceptions and policies in countries of the Economic and Social Commission for Asia and the Pacific", prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat (working paper, in press).

accepted a large number of Indo-Chinese refugees, totalling approximately 230,000 to 250,000 in number. Elsewhere in the East Asia region, Japan is neither a significant labour exporter or importer; Mongolia, as a result of serious manpower shortages in almost all sectors of the economy, has permitted the temporary immigration of labour from the USSR and other COMECON countries; and the Republic of Korea, concerned at first with high levels of unemployment and later with the balance of payments has in recent years sought to encourage emigration and even set a target for temporary emigration of 60,000 persons during the Fourth Plan period 1977-1981.[20] This has generally been done by supplying not only labour, but whole projects from design through execution, primarily to Middle East markets. The Government, has however, emphasized that its intention is not to export labour *per se* and in this connection has very recently moved to prohibit recruitment of Korean construction workers by foreign firms.

In the past decade, the chief intra-regional flow of labour migrants in the Eastern South Asia region has been that of Malaysian workers to Singapore, although this is likely to undergo changes due to incipient changes in Singapore's manpower recruitment policies. Flows of migrants to countries outside the region have mainly been to the Middle East, with the Philippines and Thailand in recent years having developed an organized system of large scale labour recruitement and export. Indonesia also sends manpower to Middle East markets although it is generally of a smaller magnitude and less organized. Refugee movements were a major concern in the past decade in this subregion involving primarily Indo-Chinese refugees from Democratic Kampuchea, the Lao People's Democratic Republic and Viet Nam, who were absorbed to varying degrees by countries within the region such as Indonesia, Malaysia, the Philippines and Thailand, and outside the region by some countries such as Australia, Canada, China, France and the United States. During 1978 there was also a refugee movement from Burma to neighbouring Bangladesh but a mutual accord was arrived at shortly thereafter and the situation was resolved.

Among the countries of Middle South Asia, although none desire significant immigration, several encourage emigration. The Government of Pakistan, for instance, is taking an active role in regulating the outflow of migrant workers and introduced an Emigration Ordinance in 1979. A Bureau of Emigration and Overseas Employment will, however, deny permission for the overseas recruitment of personnel if it considers such an emigration to be a brain or skill drain. Bangladesh and Sri Lanka are also labour suppliers to the Middle East and some other countries, although in the latter case a compulsory period of government service prior to departure is required for certain professional categories. India is also an important exporter of labour to the Middle East and some Western countries, although the Government does not emphasize project and manpower export to the same extent as some other Asian countries. However, the remittances sent back by emigrants have been important for the national economy especially in terms of foreign exchange reserves, so it could be assumed that the Government would like to see this emigration continue. Among the other countries affected by the refugee situation are India, which has recently had communal trouble because of the presence of Bengali immigrants in the North-East states, many of whom came in as refugees from Bangladesh after 1971. Pakistan has been the main receiving country for refugees from Afghanistan, which is considered to have placed a heavy financial and administrative burden on it; however, Iran has also absorbed some of these refugees.

Among the countries of Oceania, Australia has sought to increase immigration and in this connection the Government announced a new policy in 1978, expected to attract some 210,000 immigrants in the following three years. Australia also accepted a significant number of Indo-Chinese refugees in the late 1970s to the extent that it has a higher ratio of refugees to population (1:290) than any other major country of resettlement. New Zealand, on the other hand, with its policy of maintaining its moderate level of immigration, in effect since early 1976, aims for an annual net migration of only about 5,000 persons. In fact New Zealand is now more concerned with the numbers departing the country especially since the transfer of emigrant's assets to their new countries of residence is creating a perceptible burden on the country's balance of payments.

Spatial distribution

The distribution of population in the national territory has received increased attention from governments in the past few decades, particularly as problems associated with increasing urbanization

[20] United Nations, *Population Policy Compendium: Republic of Korea* (November 1980), p. 5.

have been aggravated. The highly urbanized countries in the region have, of course, been the more developed ones, although the largely rural countries which comprise a majority of the cases, have been urbanizing to varying degrees over the past decade. Apart from urbanization, the issue of spatial distribution is also concerned with other movements such as those between rural areas, from urban to rural areas, and from rural and smaller urban to metropolitan centres.

Almost all of the countries with over 50 per cent of the population urban are located in the East Asia and Oceania sub-regions. The major exceptions are Brunei (76.3 per cent urban in 1980), Singapore (74.1 per cent urban) and Iran (49.9 per cent urban). The countries and area in the region with the highest proportion urban are, in descending order, Hong Kong (90.3 per cent urban in 1980), Australia (88.8 per cent), New Zealand (84.5 per cent) and Japan (78.2 per cent). The least urbanized countries in the region, with rural populations of over 80 per cent are mainly but not entirely in the Middle South Asia sub-region: Afghanistan, Bangladesh, Bhutan along with Democratic Kampuchea and the Lao People's Democratic Republic in Eastern South Asia. In the Oceania sub-region, most of the countries had between 30 to 40 per cent urban, the major exception being Fiji (with 68.7 per cent urban in 1980); the most rural countries in this sub-region were Samoa and Solomon Islands with rural populations of more than 75 per cent.

In all but one of the countries of the region there was an increase in urbanization over the past decade; the only rather technical exception being Maldives (from 11.0 per cent urban in 1970 to 10.5 per cent in 1980). The most spectacular increases took place in Papua New Guinea and Solomon Islands where the proportion urban almost tripled in the past decade (from 9.8 and 9.3 per cent urban in 1970, respectively, to 28.0 and 23.2 per cent in 1980).[21]

The increase in urbanization in the region is due only partly to an increase in the rate of growth of the population itself. To some extent it is a result of reclassification of some formerly rural areas, but a major factor is migration towards urban areas, where the earning opportunities are thought by the migrants to be better. For the decade of the 1960s, it was estimated that over 45 per cent of urban population growth in the region was due to rural-urban migration and reclassification. Virtually all countries in the region are attempting to modernize and along with modernization comes urbanization. Nevertheless, governments have become increasingly concerned with the growth of urban areas, particularly because in most cases, the push is towards the major existing metropolitan centre rather than towards intermediate or other urban locations. This is especially highlighted in the fact that of the world's 35 largest urban areas, 13 are to be found in the regions of East and South Asia.[22]

In the early 1970s and as reported in the Second United Nations Population Inquiry, an equal number of governments (13 each) conceived of the levels and trends of metropolitan region growth in their countries as "acceptable" as well as "excessive".[23] By 1980 only two countries in the region, Nauru and Singapore, considered the distribution of population as appropriate, while 31 considered it to be to some extent inappropriate (see table 6). This concern with spatial distribution of the population continues to be felt by the developed and developing countries in the region alike as was the case in 1970 as well.[24] The main concerns of the developing countries have been, and continue to be the aggravation of underemployment and unemployment, a depression of the general living conditions in the rural areas and intense pressure on services and infrastructure in the urban areas. The developed countries in the region have tended more to stress social and environmental conditions resulting from high concentrations of population.

Policies affecting the spatial distribution of the population have been formulated by Governments ever since the concept of national level development planning was adopted, although in many instances these earlier policies were not formulated with their direct effects on migration flow necessarily in mind. In more recent years, however, particularly in the last decade, policies in this area have been formulated with a more explicit objective of directly modifying the spatial distribution of the population. According to the Second Population Inquiry, in the early 1970s governments reported policies and measures intended to meet demands for employment,

[21] United Nations *Urban, Rural and City Population, 1950-2000 as assessed in 1978*, (ESA/P/WP.66), pp. 27-28.

[22] *Ibid.*, p. 38.

[23] United Nations. "Population policies and programmes", *op. cit.*, p. 46.

[24] *Population Strategy in Asia, op. cit.*, pp. 96-97.

Table 6. Spatial distribution: urbanization, perception and policies

	Proportion urban (percentage)[a]		Current perception of overall acceptability of spatial distribution[b]			Current policies[c]	
	1970	1980	Appropriate	Partly appropriate	Inappropriate	Internal migration	Modification of rural and/or urban configuration
East Asia							
China	21.60	25.41		x		R	RU
Democratic People's Republic of Korea	43.58	56.36		x		D	RU
Hong Kong	89.66	90.34			x		U
Japan	71.30	78.24			x	D	RU
Mongolia	44.79	50.45		x		A	RU
Republic of Korea	50.08	56.69					
Eastern South Asia							
Brunei	61.67	76.26	..	..	..	..	..
Burma	22.84	27.16		x		D	RU
Democratic Kampuchea	11.70	13.91			x	R	RU
Indonesia	17.07	20.21			x	D	R
Lao People's Democratic Republic	9.62	13.45			x	R	RU
Malaysia	26.97	29.36		x		NI	RU
Philippines	32.94	36.21			x	R	RU
Singapore	75.29	74.07	x			NI	NM
Thailand	13.22	14.37			x	D	R
Viet Nam	18.30	22.76			x	R	RU
Middle South Asia							
Afghanistan	11.03	15.35		x		NI	RU
Bangladesh	7.61	11.24		x		R	R
Bhutan	3.10	3.92		x		A	RU
India	19.70	22.26			x	D	RU
Iran	40.91	49.90			x	D	RU
Maldives	11.00	10.54		x		D	NM
Nepal	3.91	4.98			x	D	RU
Pakistan	24.89	28.17			x	D	RU
Sri Lanka	21.86	26.56			x	D	R
Oceania							
Australia	85.18	88.81			x	R	U
Cook Islands	29.88	29.89	..	..	..	..	..
Fiji	35.62	42.20			x	D	RU
Kiribati	25.63	37.83		x		R	RU
Nauru	--	--	x			NI	NM
New Zealand	81.10	84.77		x		NI	NM
Papua New Guinea	9.79	27.96			x	NI	NM
Samoa	20.28	23.17			x	D	NM
Solomon Islands	9.30	23.23		x		NI	NM
Tonga	24.37	31.81		x		NI	NM
Trust Territory of Pacific Islands	41.76	55.60			x		RU
Tuvalu	--	--			x	D	NM

Sources: [a] United Nations. "Urban, rural and city population, 1950-2000, as assessed in 1978," prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat, 3 June 1980 (ESA/P/NP/66).

[b, c] United Nations. "Population policy digest: indicators, perceptions and policies in countries of the Economic and Social Commission for Asia and the Pacific," prepared by the Population Division, Department of International Economic and Social Affairs of the United Nations Secretariat (working paper, in press).

(--) : No consistent estimates and projections available for these countries.

(..) : Not available.

A : Accelerate.

D : Decelerate.

R : Reverse.

NI : No intervention.

R : Rural configuration.

U : Urban configuration.

RU : Rural and urban configuration.

NM : No modification.

housing and other services in the urban areas; policies aimed at easing pressures on large cities through partial redistribution of industrial activities and social services among cities of smaller sizes; and measures to slow down or reduce the exodus from rural areas.[25] By the 1980s policies continued to be addressed to these issues but in addition there was an increased emphasis on those involving rural development and technological modernization.

According to the results of the Fourth Inquiry, most countries in the region had formulated policies to modify the distribution of their population between rural and urban areas. Relatively fewer reported intervention to modify only the rural configuration, namely Bangladesh, Burma, Indonesia, Nepal, the Philippines, Sri Lanka and Thailand. Only two countries, Australia and the Republic of Korea, intervened at the level of urban configuration alone. The countries which had no policies of intervention whatsoever were located primarily in the Oceania sub-region and included Nauru, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga and Tuvalu and in addition Maldives and Singapore.[26]

The actual components of policies varied only moderately between countries. For example, most countries reported policies of urban and/or rural development along with measures to encourage decentralization, in order to facilitate and encourage the movement of populations in the desired direction. Policies of agricultural development, along with land distribution and rural modernization have been in force in countries such as China, India, Malaysia, Sri Lanka as well as Japan. Other countries with active policies which could help control the movements from rural to all urban areas or to certain large metropolitan areas, included Fiji, Iran, Maldives and Samoa, and Indonesia with its policy of transmigration. Viet Nam, also desiring a move of populations away from urban areas, had however formulated policies aimed at developing virgin rural areas in order to accelerate the economic recovery of the country. Democratic Kampuchea and the Lao People's Democratic Republic report policies to adjust the rural and urban configurations of the population.[27]

An accelerated movement from rural to urban areas was encouraged only by Bhutan, Mongolia and Tonga. However, very many other countries favoured the establishment of intermediate level, second-order centres towards which migrants from urban and/or rural areas could be directed. Australia, for instance favoured the establishment of non-metropolitan growth centres; Mongolia, the development of second order centres as industrial complexes; Nepal, the development of new small towns and establishment of small scale industries in non-urban areas; India, the strengthening of existing intermediate level towns; and Burma and the Republic of Korea favoured relocation from rural/urban areas to planned satellite towns. Certain other countries, for instance Japan, Kiribati, New Zealand, Pakistan and Sri Lanka and also India report policies aimed at the decentralization of industry and economic activities in general, as well as promoting the economic development of slow growth regions. Some countries such as India, Indonesia and Thailand also offer tax or other fiscal incentives for relocation in priority areas. Apart from rural and/or urban development policies, some countries also have special policies for general regional-level distribution: for example China, which aims at a more even distribution between the more dense and the less dense regions, and India, which aims at a balanced development between regions defined as "more backward" (in terms of climatic, geographic, ecological or economic factors), and other more advantaged regions. Countries in the region such as China and India have had long experiences with regional planning, but by now most other countries have also moved forward rapidly in this area; it is very likely that regional development policies will continue to rise in priority, especially as the full impact of these on the whole population question becomes better understood.

Conclusion

Asia has long taken a position of leadership in the field of population policy. Moreover, there has been an evolutionary process at work in the area. It is evident from the foregoing discussion that population policy has assumed increasing and broadening importance in the overall national development strategy of governments. Whereas up until the 1970s the problem of population growth tended to be the foremost concern for most countries in the region, by the end of the 1970s fewer countries concentrated on this issue alone. Other issues, particularly those relating to international migration and population distribution

[25] United Nations, *Report on the Second Inquiry among Governments on Population and Development, op. cit.*, pp. 64-68.

[26] United Nations, *Report on Monitoring of Population Policies, op. cit.*

[27] United Nations, "Population policy digest", *op. cit.*

assumed greater significance. The reasons for this have been two fold: firstly, modification of demographic trends themselves, at least partly as a result of population policy implementation, and secondly, crucial changes in the prevailing economic and socio-political conditions in which countries find themselves. For example, there has been a reduction in birth rates and population growth rates in some countries, primarily those of South-East and East Asia: and furthermore there have been increasing possibilities to export labour, with at least short-term benefits both to the migrants and to the sending country.

The decline of fertility in many countries during this past decade has almost certainly been, to some significant extent, a result of the effectiveness of family planning programmes, improvements of contraceptive technology, liberalization of relevant laws and regulations and, greater social acceptance. Nevertheless, one needs to bear in mind that those very countries in which fertility decline was occurring were the ones where rapid economic expansion was also taking place. The availability of social and economic infrastructure had improved, educational levels raised, health and mortality status improved, the number of women in paid employment increased: all factors which, it is likely, could have contributed to a not small extent, to the fertility decline. Yet it may also be conjectured that measures to control fertility contribute indirectly to social and economic development. For instance, the outcome of fertility decline (as manifested in the changing self image of women, changed structure and role of the family, new dependency ratios, changed apportionment of land holdings within families and so forth) could also have contributed indirectly to the process of economic expansion.

The recent migratory movements have to a major extent been a result of the Middle East oil-boom and since governments of these countries carefully control permanent migration, family reunion, and the holding of permanent assets in the host country by migrants, a significant portion of the migrants' earnings are channelled back into the home country's economy. As time goes on, more countries are designing and exporting project packages including labour, which bring forth a better return to the national government and also serve to better control emigration. Thus, even though levels of international migration may not be demographically significant in terms of the size of the sending country's population, they have acquired substantial economic importance to the region. The question of refugees also remains a pressing issue for some countries.

The situation with regard to mortality had already improved to a considerable extent in previous decades, a result of medical technology, vaccines and focussed outreach disease control programmes. The last decade has especially witnessed an increase in attention to the distributive aspects of health and health care. However, maternal and child health and infant mortality continued to be serious issues of concern. Since large proportions of the population in Asian developing countries lives in rural areas, services for these especially vulnerable groups are yet not fully adequate. To become so, they may have to be more fully integrated into the primary health approach now being adopted by many countries.

The pressures of population growth on certain major cities and metropolitan centres has increasingly become a major cause of concern for most countries in the region. This, along with the concentration of economic activities in certain areas of the national territory and with resultant poverty and underdevelopment in other areas, has led to major efforts to achieve a more balanced distribution through planning. Although a debate continues as to whether increased maldistribution is an inevitable but eventually passing phase of the development process, and the extent to which intervention can be cost effective, the great majority of governments feel constrained to take ameliorative steps to alter their distribution trends. Thus, a variety of experiments have been made in the past decade to modernize rural economies, introduce new agricultural technologies, follow integrated models of rural and urban development, develop new towns, industrial sites and so forth.

In conclusion, it may be observed that in the Asian region, which was a forerunner in policy formulation with regard to population issues, the significant change over the decades has been not only in terms of programme elements but more importantly in the overall conception of the issue. In the earlier phase greater emphasis had been placed on the individual aspects of fertility, mortality and migration, whereas now the issue is viewed more as an element in the overall context of development. Nevertheless, while Governments perceive the importance of integrating population and development policies, it appears that the complete integration of the two and their effective implementation has yet to be evolved. It is these aspects that call for particular attention in the forthcoming years.

2.4 INTEGRATION OF POPULATION AND DEVELOPMENT POLICIES: A COMPARISON OF THE DEVELOPING REGIONS OF THE WORLD

by

United Nations Population Division

Introduction

The World Population Conference held at Bucharest in 1974 brought to the fore the interdependance of population variables and socio-economic development. In its recommendations for action and implementation, the World Population Plan of Action formulated at that time sought to emphasize the necessity of the interaction between population and development issues and policy formulation in this respect. The responsibility of national governments was stressed for implementation of the appropriate policies (along with the supportive role to be played by international co-operation), taking into consideration the individual priorities, needs and circumstances of a country.[1] Since then many Governments have attempted to evolve ways of integrating population and development issues. One of the more obvious ways of doing this was by incorporating population policies in the national development plans.

The formulation of population policies at the national level began to assume some substantial significance in the 1960s in the developing countries. The emphasis at that time was primarily on population growth and fertility control. Over time, however, and with the changing world economic situation the major issues of concern have expanded to presently include, also with substantial importance, problems connected with international movements of populations, and with the distribution of the population within the national territory. Mortality control has continued to be an important priority area for most countries, although the emphasis changed over time.

A formal system of planning at the national level was also first introduced by many developing countries in the 1950s and 1960s. Development plans have subsequently come to be widely formulated at regular intervals, generally stating major overall developmental objectives, with detailed plans at the sectoral level, and frequently with quantitative targets; the plans have tended to become increasingly detailed and comprehensive as experience with planned development grows. Population policies and programmes are often included by Governments in the development plans, the presentation usually taking the form of estimates in regard to population size and growth, projections, major problems in the area of population, basic policy orientation to resolve these and details of measures aimed at changing the situation. Intervention is directed at any one or more of the following issues: fertility, mortality, international migration and spatial distribution. Although the inclusion of population policies in development plans could be considered a form of integration of population and development policies, it is not automatically indicative of integration at a more effective level. The concept of "integration" needs to be specified beyond the mere inclusion in development plans, in order to more clearly indicate the interaction and interlinkages between population and development issues.

In this presentation, integration of population will be discussed as far as possible at the following levels: first, at the institutional level, whereby specialized or sectoral institutions at the national, intermediate or local level are in existence for the purpose of integrating population and development issues; and secondly, at the level of implementation, indicated by the combined implementation of programmes to control fertility and mortality through maternal child health programmes for

[1] United Nations, *Report of the United Nations World Conference, 1974, Bucharest, 19-30 August 1974* (New York, 1975), pp. 3-26.

instance, integration of fertility and integrated rural development programmes and so forth.

Many governments may have instituted various forms of intervention directed either at the institutional or at the implementation level, in order to effect changes in one or more of the population concerns in the country. However, the main observation presented in this paper is that the more salient an issue (e.g. mortality, fertility, international migration or spatial distribution) for a particular country, the greater the likelihood of its being integrated by the government into other areas of national development policy. Thus, maximum integration in all areas of the problem is not necessarily the over-riding universal goal; Governments tend to concentrate on those specific areas of major concern where they believe they need to achieve the most significant results.

Discussion

The presentation is made in four sections according to the regions of the developing world as categorized by the United Nations: the Economic Commission for Asia and the Pacific (ESCAP), the Economic Commission for Latin America (ECLA), the Economic Commission for West Asia (ECWA) and the Economic Commission for Africa (ECA). The discussion within each section broadly takes the following form: statement of the major demographic issue seen to be facing the countries of the region; development planning in countries of the region, with reference to the overal level of institutional development and complexity, and with particular reference to the integration of other policies or programmes (such as education, status or women policies, social welfare programmes expected to have an indirect effect on population issues. Each section concludes with a discussion of recent changes in emphasis and/or the expected shift in emphasis of population issues in the forthcoming years. In order to draw interregional comparisons, the presentation is rather highly generalized; it is not possible to provide full and precise detail within the scope of this paper and a good deal of the variation in intraregional experience is necessarily lost. Nor is it possible, in this presentation, to evaluate the extent to which the policies or institutional arrangements actually achieve their intended goals.

The main sources drawn upon are the data files of the Population Policy Section of the Population Division (Department of International Economic and Social Affairs) of the United Nations and recent regional-level publications of the same unit.[2]

ESCAP

The major concern for a large proportion of countries in the ESCAP region has, until quite recently, been with problems associated with overpopulation and high fertility levels. In response to this concern many Governments had formulated population policies for the purpose of intervention in this area. In fact India was one of the first countries in the world to adopt family planning as a national level programme. Many other Asian countries subsequently formulated and instituted population policies and programmes at various levels. Development planning has been more formalized since the 1950s, with most countries in the region now having completed two to six rounds of development plans. These plans are generally formulated for a five-year period but are often supplemented with annual plans as well. Population policies are almost always reported and accorded a separate section in the development plans.

Some countries have, in recent decades, attempted to establish institutions which could serve the purpose of coordinating population and development policies with the expectation that the end result would be the greater effectiveness of the policies. Thus, whereas some countries in the region report mainly sectoral institutions, such as for family planning (e.g. Population Control and Family Planning Division in Bangladesh, Leading Group on Family Planning in China, National Family Planning Board in Malaysia), other countries have multiple institutions equally responsible for implementing population policies (for instance, the Ministry of Manpower and Transmigration as well as the National Family Planning/Population Coordination Board in Indonesia). Although few countries have formal institutions at the Ministerial policies such as in Indonesia, some do have special level dealing with integrated regional development

[2] United Nations, "Population policy digest: indicators, perceptions and policies in the countries of the Economic Commission for Latin America" (ESA/P/WP.79), 15 April 1982. Similar publications for: countries of the Economic Commission for Africa (ESA/P/WP.74), 8 July 1981; countries of the Economic Commission for Western Asia (ESA/P/WP.78), 15 April 1982; countries of the Economic Commission for Asia and the Pacific (ESA/P/WP.80), in press. See also publications in the series; *Population Policy Compendium*, a joint publication of the United Nations Department of International Economic and Social Affairs and the United Nations Fund for Population Activities.

Table 1. Major institution responsible for formulating and implementing population policy in selected countries of the ESCAP region

Country	Institution
Bangladesh	Population Control and Family Planning Division
Brunei	Economic Planning Unit, State Secretariat
Burma	Central Population Commission
China	Leading Group on Family Planning
Cook Islands	Development and Planning Unit
Fiji	Central Planning Office
Indonesia	Ministry of Manpower and Transmigration BKKBN (National Family Planning/Population Co-ordinating Board)
Kiribati	Ministry of Finance
Malaysia	National Family Planning Board
Maldives	Public Health Division of Ministry of Health
Niue	Central Office
Pacific Islands	Office of Planning and Statistics
Pakistan	National Council for Population Planning, Population Division
Philippines	Commission on Population (POPCOM)
Republic of Korea	Economic Planning Board (Population Policy Co-ordinating Committee)
Samoa	Department of Statistics and Department of Economic Development
Singapore	Singapore Family Planning and Population Board, National Family Planning Centre
Solomon Islands	Central Planning Unit
Sri Lanka	Ministry of Plan Implementation
Thailand	Committee on Population Policy and Planning
Tonga	Central Planning Office
Vanuatu	Central Planning Office

Source: Population policy data files of the Population Division, Department of International Economic and Social Affairs, United Nations, New York.

committees, boards or regional and sub-regional level plans, dealing with these issues, (for instance, the recently constituted National Committee for the Development of Backward Areas, in India.)

Integration at the level of implementation has been a more common feature, with almost all countries in the region integrating, for instance, health care services with population planning services. More recently the concept of the rural-level multipurpose worker has been increasingly favoured, with these individuals being charged simultaneously with implementation in several areas such as health, family planning, agriculture and rural development. Examples of countries which have adopted this concept include India and the Republic of Korea. Integration at the level of implementation has also been pursued through special integrated regional/rural development programmes, such as the Saemaul Undong (New Community Movement) in the Republic of Korea which aims at simultaneous intervention in the areas of health, family planning, rural development and internal migration by enlisting the active participation of the local community. Other examples include the Integrated Rural Development Programme of the Philippines, the Small Area Package Programme of Nepal, the various special area development programmes of India, and the Federal Land Development Authority scheme of Malaysia.

In the past decade increasing attention has been given to other developmental aspects of intervention which could effect the population situation. In this connexion policies to effect the status of women have been formulated by most Governments in the region. Some countries such as Afghanistan, China, Fiji, Indonesia, Iran, the Philippines and Thailand have national level women's organizations, others such as Bangladesh, India, Republic of Korea and Papua New Guinea have representation at the ministerial or equivalent level, while various other countries report special offices, units or organizations dealing with women's issues. The level of implementation and the success of policies designed to improve the status of women is, of course, variable and it is not certain to what extent governments view these as critical in influencing population variables. In some other countries, where direct intervention in reference to demographic variables is quite limited, general development policies (which may also include policies for improving women's educational levels, for instance) are considered by government as very important in influencing the population situation. Thus, countries such as Burma, and the

Lao People's Democratic Republic stress overall national development and reconstruction for the achievement of their population objectives.

The change in emphasis in regard to the relative importance of the components of the population issue, in countries of the ESCAP region, has been in a shift towards greater concern with spatial distribution of the population in the national territory and with international migration.[3] Thus, whereas integration has so far been more evident, for most countries, in terms of fertility and/or mortality policies with rural development and/or status of women policies, it is likely that in the future policies in the areas of spatial distribution and international migration will be more fully integrated, both at the level of intervention and in the development of institutional infrastructure.

ECLA

In countries of the ECLA region the major population concern has been less with issues of growth and high fertility, as was the case in countries of the ESCAP region, but rather with issues

Table 2. Major institution responsible for formulating and implementing population policy in selected countries of the ECLA region

Country	Institution
Argentina	National Commission for Demographic Policy (Comisión Nacional de Política Demografica)
Bolivia	National Immigration Council (Consejo Nacional de Immigración)
Brazil	National Commission for Metropolitan Regions and Urban Policy
Chile	National Planning Office
Colombia	National Population Council
	National Council on Population and Environment
Costa Rica	National Commission for Population Policy (Comisión Nacional de Políticas de Población)

[3] See, United Nations, Department of International Economic and Social Affairs, Population Division "Population situation and policies in countries of the Asia and Pacific Region", document prepared for the Third Asian and Pacific Population Conference, Colombo, Sri Lanka, 20-29 September 1982.

Table 2. *(continued)*

Country	Institution
	Department of Population, Office of National Planning and Economic Policy
Cuba	Central Planning Board (Junta Central de Planificación)
Dominican Republic	National Council on Population and the Family (Consejo Nacional de Población y Familia)
Ecuador	National Development Council
El Salvador	National Population Commission and Technical Committee on Population (Comisión Nacional de Poblacion y Comité Técnico de Población)
Guatemala	Department of Employment and Population Secretary-General of the National Council for Economic Planning
Haiti	Département de la Santé Publique et de la Population
Honduras	Department of Population and Migration Policy
Mexico	National Population Council (Consejo Nacional de Población)
Panama	National Commission for Demographic Policy (Comisión Nacional de Politica Demográfica)
Paraguay	Special Committee on Population (Comité Especial de Población)
	Population and Human Resources Division
	Directorate General for Migration (Dirección General de Migraciones)
Peru	Commission for the Formulation of Guidelines for a Population Policy in Peru (Comisión para Lineamientos para una Politicá de Población en el Perú)
	National Planning System (Sistema Nacional de Planeación)
Uruguay	Interministerial Commission (Comisión Interministerial)
Venezuela	Central Co-ordination and Planning Office (Oficina Central de Coordinación y Planificación)

Source: Population policy data files of the Population Division, Department of International Economic and Social Affairs, United Nations, New York.

related to the spatial distribution of the population. Internal migration has been a major focus for many countries in the region because of the movements of population towards the major metropolitan centres. Thus many governments have been attempting to reverse this situation through regional development efforts.

More recently, family planning programmes and services are being made more widely available in many countries of the region, and direct governmental support for these activities has been increasingly provided since the last decade. In some of the countries, although problems associated with high rates of growth and fertility levels are recognized, official population policies of intervention have not yet been formulated. For instance, the Bahamas, Guatemala and Nicaragua consider the fertility levels as too high but report no official policy of intervention to reduce the rates. On the other hand, certain pro-natalist countries in the region such as Argentina, Bolivia and Uruguay have specific policies of intervention in the areas of fertility and international migration aimed at increasing overall population size.

A formal system of development planning has existed in most countries of the region for over three decades, with the plans generally extending over a three- to five-year period. Along with the history of planned development, most countries in the region also have specialized planning boards and commissions. Population issues are generally discussed and reported in the national development plans.

The level of institutional development and organization in regard to population issues increased considerably in the 1970s with numerous governments establishing national level commissions or councils charged with the responsibility of formulating an appropriate population policy. Integration at the institutional level, however, occurs only in cases where there is formal representation from other ministries or bodies. For instance, the National Commission on Population Policy was established in 1978 in Costa Rica and is headed by the Minister of External and Religious Affairs but has representation from the major ministries and from the Office of National Planning and Economic Policy. Similarly, El Salvador, Mexico and Panama report national level population commissions with broad ministerial representation. Other countries, such as Cuba, Haiti and Venezuela, for instance, have not considered it essential to establish separate institutional arrangements for population issues, and these functions are, where necessary, assigned to other national development or planning agencies. In some cases, special institutions have been established in response to an issue of high priority, as in the instance of Bolivia's National Immigration Council designed to encourage immigration.

Integration between population and development policies at the level of implementation occurs in the case of the countries in the ECLA region primarily between health care policies and overall family welfare policies. For instance, Colombia provides family planning services within its maternal and child health programme, the objectives of which are to bring about a reduction in mortality of the vulnerable groups and to improve family welfare. Emphasis is also placed on the Plan of Feeding and Nutrition and on Integrated Rural Development. Similar integration exists in many other countries in the region such as Costa Rica, El Salvador, Grenada, Guatemala all countries which have a policy to reduce fertility levels. However, it is noteworthy that even countries which do not have an official policy of direct intervention to effect fertility, report the same kind of integration of health and family planning or family welfare policies; for instance, Cuba, Honduras, Nicaragua. Some countries, in an attempt to integrate spatial distribution policies with overall development policies have introduced special measures aimed at relocation of the population, for instance the Industrial Incentive Law of the Dominican Republic which provides special benefits to industries which locate in areas other than Santo Domingo; and, special incentives for industrial location in development areas and frontier zones by the Government of Argentina.

As regards general development policies which could be expected to indirectly affect the demographic situation, education, status of women and rural development have been subjects of policy to varying extents within the region. Cuba, for instance, which sees a close relationship between economic-technological-scientific development and human reproduction, has laid heavy emphasis in its development policy on education for all ages of the population, as well as on improving the status of women. Some countries in the region have national level women's commissions, secretariats or ministries, such as Barbados, Chile, Paraguay and Venezuela. Other countries such as Argentina, the Dominican Republic, Honduras, Jamaica, Nicaragua, Peru and Uruguay have special units or offices, and Cuba and Guyana have national level federations and organizations.

Finally, in the ECLA region, although the major population concern has traditionally been with problems of spatial distribution, and this concern continues to remain, some countries are now expressing an obvious dissatisfaction with high fertility levels which were formerly considered satisfactory. It may well be that governments were in the past more hesitant to advocate active intervention in this area, than at the present time. Thus, for instance, countries such as Brazil and Costa Rica which formerly reported no intervention to modify fertility now report official policies of intervention. In light of this trend, it is quite possible that in the future an increasing number of countries in this region will more actively pursue policies of intervention in the area of fertility.

ECWA

In countries of the ECWA region the major population concern has been and continues to be with issues related to international migration. Fertility levels are considered by most countries to be either satisfactory or too low; in the few cases (Bahrain and Jordan) of countries which consider these rates as too high there is still no reported intervention to directly modify these rates, but rather only to encourage birth spacing.

There has been little history of formal population policy formulation among countries of this region and it has only been recently that the limited establishment of family planning associations has been permitted in some of these countries. International migration policies had also been relatively open in the past and it is only in the last decade that governments have attempted to enforce stricter controls.

Development planning at an official level has also been more formalized in most countries of the region only since the last decade or two, as opposed to the relatively longer history of development planning in other developing regions. The plans are generally formulated for period ranging from five to seven years. Population components are an integral part of the plans with a sectoral presentation of health, immigration and other issues.

The level of institutional development in the area of population has thus far been limited. A major concern has been with adequacy of statistics, so institution building in this area has been given priority (see table 3). More recently, however, institutional infrastructure to monitor immigration and emigration have been established by some countries as well as special laws promulgated, frequently at a bilateral level, in order to control the flow. Integration at the institutional level is also attempted by some countries; an example is the establishment of the National Committee for Population Policy within the Ministry of Planning, in Iraq. Because of the concern with labour supply, governments such as that of the Syrian Arab Republic, have also established units like the Directorate of Manpower Planning within the State Planning Commission.

At the level of implementation, integration between population and development policies occurs to the extent that many countries are encouraging the rapid education and training

Table 3. Major institution responsible for formulating and implementing population policy in selected countries of the ECWA region

Country	Institution
Bahrain	Director of Statistics
Democratic Yemen	Central Statistical Organization
Iraq	National Committee for Population Policy, Ministry of Planning
Jordan	National Population Commission
Kuwait	Central Statistical Organization, Ministry of Planning
Oman	Department of National Statistics, Development Council
Saudi Arabia	Central Department of Statistics, Ministry of Finance and National Economy
Syrian Arab Republic	Directorate of Manpower Planning, State Planning Commission
Turkey	General Directorate of Population Planning, Ministry of Health and Social Affairs
United Arab Emirates	Central Statistical Department, Ministry of Planning
Yemen	Statistical Department, Central Planning Organization

Source: Population policy data files of the Population Division, Department of International Economic and Social Affairs, United Nations, New York.

of the local populace so as to reduce the dependance on imported labour. Thus programmes of "Bahrainization" and "Omanization", for instance, are taking place in the respective countries with the major objectives of building a healthy, educated, national population. Thus, this involves simultaneous intervention in the areas of health, education and related areas with the specific aim of effecting the population composition.

Another distinctive development policy, which has a direct effect on the spatial distribution of the population, is that of sedentarization of nomads. Countries such as Democratic Yemen, Qatar, Saudi Arabia and the Syrian Arab Republic, for instance, have given special attention to this policy for some time and continue to do so as an important component of national development policy, chiefly through the provision of localized employment opportunities.

Policies to effect the status of women have been relatively limited in this region although the education and training of women is being specifically encouraged in some countries such as in the Syrian Arab Republic, Jordan and Democratic Yemen. A few countries in the region have also developed special institutions to deal with women's issues such as the Department of Women's Affairs in the Ministry of Labour in Jordan, the Women's Committee in Kuwait, the National Council of Women in Lebanon and the General Union of Syrian Arab Women in Syria. However, in some other countries women do not have full civic rights.

Although international migration is currently, and will almost certainly continue to be, a major element of concern in countries of the ECWA region, another area that is increasingly absorbing attention is that of internal spatial distribution. Rapid economic development in the 1970s resulted in considerable economic expansion and the development of large construction projects. If left uncontrolled and unplanned this expansion will be likely to create serious problems for these countries. Thus, countries such as Bahrain, Kuwait and Saudi Arabia are now giving special attention to the establishment of new towns and satellite centres, and this aspect of planned intervention is likely to increase in the future.

ECA

Whereas countries in most other developing regions of the world have had relative success in combatting high levels of mortality, this still remains the major concern for countries of the

Table 4. Major institution responsible for formulating and implementing population policy in selected countries of the ECA region

Country	Institution
Algeria	State Secretariat for Planning (Secrétariat d'Etat au Plan), Ministry of Health
Botswana	Maternal Care and Family Planning Unit for Education and Service
Egypt	Supreme Council for Population and Family Planning, Population and Family Planning Board
	Central Agency for Public Mobilization and Statistics
Gabon	Population Directorate, Ministry of Public Health and Population
Ghana	Manpower Board, National Family Planning Secretariat
Guinea	National Population Commission
Kenya	Ministry of Health
Libyan Arab Jamahiriya	Demography and Manpower Section, General Department of Economic and Social Planning
Madagascar	Permanent National Population Committee
Mali	Family Planning, Ministry of Health
Mauritius	Ministry of Health
Morocco	General Secretariat of Planning
Nigeria	National Population Commission
Rwania	Direction de la Statistique et du Service de la Planification Globale Conseil Scientifique Consultatif pour les Problèmes Socio-Démographiques
Senegal	National Population Commission
	Directorate of Statistics, Ministry of Finance and Economic Affairs
Sierra Leone	Central Planning Unit, Ministry of Development and Economics
Sudan	Department of Statistics, Population Census Office
Tunisia	High Council on Population
	National Office of Family Planning and Population
Uganda	Demographic and Social Statistics Section, Statistics Division, Ministry of Planning and Economic Development
United Republic of Tanzania	Bureau of Statistics, Ministry of Finance and Planning
Upper Volta	Institut National de la Statistique et de la Démographie
Zambia	Central Statistical Office

Source: Population policy data files of the Population Division, Department of International Economic and Social Affairs, United Nations, New York.

ECA region. Thus a large proportion of these countries accord high priority in the population component of the national development objectives to the reduction of mortality and morbidity levels. These countries include Benin, Equatorial Guinea, Ethiopia, Cabon, Guinea-Bissau, Ivory Coast, the Libyan Arab Jamahiriya, Mali, Mauritania, Mozambique, Nigeria, Somalia, Sudan, the United Republic of Cameroon, Upper Volta and Zimbabwe. Certain other countries in the region give highest priority to the reduction of fertility levels. These have for some years been countries such as Egypt, Ghana, Kenya, Mauritius, Morocco, Seychelles and Tunisia. More recently, other countries including Algeria, Madagascar and Senegal also report considering their fertility rates as too high and this is now being considered a priority issue.

The history of population policy formulation in countries of the ECA region has been varied. Many countries to date do not have any official family planning programme, although many others do and the number of the latter appears to be on the increase. Among the countries that have a history of official intervention in the area of fertility, Egypt was the first country in the region (and the second in the developing world) to adopt family planning as an official policy. Policy in regard to mortality has been continually and consistently formulated by all Governments. The formulation of spatial distribution and international migration policies has evolved with the changing importance given to these issues by respective countries.

Almost all countries of the ECA region have had a long history of a formal system of development planning. Planning commissions have been established at the national level and the plans are generally formulated for periods normally covering a range of five years. Population issues are usually a component of the plans and are generally discussed at the sectoral level, although explicit reference to population has frequently been limited by the scarcity of reliable demographic data.

The development of an institutional infrastructure to deal with population factors has evolved over the years. However, as can be seen from table 4, the tendency in many countries is for population to be dealt with in institutions concerned with data collection and analysis or those concerned with health, and to a lesser extent in those having primarily family planning responsibilities. Integration at the institutional level occurs in instances where the specialized population commissions or units are located in or have input from other related institutions. For example, the Ghana Manpower Board which has the responsibility for overall population policies is located in the Ministry of Finance and Economic Planning which also has established within it the National Family Planning Programme Secretariat. The National Population Commission of Nigeria is located within the Central Planning Office of the Government. In Madagascar the Permanent National Population Committee, created within the Population Directorate of the Ministry of Social Welfare, has representation from all ministries and non-governmental agencies.

Integration at the level of implementation is clearly evident among the anti-natalist countries, many of which have fully integrated programmes of fertility control and health care. Great emphasis is placed on this integration by countries such as Botswana, Egypt, Kenya, and Tunisia, for example. A country such as Gambia which considers its fertility level as satisfactory, also places a high emphasis on integration in this area. Typically in countries such as Algeria, Comoros, Liberia and Sierra Leone, which consider their fertility rates as too high but have not undertaken any measures of control, integration is more limited. In countries where mortality is the major concern, integration in implementation occurs between health policies and nutrition, general well-being, social welfare and social and economic development policies, such as in Ethiopia, Ivory Coast, Mozambique and Zimbabwe.

As regards other development policies, attempts at expanding education and encouraging rural development are also underway which may have indirect long term effects on manpower and international labour migration as well as on spatial distribution. Some countries such as Ethiopia, Mozambique and Upper Volta also give emphasis to improving the status of women explicitly as a means of effecting the overall population and development situation. However, virtually all countries in the region report the existence of national level women's organizations, or special committees on women workers, ministries, or other special units.

Although mortality, and now to a growing extent, fertility are the major current population concerns for the African countries, some variations and possible changes in the future seem likely. Most notable has been the recently increasing number of countries giving higher priority to fertility control; in addition, although to a lesser

extent, some countries are also becoming more directly concerned with some specific aspect of international migration. For instance the presence of substantial numbers of refugees is a cause for increasing concern in Djibouti, Gabon, Somalia, Sudan, the United Republic of Tanzania, Zaire and Zambia. Ivory Coast would like to limit immigration because of the recently changing economic climate in the country. Spatial distribution concerns will also continue to increase in significance as countries develop – as has been in the cases of Ivory Coast and Tunisia, for instance. Thus, as the major population concerns broaden over time, so also is there likely to evolve a higher level of integration.

Conculsion

In examining the integration of population and development policies in countries of the developing world, some broad patterns emerge. Firstly, the major population issues facing the developing countries clearly vary between regions. In the ESCAP region for instance, the major concerns for a majority of the countries have been related to population growth and high fertility; only in more recent years and for some countries have these been reduced (in countries where fertility has fallen very significantly) and concerns in regard to spatial distribution and international migration have assumed greater priority. In the ECLA region, which has traditionally expressed concern with the spatial distribution of its population, the trend now appears to be a wider direct concern with problems associated with high fertility and population growth. In the ECWA region the major concern in the past decades has been with international migration and although this concern will continue to have priority for some time to come, issues related to the spatial distribution of the population are becoming increasingly important. Mortality has been and continues to be of prime concern to countries in the ECA region although fertility is more widely being given higher priority. To a limited extent, international migration and spatial distribution are expected to gradually become higher priority issues.

Policy formulation has followed the changing trend in the importance attached to problems. Development planning in a formalized sense is now institutionalized in almost all countries. Within the general development planning institutions, the arrangements for dealing with population tend strongly to reflect the identification and articulation of the major problems faced by the individual countries; institutions are most likely to be developed for the areas given highest priority. Furthermore, institutional integration with other development agencies is also more likely to be actively attempted when the issue involved is of high priority; similarly, it has also been clear that integration at the level of implementation takes place more effectively in relation to issues of prime importance.

In the abstract, a high degree of integration of population and development policies would appear desirable and it is apparent that many governments have made this attempt. However, it is also clear that governments are more likely to make an active effort to integrate population and development policies chiefly in those areas of high priority immediately facing the country. Indeed, complete integration at all levels and of all aspects of population activities may well be a formal rather than a pragmatically useful objective; a more limited integration of those specific aspects of the population and development issue which attract the highest concern and thus the highest level of committment by the Government may be the most effective.

Topic 3.

URBANIZATION AND GROWTH OF CITIES, INCLUDING SMALL TOWNS

3.1 WORKING PAPER

by

Nibhon Debavalya*

Among the numerous population problems facing most countries in the ESCAP region, those related to urbanization and urban growth are of the most common concern and among the most perplexing. The problems associated with urbanization and growth of cities are expected to assume even more serious proportions in the future with a continuing increase in the size of the urban population and its share in the total population in many countries.

The background paper "Urbanization in the ESCAP region" by the ESCAP secretariat emphasized that the year 1980 marked a turning point in urbanization history in the ESCAP region. From now on, it is expected that the increase of urban population in Asia will be double that of the rural population; 35 million on the average will be added annually to the urban population against 18 million in rural areas. By the year 2000, according to United Nations projections, the urban population in the region will reach 1.4 billion as compared to 2.1 billion rural population, while the proportion of population living in urban places in the ESCAP region will have increased from 27.8 per cent in 1980 to a projected 39.3 per cent by the turn of the century.

Of the countries in the region, Japan and the Republic of Korea are the most urbanized because of the combined effect of rapid economic growth and falling population growth rates. The level of urbanization in these countries in 1980 reached 79 per cent and 55 per cent respectively. Most of the rest of Asia experienced lower levels of urbanization with numerically large urban centres.

Although natural increase is the dominant force behind urban population growth, the absolute transfer of population from rural to urban places is not small. At present, the very large rural population provides a tremendous reservoir of potential migrants to cities. Because very large cities in Asia dominate the urban system, the implications of the continuous rural to urban shifts of the population are quite important for both rural and urban development. By the end of the century it is expected that this region will have 14 out of the 30 largest cities in the world, each with a population of at least 10 million people. Such an increase in the size of big cities calls for a massive mobilization of resources to cope with housing, sanitation, transportation, pollution and other associated problems.

As far as the country strategies for urbanization and development are concerned, the ESCAP secretariat's paper discusses briefly some country experiences to illustrate what constitutes a complete strategy for urbanization and development. These include India and Indonesia which represent countries with large populations and relatively low-income. The Republic of Korea and Thailand represent countries of medium sized population and are at different levels of development. Malaysia and Sri Lanka are small countries also with different levels of development. China represents a unique example of a country with a centrally planned economy. These countries, in fact, vary with respect to geographic size and features, total population, level of development, political structure, natural resources, and political, social, religious, and economic history. However, many governments have recognized that there has been a mismatch between the distribution of resources and population. While population distribution remains largely the product of a pre-industrial and

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colonial past, the range and use of resources have been greatly enlarged and influenced by modern technological capabilities. Development strategies remain largely capital investment oriented which tend to focus on a few large cities, accelerating their population growth. Dissatisfaction with the conditions resulting from the primate city pattern and from regional disparities has led development plans to focus on three main strategies, rural development, regional development and improvement of large cities. The Republic of Korea provides an example of national attempts to reduce the primacy of Seoul, to develop "counter magnets" of growth in Busan and improve the regional distribution of productivity and income. The success may be the result of government tax and credit incentives to induce industrial investment in locations other than Seoul.

The ESCAP secretariat's paper concludes that the over concentration in many countries leads to new types of economic, social, environmental and political problems such as unemployment, underemployment, air and water pollution, crime, drug addiction, prostitution, inefficient bureaucracy and corruption. Policy makers may have, in the short-run, difficulty in expanding public services to keep pace with the growing population. In the long-run they may have serious problems providing interregional equity favourable to overall national economic development. Once the goal for reducing a primate city's growth rate has been specified, several types of measures are available to governments. Such measures include improving conditions in rural and other urban areas, and reducing the attractiveness of the primate city. This strategy implies a wide range of policies including rural development, particularly integrated rural development schemes, and emphasis on programmes such as land reform, labor intensive projects, provision of physical and social infrastructure particularly roads, electrification, water supply, vocational training and expansion of off-farm employment opportunities. Government intervention in the urban settlement pattern should also aim at the promotion of medium-size towns to strengthen the linkages among the levels of urban hierarchy. Thus the governments need a comprehensive plan and have to co-ordinate economic and spatial development policies and plans at both regional and national levels for more efficient distribution of population and economic activities.

The role of medium-size cities in the urbanization process is emphasized in Ashish Bose's paper. Since the major Asian countries would continue to be predominantly rural even in the year 2000, the medium-size cities have an important role in promoting rural transformation in these countries as well as in achieving a more balanced urban hierarchy.

In China, a comprehensive guideline was laid down in 1980 for urban development in which three elements were specified: strict control of the size of large cities, rational development of intermediate-sized cities and active development of small-sized cities. The guidelines also emphasized the need for vigorous development of the existing market towns, new economic construction in small sized cities and building satellite towns with a population of 100,000 to 200,000.

In India, Bose found out that it is not the size of the city which has influenced the urban growth rates but the investment pattern, especially in the public sector and the transportation network.

In general, Bose recommended that the role and function of medium-size cities should be visualized in the wider context of development planning and a more balanced pattern of all human settlements. However, the promotion of medium size cities should consider the stage of economic and social development of the country concerned as well as the overall demographic situation. The important factors for consideration include the location of the city, its linkages with the rural hinterland and/or the metropolitan areas, the transportation network, the existing infrastructure, energy constraints and environmental factors. The government concerned can use the investment in the public sector and the location of public sector undertaking for this purpose. In addition, a package of incentives and disincentives should be offered to the private sector as well. Bose also recommended three priority areas of research (a) the economic base of such cities; (b) the impact of the energy crisis on transportation, land values, house rents. etc., in the overall context of urbanization; and (c) the impact of environmental factors. For the action plan, he recommended the establishment of a Task Force in each country to conduct indepth studies for detailed recommendations on medium-size cities in selected regions and sub regions of each country.

Discussion

The two background papers, the ESCAP secretariat's which describes the general patterns of urbanization as well as the experiences of some countries and the strategies for urbanization

and development; and Ashish Bose's paper on a specific topic of the role of medium-sized cities in urbanization process which quite often is a neglected issue in the development process, are two very valuable papers and provided us with many issues for discussion.

On the basis of these papers and country experience, I suggest the following six points for discussion as guidelines, at the same time allowing for other points which participants may wish to introduce as of equal or higher priority.

1. Basic data needed for the study of urbanization

The basic data needed for the study of urbanization can be obtained through either population censuses or sample surveys. However, as the demand for the scope of urban data broadens, it will become increasingly necessary to supplement the census data with information from various types of record systems and sample surveys (Goldstein and Sly, 1974). Even though most of the ESCAP countries have conducted population censuses in 1980 or 1981, the problems of basic data needed for the study of urbanization still remain, both in terms of quality and quantity. The lack of such data is primarily the result of a shortage of skilled personnel and funds, as well as a failure to realize the relevance and importance of an item for the study of urban phenomena. Each country should recognize such problems and should give high priority to the production of basic data for urban populations and areas which include (a) data concerning the volume and structure of population and related aggregates, including such variables as age, sex, employment at specified dates; and (b) data on the components of urban and rural population growth, especially births, deaths, and migratory movements.

2. Statistical definitions of "Urban"

We have long recognized that the problems of international comparability of urban data arise primarily from differences among countries with respect to three factors: (a) nomenclature, (b) the definition and demarcation of boundaries, and (c) the criteria needed to attain urban status. While most countries of the world do recognize certain of their population aggregates as "urban," the precise definition of what constitutes an urban area varies considerably among countries. Indeed there even appears to be an agreement that there should not be a standardized definition of urban areas (United Nations, 1969).

The fact remains that in some countries, urban areas are defined primarily in administrative terms while in others they may be defined in economic or ecological terms. In many countries census data have been supplied for the "urban" population but no explanation can be found in the census literature to indicate what specific criteria, if any, were used to distinguish urban areas from other areas. In addition, some countries do not have an official definition of "urban" at all. Another interesting point is that "urban places" can grow in three ways, by "natural increase" or the excess of births over deaths, by migration, and by reclassification. Reclassification includes the change of formerly rural places into urban places. Since urbanization is a continuing process, the boundaries of urban areas need to be changed accordingly resulting in reclassification. In the case of Thailand, for example, there is, in fact, no official definition of "urban". The censuses (1980 and all previous ones) use instead officially defined "municipal areas" to denote the non rural areas and these areas are also reported separately in the annual registration data on total population. However, the number of municipalities has changed only slightly in the last several decades, from 117 in 1947 to 120 in 1960 and thereafter. The relatively fixed number of municipal areas means restricted urban growth under the definition. Boundary changes do occur from time to time, but the overall areas have not changed greatly. There is no urban growth due to villages becoming towns or, within the urban population due to towns becoming cities simply because such new urban areas are not recognized (Robinson and Wongbuddha, 1980; Debavalya, 1981).

Of course, it does not appear that a single definition of urban can meet all the needs of each individual countries. But the conventional urban-rural dichotomy which each country accepts should be updated; for example, if the country uses "municipal area" as urban, such area should cover only the areas with urban characteristics.

It is recommended that for the immediate future efforts be directed at the development of standard procedures and definitions for groups of countries at similar levels of development and with similar cultural backgrounds. Longer range planning, however, should be undertaken at the same time with the goal of developing a standard set of statistical procedures to differentiate urban from rural areas in all countries in this region.

An alternative strategy could be to encourage countries in the region to use two sets of definitions with respect to urban-rural distinctions. One set would be aimed at providing data for use for international comparisons and this would follow some agreed upon standard. The other set would be for use locally and designed to meet the peculiarities of local conditions. This would be a compromise solution which would recognize the impossibility of finding any one single definition which would be able to meet the local needs of all countries.

3. Utilization of United Nations projections

It should be noted that both background papers have utilized data from the United Nations projections, especially projections for urban and rural populations (United Nations, 1980). It is in the preparation of projections, particularly of urban and rural populations, that studies of trends, determinants, and consequences of urbanization gain their practical use. This results from the fact that projections most frequently represent extrapolations of past trends modified by assumptions about the continuance of the specific conditions which give rise to and maintain these trends. Thus, more the information available and more the reliability, the more likely it is that the projections can be grounded on assumptions that will fit the unique circumstances of particular urban populations.

Having carefully checked the results of United Nations projections (United Nations, 1981) for the ESCAP countries, we have found that the data, both country totals and the projections for urban and rural populations, differ in some cases from those used by the countries. This may be because the United Nations office in New York may not receive the most recent information from every country or because of an excessive time lag between when the projections are made and when the results are finally published and distributed. Undoubtedly a long time is required for revision of the world population projections and thus the problems may be intractable. A question may be raised whether the regional office of the United Nations should take the responsibility for preparing the population projections, including projections of urban and rural populations for the ESCAP countries in close consultation with country members. In this way, we should obtain more up-to-date projections for the ESCAP countries. In addition, the revision or up-dated projections can be done more frequently and hopefully as often as needed.

4. Problems of over concentration

There seems to be a recognition that urbanization is a problem to be reckoned with during the 1980s and beyond. The reason is not because there is something wrong or unusual about urbanization *per se,* as it is a feature that goes with development. Rather, the reason seems to be that urbanization in the Asia and Pacific region, like economic development itself, continues to be unbalanced spatially or concentrated in the metropolitan centres. There is a feeling that a great majority of the people outside those centres have been practically left out from the benefits of urbanization and development. There is also the common observation that the carrying capacity of urban centres is bursting at the seams, so to speak. These and other concerns appear to have become prominent in recent years (Pernia, 1981; Todaro, 1979; United Nations, 1981; and Jones and Richter, 1981).

Thus the very rapid growth of the primate cities or a few metropolitan centres resulted in many socio-economic problems in themselves. The cities are urbanizing more rapidly than the industrial base can absorb, and the concentration of population in the cities far exceeds the ability of the industrial establishment to employ the people productively. Among the most serious environment problems is the housing shortage, and the poor condition of so many of the existing units. Such deterioration is particularly characteristic of the rapidly growing, large urban areas where rapid population growth has generally led to a considerable increase in the cost of land. Resulting from the combined influence of the high cost of land, the rapid movement of rural population into the cities, the resultant housing shortage and the difficulty the migrants face in obtaining adequate jobs and income, an increasing proportion of urban settlement occurs spontaneously without planning and central control, largely manifesting itself in shanty towns occupied by squatters.

The resulting overcrowding has produced serious environmental hazards in the form of polluted water and waste removal problems. Overcrowding in the home as well as the accompanying poverty and unemployment are held responsible in great measure for the high incidence of crime, juvenile delinquency and prostitution among newcomers to the city. The huge numbers of vehicles on an inadequate road network have caused a serious rise in the level of air pollution. Among other serious problems are poor drainage

facilities, water supply shortage, inadequate sanitation systems, and the lack of recreation and park areas.

As previously mentioned, development plans for solving such problems of over concentration have been focussed on three main strategies: rural development, regional development and improvement of large cities. Besides the measures to decentralize the primate cities or metropolitan centres, we should recognize that in such main cities there are manifold and costly physical problems. Any solutions which bring adequate relief are extremely expensive, and attempts at such solutions may indeed draw even more funds into the growth process at the centre, leaving commensurately less for public investment elsewhere. Thus efforts should be made to respond to the needs of the great centres constructively but not indiscriminately, carefully estimating what proportion of the nation's resources for investment would be directed to them and what specific activities and objectives they might be expected to nurture. The question here is clearly not an "either-or" one, but, rather one of balance between rural and urban development programme (Jones and Richter, 1981). At the same time it must be recognized that improvements of conditions in the large cities may serve to further attract migrants thus exacerbating the situation, and self defeating the purpose.

5. Plan of action

Each country should make a comprehensive plan based on the assumption that the problems of urbanization are not just urban problems, and their solution is not just a matter of urban planning. It is also a matter of national planning. The crucial need is to develop national urban policies conductive to balanced economic, social and political development.

(a) *Reduce the attractiveness of the primate city or metropolitan centres*

Measures to control migration directly are rarely to be recommended because of the high opportunity costs, the difficulty of implementation and the risks of political opposition. Instead it is recommended that measures to restrict employment growth in the main cities be exercised either through direct controls or control on the establishment new plants and expansions of old plants or through policies on the location of industry, and through reducing the infrastructure and services superiority of large cities compared to elsewhere. Decentralization of some government agencies and possible disincentives to migration including city tax systems may also be appropriate.

(b) *Medium-size cities*

It is recognized that development of medium-size cities as counter-magnets for potential migrants to large cities, is an appropriate measure. The rationale for this approach, which typically adopts some form of growth-centre strategy, is that medium-size cities need to be large enough to generate significant economies of scale and agglomeration economies (which almost by definition are lacking in small places) but not so large that these advantages are outweighted by concomitant diseconomies of agglomeration. With increasing emphasis on employment creation as a planning goal, small towns may act as generators for off-farm job opportunities and as alternative destinations for potential migrants from rural areas.

In fact at present, many ESCAP countries are committed to industrial dispersion to small and medium-size settlements. To cite only a few examples, Japan, the most industrially advanced country in the ESCAP area, reported that it would promote industrial development in non-metropolitan areas and improve living conditions in agricultural zones. India reported that it would provide improved infrastructure and other facilities in smaller towns and would restrict the growth of its large urban centres. Indonesia established industrial estates in several of its less developed zones. Malaysia has sought to promote the dispersion of industry, mainly through the use of tax incentives. In the Republic of Korea, urban-industrial decentralization succeeded in creating counter-magnets of growth in Busan and its surrounding region through various tax instruments. In addition, the industrial estates programme was also scheduled to be more dispersed, emphasizing locations in or near smaller cities. In the Philippines, the Government utilized tax incentives, and the selective provision of transport facilities, water and power subsidies and low-cost housing programmes to divert medium-and small-scale industry to various regional centres. Sri Lanka has been attempting to divert population from the metropolitan centre through the establishment of industrial activity outside of the metropolitan region.

Even many countries have had policies favouring the medium-size city but what can be accomplished will vary from country to country; in each case, however, decisions concerning the timing and location of growth-centre investments

are crucial. Moreover, these decisions need to be related to the historically inherited spatial structures of each country and to the nature of development processes. In this view, what is needed are better decisions with respect to the kinds, location and timing of relevant investments, as well as a longer time horizon and greater commitment to implementing policy measures.

(c) *Rural development*

The strategy implies a wide range of policies to raise income in rural areas, provision of infrastructure and services to population in rural areas in combination with a broad range of measures for promoting agricultural and rural development and expanding employment opportunities in rural areas especially off-farm jobs for agricultural workers. The adoption of pricing policies favouring village farmers and land settlement schemes such as FELDA in Malaysia provide incentives to people to stay in rural areas. The Mahaweli development scheme in Sri Lanka is a major project that should generate employment and might encourage movement into a presently lightly populated zone. In the Republic of Korea, rural development programmes (the New Village Movement) and agricultural pricing policies have reduced rural-urban income inequalities on a household basis. Bangladesh reported that it would attempt to create more employment in rural areas as a means of reducing migration to urban zones. Fiji intends to focus on rural development as a means of retaining population in rural zones. In Pakistan, the focus has been on an integrated rural development programme and "agroville" scheme, as well as community development and the promotion of cottage industries in rural areas. The transmigration scheme in Indonesia is an example in which fully sponsored migrants are transported to sites in the country's sparsely populated regions and are allotted land, housing, etc.

In fact, several countries have officially adopted various versions of the anti-concentration schemes to promote balanced urban and regional growth. The degree of success has varied from country to country. Countries with a comprehensive plan and strong policies are more successful in implementing constraints on metropolitan city growth. China, Japan and the Republic of Korea for example, have experienced some success in slowing metropolitan growth. They are obviously very different from each other in terms of political orientation, culture, level of development and urbanization. These successful countries are distinguished in several ways, including a high national priority on solving this problem, a greater allocation of resources and co-ordination across various levels of government.

6. Research priority on urbanization and development

The situation in each country clearly must be examined in the light of its own stage of development and urbanization and its national factor endowments. And policies best suited to national objectives in type, place and time can only be devised in the full knowledge of alternative costs and benefits. The search for a positive urbanization policy needs more detailed analysis of the dynamic relationship between urbanization and development (see for example Population Council and United Nations Centre on Regional Development, 1980; Goldstein, 1981).

Policy-oriented research is a kind of research needed by planners and policy-makers in this region. Research priority on urbanization and development should be given to the following topics:

(a) A systematic study of the structure and role of the urban system in the context of national development, especially the importance of the urbanization process as a factor in national development. Efforts should be made to assess the relationship between population movement and the problems of cities and rural areas, as well as the formulation of policies and programmes designed to cope with these problems and to foster development. This should include research aimed at finding alternative policies and strategies in solving urbanization problems in national development.

(b) Analysis and monitoring of the dynamics of metropolitan areas in relation to their changing economic structure, the emergence of spontaneous settlement areas, the interrelations and relative location of modern sector, activities in its articulation with the informal sector, and rural-urban processes which contribute to these structural changes.

(c) Research on small- and medium-size cities particularly with respect to factors determining the location and specificity of development resources at different levels of the settlement hierarchy in terms of the differing constraints imposed by the economies of scale, agglomeration and urbanization.

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3.2 URBANIZATION IN THE ESCAP REGION

by

ESCAP Population Division

Introduction

"Historically, the city has been the engine of development and the forge of human creative energies . . . We believe that the process of urbanization can be harnessed to achieve mankind's goal of just, peaceful and lasting progress. But if this is to happen, urbanization must take place under planned and orderly conditions".

– International Conference on Population and the Urban Future, Rome, September 1980.

The countries of the ESCAP region are becoming more and more urbanized. The year 1980 marked a turning point in urbanization history in the ESCAP region in that for the first time the annual increment to the urban population of the region exceeded the increment to the rural population. During the next 20 years, it is expected that the increase of urban population in Asia will be nearly double that of the rural population; 697 million will be added to the urban population as against 362 million in rural areas. Between 1950 and 1980 the urban population in the region is estimated to have increased from 220 million to 678 million. By the year 2000, according to the United Nations projections, the urban population in the region will further double to reach 1,375 million.[1] In contrast, the rural population increased by 58 per cent from 1,116 million to 1,758 million between 1950 and 1980 and is projected to increase by an additional 21 per cent to reach 2,120 million by the year 2000. As a result, the proportion of population living in urban places in the ESCAP region has increased from 16.5 per cent in 1950 to 27.8 per cent in 1980 and is projected to reach 39.3 per cent by the turn of the century. The corresponding figures for the world as a whole are 29 per cent in 1950, 41 per cent in 1980 and 51 per cent in the year 2000. Over the 50-year period 1950-2000, while the world urban population is expected to increase about fourfold, the ESCAP urban population is projected to increase more than sixfold and will contain 43 per cent of the total world urban population.

The ESCAP region is heterogeneous; and because of the dominance of China, India and Indonesia, it has a low level of urbanization. During the past 30 years Japan and the Republic of Korea have begun differentiating themselves from the rest of the region because of the combined effects of rapid economic growth and falling population growth rates. The level of urbanization in 1980 reached 79 per cent in Japan and 55 per cent in the Republic of Korea. The rest of Asia experienced a different type of urbanization, combining a low level of urbanization with numerically large urban centres. On the basis of current trends, it is expected that the urban population of less developed countries such as Burma, India, Indonesia, Iran, Malaysia, Pakistan, the Philippines, Sri Lanka and Viet Nam will grow much faster in terms of percentages as well as in absolute numbers than those of more developed countries such as Australia, Japan, New Zealand and the Republic of Korea (see annex). Many features of urban life, such as housing construction, health education and transport services, are primary functions of urban growth. Management of these functions in the next two decades of this century will be much more difficult for the developing countries than it has ever been for the developed countries as the anticipated gain in the region's urban population between 1975 and 2000 (708 million) is almost double the estimated gain between 1950 and 1975 (347 million).

Urban and rural growth rates

In the second half of the century, 1950-2000, the rural population is expected to grow by about 190 per cent and the urban population by an

[1] United Nations, *Patterns of Urban and Rural Population Growth* (New York, Sales No. E. 79.XIII.9, 1979).

enormous 623 per cent. Whatever the degree of error in the United Nations projection (as a result of various possible definitions of urbanization), the urban places in the region will play an important role in absorbing a larger share of the population growth with more and more concentration of the urban population in very large cities.

Table 1 presents the average annual growth rates of urban and rural sectors in major subregions of the ESCAP region. Although East Asia appears to have experienced the most rapid urban growth in the 1950s and 1960s, it has been replaced since that time by East South Asia and Middle South Asia. The latter subregion appears to be in the midst of a continuously rising urban growth rate, which is anticipated to continue through the decade of the 1980s and then taper off. Although the urban sector in these areas is quite small, it provides the basis for explosive urban growth in view of the large base populations. In contrast, Australia, which is almost wholly urban, appears to be experiencing a continuous decline in the rate of urban growth.

The rural gain in the region as a whole is diminishing as a result of a slow decline in the rural rate of growth. Between 1980 and 2000 the rural gain in the region is expected to be 362 million or about half of the urban gain of 697 million. The more developed countries in East Asia and Australia have had slowly declining rural populations and the rate of decline has increased sharply. In the less developed countries, however, rural growth rates appear to have been relatively high (over 2 per cent), but are expected to decline slowly during the next two decades.

Components of urban growth

Urban places can grow in three ways, by natural increase, or the excess of births over deaths; by migration and by reclassification. Reclassification includes the change of rural places into urban

Table 1. Average annual growth rate of urban and rural areas by subregion, 1950-2000

		1950-1960	1960-1970	1970-1980	1980-1990	1990-2000
East Asia						
China	Urban	6.84	3.15	3.25	3.29	3.25
	Rural	0.70	1.27	1.11	0.49	0.08
Japan	Urban	3.36	2.37	2.12	1.29	0.87
	Rural	−0.63	−1.67	−1.57	−1.72	−1.36
Other East Asia	Urban	4.16	5.20	4.26	3.33	2.36
	Rural	0.63	0.60	−0.31	−0.40	−0.29
South East Asia	Urban	3.92	3.99	4.15	4.49	4.34
	Rural	1.93	2.35	2.30	1.89	1.09
South Asia	Urban	2.98	3.66	4.01	4.46	4.33
	Rural	1.81	2.18	2.11	1.81	1.04
Pacific	Urban	3.00	2.70	2.65	2.37	1.84
	Rural	0.84	0.58	−0.09	−0.24	−0.09

Source: United Nations, *Patterns of Urban and Rural Population Growth* (New York, Sales No. E.79.XIII.9, 1979).

places. In the estimation of components of urban growth, the last two are often calculated together. On the basis of 65 observations, the United Nations has estimated that in the more developed countries, the mean contribution of migration and reclassification to urban growth was 60 per cent, leaving 40 per cent to be the contribution of natural increase. In the less developed countries, however, migration and reclassification contributed only 39 per cent. Natural increase was more important and contributed 61 per cent of the urban growth. The contribution of the component of migration and reclassification was 87.0 per cent in the Republic of Korea, 42.6 per cent in Iran and less than 40 per cent in Bangladesh, India, Indonesia and Sri Lanka. It is too early to assess the situation in the 1970s but it seems that the contribution of migration will be higher where economic growth is more rapid. In most of the developing countries, urban growth seems to have resulted primarily from the natural increase of the urban population. The effect of poverty in less developed countries seems to some extent to hold population in rural areas and has induced a different type of circular mobility as farmers move temporarily to the urban areas seeking cash income in off-seasons.

The relative importance of the components of urban growth is of significance to policy-makers. In preparing policies designed to affect population growth of a particular urban locality, it makes a great deal of difference whether the major source of urban growth is in-migration or natural urban growth. Generally, in rapid-growth economies, rural-urban migration is proportionately large and both urban and rural population growth are low. In developing countries, natural urban population increase is the dominant force behind urban growth. Non-farm sectors in these countries are not dynamic enough to stimulate rapid migration.

However, in absolute numbers the transfer of population from rural to urban places is not small. At present, the very large rural population provides a tremendous reservoir of potential migrants to cities. Because very large cities dominate the urban system the implications of rural-urban migration for both rural and urban development are quite important. The trend toward larger and larger cities, which are increasing their share of the total urban population, is quite clear in the ESCAP region. The concentration of urban population of a country in one single primate city is a matter of concern to national planners. Most of the countries, other than the two "city-states" of Hong Kong and Singapore, have a tendency of high primacy during their early stages of development.

Growth of large cities

Urbanization in Asia has been accompanied by the explosive growth of big cities. In 1950 there were only two cities with a population of 5 million or more, Tokyo and Shanghai. The number of these cities had increased to 14 by 1980. By the end of the century, it is expected that these cities will be among the 30 largest urban agglomerations in the world, each with a population of at least 10 million people. The population expected to reside in these cities is shown in table 2. These projections, of course, are not to be taken as predictions, because various types of limits may become operative in the years ahead. For example, there is increasing indication that since 1975 large cities in the devloped world are either failing to increase or are actually losing population. The relatively slow rate of growth of large cities has been noted in Japan, the United States of America and elsewhere.

Table 2. The fourteen largest agglomerations in the ESCAP region, ranked by size, 1950-2000

Cities	Population in millions		
	1950	1980	2000
Tokyo/Yokohama	6.7	20.0	24.2
Shanghai	5.8	13.4	22.7
Beijing	2.2	10.7	19.9
Bombay (Greater)	2.9	8.3	17.1
Calcutta	4.4	8.8	16.7
Jakarta	1.7	7.3	16.6
Seoul	1.1	8.5	14.2
Madras	1.4	5.4	12.9
Manila	1.6	5.7	12.3
Bangkok-Thonburi	1.4	4.9	11.9
Karachi	1.1	5.0	11.8
New Delhi	1.4	5.4	11.2
Teheran	1.1	5.4	11.3
Osaka/Kobe	3.8	9.5	11.1
Total	36.6	118.3	213.9

Source: Same as table 1, p. 125, table 48.

Nevertheless, in Asia the total population residing in big cities 5 million and over has been increasing. In 1950, the combined population of Tokyo and Shanghai was 12.5 million. In 1980 the population residing in cities of this class totalled 113.5 million –a ninefold increase. by the year 2000, it is expected that the ESCAP region will have 25 such super-cities which will be inhabited by 282.7 million people.

It is interesting to see the change in the super-city populations as a percentage of the total urban population (see table 3). In 1950 the population living in such cities accounted for 10 per cent of the total urban population in the ESCAP region. In 1980 inhabitants of the super-cities made up about 30 per cent of the regional urban population and this figure is expected to increase to 39 per cent by the year 2000. This is partly due to the graduation of smaller cities into a higher size class by virtue of rapid population growth.

Growth of intermediate- and small-size cities

The population in intermediate-size cities 1 to 5 million increased by 187 per cent between 1950

Table 3. Urban population by city size classes in subregions, 1950-2000

(Thousands)

	1950		1980		2000	
	Population	Percentage	Population	Percentage	Population	Percentage
Total ESCAP region						
100,000 to 1 million	67 792	56.2	144 446	38.6	154 303	21.4
1 to 5 million	40 397	33.5	115 916	31.0	283 427	39.3
5 million and over	12 517	10.3	113 541	30.4	282 761	39.3
East Asia						
100,000 to 1 million	36 376	54.5	62 150	32.6	56 996	18.3
1 to 5 million	17 883	26.8	66 170	34.8	127 141	40.7
5 million and over	12 517	18.7	62 177	32.6	127 912	41.0
South East Asia						
100,000 to 1 million	8 522	59.3	17 951	36.8	23 117	20.8
1 to 5 million	5 851	40.7	17 940	36.7	41 279	37.2
5 million and over	...	...	12 927	26.5	46 516	42.0
South Asia						
100,000 to 1 million	20 823	60.6	59 392	48.5	70 284	25.1
1 to 5 million	13 509	39.4	24 619	20.1	101 580	36.2
5 million and over	...	...	38 437	31.4	108 333	38.7
Pacific						
100,000 to 1 million	2 069	39.7	4 953	40.8	3 906	22.5
1 to 5 million	3 136	60.3	7 185	59.2	3 427	67.5
5 million and over	...	...	...	...	...	...

and 1980. Over this period cities in this class accounted for one out of three urban dwellers and their share is expected to remain the same up to the turn of the century. In contrast to the big cities, the share of smaller cities of 100,000 to 1 million in urban population has been declining. In 1950, smaller cities in the ESCAP region accommodated 56 per cent of the total urban population. Although the number of their inhabitants had more than doubled by 1980, their share of the urban total had declined to 38.6 per cent. Their share is projected to decline further to 21.4 per cent by 2000.

In the more prosperous countries, such as Japan and the Republic of Korea, for example, intermediate and smaller cities tend to be viewed as instruments for bringing about a more balanced distribution of population and an improvement in income disparities within and between subnational regions. In the less prosperous countries, such as Indonesia and the Philippines, smaller cities tend to be perceived as bridgeheads for promoting the growth of rural industries, especially the processing of farm products for export.

Country strategies for urbanization and development

Statistics on the level of urbanization, growth rates and urban structure are important data for the formulation of national settlement policies, but they reveal more than explain the factors behind the changing patterns of population distribution. Given the wide diversity of national conditions and Governments' policies relating to population redistribution and development, it is necessary to discuss briefly some country experiences to explain what constitutes a complete strategy for urbanization and development.

Because of limitations of data, it is a difficult task to deal with every country in the region. Instead, a few countries are selected to represent different stages of development, different size of population and different economic systems. India and Indonesia represent countries with large poulations with relatively low income. The Republic of Korea and Thailand represent countries which are medium-sized as far as population is concerned and are at different levels of development. Malaysia and Sri Lanka are small countries, again at different levels of development. Finally, the long Chinese experience in development and urbanization represents a unique example from a centrally planned economy.

India

Between 1951 and 1981 the proportion of the urban population in India increased from 16.8 per cent to 22.3 per cent, indicating that by and large India continues to be predominantly rural. Yet in terms of absolute population size, this increase of 5.5 percentage points involved an addition of about 95 million persons to the urban population of India during the 30-year period. In the last decade (1970-1980) alone, the urban population increased by more than 49 million people at a rate of 4.6 per cent per annum. This physical number will have important implications with regard to the provision of employment and services such as water, sewage disposal and housing.

The main cities in India have been playing an increasingly important role in the process of urbanization. At the beginning of the twentieth century, India had just one city, Calcutta, with a population of 1 million: by 1980 there were 12 such cities.[2] Middle-size cities of less than 1 million have maintained their relative position, while the proportion of the population in the remaining smaller-size towns of less than 100,000 people has decreased substantially. The persistent decline in the importance of small towns is an indication of the deterioration in the economic conditions of small towns and the consequent movement of population towards big cities in search of better economic opportunities.[3]

The proportions of the rural and urban populations of India do not give rise to optimism about the future urbanization structure in the country. If the projected figures are correct, the proportion of the urban population would rise from 22.8 in 1980 to 34.0 per cent adding 200 million by the year 2000.[4] Such an increase would call for a massive mobilization of resources on a large scale to cope with housing, sanitation and other associated problems of urban growth. The implied cost of these services is likely to be extremely difficult to meet in the light of the present low rate of domestic savings.

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[2] Government of India, *Census of India, 1981, Series I, Paper 2: Provisional Population Totals, Rural-Urban Distribution* (New Delhi, Government of India Press, 1981).

[3] Ashish Bose, "Urbanization in India: a demographic perspective", in Sidney Goldstein and David F. Sly, eds., *Pattern of Urbanization: Comparative Country Studies* (Liège, International Union for the Scientific Study of Population, 1975), pp. 289-339.

[4] United Nations, *op. cit.*, table 48.

In less than 20 years from now, the big cities of India will continue to grow bigger with Greater Bombay, Calcutta, Madras and Delhi each having 12 million people or more. The increased importance of large cities, however, does not mean that urban poverty will diminish owing to increasing economic activities. City-based industrialization has a limited potential for absorbing surplus labour from rural areas. Availability of land for new rural settlement is also very limited in India. The basic constraints of the Indian economy and the absolute size of population call for a settlement pattern different from the Western type of industrialization and urbanization. Before independence, the pattern of settlement development was conditioned by the requirements of colonial and imperial policy in India. After independence, India's successive five-year plans have not succeeded in reducing inequalities of income and wealth.[5] In the first five-year plan in 1951-1956, a policy of industrial decentralization was introduced, but there is no indication that this objective has in fact been realized. On the contrary, industries have by and large been established in the big cities as economies of scale make their location there more economical. A number of new towns were developed as steel (the main steel town Jamshetpur dates from long before independence), oil, fertilizer or port towns but their role to act as bridges between the rural areas and big cities is questionable. Although the second plan, 1956-1961, made reference to the need to expand employment opportunities, heavy industries developed with high technologies have not reached the stage where they start generating secondary labour-intensive kinds of manufacturing. Since the third five-year plan, 1961-1966, emphasis has been given to power development needed for irrigation and industry, self-sufficiency in foodgrains and the need to increase jobs and reduce disparities in wealth. However, the economic process was handicapped by several problems such as war with Pakistan, fast population growth, droughts, industrial unrest and administrative weaknesses. Given the rapid increase in the rate of urban population growth, it seems likely that there will be an accelerated increase in India's urban unemployment. This calls for the adoption of a comprehensive urban policy and effective steps to reduce the rate of population growth not only in the overcrowded cities but in the country as a whole. It is necessary to emphasize that urban problems cannot be solved without real progress in rural areas. To the extent that rural development succeeds, urban development will also succeed.

[5] Ashish Bose, *loc. cit.*

China

During the last 30 years, China has charted a path different from other developing nations in Asia. The results of the Chinese experience have been impressive, particularly with respect to establishing viable and self-sustaining rural development. The impact on the urban system seems to have favoured growth of the small- and medium-size cities, although existing major urban centres have continued to grow.

Like India, China to date remains largely a rural society. In 1950 the urban population was 61 million, which represented 11 per cent of the total population. In 1980, the United Nations estimate of the population of Chinese cities and towns of 100,000 and over people was 230 million. However, this may be too high: in an estimate for 1979 the total urban population was almost half this figure at 128 million.[6] The results of the 1981 census, when available, will provide more accurate figures. Over the last 30 years, five cities out of the 25 provincial capitals have tripled their population and another five doubled in size. However, it is in the big cities that the significance of the new industrial development becomes even more evident. Beijing, Shanghai and Tianjin remain the most important industrial centres in the country.[7] Small towns *(hsien)* have been the basic administrative units of China for centuries, although their functions have been modified since the establishment of communes and the decentralization of administration to the commune and brigade levels. The number of *hsien* has remained relatively stable through time, and by 1975 there were 2,133 *hsien* with an average of 5,000 to 20,000 population. These are the primary sites of rural, small-scale and light industries which are primarily geared towards processing agricultural products and satisfying the needs of the rural population.

Despite the intention to achieve a more even distribution of industry across China through the dispersal of small-scale industries, the dominance of the pre-revolution heavy industrial centres has

[6] The definition of urban places in this estimate is not given; see Liu Zheng, Song Jin and others, *China's Population Problems and Prospects*, China Studies Series (Beijing, 1981).

[7] Chung-Tong Wu, "Development strategies and spatial inequality in the People's Republic of China", paper presented at the Seminar on Rural-urban Transformation and Regional Development Planning, United Nations Centre for Regional Development, Nagoya, Japan, November 1978.

remained largely unchallenged. When the rural sector did not improve fast enough in the years which followed the formation of the People's Republic of China, vast numbers of Chinese peasants moved to the big cities looking for better opportunities. Measures to prohibit rural-to-urban migration were adopted. But it was not before the creation of the People's Communes in 1958-1962 that the Chinese Government began to deal firmly with the issue of urban-rural balance, sending the migrants back to the countryside. Agriculture is the foundation of the Chinese economy and therefore rural development is the basis for the formation of People's Communes. The following were all part of the comprehensive package of reform and policies to stimulate rural development geared towards a more balanced urban and rural economy: land reforms; organization of rural labour into work teams for collective production; policies to ensure low grain tax and fair prices for rural products; reform of the educational system; improvements in cultivation techniques; and diversification of the rural economy through the development of small industries.

The main issue that seems to emerge from the Chinese experience is that rural development at the commune or village level is reinforced by the location of medium- and small-scale industries at the small town and lowest administrative level. It also seems important that the existing urban system was used to facilitate the industrial decentralization programme. Where the employment potential and the total industrial output contributed by the small-scale industries at the *hsien* level is small, their location close to the rural sector is particularly significant. These small urban places have long-established administrative and service relations with their surrounding areas.

Since 1978, the policies for urban development have had three basic directions: to control big cities; to develop medium-size cities rationally; and to develop small cities vigorously. Capital investment in transportation, housing and social services in the big cities was perceived to have reached a state of diminishing returns. Small cities, however, were to be strengthened not only as an instrument of governmental control but also as an instrument of economic and social transformation for the rural sector.[8] In production, they are brought into the national industrial network by linking them with industries in big cities. Because of their rural market orientation, they are closely connected with the rural communities through services and retailing. Small cities therefore would have a dual roles, as the key intermediary between cities and countryside and the rural retailer of urban goods and services.

Indonesia[9]

One of the most frequently noted characteristics of Indonesia's demography is the uneven distribution of its population. In 1980, inner Indonesia (Java, Madura and Bali) supported 63.6 per cent of Indonesia's 147.4 million population on 6.9 per cent of the nation's area. Yet the country is one of the least urbanized nations of south-east Asia. The proportion of national population living in urban areas increased from 12.4 per cent in 1950 to 20.2 per cent in 1980 and is expected to reach 32.3 per cent by the year 2000.

The changes in the proportion of the total population living in different-size localities was not uniform; while the share of large urban places has increased substantially, the smaller urban areas increased their share only marginally. The two largest centres of Jakarta and Surabaya grew rapidly at 4 per cent and 3 per cent respectively between 1971 and 1980. Most of middle and lower levels of the urban hierarchy in Java increased but with much slower rates of growth. In the outer islands the large regional centres experienced strong growth, while the fastest growth rates were recorded in the oil and mining towns, where exploitation activity was considerably stepped up in the late 1960s and early 1970s.

Unlike many other developing countries, Indonesia in the past was characterized by a balance among city-size classes. In the Dutch period there was a deliberate policy of decentralization of small-scale industries in a hierarchical network of smaller centres. The independence period, however, has seen a greater centralization of activities in the national capital. While Jakarta accounts for only 4.1 per cent of the national population, it has a quarter of the total employment in manufacturing, receives two thirds of Indonesia's imports and accounts for a quarter of its private investment and half of foreign investment. It contains two thirds of the top two grades of public services, and half

[8] R.Y. Kwok, "Role of small cities in Chinese urban development", paper presented at the Pacific Science Association 4th Inter-Congress, Singapore, September 1981.

[9] See United Nations, *Migration, Urbanization and Development in Indonesia* (New York 1982).

the money in circulation; it has more than a quarter of the registered vehicles, 30 per cent of the telephones and 30 per cent of doctors; most important, it is the centre and symbol of Indonesian national unity.[10]

Policies and programmes which seek directly to influence population distribution have a long history in Indonesia and are still of considerable significance. The most important of all is the attempts under both government and non-government auspices to resettle inhabitants of densely populated Java and Bali in agriculture-based colonies in the outer islands, known as the transmigration programme.

Other programmes directly linked to urbanization have attempted to "close" some of Java's cities, especially Jakarta, to migrants. In the mid-1970s closure legislation was also enforced to restrict migration to the island of Bali. Other administrative measures deny movers access to certain types of employment and education or to housing in order to discourage movers from coming to the city. But these attempts and similar experiences in other developing countries have not proved successful as people usually try every means they can to get around the regulations.

There have been a few direct attempts to decentralize activities but the overwhelming influence, which has operated indirectly, has been towards centralization, particularly in Jakarta. The capital and its environs have become the main focus of industrial development in the nation. The Government's development investments in the agricultural sector have been primarily geared towards achievement of self-sufficiency in food. A rural development strategy would also involve, first, a wide range of employment generating activities not only in agriculture but also in light industry, services and public works and, second, a major improvement in the provision of services in rural areas.

The urban-rural dichotomy is one dimension of the spatial, social and sectoral inequalities within Indonesian society. Over the first half of the 1970s mean rural income fell from 64.1 per cent to 48.5 per cent of mean urban income. Inter-urban inequalities also exist; in 1963, the average *per capita* income in other urban areas in Java was 88 per cent that of Jakarta. This had been reduced to 71 per cent in 1970 and to 60.9 per cent in 1976.[11] Analysis of *per capita* consumption levels in 1976 indicated that inequalities within the urban areas had increased, with a substantial widening of the disparity between the poorest 40 per cent of the population and the rest.[12] This widening was especially marked in Jakarta and was more evident in Java than the outer islands.

Population growth justifiably remains the central demographic concern of Indonesia's planners, but population redistribution has a role to play in working towards the goals of maximizing efficiency of exploitation of Indonesia's resources and in narrowing the wide gaps which exist in the level of living and welfare between regions and between urban and rural sectors.

Thailand[13]

Despite the rapid growth of Bangkok Metropolis, Thailand continues to be a predominantly rural nation. The level of urbanization has been low, reaching 13.2 per cent in 1970 and 17.3 per cent in 1980, according to the census definition. One study suggested, however, that if sanitary districts which could rightly be defined as urban places were included, the percentage urban in 1970 would have been 20.8, which indicates that in 1980 Thailand's population may have been about 25 per cent urban. The Bangkok Metropolis is the most primate city in Asia and its dominance of urban population in Thailand continues as current national economic growth proceeds. The cumulative effect of local and foreign investment activities in Bangkok has been to generate a broad expansion of industries and job opportunities in manufacturing, transport, construction and services as well as in commercial sectors. More than half of the recent promoted industries are located in Bangkok. Bangkok contains 62 per cent of the nation's urban population and 33 per cent of the nation's GNP, with *per capita* GDP 2.5 times higher than the national average;

[10] J. Osborn, "Government and urbanization in Indonesia", paper presented at the 13th Pacific Science Congress, Vancouver, 1975.

[11] D. King and P. Weldon, "Income distribution and levels of living in Java 1963-1970", *Economic Development and Cultural Change*, 25, 4:699-711, 1977.

[12] International Bank for Reconstruction and Development, *Employment and Income Distribution in Indonesia* (Washington D.C., 1978).

[13] See United Nations, *Migration, Urbanization and Development in Thailand* (New York, 1982).

it consumes over 80 per cent of the nation's electricity.[14]

Despite the large scale of public development expenditure in other regions and in the hinterland during the past two decades, Bangkok retains its dominance. Official figures put the population of Bangkok at 5.0 million in 1980, or 50 times greater than that of the second largest city, Chiang Mai. There is evidence, however, that designated municipal areas underrepresent actual urban areas. The urban planning area of Chiang Mai identified by the Ministry of Interior contained a population of 170,000 in 1980, compared with the census total of 100,000. Using the former figure for Chiang Mai reduces Bangkok's primacy to a factor of about 30. Because of the great variations possible in the designation of urban areas, it is impossible to say if Bangkok's primacy ratio is currently increasing or decreasing.

There has been a considerable shift from small-size to moderate-size places. But up to 1980 two thirds of the 119 municipalities were still relatively small towns of 25,000 persons or less. The most important function of these towns is as market places for Bangkok goods as well as for processing of agricultural products. In spite of the Government's efforts to promote the growth of these towns as centres for rural development, it seems that small farmers and the landless are the people who benefit least. Educational and health services are generally poor, and the low level of industrial development does not create many non-farm employment opportunities to subsidize income.

The first national development plan, 1961-1966, almost completely neglected the strategy of urbanization in regions outside Bangkok. In fact, national infrastructural development programmes such as highways, improved telecommunication systems, and Bangkok harbour and airport improvements tend to have strengthened the primacy role of Bangkok as the only major industrial and commercial centre of Thailand. A national policy for urbanization to promote economic decentralization and check excessive population flows into Bangkok was weakly articulated in the second and the third national plans.

The fourth five-year plan, 1976-1981, for the first time, proposed a decentralization of urban administrative authority to support Thailand's overall national redistribution objectives and development programmes for various lagging regions. However, in allocating resources for development, the Government took into consideration the number of people residing in local areas who would benefit from such resources. As a result, small communities received less than large communities. Once again, Bangkok received the lion's share of resources, attracting more migrants and business and fostering economic disparities among urban localities and between urban and rural areas.

In the fifth plan, 1981-1986, the Government of Thailand supports a more balanced pattern of population distribution and human settlement in relation to natural resources and national security. Among the strategies and measures adopted by the Government are: (a) the establishment of land reform co-operatives in disadvantaged areas; (b) the acceleration of rural development programmes; (c) the extension of secondary education to rural areas; (d) the encouragement of investment in basic social and economic services in small urban areas; and (e) in communities with potential for growth, the encouragement of industries outside Bangkok Metropolis.

In order to reverse the strong tendency towards industrial concentration and primacy of Bangkok, strong long-term measures are needed. Decentralization of economic and social activities away from the primate city cannot be achieved without special fiscal and monetary incentives. A combination of such policies will create alternative points of attraction for human and economic resources in the regions.

Republic of Korea[15]

The process of urbanization and development in the Republic of Korea provides an exceptional case for developing countries. The rapid transformation of the economy from an agricultural to an industrial base during the 1960s escalated urban population growth. In 1950 the proportion of urban population was only 21 per cent. This increased to 54.8 per cent in 1980 and is expected to reach 71.3 per cent by the year 2000. Between 1955 and the early 1960s there was a period of relative economic stagnation and a massive return of refugee populations from the southern provinces to their former residences in the northern cities.

[14] Phisit Pakkasem, *Rural-urban Relation in Bangkok Metropolitan Dominance Subregion* (Nagoya, United Nations Centre for Regional Development, 1979).

[15] United Nations, *Migration, Urbanization and Development in the Republic of Korea* (New York, 1980).

Seoul, which had experienced an extremely low rate of growth before 1955, began to grow rapidly, with an average annual growth rate of 8.2 per cent. At the same time, smaller cities, which were essentially rural central places and therefore dependent upon rural prosperity for their own growth, began losing population under conditions of rural stagnation.

At the same time, the rural population continued to grow at a rate of 2 per cent per year, land/man ratios increased, creating "postage stamp" -size farms and chronically low *per capita* incomes. Urban growth was, however, not high enough to generate employment capable of absorbing the migrants from rural areas.

During the period 1960-1966, the economy began its dramatic transformation from a low-growth rural-based economy to a rapidly growing urban-industrial economy. The concentration in the capital region increased as the volume of migration to Seoul increased. Seoul absorbed 52 per cent of the total urban population growth and accounted for 69 per cent of the total net migration to urban areas. Migration to most other urban places, including Busan, was negligible. Small cities showed net migration losses.

During 1966-1970, the development strategy of accelerated urban industrialization began to pay off to the extent that not only did the economy register a growth rate of over 10 per cent per annum, but it also was able to absorb virtually all increases in the rural labour force. This itself relieved the pressure on the countryside, but at the same time widened rural-urban disparities.

Within the urban system, the concentration of growth became obvious during 1966-1970. Although Busan and a few other regional cities began to show signs of growth, and although the industrial estates programmes in Ulsan and other areas along the south-east coast were beginning to grow rapidly, Seoul increased at more than 9 per cent per year, accounting for 77 per cent of the national population increase.

The concentration in the capital region was a success in meeting economic growth objectives and in reaching and maintaining a level of low unemployment. With these successes, however, new issues and problems emerged which were the focus of policies in the 1970s and were increasingly cast in spatial, regional and demographic terms. Among these were concerns over the formulation of policies to deal with the following: squatter settlements around Seoul; problems of metropolitan management; high rural-urban inequalities; the stagnation and decline of small towns and rural service centres; external dependance on food imports owing to slow growth in agriculture; and indications of an undesirable rural population structure as the out-migration of the young, most productive members of the rural labour force left behind an increasing dependency ratio and an aging of the rural labour force.

During the 1970s policies were formulated to meet these problems. First, urban-industrial decentralization succeeded in creating a counter-magnet of growth in Busan and its surrounding region, but it failed to shift sources of growth substantially away from Seoul. Secondly, the "New Village Movement" aimed at supporting village and rural development efforts was initiated at the local level. The industrial estates programme was also scheduled to be more dispersed, emphasizing locations in or near smaller cities. In addition, plans drawn up for 1977-1986 show strong administrative decentralization policies. Higher education, one of the major "non-economic" determinants of migration to the capital city, was also to be decentralized with restrictions put on the expansion of enrolment in Seoul. As a result of the New Village Movement and agricultural pricing policies, rural-urban income inequalities on a household basis have been virtually eliminated.

Sri Lanka[16]

Given the small size of the island and the well-developed and subsidized transportation network, urbanization is Sri Lanka did not increase quickly. The proportion of urban population to the total population was 14.4 per cent in 1950 and 26.0 in 1980.

This increase has resulted mainly from a process of reclassification of rural settlements as urban owing to the creation of new towns. There were 93 new towns established during the post-independence period. The majority of these were created near Colombo and Jaffna and in high-density regions in the south. However, the creation of new towns had a relatively greater impact in the medium-density and low-density regions, in the east and north-east of the island. The spread of urban places into those areas which were previously entirely rural has helped to bring facilities such as

[16] United Nations, *Migration, Urbanization and Development in Sri Lanka* (New York, 1980).

agricultural service activities, banking, marketing, secondary education and health centres closer to rural people. This has helped to minimize rural-urban disparities and avoid rural-urban polarization. This favourable situation has been brought about mainly as a result of political, social and administrative changes that have taken place in the post-independence period. As a result, policies in Sri Lanka until recently were primarily oriented towards rural development.

Industrial development, though modest in scale, was encouraged in non-urban areas in different parts of the country. Although much of the private sector industry that developed in the 1960s was in Colombo district, it was located in the urban centres around the city rather than in the city of Colombo itself. An interesting characteristic of industrial employment in Sri Lanka is that three quarters of the 436,270 persons 15-64 years old employed in manufacturing in 1971 were resident in rural areas. Most of the manufacturing industries are based on agricultural products and several of these are traditional small-scale industries such as the manufacture of clay products, furniture and ropes. Under these circumstances, urban areas did not attract the volume of migrants in search of employment that could have been expected. For poorer people in particular, living conditions and even employment opportunities were often not as good in towns as in the rural areas.

Over two decades, government policies have aimed at a substantial transfer of resources to the rural sector. The increase in the productivity of the rural sector has been the principal goal, although other policies aimed at a reduction in the cost of living through various income transfers. The combined effect of these has been to increase the real income of people in rural areas compared with urban areas. Although some of these policies were designed to help the poor, regardless of whether they were rural or urban, the benefits have been proportionately greater for the rural sector.

The ambitious accelerated Mahaweli development scheme is a major project that should generate employment and might encourage movement into a zone which is lightly populated at present. While unemployment is still a problem in rural areas, the solution is not merely a question of generating employment there. The types of employment must be acceptable to the job-seekers. The more educated unemployed are not willing to accept rural types of employment, especially if there are alternative opportunities available elsewhere, in urban areas or overseas.

The development of a free trade zone north of Colombo together with the incentives offered to the private sector to develop the manufacturing industry might attract more migrants to Colombo. At the same time, increased construction and commercial activities in Colombo and the increasing cost of transport could induce more people to move to Colombo permanently instead of commuting daily. While the Government's policies are geared towards solving the acute unemployment problems, such policies might lead to a high degree of concentration within the Colombo urban areas similar to what has taken place in other developing countries.

Malaysia[17]

Urban population as a proportion of total population in Malaysia increased from 20.4 per cent in 1950 to 29.4 per cent in 1980 and is expected to reach 41.6 per cent by the year 2000.

The rate of urban population growth was rapid in the 1950s as a result of the declaration of a state of emergency in 1948, which for many years caused thousands of rural families to leave for the relative security of the towns. Normalization of conditions resulted in very low rates of urbanization in the late 1950s and early 1960s. The average annual growth rate of the urban population decreased considerably from 5.8 per cent in 1947-1957 to 3.2 per cent in 1957-1970, but was still higher than the rate of total population growth. Nevertheless, by 1970 the level of urbanization had reached 28.7 per cent in Peninsular Malaysia and 16.6 per cent in Sabah and Sarawak and it is believed to have increased rapidly in the 1970s. Although the Chinese community continued to be predominant in the urban areas, the number of urban Malays increased steadily over the years, particularly in the largest centres of the urban hierarchy.

The Malaysian Government has perhaps been more sensitive to population redistribution issues than other Governments in the region. Since the 1969 race riots, population redistribution has featured as an integral aspect of the economic policy and regional development planning. The new economic policy introduced in 1971 focuses on reducing racial and regional inequalities through the expansion of employment opportunities and the provision of a wide range of public and social services and amenities, regional development schemes,

[17] United Nations, *Migration, Urbanization and Development in Malaysia* (New York, 1982).

decentralization of industrial development, modernization of rural life, rapid and balanced growth of urban activities and the creation of a Malay commercial and industrial community. The strategy adopted for regional development on the basis of differences in *per capita* GDP among states has had a direct consequence for population redistribution. Two "magnet" areas have been developed: Selangor on the west coast as an administrative, commercial and industrial nerve centre; and Pahang on the east coast as the largest state with vast potential for massive land development.

The Government has also encouraged industries to move into the rural areas, and as a result rural-urban migration did not figure prominently during the 1960s. Instead, migrants moved from smaller towns to larger ones with a strong gravitational pull towards the Kuala Lampur conurbation. In addition, the Federal Land Development Authority has played an effective role in mobilizing rural population resources from areas with labour surplus to land-surplus areas.

The strategy of urban dispersal in Malaysia aims at bringing about a more balanced economic situation in the depressed areas. The greatest potential for the development of new urban centres lies in industrial expansion. Incentives such as tax relief would further attract industries away from the metropolitan areas offering modern-sector and non-agricultural jobs to the rural Malays. By means of inputs of capital, manpower and technology, publicly or privately financed, the Government hopes to exploit untapped natural and mineral resources that could stimulate other supporting industries and lead to greater employment opportunities.

Summary

Many governments have recognized that there has been a mismatch between the distribution of resources and population. While population distribution remains largely the product of a pre-industrial and colonial past, the range and use of resources have been greatly enlarged and influenced by modern technological capabilities. Development strategies remain largely capital-investment-oriented and tend to focus on a few large cities, accelerating their population growth. With dissatisfaction over the conditions in the primate city pattern and regional disparities, development plans have been focused on three main strategies: rural development, regional development and improvement of large cities.

First, there are rural development strategies implemented in both modern and traditional sectors of the economic periphery of a developing country. These have been designed to improve agricultural productivity and socio-economic status as well as to alleviate population pressure elsewhere. Examples are the dry zone projects in Sri Lanka, transmigration to the outer islands in Indonesia and the subsidized migration to Mindanao in the Philippines. Agrarian and land-tenure reform, rural infrastructural development and elements of the green revolution have influenced the migration pattern.

Secondly, there is the promotion of expanded economic bases in peripheral or lagging regions by means of inputs of capital, manpower and technology, primarily directed at increasing labour productivity on a selective regional basis. There is the promotion of growth centres and industrial decentralization to channel economic expansion to extra-metropolitan regions. Few countries are able to finance such programmes on a large scale. Japan and the Republic of Korea provide examples of national attempts to reduce primacy, develop "countermagnets" and improve the regional distribution of productivity and income. Programmes for new towns provide a variant of this strategy through planning employment opportunities in conjunction with the provision of the urban infrastructure.

Thirdly, there is the promotion of urban development and renewal in existing metropolitan areas as a means of improving the quality of life by alleviating congestion, environmental pollution and health hazards, and by improving housing and services standards.

Economic development policies as embodied in national development plans have not directed adequate attention to their impact on spatial concentration of industries and the accompanying phenomenon of urbanization. As a result, most of the metropolitan areas in the countries of the ESCAP region have grown at a considerably faster rate than most of the medium-sized cities.

General issues for consideration

Over-concentration

Generally levels of urbanization rise as levels of national income and industrial production rise. The concern here is not the level of urbanization as such, but rather the rate of its concentration. In the ESCAP region, some countries have a strong primacy pattern (Thailand), while others reveal a

decreasing primacy trend (the Republic of Korea) and still others (Indonesia, Malaysia, Sri Lanka) have more balanced urban hierarchies, although their urbanization structures appear to be moving towards more and more concentration.

Pre-industrial cities were restricted in size by the distance a man could walk to his place of work. Technological development of transportation in the twentieth century has enabled human agglomerations to expand indefinitely. The evolution of the city has both permitted a higher quality of life and precipitated serious problems which remain unsolved.

A major physical problem confronting urban areas in the less developed countries is the spread of squatter settlements. The urban poor tend to settle in shanty towns in areas which usually have minimum urban amenities such as piped water and sewerage. New types of economic, social, environmental and political problems also emerge, such as unemployment, underemployment, air and water pollution, crime, drug addiction, prostitution, inefficient bureaucracy and corruption. Many of the traditional functions of the family in the pre-urban setting have weakened. The family's protection functions have been taken over by new institutions, such as the police, hospitals, welfare programmes and various social security provisions. The recreational function of the family has been largely taken over by commercial institutions such as the cinema, radio and television.

The growth of cities is, however, positively correlated with increasing income, improving education and health, expanding communication channels and promoting employment and other opportunities for women. Despite many problems, cities continue to be the production centres and the hubs of trade and commerce.

However, the growth of a city's size depends upon its role and function. The concept of an optimum city size is not an operational one, since the cost and benefits of city functions are not quantifiable. In many developing countries, there may be a strong case for slowing down the growth of the primate city. This case, however, rests not on identifying an optimum city size, but on the grounds of its absorptive capacity. Policy-makers may, at least in the short run, have difficulty in expanding public services to keep pace with growing populations. In the long run they may have serious problems providing interregional equity favourable to over-all national economic development. Once the goal for reducing a city's growth rate has been specified, several types of measures are available to Governments. Such measures include improving conditions in rural and other urban areas and reducing the attractiveness of the primate city. This strategy implies a wide range of policies including rural development, industrial location and improvement of services in other urban areas as well as providing effective measures to restrict industrial expansion and employment growth in the primate city.

Unpopular measures of the closed-city type (e.g., Jakarta) are very difficult to administer and might lead to corruption. Experience has also shown that the establishment of new centres within commuting distance of the metropolitan area has resulted in outright failure as individuals and firms take advantage of proximity to various services and markets concentrated in the core city.

Rural development

The driving goal of capital-intensive agricultural development strategy is increased agricultural productivity through new technological inputs (seeds, fertilizer, pesticides etc.), mechanization and credit. This strategy is not usually directed to small-scale farmers or landless labourers. As a result, the large landowners get richer, while the small farmers and the landless are being pushed out. Most of these persons have little choice but to look for work elsewhere. Young people with some education tend to migrate to cities either to find available non-agricultural jobs or to continue their education.

Land colonization is another strategy adopted in many countries (e.g., Indonesia, Malaysia, the Philippines, Sri Lanka) mainly for agricultural development and partly to serve as an alternative attraction for surplus rural labourers. Whether land settlement schemes have been carried out as independent Government-sponsored programmes or integrated with other regional development, more adequate and long-lasting measures are required in order to reduce drop-out rates among the settlers and to retain their children on the land.

Where agricultural development strategies have failed to serve the low-income groups, integrated rural development schemes are designed to involve a broader spectrum of the rural population. Emphasis in those programmes is given to land reform; labour-intensive projects; provision of physical and social infrastructure, particularly roads, electrification, water supply and vocational training; and expansion of off-farm employment opportunities. A significant aspect from the urbanization

point of view is the establishment of rural market towns as a linking mechanism between rural-based agriculture and urban-based secondary and tertiary activities. It is too early to discuss countries' experiences in this regard, but it is believed that these towns would, if successfully implemented, provide in the long run small urban alternatives for migrants from the surrounding rural areas.

The neglected issue in the development process: the middle-size cities

In most developing countries, glaring economic and social disparities between primate cities and rural areas represent a great problem. Even in countries not characterized by primacy, such as India and Indonesia, the sheer size of large metropolitan areas gives rise to critical urban management challenges. Intermediate cities, however, can provide a social and economic transformation by functioning as regional industrial and commercial centres and as locations for decentralized transportation, marketing, educational services and other government functions.

During the late 1950s and the 1960s there was considerable interest in the possibilities of promoting growth in a few centres and the subsequent generation of spread effects. The experiences in Indonesia, Malaysia, the Philippines and Thailand show that the spread of development was smaller than expected and limited in geographical extent.[18] The development of growth centres in these countries has proven extremely expensive and has had a sobering effect on Governments. Skilled workers have been reluctant to leave their homes in large urban areas even when attracted by high wages. Small industries in particular have been hesitant to move to distant locations as they require access to products from other firms in the metropolis.

The success of the Republic of Korea in slowing the growth of Seoul is unique among the developing countries and may be the result of tax and credit incentives introduced by the Government for industrial investment in locations other than Seoul.

It should also be pointed out that growth centre strategies should be an integral part of more comprehensive development schemes. Thus, while developing countries need to create functional economic centres, they also need adequate transportation and health and educational facilities that would promote entrepreneurship even in the lower strata of the urban hierarchy. In view of the limited resources in the developing countries, the concentration of developmental efforts in a few centres would be more realistic. Eventually, the inter-regional growth pattern becomes more balanced through the growth of less developed regions and other urban centres.

With the increasing emphasis on employment creation as a planning goal small towns may act as generators for off-farm job opportunities. Additionally, apart from home-based cottage industries, many rural industries requiring a sizable labour force are located in or near large or medium-size towns. Given the resource constraints, public as well as private, services such as health, education and marketing can also be supplied at minimum cost only by delivering them in medium-size towns or in provincial capitals.

Government intervention in the urban settlement pattern should aim at the promotion of medium-size towns to strengthen the linkages among the levels of the urban hierarchy. Agricultural products flow out of rural market centres into towns of all sizes while urban goods often flow only from the big cities to the regional markets and abroad. Thus, the medium-size cities in this situation are not fully integrated with the urban-rural economic production system. Their function and their relationship with other settlements are distorted since they supply only services and not goods. Without strengthening these towns, the urban hierarchy may develop a dualistic pattern with the primate city (or in some countries a few other major cities) forming one subhierarchy and the lowest-order urban centres forming another, but with minimum interconnection between the two.

The need for a comprehensive plan

In the process of development, countries are faced with the challenges of full utilization of their natural and human resources promoting regional equity and avoiding and reducing excessive development disparities and concentration. To achieve these two objectives, Governments need to co-ordinate economic and spatial development policies and plans at both the regional and the national levels for more efficient distribution of population and economic activities.

Often national Governments are preoccupied with economic problems to the extent that they neglect to integrate physical and socio-economic

[18] Fu-Chen Lo and Kamal Salih, eds., *Growth Pole Strategy and Regional Development Policy: Asian Experiences and Alternative Approaches* (Nagoya, United Nations Centre for Regional Development, 1978).

development plans. A comprehensive plan should consider that economic decisions necessarily affect the location of industry, the distribution of population, the pattern of land use and the groups of individuals who would benefit from government action. When decisions are made on targets for investments, taxation, employment generation or infrastructure construction, the issues of who are affected by these policies and where they live should be of the highest priority. In providing social services like housing, health, education and transportation, the participation of people concerned is important at the policy formulation stage as well as in the actual execution of programmes.

Unplanned urbanization may generate tension between groups and classes within the city itself and between urban and rural areas. Peace, which is the pre-condition for development, may be put in jeopardy as the urban poor in the heart for the city accumulate fear and hopelessness. The recognition of this threat led the mayors and urban planners of the 60 largest cities in the world assembled in Rome in September 1980 to declare:[19]

> "All countries which do not yet have comprehensive population policies and programmes should formulate them. A comprehensive national population policy, should among other things, specify sub-national goals on the rate of growth of population, on levels of fertility and mortality and on the distribution of population between urban and rural areas. It will need to be fully integrated into the process of development planning, particular emphasis being given to health, education, housing, nutrition, employment and environmental conditions. We urge that such policies be formulated in all countries by 1985."
>
> "Plans for redistribution of population, as part of a comprehensive national population policy, will only succeed if they form part of a strategy for balanced development. Such a strategy should be aimed at encouraging a balanced pattern of urban settlements, i.e. small, intermediate and large cities, and at the economic development of rural areas."

[19] United Nations Fund for Population Activities, "Rome Declaration on Population and the Urban Future", International Conference on Population and the Urban Future, Rome, September 1980.

Annex

Urban and City Populations in Countries of the ESCAP region, 1950-2000

(Thousands)

Country or area	Year	Total population	Urban population	Percentage of urban population	Cities with 100,000-1,000,000 inhabitants		Cities with 1,000,000-4,999,999 inhabitants		Cities with over 5,000,000 inhabitants	
					Number of cities	Population	Number of cities	Population	Number of cities	Population
East Asia										
China	1950	558 190	61 393	11.0	96	25 706	6	10 901	1	5 781
	1980	907 609	230 652	25.4	74	39 128	29	53 003	2	24 146
	2000	1 147 987	443 213	38.6	40	27 423	58	106 760	7	72 740
Hong Kong	1950	1 974	1 747	88.5	1	815	–	–	–	–
	1980	4 522	4 085	90.3	–	–	1	1 805	–	–
	2000	5 625	5 210	92.6	–	–	1	2 453	–	–
Japan	1950	83 625	41 977	50.2	50	8 480	2	17 571	1	24 413
	1980	117 546	91 970	78.8	72	4 829	4	6 661	2	9 379
	2000	132 929	114 128	85.8	72	6 736	5	29 541	2	35 281
Mongolia	1950	747	142	19.0	...	...	...	...	...	...
	1980	1 669	842	50.5	...	...	...	...	...	...
	2000	2 701	1 709	63.2	...	...	...	...	...	...
Republic of Korea	1950	20 356	4 347	21.3	7	1 375	2	2 153	–	–
	1980	38 185	20 921	54.7	15	5 451	2	4 701	1	8 490
	2000	52 991	37 807	71.3	11	4 698	5	8 549	2	19 891
South-East Asia										
Brunei	1950	46	12	26.0	–	–	–	–	–	–
	1980	160	122	76.2	–	–	–	–	–	–
	2000	216	188	87.0	1	123	–	–	–	–
Burma	1950	18 380	2 965	16.1	3	1 105	–	–	–	–
	1980	35 195	9 560	27.1	5	1 536	1	2 185	–	–
	2000	54 902	22 442	40.8	4	2 307	2	6 084	–	–

Annex (continued)

(Thousands)

Country or area	Year	Total population	Urban population	Percentage of urban population	Cities with 100,000-1,000,000 inhabitants		Cities with 1,000,000-4,999,999 inhabitants		Cities with over 5,000,000 inhabitants	
					Number of cities	Population	Number of cities	Population	Number of cities	Population
Democratic Kampuchea	1950	4 163	425	10.2	1	372	–	–	–	–
	1980	9 409	1 309	13.9	1	200	–	–	–	–
	2000	15 819	3 749	23.7	1	200	–	–	–	–
Indonesia	1950	75 449	9 362	12.4	16	4 543	1	1 725	–	–
	1980	154 869	31 293	20.2	24	8 508	2	4 023	1	7 263
	2000	237 507	76 612	32.2	18	10 007	7	11 977	2	22 267
Lao People's Democratic Republic	1950	1 949	141	7.2	1	128	–	–	–	–
	1980	3 721	500	13.4	1	248	–	–	–	–
	2000	5 725	1 439	25.1	1	638	–	–	–	–
Malaysia	1950	6 187	1 260	20.3	2	411	–	–	–	–
	1980	13 998	4 110	29.3	5	2 206	–	–	–	–
	2000	22 054	9 172	41.5	4	2 368	1	2 552	–	–
Philippines	1950	20 988	5 695	27.1	6	772	1	1 598	–	–
	1980	52 203	18 902	36.2	15	4 153	–	–	1	5 664
	2000	89 707	43 988	49.0	13	7 047	2	2 816	1	12 313
Singapore	1950	1 022	815	79.7	1	815	–	–	–	–
	1980	2 437	1 805	74.0	–	–	1	1 805	–	–
	2000	3 126	2 453	78.4	–	–	1	2 453	–	–
Thailand	1950	20 010	2 096	10.4	–	–	1	1 414	–	–
	1980	49 473	7 110	14.3	–	–	1	4 870	–	–
	2000	85 618	19 850	23.1	–	–	–	–	1	11 936
Viet Nam	1950	24 600	2 880	11.7	2	376	1	1 114	–	–
	1980	48 634	11 070	22.7	3	1 106	3	5 057	–	–
	2000	75 802	27 574	36.3	1	427	5	15 397	–	–

Annex (continued)

(Thousands)

Country or area	Year	Total population	Urban population	Percentage of urban population	Cities with 100,000-1,000,000 inhabitants		Cities with 1,000,000-4,999,999 inhabitants		Cities with over 5,000,000 inhabitants	
					Number of cities	Population	Number of cities	Population	Number of cities	Population
South Asia										
Afghanistan	1950	11 660	676	5.8	1	210	–	–	–	–
	1980	22 038	3 383	15.3	5	1 213	–	–	–	–
	2000	36 654	10 262	28.0	4	1 630	1	1 270	–	–
Bangladesh	1950	41 037	1 786	4.3	2	611	–	–	–	–
	1980	84 803	9 531	11.2	4	1 563	2	4 134	–	–
	2000	144 347	32 095	22.2	2	1 501	3	7 700	1	9 725
Bhutan	1950	726	15	2.0	...	...	...	...	...	...
	1980	1 327	52	3.9	...	...	...	...	...	...
	2000	2 145	167	7.7	...	...	...	...	...	...
India	1950	352 664	59 247	16.8	76	15 913	5	11 256	–	–
	1980	694 309[a]	154 524	22.2	133	41 814	10	16 324	4	27 985
	2000	1 059 429	360 688	34.0	104	51 953	37	68 388	6	68 798
Iran	1950	16 913	4 687	27.7	8	1 304	1	1 126	–	–
	1980	38 492	19 209	49.9	24	7 764	–	–	1	5 447
	2000	66 593	43 138	64.7	18	7 790	6	10 575	1	11 329
Maldives	1950	82	9	10.9	...	...	...	...	...	...
	1980	132	14	10.6	...	...	...	...	...	...
	2000	205	34	16.5	...	...	...	...	...	...
Nepal	1950	8 000	183	2.2	1	100	–	–	–	–
	1980	14 231	708	4.9	1	190	–	–	–	–
	2000	23 196	2 275	9.8	1	503	–	–	–	–
Pakistan	1950	36 450	6 387	17.5	8	2 274	1	1 127	–	–
	1980	82 952	23 371	28.1	18	5 864	2	4 161	1	5 005
	2000	146 924	60 323	41.0	13	6 238	6	12 522	2	18 481

Annex (continued)

(Thousands)

Country or area	Year	Total population	Urban population	Percentage of urban population	Cities with 100,000-1,000,000 inhabitants		Cities with 1,000,000-4,999,999 inhabitants		Cities with over 5,000,000 inhabitants	
					Number of cities	Population	Number of cities	Population	Number of cities	Population
Sri Lanka	1950	7 678	1 106	14.4	1	413	–	–	–	–
	1980	15 465	4 108	26.5	3	984	–	–	–	–
	2000	21 339	8 660	40.5	2	668	1	1 125	–	–
Pacific										
Australia	1950	8 219	6 181	75.2	6	1 430	2	3 136	–	–
	1980	15 140	13 445	88.8	7	3 075	3	7 185	–	–
	2000	20 245	18 754	92.6	5	1 881	5	12 258	–	–
Cook Islands	1950	14	4	28.5	...	...	...	...	...	...
	1980	29	9	31.0	...	...	...	...	...	...
	2000	52	21	40.3	...	...	...	...	...	...
Fiji	1950	289	70	24.2	–	–	–	–	–	–
	1980	635	268	42.2	1	117	–	–	–	–
	2000	847	481	56.7	1	206	–	–	–	–
Guam	1950	59	14	23.7	...	...	...	...	...	...
	1980	113	31	27.4	...	...	...	...	...	...
	2000	184	72	39.1	...	...	...	...	...	...
Kiribati and Tuvalu	1950	38	4	10.5	...	...	...	...	...	...
	1980	77	29	37.6	...	...	...	...	...	...
	2000	123	70	56.9	...	...	...	...	...	...
Nauru	1950	...	...	...	...	...	...	...	...	...
	1980	...	...	...	...	...	...	...	...	...
	2000	...	...	...	...	...	...	...	...	...
New Zealand	1950	1 908	1 384	72.5	3	639	–	–	–	–
	1980	3 253	2 766	85.0	5	1 546	–	–	–	–
	2000	4 267	3 822	89.5	4	966	1	1 169	–	–

Annex (continued)

(Thousands)

Country or area	Year	Total population	Urban population	Percentage of urban population	Cities with 100,000-1,000,000 inhabitants		Cities with 1,000,000-4,999,999 inhabitants		Cities with over 5,000,000 inhabitants	
					Number of cities	Population	Number of cities	Population	Number of cities	Population
Niue	1950	4	1	25.0	...	...	...	...	...	...
	1980	6	1	16.6	...	...	...	...	...	...
	2000	7	2	28.5	...	...	...	...	...	...
Papua New Guinea	1950	1 613	11	0.6	–	–	–	–	–	–
	1980	3 082	862	27.9	1	215	–	–	–	–
	2000	5 039	2 915	57.8	1	853	–	–	–	–
Samoa	1950	78	10	12.8	...	...	...	...	...	...
	1980	194	45	23.2	...	...	...	...	...	...
	2000	345	122	35.3	...	...	...	...	...	...
Solomon Islands	1950	104	1	0.9	...	...	...	...	...	...
	1980	216	50	23.1	...	...	...	...	...	...
	2000	369	182	49.3	...	...	...	...	...	...
Tonga	1950	46	6	13.0	...	...	...	...	...	...
	1980	119	38	31.9	...	...	...	...	...	...
	2000	212	102	48.1	...	...	...	...	...	...
Trust Territory of the Pacific Islands	1950	57	10	17.5	...	...	...	..	...	...
	1980	135	75	55.5	...	...	...	...	...	...
	2000	218	157	72.0	...	...	...	...	...	...
Vanuatu	1950	...	...	...	...	...	...	...	...	...
	1980	...	...	...	...	...	...	...	...	...
	2000	...	...	...	...	...	...	...	...	...

Source: Patterns of Urban and Rural Population Growth (United Nations publication, Sales No. E. 79.XIII.9).

[a] The provisional result of the 1981 census in India was 683,810,051 total population, of which 23.7 per cent was registered in urban areas.

3.3 THE ROLE OF MEDIUM SIZE CITIES IN THE URBANIZATION PROCESS

by

Ashish Bose*

New issues

The last decade has witnessed significant improvements in the state of knowledge on the urbanization process in the Asian and Pacific countries. The data base has been strengthened and with the exception of only a few countries, all the countries in the ESCAP region would have completed the population census by 1983.[1] Improved tabulation schemes and the increasing use of electronic computers have facilitated a more detailed analysis of the urbanization process than was possible in earlier censuses.[2] Another significant development has been an increasing concern for policy issues in the field of population distribution, and in particular, policies aimed at a more balanced pattern of urbanization.

The 1974 World Population Conference and the Plan of Action adopted at that conference paid particular attention to the role of population distribution policies in development planning. Subsequent seminars and conferences have focussed attention on the wide range of policies (direct as well as indirect) adopted by various governments to influence not only the urbanization process but the whole gamut of human settlements, in order to improve the quality of life of the people.[3] These deliberations have contributed to a better conceptualization of the issues involved, and also led to a better understanding of the problems of implementation of such policies in the light of several evaluation studies.[4]

In spite of these positive developments, it cannot be said that the urbanization process is occurring smoothly. The last decade has witnessed several disquieting features such as the explosive growth of metropolitan areas, increasing environmental degradation, intolerable strains on the urban infrastructure and the adverse impact of the post-1973 energy crisis. The gap between policy formulation and their actual implementation and the comparative lack of success stories should be a cause for concern to planners and policy makers, especially in the developing countries of the ESCAP region.

The object of this paper is to highlight some critical issues with special reference to the role of medium size cities. For obvious reasons, it is not possible to generalize on the region as a whole. Our focus will be on countries which are undergoing urbanization under conditions of rapid population growth and surplus labour in agriculture (such as Bangladesh, India and Pakistan). It must also be stated at the outset that an understanding of the role of medium size cities in the urbanization process calls for an equally good understanding of the role of the urbanization process itself in the overall process of development planning, and even more

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[1] Economic and Social Commission for Asia and the Pacific, *Asian and Pacific Population Programme News*, vol. 10, No. 4, 1981, p. 9.

[2] See for example, United Nations, *Patterns of Urban and Rural Population Growth* (New York, Sales No. E.79. XIII.9, 1979).

[3] See for example, United Nations, *Population Distribution Policies in Development Planning* (New York, Sales No. E.81.XIII.5, 1981).

[4] See for example, Niles Hensen. "A review and evaluation of attempts to direct migrants to smaller and intermediate size cities", in *Population Distribution Policies in Development Planning, op. cit.*, pp. 113-127. Koichi Mera, "Population concentration and regional income disparities: a comparative analysis of Japan and Korea" in M. Niles Hensen, Ed., *Human Settlements System: International Perspective on Structure, Change and Public Policy* (Cambridge, Ballinger Publishing Co., 1978), pp. 155-174. Ashish Bose, "Rural development, dispersal of industries and population re-distribution: policies and experiences" in *Population Debate: Dimensions and Perspectives*, vol. 2, (Sales No. E/F/S.75.XIII.5), pp. 151-159. See also, Ashish Bose, *India's Urbanization, 1901-2001* (New Delhi, Tata McGraw Hill, 1980), pp. 257-331.

importantly, the historical phase of economic and social development of the country concerned. Policy prescriptions of general applicability should therefore be ruled out. In this context, we shall take due note of the deliberations of the recent Expert Group Meeting on the Role of Small and Intermediate-size Cities in National Development convened by the United Nations Centre for Regional Development at Nagoya.[5] The feed-back from this meeting should help the deliberations of the Third Asian and Pacific Population Conference in assessing the role of medium size cities in several Asian countries.

Policy perspectives

There is a growing volume of literature on the city bias and the neglect of rural areas in the economic development programmes of many developing countries. For example, Michael P. Todaro, a well-known international migration expert, poses the urban dilemma in developing countries as follows:

> If the country side does not prosper, the migrant flow will continue and the cities will deteriorate. This is the paradox of the urban dilemma in developing countries: to help the cities, development must be focussed on the rural areas.[6]

This view can be questioned. The crucial issue is not one of helping cities through rural development but of helping the transformation of traditional agricultural economies in developing countries. It is also not enough to say that there are important functional linkages between the cities and the countryside, linkages which should reinforce each other. It is the basic thrust of the development strategy that matters.

Interestingly enough, Mahatma Gandhi, who was by no means an urban expert, expressed his grave misgivings about the urbanization process in India several decades back. To quote him:

> "The blood of the village is the cement with which the edifice of the cities is built. I want the blood that is inflating the arteries of the cities to run once again in the blood-vessels of the villages; I do not want to depopulate the cities and send the city folk back to the villages. All I want is that they should readjust their lives so as to cease to sponge upon the poor village folk and make to the latter what reparation is possible, even at this late hour, by helping to resuscitate their ruined economy."[7]

At the Nagoya Meeting on the Role of Small and Intermediate Cities which we have referred to earlier, P.B. Desai put the crux of the matter as follows:

> "The expansion of urban functions has to serve the dual purpose of servicing agricultural progress and of absorbing the existing and potential labour surplus occasioned both by the progress of agriculture and the possible continuation of high rates of natural increase. The urban policy must then be tailored to the need of distributing the enlarging and multiplying urban functions over space; of devising a geographical pattern of urban settlements as well as of influencing their pattern of distribution according to population size."[8]

Another policy issue concerns the relative role of efficiency and equity. Commenting on the urbanization process in the Philippines, Ernesto M. Pernia observes:

> "It is clear that the problem to be coped with now in the Philippines (and most likely in other developing Asian countries as well) is not rapid urbanization but unbalanced urbanization. The phenomenon of primacy – whereby urbanization is concentrated in metropolitan Manila – must be understood as the cumulative consequence of historical, demographic, and economic trends, engendered by the long tradition of interest in the metropolis and neglect elsewhere, as well as the supremacy long given to efficiency over equity. A desire to "nationalize" urbanization by spreading it to the other regions

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[5] United Nations Centre for Regional Development. *Expert Group Meeting on the Role of Small and Intermediate-sized Cities in National Development*, Report of the meeting held at Nagoya, Japan, 26 January to 1 February 1982.

[6] Michale P. Todaro. *City Bias and Rural Neglect: The Dilemma of Urban Development.* (New York, The Population Council, 1981), p.x.

[7] Quoted by B.N. Ganguli in *Gandhi's Social Philosophy* (Delhi, Vikas Publishing House, 1973), p. 187.

[8] P.B.Desai, "The pace and pattern of urbanization in the context of development in Asia", Background paper for United Nations, Expert Group Meeting, Nagoya *op. cit.*, p. 45.

would, therefore, entail a basic redefinition of the usual concepts, interests, and priorities."[9]

To sum up, the role and functions of medium size cities in the development process should be visualized in the following context: (a) the overall rate of population growth and, in particular, the impact of natural increase in population; (b) the urgency of promoting rural transformation, keeping in mind the problem of surplus labour in agriculture; (c) the goal of attaining a more balanced hierarchy of urban settlements; (d) counteracting the excessive migration to the metropolitan areas; and (e) as a planning tool for population redistribution in the regional and sub-regional setting.

Conventionally, the planning and development of medium size cities is left to urban planners and policy makers who tend to take a rather restricted view of the problem in terms of development of infrastructure, regulation of land use patterns and similar legislative measures. But as we have already indicated, the success of such measures is bound to be limited in the developing countries of Asia in view of the basic demographic-economic constraints, namely, rapid population growth and surplus agricultural labour.

In table 1 we give the absolute urban population and the percentage of the urban population to the total population in 12 countries of the ESCAP region, with an estimated urban population of 10 million or more in 1980. We have also given the United Nations projections for 1990 and 2000. It will be seen that barring Japan, Democratic People's Republic of Korea, Republic of Korea and Iran, the major Asian countries would continue to be predominantly rural even in the year 2000. The medium cities, therefore, have an important role in promoting rural transformation in these countries and not merely in achieving a more balanced urban hierarchy.

[9] Ernesto M. Pernia, *Urbanization in the Philippines: Historical and Comparative Perspectives.* East-West Population Institute Paper No. 40, (Honolulu), November, 1976, pp. 28-29.

Table 1. Scale and level of urbanization in selected Asian countries, 1980-2000

Country	Estimated urban population (millions)			Percentage urban		
	1980	1990	2000	1980	1990	2000
China	231	320	443	25.4	31.1	38.6
India	155	236	361	22.3	26.9	34.1
Japan	92	105	114	78.2	82.9	85.9
Indonesia	31	49	77	20.2	25.2	32.3
Pakistan	23	38	60	28.2	33.6	41.1
Republic of Korea	21	30	38	54.8	65.2	71.4
Iran	19	30	43	49.9	58.1	64.8
Philippines	19	29	44	36.2	41.6	49.0
Viet Nam	11	18	28	22.8	28.8	36.4
Democratic People's Republic of Korea	11	15	20	59.7	67.4	72.9
Burma	10	15	22	27.2	33.2	40.9
Bangladesh	10	18	32	11.2	16.1	22.2

Source: Compiled from United Nations, *Pattern of Urban and Rural Population Growth* (New York, Sales No. E.79. XIII.9, 1979), pp. 135-162.

Note: The countries are arranged in order of their estimated urban population in 1980.

Relevance of size

While considering the urbanization process, it is necessary to consider both the absolute size of the urban population (the scale) and the proportion of the urban population to the total population (the level). The next step would be to consider the distribution of the urban population into different size categories. The role of primate cities is brought out by calculating the index of primacy. For our purpose, however, it is more important to get data on the distribution of medium and small cities rather than the large metropolitan areas and primate cities. Each country has its own definition of "urban areas" and its own classification of urban population into size categories and it is neither possible nor necessary to arrive at a standard definition of a medium city for the countries in the ESCAP region. Nevertheless, it is important to decide at the outset as to what constitutes a medium city in the specific country or group of countries concerned.

In India, it has been a census tradition for the last one hundred years to classify the urban population into the following size categories: I. 100,000 and over; II. 50,000 to 100,000; III. 20,000 to 50,000; IV. 10,000 to 20,000; V. 5,000 to 10,000; and VI. Below 5,000. The urban areas in class I are designated as "cities" while the urban areas belonging to the remaining categories are called "towns". The perception of the medium size town is generally in terms of the size categories ranging from 20,000 to 100,000. For example, India's Sixth Five Year Plan (1980-85) makes a special allocation for the Development of small and medium towns under a new centrally sponsored scheme. Under this scheme, "small and medium towns with a population of less than 100,000 are eligible to receive assistance from the Centre, provided matching contributions are forthcoming from the State governments and implementing agencies."[10] Initially, 200 such towns have been selected for the development of infrastructure.

It may be noted in passing here that a Task Force on Planning and Development of Small and Medium Towns and Cities appointed by the Government of India in 1975 had, in its report, concentrated on the cities and towns in the size category of 50,000 to 300,000.[11]

The size of a medium city should obviously have a relation with the total population as well as the total urban population of the country concerned, apart from the geographical area involved. It is our contention that the Indian census classification of urban areas needs to be modified in view of the scale and level of urbanization in India, especially in the last four decades. We suggest the following classification:

Class I cities	: (a) population :	1 million and over
	(b)	500,000 to 1,000,000
	(c)	200,000 to 500,000
Class II cities/towns	: 50,000 to 200,000	
Class III towns	: 20,000 to 50,000	
Class IV towns (semi-urban area)	: below 20,000	

Table 2 presents the data on the size distribution of the urban population based on the 1981 Census of India, both according to classification and the usual census classification. We shall designate class II cities/towns as medium cities, and towns with population below 20,000 as semi-urban areas in the India context.

It may be mentioned here that the censuses of Pakistan and Bangladesh have adopted the same classification as in the Indian census with very minor modifications (e.g. their urban class III covers a population of 25,000 to 50,000 instead of 20,000 to 50,000 adopted in the Indian census).[12]

In China, cities have been classified as follows in a recent official paper:[13]

> Large cities: 500,000 and more
> Intermediate cities: 200,000 to 500,000
> Small cities (including market towns): less than 200,000.

China and India have urban populations comparable to those of highly urbanized and industrialized countries outside the ESCAP region, in spite of their low level of urbanization and the high proportion of the labour force engaged in agricultural activities. The medium cities, therefore, assume a much greater importance than in the developed countries because of the positive role such cities

[10] Government of India, Planning Commission, *Sixth Five Year Plan 1980-85* (New Delhi, 1981), p. 396.

[11] Government of India, Ministry of Works and Housing, *Report of the Task Force on Planning and Development of Small and Medium Towns and Cities* (in 2 volumes) (New Delhi, 1977).

[12] Rafiqul Huda Chaudhury, *Urbanization in Bangladesh* (Dacca, University of Dacca, 1980), pp. 10-12.

[13] United Nations, *Report of the Export Group Meeting*, Nagoya, *op. cit.*, p. 18.

Table 2. Distribution of urban areas by size of town in India, 1981

Size groups	1981 Census classification			Size	Our classification		
	Number of towns	Population (millions)	Percentage of urban population		Number of towns	Population (millions)	Percentage of urban population
I. 100,000 and over	216	94.3	60.37	I. (a) 1,000,000 and over	12	42.0	26.92
II. 50,000 to 99,999	270	18.2	11.65	(b) 500,000 to 1,000,000	28	18.2	11.64
III. 20,000 to 49,999	739	22.4	14.35	(c) 200,000 to 500,000	62	18.6	11.88
IV. 10,000 to 19,999	1 048	14.9	9.51	II. 50,000 to 200,000	384	33.7	21.58
V. 5,000 to 9,999	742	5.6	3.62	III. 20,000 to 50,000	739	22.4	14.35
VI. Below 5,000	230	0.8	0.50	IV. Below 20,000 (semi-urban)	2 020	21.3	13.63
Total urban	3 245	156.2	100.00	Total urban	3 245	156.2	100.00

Source: Computed from the Census of India 1981, Series-I-India, Paper No. 2 of 1981, *Provisional Population Totals: Rural-Urban Distribution* (New Delhi), pp. 47-71.

Note: The table excludes data for towns in Assam and Jammu and Kashmir.

are expected to play both in rural and metropolitan development. This is largely true also of the smaller developing countries in the ESCAP region. In Thailand and the Philippines, the primate cities of Bangkok and Manila pose very difficult problems and the main role of medium cities is visualized as countermagnets to the explosive growth of the primate cities. In small island countries also, the capital city tends to dominate the urbanization process (e.g. Suva in Fiji). The small size of a country, coupled with a good transportation network, tends to reduce the pressure of migration to the cities and instead generate mobility (e.g. Sri Lanka).

Economic function and growth rates

Our concern for size should not lead to an over-simplification of issues. Both from the analytical and policy angles, much more than the city size, but also factors like location of the city, its economic function, its linkage both with the metopolitan cities and the rural hinterland, the availability of infrastructure and energy constraints are important. The usual demographic analysis of population growth rates in terms of urban categories and the relative rates of growth of large, medium and small cities is not particularly helpful in assessing the role of medium cities from the point of view of development planning. There are also statistical hazards in calculating growth rates by population size categories of towns as presented in the national censuses, unless detailed calculations are made for the upward and downward mobility of towns, the emergence of new towns, the declassification of towns, the merger of towns, etc.

In the ultimate analysis, each individual city or town should be considered as the unit of observation, in the context of the area or region of its influence (urban field), for drawing meaningful conclusions, and one should not get lost in the maze of aggregate data.

Japan and the Republic of Korea are two major industrialized countries in the region. In considering the role of medium cities in the urbanization process, it is important to analyze the impact of regional income disparities. Koichi Mera points out that "economic growth and regional income disparity tend to intensify population concentration during the initial phase of development but during the second phase, the trend for greater population concentration will be substantially reduced or even reversed as regional income disparity diminishes. Therefore, the problem of population concentration is a temporary problem for developing countries."[14] The temporariness of the problem would, however, depend on the historical situation. Mera observes that in the Republic of Korea, the reduction in population concentration was faster than in Japan. He commends the use of pricing policies in favour of the farmers as an important factor in reducing the time gap. According to him, "The Korean experience is particularly encouraging for currently developing countries because of the success in reversing worsening trends at a fairly early stage of development."[15]

Mera in his analysis has considered the importance of "the change in value orientation from economic affluence toward environmental amenities"[16] in explaining the lower rates of population concentration in recent years in the largest metropolitan regions of Japan.

In a more recent contribution on the Japanese situation, Jinichiro Yabuta discusses the limitations of the application of the economic base theory. He observes: "Thus development strategies using economic base theory have not contributed much to attaining a new population distribution pattern, desirable from the viewpoint of reducing over-concentration of population in metropolitan areas on the one hand and revitalising depopulating rural settlements on the other . . ."[17] Yabuta finds a close relationship between service activity and urban growth. On the basis of his analysis of 70 medium cities in the Chubu region of Japan, he concludes that "larger the population of the city, the more self-sustained and stable is its growth, while the population change of smaller cities is directly affected by locational conditions and changes in industrial structure."[18] He also finds that "the stability of the population growth rate of cities can be explained by both city size and service employment level, but service employment is a stronger determinant of such stability."[19]

In the absence of detailed socio-economic and demographic data on medium cities in most countries of the region, there are very few in depth

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[14] Koichi Mera, "Population concentration and regional income disparities", *op. cit.*, p. 156

[15] *Ibid.*, p. 174.

[16] *Ibid.*, p. 174.

[17] Jinichiro Yabuta, "Service employment and population growth in Japan", *Habitat International* (Oxford), vol. 5, No. 5/6, 1980), p. 699.

[18] *Ibid.*, p. 701.

[19] *Ibid.*, p. 707.

studies on the role of such cities in development planning. Reference may be made here to a series of pioneering studies on the functional classification of cities and the industrial structure of cities based on Indian data by Asok Mitra.[20] In his most recent contribution Asok Mitra observes that:

> "The biggest problem in my opinion facing urban India today is not so much urban planning or management of land in metropolitan development, as restoring and improving infrastructure or regional networks of metropolitan cities and their supporting nexuses of medium cities and smaller ones, with particular attention to their respective economic and natural resource bases . . . It is quite plain that unless the rapidly growing smaller cities are assisted to thrive on the support of their regional networks of towns, the onward march of agricultural production and rural prosperity itself will soon grievously slow down."[21]

Appraisal of policies and programmes

Space does not permit us to review case studies of different countries in the ESCAP region. We are more concerned with critical issues. We have already referred to the recent experience of Japan and the Republic of Korea, two highly developed countries in the region. Among the developing countries, the Chinese and Indian cases are unique in their own way.

At the recent Nagoya meeting already referred to, the Chinese experience received considerable attention. It was felt that in China "a reasonable measure of success was achieved in containing the primacy of large metropolises and in imparting a meaningful role to intermediate-size cities, both in industrialization and agricultural progress.[22] It is important to note in this connection that the comparative success of the Chinese policy was due to a series of measures in other sectors, in particular, the success of policies in regard to fertility control and regulation of internal migration, heavy investment in the transport sector, energy development and strong organizational vertical linkages. Nevertheless, it was conceded in the official Chinese paper that though policies and measures for the development of small size cities were visualized in 1960, "a great variety of factors had come in the way of their vigorous pursuit . . . and the unsatisfactory progress of such measures was reviewed in 1980 and a comprehensive guideline was laid down for urban development. . . three elements were specified as follows: strict control of the size of large cities, rational development of intermediate-size cities and active development of small-size cities."[23] The guidelines also emphasized the need for vigorous development of the existing market towns, new economic construction in small size cities and building satellite towns with a population of 100,000 to 200,000.

No easy generalizations about the Indian experience are possible because of the great diversity in the demographic, economic and social situation in India. Elsewhere[24] we have given a critical appraisal of the evolution of urban policy in India since 1947 when India attained independence. The experience of Maharashtra, the most highly industrial and urban state in India is relevant in this connection. In a detailed case study of the industrial dispersal policies in this state, M.D. Godbole concludes:

> The experience of Maharashtra in this field is indeed rich and varied. . . (It) further underlines the limitations of relying only on provision of financial incentives and physical infrastructure facilities for achieving the objective of industrial dispersal. Unless the negative policy of serverely controlling the growth of industrial and commercial activities in the developed parts of the state is pursued vigorously, the balanced regional development of the state as a whole may remain an elusive goal."[25]

Our preliminary analysis of the 1981 census data on Indian cities indicates that the package of incentives and disincentives introduced by the Maharashtra Government for the dispersal of

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[20] Asok Mitra *et al., Indian Cities, their Industrial Structure, Immigration and Capital Investment* (New Delhi, ICSSR, 1980); *Functional Classification of India's Urban Areas by Factor Cluster Method 1961-71* (New Delhi, ICSSR, 1981); *Shifts in the Functions of Cities and Towns of India, 1961-71* (New Delhi, ICSSR, 1981).

[21] Asok Mitra, Keynote address to Seminar on *Land in Metropolitan Development* (Calcutta, The Times Research Foundation, 17-18 April, 1982) pp. 9-10 (mimeo.).

[22] United Nations, *Expert Group Meeting, Nagoya, op. cit.*, pp. 30-31.

[23] *Ibid.*, p. 19.

[24] Ashish Bose, "Evolution of urban policy in India, 1947-78" in C.H.H. Rao and P.C. Joshi, eds., *Reflections on Economic Development and Social Change* (New Delhi, Allied Publishers, 1979), pp. 339-360. Also, Ashish Bose, "Demographic trends: the census of 1981", *Urban India* (New Delhi), vol. I, No. 1, September 1981, pp. 3-8.

[25] M.D. Godbole, *Industrial Dispersal Policies* (Bombay, Himalaya Publishing House, 1978), p. 233.

Table 3. Growth rate in selected cities of Maharashtra, India.

City	Population in 1981 (thousands)	Dacade growth rates (per cent)	
		1961-1971	1971-1981
Greater Bombay	8 227	43.8	37.8
Nagpur	1 297	34.8	39.5
Nasik	428	26.0	57.8
Aurangabad	316	69.1	91.4
Ballarpur	61	68.4	79.1

Source: *Census of India 1981*, Series I, India, Paper No. 2 of 1981.

industries, did have an impact in slowing down the growth rate of Greater Bombay and generating higher growth rates in smaller cities like Nagpur, Nasik and Aurangabad.

In this context, the role of public sector investments is of crucial importance. Our analysis of urbanization in India during the 1971-1981 decade indicates that it is not the size of the city which has influenced the urban growth rates but the investment pattern, especially in the public sector, and the transportation network. A few illustrative examples are given in table 4.

We have also observed that medium and small towns in the agriculturally prosperous areas of Punjab, Haryana and Western Uttar Pradesh have grown very rapidly during the last decade. An important contributory factor in the transportation network.

Rafiqul Huda Chaudhury observes that in Bangladesh, there is a disproportionate location of industries in Dacca and the adjoining Narayanganj city which comprise 31 per cent of the total urban population in 1974. The district of Dacca "accounts for 40 per cent of all the major industries in the public sector in Bangladesh."[26]

Summary and conclusion

Round the world, there are very few shining examples of successful implementation of policies and programmes which, in fact, resulted in effectively curbing migration to the large cities and bringing about a more balanced pattern of urban settlement. But this should not deter planners and policy-makers from a relentless effort to find more effective methods of tackling the problem. Our

[26] Rafiqul Huda Chaudhury, *op. cit.*, pp. 7-8.

Table 4. Growth of Indian cities where large investments have taken place in the public sector

City	Population in 1981 (thousands)	Decade growth rates (percentage)	
		1961-1971	1971-1981
Bangalore (public and private sector industries)	2 914	37.8	76.2
Surat (mostly private and co-operative sector industries)	913	55.3	85.1
Vadodara (public and private sector industries)	744	50.9	59.2
Ranchi (public sector industries)	501	82.2	95.9
Durg-Bhilainagar (steel city, public sector)	490	84.0	100.0
Rourkela (steel city, public sector)	321	91.1	86.3
Bokaro (steel city, public sector)	261	–	143.8

Source: *Census of India 1981, op. cit.*

discussion on some new and critical issues in this context can be summarized as follows:

(1) The role and function of medium cities should be visualized in the wider context of development planning and a more balanced pattern of all human settlements, rather than in the narrow context of the urbanization process *per se*.

(2) While the size of the city is relevant in fixing priorities in regard to allocation of resources for infrastructure development and related matters, the more important variables are the economic function of the city, the location of the city, its linkages with the rural hinterland as well as with the metropolitan areas, the transportation network, the existing infrastructure, energy constraints and environmental factors.

(3) While considering these factors, it is important to keep in mind the stage of economic and social development of the country concerned and also the overall demographic situation. For example, in a developed country like Japan, environmental factors are playing an increasingly important role in influencing population redistribution. In countries like India, Pakistan and Bangladesh, the high fertility rates and the rapid increase in population, coupled with surplus labour in agriculture, underline the importance of demographic factors. It must be noted, however, that though fertility control will eventually reduce the pressure of rural to urban migration, the more immediate and direct impact is that of the growth of the labour force. It follows, therefore, that the mere extension of the urban infrastructure in medium cities, like housing, water supply, etc. will only mean increasing state subsidies unless the economic base of the city is strengthened by generating employment and higher income levels.

(4) In several developing countries, the key variable which affects the urbanization process and the urban hierarchy is the pattern of investment in the public sector and the location of public sector undertakings. The private sector generally follows the footsteps of the public sector. It is possible to evolve a more balanced pattern of human settlement if decisions in regard to location of public sector industries, etc. are taken on the basis of technical considerations alone and a package of incentives and disincentives are offered to the private sector.

(5) In most countries of the ESCAP region, even in the year 2000, the population would be predominantly rural. The role of medium cities should be envisaged in terms of their contribution to the promotion of the transformation of traditional agricultural economies into modern agricultural and industrial economies. Agricultural prosperity will make increasing demands on such cities.

(6) The population censuses in the 1980s in almost all countries of the region should pay greater attention to more intensive tabulation of data for medium and small towns. At present, the literature and the data base are heavily loaded in favour of million-plus cities and cities with population of 100,000 and more. We have suggested, by way of example, modifications in the conventional Indian census practice of classifying urban areas in population size categories. In regard to research gaps in our knowledge and understanding of the role of medium cities, we suggest three priority areas of research: (a) the economic base of such cities; (b) the impact of the energy crisis on transportation, land values, house rents, etc. in the overall context of urbanization; and (c) the impact of environmental factors.

(7) From the point of view of an action plan, we recommend that more emphasis should be put on the findings of task forces appointed to conduct in depth studies on medium cities in selected regions and subregions of each country. The detailed recommendations of such task forces would perhaps be of greater value than general policy pronouncements. The successful implementation of such recommendations would, of course, depend on the efficiency of the planning process itself, and, in particular, on the innovations in urban administration at the local level and the involvement of the people in their own quality of life issues.

Topic 4.

SPATIAL MOBILITY, INCLUDING REDISTRIBUTION PROGRAMMES, OTHER INTERNAL MIGRATION AND INTERNATIONAL MIGRATION

4.1 WORKING PAPER

by

Toshio Kuroda*

Introduction

Among the demographic processes considered to be closely related with development, the spatial distribution of population has been a major concern of many governmental policies, especially in the developing countries.[1] Migratory movement greatly affecting the geographical distribution of the population, and also causing rapid urbanization, has attracted the attention of policy-makers. However, in spite of increasing studies and surveys aimed at determining migration mechanisms, it is extremely difficult to derive any general theory or principles from those studies and surveys applicable for the implementation of policies. There are many difficulties: lack of sufficient data, data collection problems, and non-comparability among countries. Moreover, it should be mentioned that migration patterns tend to be quite diverse from country to country, depending on social, cultural and economic factors and also the political system. Even in the same country migration pattern changes,[2] including volume, directions of flow, and reasons for moving.

In view of the close relationship between economic and social development and migration and distribution of population in this region, relevant issues and prospects will be highlighted.

Implications of the migratory movement

An adequate understanding of the migration processes is needed for a social and economic development policy and also human resource planning. In this context demographic, economic and social implications are to be considered.

Demographic implications

It is clearly evident that migratory movement of population affects: (a) size and sex-age composition of population, and (b) vital rates such as crude birth rate and crude death rate. The extent of these demographic effects, of course, depends upon the intensity of mobility. If the migration volume is small and temporary, the expected effects are negligible in both areas of origin and destination.

Japan is a good example in this regard. It is very common that the urban pattern of natural increase rate is lower than that of the rural areas mainly due to the higher birth rate in the latter. However, if a tremendous population shift between rural and urban areas takes place, the birth rate begins to rise in the urban area, and to decline in the rural area with a short time lag after the commencement of heavy migratory movement because the majority of migrants are usually young people who are just married or likely to marry soon. The mortality differential by age is also another factor which possibly affects the death rates between urban and rural areas due to a rapid increase of the young population in the urban areas, and a substantial loss of young population in the rural areas which are characterized by a very low mortality rate. Thus, a substantial population shift brought about a reversal of the natural increase rate in urban and rural areas. For example, the crude birth rates in highly urbanized prefectures like Tokyo and Kanagawa, absorbing enormous inmigrants in the 1960s in particular, rose by 20 per cent in 1970, and on the other hand, they fell by around 14 per cent in rural prefectures like Shimane

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[1] United Nations, World Population Situation in 1981, Report of the Secretary-General (New York, Economic and Social Council, 1981).

[2] Toshio Kuroda, *Nihon Jinko no Tenkan Kozo* (Transitional Structure of Population of Japan), (Tokyo, Kokon Shoin, 1981), (enlarged edition) and "The role of migration and population distribution in Japan's demographic transition", paper of the East-West Population Institute, No. 46, 1977.

and Tottori whose crude birth rates were higher than those of urban prefectures previously.[3]

It should be pointed out that a drastic change of age composition of the sub-areas is not only a basic factor affecting the future population trends, but also has a direct influence upon economic development and social change. There are about 400 small administrative units (called towns or villages, about 12 per cent of the total administrative units in Japan) which show a negative natural increase in 1977.[4] Since such a minus natural increase is caused by excessive out-migration, their population increase rates tend to be minus.

Economic implications

There seems to be a strong argument to explain migration in economic terms. Migratory behaviour is an individual's response to improve his economic standing in the micro sense. Migration is interpreted as an adjustment of population to economic and social change in the macro sense. Of course, needless to say, the economic implications of migration are quite different among areas of origin and destination, and also depend greatly on the scale of migration, migration selectivity, and migration type–family or alone.

In the case of Japan, heavy migration between rural and urban areas has brought about serious economic and social problems in both areas of origin and destination. Rural areas lost a large percentage of the young adult population, suffering from a shortage of the young labour force needed to maintain productive activity and community level activities. However, large metropolitan areas, which are extremely urbanized, are also facing many serious problems created by a tremendous influx and accumulation of population and industries: environmental deterioration with air pollution, water contamination , noise pollution, and housing problems such as congestion. There are also several external diseconomies impeding the new location and expansion of industries.

However, in general, rural to urban migration tends to alleviate unemployment and underemployment in the rural sector by siphoning out surplus work force to the urban areas. Out-migration may not have a detrimental impact on village production because the marginal productivity of labour is zero or close to zero in many cases in most developing countries.[5] Through the process of migratory movement, income equalization sets in between urban and rural areas. The remittance of some urban salary of the migrants to their villages of origin and the same amount of productivity shared by fewer people after out-migration may be able to reduce income disparities between urban and rural areas.

It has been argued that the regional economic disparities are basic factors to induce migratory movement of population.[6] If so, the reduction of regional economic disparity in terms of income distribution may lead to a slowing down of rural-urban migration, and also may induce a return or circular migration response. In this regard some evidence is observed in Bangladesh and India.[7] It may be interesting to show Japan's experience in this context, which appears to be quite different from other countries in terms of economic development and social and cultural variables. Regional economic disparity expressed in terms of personal income per capita by prefecture was used, and the coefficient of variation (ratio of standard deviation to the mean) was computed.[8] The coefficient of variation was maintained at a high level of 20 up to the middle of the 1960s when there was a tremendous influx of population into the large metropolitan areas from the rest of the country. However,

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[3] Toshio Kuroda, *Chiki Jinko Hendo no Yoin ni Kansuru Bunseki – Shichoson Betsu Shizensoka no Hendo (I)* – (An Analysis Concerning Factors Affecting Local Population Change), Working Data No. 1 (Tokyo, Nihon University, 1980).

[4] G.J. Hugo, *Implications of the Imbalance in Age and Sex Composition of Sub-areas as a Consequence of Migration: The Case of a Rural Developing Nation – Indonesia.* Prepared for Formal Session F. 15 on Implications of the Imbalance in Age and Sex Composition of Subareas as a Consequence of Migration, XIX General Conference of the International Union for the Scientific Study of Population, Manila, 9-16 December 1981.

[5] M. Tachi, "Regional income disparity and internal migration of population in Japan," *Economic Development and Cultural Change*, vol. 12, No. 2, January 1964.

[6] Fu-Chen Lo and K. Salih, Structural Change and Urbanization in Asia, 1960-1980: Implications for Urban Policy and Development, prepared for Conference on Urbanization and National Development, Honolulu, East-West Center, 25-29 January 1982.

[7] K. Mera, National Spatial Policies and Urban Development: Lessons from the Japanese Experience. Presented at the Urbanization and National Development Conference, Honolulu, East-West Center, 25-29 January 1982.

[8] S. Uchino, *Saikin no Kohunai Jinko Ido Doko* (Recent Trends of Internal Migration in Japan), *Tokyo*, vol. 31, No. 3, March 1980.

the coefficient of variation of personal income per capita by prefecture started to decline rapidly: 15 in 1970, 11 in 1975, and finally 10 in 1976, corresponding to a quick declining trend of net in-migration in the large metropolitan areas. It is striking that the year 1976 showed the lowest coefficient of variation and was exactly the year when the net migration in the three large metropolitan areas combined together made a reversal from positive to negative for the first time.[9] The reversal from a large net in-migration to a net out-migration was caused by a continuous increasing out-migration, finally outstripping in-migration which had showed a decreasing tendency since around 1970. Many of these return migrants (called "U" turn) were included among the out-migrants who were mostly young adults aged 25 to 34. Regional economic disparity may not be the one and only factor to induce migration, but still its importance cannot be ignored.

One of the important impacts of age-sex selectivity in migration is that upon supply and demand for labour (especially the young labour force), considerably contributing to economic growth in the urban areas receiving young people, and impeding economic development in the rural areas losing them. Of course, economic implications of imbalanced distribution due to migration are quite different in each country. However, it may be interesting to note that a lack of young people was commonly felt in terms of difficulties of providing *gotong royong* labour for village improvement in Indonesia,[10] and difficulties in providing community services such as fire fighting, helping natural disasters and other communal activities in heavily depopulated villages in Japan.

Social implications

It is clear that the social life in both areas of origin and destination suffers due to migration selectivity especially in the case of heavy migration. It is widely known that the majority of migrants tend to be young adults not only in this region, but also throughout the world. Simultaneously, attention should be paid to differential mobility by sex. For example, the sex ratios of migrants (males per 100 females) are very high in Indonesia (124) and Pakistan (122), in comparison with the Philippines (92) and the Republic of Korea (93) where the sex-ratios are very low.[11] In any way, the imbalanced distribution of the sex-age composition induced by a heavy migratory movement, a "waist" population pyramid in the areas of origin and a "bulge" population pyramid in the areas of destination, may produce social change in a sociological sense. The social relations of production may be altered. For example, women in the rural areas in households where husbands are working in cities temporarily or permanently have come to take on a more important role in household decision-making. However, on the other hand, it is reported that a substantially greater incidence of divorce occurs among households where the husband is temporarily gone, especially where the average duration of the absence is considerable.[12] It may be suggested in general that mobility tends to induce the breaking up of families, even for short periods, which leads to marital instability. More attention has been placed on negative social effects induced by mobility, but positive aspects of migration should not be overlooked. Some of them were touched on briefly earlier.

Another important selectivity of migrants is education. It is almost universally known that migrants tend to have higher educational levels than non-migrants. More enterprising or innovative members of the sending community are included among migrants. The exodus of these poeple can be beneficial to both rural and urban areas, because they may be able to contribute to economic development in the urban areas, and also to alleviate the population pressure on land in the rural areas. However, this is not necessarily the case. If the out-migration of higher educated people is severe, it will be disadvantageous for development in a rural community. It is often observed that a heavy concentration of highly educated population is found in large metropolitan area even with unemployment among the educated. Much attention should be paid to more equal distribution of higher educated people from the standpoint of regionally balanced development within the country.

Determinants of migration

Why people move and what is the motivation for migration have been a major concern for students of population and policy makers concerned with

[9] G.J. Hugo, *op. cit.*

[10] ESCAP, "Internal migration in the countries of the ESCAP region". Third Asian and Pacific Population Conference, 20-29 September 1982.

[11] Hugo, *op. cit.*, p. 11.

[12] E. Lee, "A theory of migration", *Demography*, vol. 5, 1966.

overall development and regional development. However, due to the greater complexity of migration as compared with the other two components of population change, mortality and fertility, most migration studies have tended to be factual and empirical, avoiding generalizations. We know that not only demographers but also social scientists interested in migration study have made serious efforts to develop generalizations. Among those who have attempted to generalize, the so-called "push-pull" theory may be mentioned. This is a situational approach to the migration theory and widely known and used to explain the causes of migration. In this type of analysis, migration is considered to be "the outcome of the interplay and balance of expulsive forces—and of attractive forces" in the places of origin and destination.[13] In this way, the "push-pull" hypothesis has proved to be a useful device for listing all the factors affecting a given migratory movement. This approach seems to be powerful in explaining many reasons which appear to motivate migration between two places. However, it does not lead to any theory.

Economic reasons have been considered a primary source of motivation for people. Regional economic disparity in terms of income level, industrial activity, and employment opportunity was an effective hypothesis, particularly under rapid economic development. However, in accordance with the reduction of regional economic disparity, non-economic factors also stimulate migration. For example, social reasons, including a worsening environment physically and socially in the extremely urbanized metropolitan areas, are also deemed important. It is presumed that social factors have come to accelerate return migration recently in Japan. Attention should be paid to a constantly changing combination of the relative importance of economic and social factors motivating migration.

Another important point is to make a study of why some migrate and others do not. One reason is that the majority of people do not move. Why they do not move is a key question to answer why some do migrate. In addition, a special survey designed to measure potential movers should be encouraged in view of the importance of migration estimates needed for effective regional development planning.

[13] United Nations, *The Determinants and Consequences of Population Trends*, vol. 1, (New York, Sales No. E.71.XIII.5, 1973), p. 210.

Patterns of migration

It is not easy to discuss in detail all patterns of migration in countries in this region, particularly because underlying conditions affecting migratory movement are quite diversified from country to country, and also it is not practical to do so here.

Only a few noticeable points will be mentioned. Firstly, movement to the largest metropolitan areas is the most significant pattern of population flow in the countries of the ESCAP region. While many small- and medium-size urban areas grew only slowly, the largest cities showed unprecedented growth with increasing expansion into larger metropolitan areas. As a result, Asia contains many of the world's largest cities, even though overall urbanization levels are low in the region. Whether or not the metropolitan cities are too large is a moot question. So-called "overurbanization" in Asian large cities is also a controversial question. However, it is true that many politicians, policy-makers and scholars in Asia perceive political, social, and economic problems resulting from a tremendous inflow and accumulation of population in primate cities or the largest metropolitan areas.

Secondly, it should be noticed that rural-to-rural migration is still the principal pattern of population migration in most of the countries in this region. Also those migrants are dominated by women moving for reasons of marriage. In India, of some 106 million intra-state rural-to-rural lifetime migrants, 78 per cent were women,[14]

Thirdly, movements of a temporary nature should not be ignored, because they are of increasing significance, greater in volume and impact than more permanent movements. Their forms are quite varying from seasonal agricultural labour and other temporary work in cities, to urban commuting.

Fourthly, migration more or less induced and assisted by government policy is another pattern which should be distinguished from other types of migration. The transmigration policy in Indonesia,[15] subsidized migration to Mindanao in the Philippines, and FELDA land settlement schemes in Malaysia are well known.[16] Organized migration into

[14] ESCAP, *loc. cit.*

[15] Ida Bagus Mantra, *Population Problems and Resettlement Program in Indonesia.*

[16] N. Ogawa and K.C. Cheong, *Migration and Development: The Case of Hokkaido and Malaysia's FELDA Scheme*, NUPRI Research Paper Series No. 5, Population Research Institute. (Tokyo, Nihon University, 1981).

Hokkaido for development is an old example in Japan.[17] Even though not necessarily successful so far, the Government's efforts designed to attract migration to desired areas seem to be increasingly important for national and regional development and a balanced distribution of population on land.

Finally, a movement up the urban hierarchy from villages to small towns and then to large towns, and also a movement down is another dimension of migration. This is the sensitive response of people to individual and socio-economic change, which should be captured quickly and translated into policy.

Policies and migration and development

According to the most recent United Nations Monitoring Report (1980), it is confirmed that the governments of developing nations are now more concerned with problems of distribution than of fertility. Of the 30 nations in the Asian and Pacific region, only two – Nauru and Singapore – considered their spatial distribution of population as entirely acceptable. It means that almost all nations perceive the requirement of intervention with varying degrees. Fifteen nations, exactly half of those surveyed, believed their distribution was extremely unacceptable and in need of radical intervention.[18]

A variety of intentions of modifying the flow of migrants has been shown: deceleration or reversal of rural-urban migration trends which are apparently the most common goals, alteration of urban configuration, and redistributiion of rural population through colonization or resettlement schemes.

In order to achieve those goals, a number of explicit policy programmes and instruments have been adopted, which are exemplified as follows:

(a) So-called "closed city" programmes to stop or slow down in-migration, for example, Jakarta and Manila;

(b) Rustication programmes, for example, China;

(c) Programmes of expanding intermediate-size cities and growth poles serving as "countermagnets" to continued economic expansion and population concentration in a few large cities;

(d) Programmes aimed at increasing urban functions through promotion of satellite cities and dormitory towns;

(e) Rural development programmes directed at retention of rural population;

(f) Land colonization programmes designed to shift rural population.

Programmes and measures are taken directly and indirectly. However, they are more often isolated from an overall development plan or subsidiary components of national or regional economic and social development programmes.

Conclusion

The migration phenomenon is complicated, and tends to be "time-bound, culture-bound and descriptive bound."[19] However, it may be right to say at least that it is a social adjustment process of population, responding to economic and social-cultural changes, national or local. It implies that migration is not easily stopped, diverted or reversed without policies and programmes responding to people's aspirations and expectations about location of residence and work, and also without altering the forces that have given rise to current flows.

In this context, planners and policy-makers must become very sensitive to the demographic implications of development policies and more conscious of human resource development through population transfer.

It might be recommended that a package of programmes and measures, seriously taking into account mutual interaction between migration and development and also especially designed on a country-specific basis, should be adopted. For effective implementation of a migration-development policy, a policy-oriented study is urgently needed, because of a serious deficiency of knowledge in this area, and a greater need for intervention in this field in the ESCAP region.

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[17] T. Kuroda, "Introduction and overview", in *Planned Population Distribution for Development: Hokkaido Experience*, (New York, United Nations Fund for Population Activities, 1981).

[18] R.J. Fuchs, *Population Distribution Policies in Asia and the Pacific: Current Status and Future Prospects.* Presented at the Conference on Urbanization and National Development, Honolulu, East-West Population Institute, 25-29 January 1982.

[19] United Nations, *op. cit.*, p. 209.

4.2 INTERNAL MIGRATION IN THE COUNTRIES OF THE ESCAP

by

ESCAP Population Division

Introduction

The purpose of this paper is to provide an overview of population migration in the ESCAP region to highlight the principal patterns, issues and prospects and to suggest linkages between migration and development. Any attempt to build up a regional picture is fraught with difficulties. Data are not available for certain countries and in many cases the existing data cannot be compared because of (a) the different nature of censuses (it is deceptive to compare the results of a *de jure* census with those of a *de facto* census, for example), (b) the various sizes of the geographical units across which one must cross to be defined as a migrant and (c) the actual types of questions asked in the various censuses.[1] Despite these disadvantages, the starting point for any country- or regional-level analysis of migration must be the national population censuses and these will be the principal data sources used in this overview although survey data will be referred to in order to supplement these macro data where available and where appropriate.

A particular difficulty in the ESCAP region is the size and diversity of countries within Asia and the Pacific. The types of migration in the highly urbanized and developed countries of Australia and Japan are very different from those of developing countries such as Nepal or the Philippines and the problems of migration faced by the large countries of south Asia or east Asia are poles apart from those of the small countries of the Pacific. The one common theme throughout the region is that migration is perceived as a problem and governments are concerned over what should be done about existing patterns of population movement and their impact on population distribution. It is almost a truism to say that everyone welcomes a new child whereas few people welcome a new migrant. It has become possible to plan rationally for the number of new births but controlling the number of migrants has proved a particularly intractable problem. The freedom to move is guaranteed under most national constitutions in the countries of the region, but at the same time governments would like to achieve some degree of balance between population distribution and national development. Policy-makers would like to accelerate migration in some directions, to slow it down in others or to channel movement in particular directions. Some governments are concerned that their levels of urbanization are too low and encourage movement to the cities; other countries are faced with problems associated with over concentration of population in one or two large cities and wish to decentralize migration flows. Some governments have ambitious programmes to alter the existing distribution of population, but so far experience has shown that these at best have met with only limited success. This paper attempts to analyse the regional patterns and to identify the main policy-relevant issues in migration in the ESCAP region (Asia and the Pacific). However, the key to a clear understanding of these issues lies in a solid data base and the limitations of the exising data should be borne in mind when interpreting the patterns and trends presented in this paper.

The general patterns of migration

In a brief paper such as this it is not practical to discuss the spatial origin-destination patterns of migration country by country. The maps in the annex provide basic information for certain countries and only passing reference will be made to the country-specific patterns before comparative issues are discussed.

The maps, for reasons of simplicity, show only the principal flows among the larger administrative units in the countries. The basic patterns

[1] The principal types of questions used to define migration refer to "place of birth", "place of previous residence" and "place of residence x years ago"

show migration to the units in which the largest cities are located: to West Bengal, Maharashtra and the union territory of Delhi in India, where are located Calcutta, Bombay and New Delhi; to the Seoul metropolitan area in the Republic of Korea, to Selangor State in Malaysia, where the capital Kuala Lumpur is located; and to Colombo in Sri Lanka. The friction of distance is also clear from the maps with the volume of migrants decreasing with distance from the major cities. These patterns appear to suggest that movement to the largest urban areas is the most important population flow in the countries of the ESCAP region. Certainly, rural-to-urban migration has been the principal concern of policy-makers and the principal focus of research on migration in the countries of Asia and the Pacific in the recent past. However, as will be shown in this paper, this flow is only one type of movement among several and quantitatively is not usually the most important, even if it may still give rise to some of the principal policy concerns for planners in the region. In this paper, the emphasis will be on international comparison and this is best considered through the examination of sectoral movements, that is, movement between and within the urban and rural sectors. Even though the definition of urban varies from country to country, the sectoral flows can give a better idea of the structure of movement within the context of development than the spatial patterns of migration.

The regional pattern of intersectoral flows

In examining the countries for which data are readily available (see table 1) and considering movements to sector of destination irrespective of sector of origin, it can be seen that only the Republic of Korea has been dominated by movement to urban destinations. There, over three quarters of the recent migrants[2] captured by the census moved to an urban destination. At the other end of the spectrum, three countries, India, Sri Lanka and Thailand, were dominated by movement to rural destinations. Recent migration in the other countries appeared to be more finely balanced, with between 40 and 50 per cent of migrants moving to either urban or rural areas.

If the case of the Republic of Korea is examined in more detail, it can be seen that although rural-to-urban migration was the more important flow it was only marginally so (see table 2). About 45 per cent of migrants to urban destinations came from other urban areas. This implies that a system of stage and step migration[3] may be occurring with people moving from rural areas to towns; this is followed by a population relocation within the urban sector. Much of the recent movement captured by the census in the Republic of Korea was in fact intra-urban relocation to surburbs within the Seoul metropolitan area.[4] Although data for Australia and Japan at the sectoral level are not available, these developed countries with their very high proportions of urban population, 90 per cent and 80 per cent respectively, were typified primarily by movement within and between urban centres. Hence the Republic of Korea is approaching the pattern of migration typical of more developed countries in the post-Second World War era, when movement to the suburbs was one of the principal characteristics of population movement.

In India and Thailand, two of the countries dominated by movements to rural destinations (unfortunately the data for Sri Lanka do not allow the identification of sector of origin), the migrantion is primarily within the rural sector. In Thailand, about nine tenths of migration to and from rural areas was to other rural areas and in India the proportion ranged from 80 to 90 per cent. Much of this migration was associated with marriage as the migration-defining areas were small and captured the traditional village exogamy typical of India. When movements using the much larger state as the basis for defining migration in India are considered, the movement out of the rural sector becomes more urban-oriented. Only 21 per cent of migrants leaving rural areas moved to urban areas when the village is used as the migration-defining area, compared with 45.5 per cent when the state is used (compare India A and C in table 2). This pattern of long-distance movement being more urban-oriented than local movement is common throughout the Asian region and is also illustrated by the data available from both Pakistan and the Philippines. This is consistent with one of Ravenstein's

[2] Recent migrants are those who moved in the five-year period immediately preceding the census. Most of the data presented in the tables refer to "recent migrants".

[3] Stage migration is a system of movement up the urban hierarchy by different groups of people. For example, village people move to small towns and people in small towns move to large towns. Step migration is a system of movement up the urban hierarchy by the same group of people. Village people move to small towns and then to larger towns.

[4] See Economic and Social Commission for Asia and the Pacific, *Migration, Urbanization and Development in the Republic of Korea* (Bangkok, 1980).

Table 1. Magnitude and direction of internal migration from latest censuses (both sexes)

		Total volume of migration	Direction of migration flow					Percentage urban at end of period
			Percentage	Urban to urban	Rural to urban	Urban to rural	Rural to rural	
Bangladesh (1974)		697 665	100	11.0	40.2	1.6	47.2	9
India (1966-1971)	A	43 987 553	100	13.9	16.2	8.7	61.2	20
	B	17 661 051	100	27.1	22.1	11.0	39.7	
	C	6 192 450	100	31.4	25.5	11.6	31.2	
Malaysia (1970) (estimate)		2 412 900	100	33.1	15.3	12.3	39.3	27
Pakistan (1965-1973)	A	9 985 250	100	39.2	11.7	7.6	41.5	25
	B	1 961 614	100	37.0	17.5	11.4	34.1	
	C	770 687	100	43.8	18.6	13.5	24.1	
Philippines (1970-1975)	A	3 429 816	100	32.5	19.9	15.3	32.3	32
	B	2 245 246	100	29.8	23.1	18.0	29.1	
	C	1 376 567	100	26.3	24.5	22.6	26.6	
Republic of Korea (1965-1970)		2 851 300	100	34.3	42.2	8.9	14.7	41
Thailand (1965-1970)		3 331 100	100	10.6	12.4	6.1	70.9	13
				To urban areas		To rural areas		
Indonesia (1971)		7 344 762	100	54.4		45.6		17
Sri Lanka (1966-1971)		1 203 110	100	32.1		67.9		22
Papua New Guinea (1971)		178 500	100	45.7		54.3		11

Notes: 1. As far as possible, period migration for the five years before the census is given. However, for Indonesia and Malaysia, data based on "place of previous residence" at no particular time period are given and for Papua New Guinea lifetime data based on birth place are used.

2. For India, Pakistan and the Philippines, data for several levels of spatial aggregation are available and these are presented as A, B and C. In India, A represents all migration, intra-district, inter-district and interstate; B represents inter-district and interstate; and C interstate migrants only. For Pakistan, the progression is similar for districts and provinces. For the Philippines, A is inter-*barangay*, B inter-municipality and C inter-province.

famous "laws of migration" that most migration is over short distances.[5] Much, although not all, of this migration is associated with marriage and when people move to towns and cities, they usually must move longer distances.

In the countries where both urban and rural destinations are of similar importance and the data allow the examination of sector of origin, it can be seen that, with the exception of Bangladesh, most of the migration to urban areas originates in urban areas and the flows from the rural areas of these countries are oriented mainly to other rural areas. In the case of Bangladesh, where admittedly only the longer distance interdivision flows are captured by the census, almost 80 per cent of migrants to urban areas originate in the rural sector.

In all the countries for which data are available, the outflow of migrants from urban areas is

[5] E.G. Ravenstein, "The laws of migration", *Journal of the Royal Statistical Society*, vol. 48, 1885, pp. 167-227.

Table 2. Intersectoral migration: origins and destinations of internal flow (both sexes)

		Urban areas						Rural areas					
		Total inflow	From		Total outflow	To		Total inflow	From		Total outflow	To	
			Urban	Rural		Urban	Rural		Urban	Rural		Urban	Rural
Bangladesh	B	100	21.5	78.5	100	87.3	12.6	100	3.3	96.7	100	45.9	54.1
India	A	100	46.1	53.9	100	61.7	38.3	100	12.5	87.5	100	21.1	78.9
	B	100	55.0	45.0	100	71.0	29.0	100	21.8	78.2	100	35.8	64.2
	C	100	55.1	44.9	100	73.4	26.6	100	27.1	72.9	100	45.5	54.5
Malaysia (estimate)		100	68.5	31.5	100	73.0	27.0	100	23.8	76.2	100	27.9	72.1
Pakistan	A	100	77.0	23.0	100	83.8	16.2	100	15.5	84.5	100	22.1	77.9
	B	100	67.9	32.1	100	76.1	23.9	100	25.1	74.9	100	36.0	66.0
	C	100	70.2	29.8	100	76.4	23.6	100	35.9	64.1	100	43.5	56.5
Philippines	A	100	62.0	38.0	100	67.9	32.1	100	32.2	67.8	100	38.1	61.9
	B	100	56.3	43.7	100	62.3	37.7	100	38.2	61.8	100	44.2	55.8
	C	100	51.8	48.2	100	53.8	46.2	100	45.9	54.1	100	47.9	52.1
Republic of Korea		100	44.8	55.2	100	79.5	20.5	100	37.7	62.3	100	74.2	25.8
Thailand		100	46.1	53.9	100	63.2	36.8	100	8.0	92.0	100	14.8	85.2

Note: See table 1.

mainly towards other urban areas and the inflow to rural areas is primarily from rural areas. That said, it must be stressed that there are not insignificant flows from urban to rural areas, particularly in the Philippines and the Republic of Korea, but whether these represent people who have been born in urban areas or those who have come to the towns from rural areas and are returning to the rural sector cannot be inferred from the census data.

Those countries with the highest urban growth per annum, Bangladesh and the Republic of Korea, also have the highest proportions of rural-to-urban migrants. However, these two contries represent almost polar extremes in development in Asia: the Republic of Korea with a large urban base population and rapidly developing industrial economy and Bangladesh with a small urban base population and an economy dominated by agricultural production. Although it is likely that in the early stage of urbanization rural-to-urban migration is one of the most important of the intersectoral flows, in the case of Bangladesh it is also likely that because of the large size of the migration-defining units (the division) much of the rural-rural migration is omitted and the importance of the rural-to-urban flows is exaggerated.[6] The figures for most of the countries for which data are available suggest that migration is primarily within sectors, with relatively small flows linking the two sectors. This partially explains the generally low rates of urbanization that have been seen as a characteristic of the countries of the ESCAP region.[7] Only when there is a strongly developing urban industrial economy does rural-to-urban migration become the dominant pattern.

[6] See R. Skeldon, "Migration in South Asia: an overview", in K. Maudood Elahi and L.A. Kosinski, eds., *Population Redistribution in South Asia* (forthcoming).

[7] See G.W. Jones, "Implications of prospective urbanization for development planning in Southeast Asia", in J.F. Kantner and L. McCaffrey, eds., *Population and Development in Southeast Asia* (Lexington Mass., Heath, 1975), pp. 99-117 and S.H. Preston, "Urban growth in developing countries: a demographic reappraisal", *Population and Development Review*, vol. 5 (1979), pp. 195-215.

Movement to rural destinations

Movement to rural destinations is still the principal type of population migration in most of the countries in the region. As mentioned above, much of the rural-to-rural movement is for reasons for marriage. In India, of some 106 million intra-state rural-to-rural lifetime migrants, 78 per cent were women. The characteristic patrilocal marriage customs of south Asia mean that these local flows are dominated by women. There is also some evidence to suggest that in the recent past the marriage fields in India have become more extensive, with Indians choosing their marriage partners over longer distances.[8] This is likely to be the result of improved transportation, more extensive flows of information and increasing education.

There are also other significant flows to rural destinations. Most important among these are the migration of agricultural labourers and the movement of people to areas of agricultural resettlement or colonization. The movement of labourers is in part seasonal and in part associated with the cultivation of particular crops, for example, sugar cane in India and the Philippines. There are also important local movements of rural labourers to construction schemes in the rural sector such as the building of irrigation canals, dams and so on. Relatively little is known about these types of rural-to-ural migration, although it is likely that these migrants are among the poorest and least privileged in their societies and policy-makers should be concerned to establish some kind of institutional arrangement for the regulation of this movement and for the protection of the migrants.

Much more is known about migration towards areas of agricultural resettlement. The programmes of transmigration in Indonesia, FELDA land settlement schemes in Malaysia, the movement into the dry zone of Sri Lanka and the clearing of the Terai in northern India and southern Nepal are well known. In Indonesia and Sri Lanka, in particular, these schemes involve deliberate policies to change the existing distribution of population in the respective countries. These programmes are often ambitious. Under the accelerated Mahaweli scheme in Sri Lanka the plan is to resettle the equivalent of 5 per cent of the total national population in the dry zone within a matter of a few years.[9] In Indonesia, there was a target of 250,000 transmigrant households during the second five-year plan.[10] Despite these targets, the numbers successfully settled have often been small and the impact on over-all population redistribution has been negligible. However, there have certainly been local successes in developing particular areas, extending the area under cultivation, increasing agricultural production and raising the standards of living of the settlers. FELDA and other state resettlement schemes in Malaysia have been particularly successful, although at very high cost. For example, the cost of establishing each family in the settlement zones in the 1970s has been estimated at around $US 15,000.[11] One problem is keeping settlers in the resettlement zone. Where an adequate infrasturcture has not been established, the failure rate tends to be high. It also seems significant that spontaneous transmigrants tend to have higher success rates than those who are entirely supported by the Government – a feature that is common in other parts of the world – and this is probably due to greater motivation on the part of the spontaneous movers.[12] There are some indications that fertility tends to rise in the resettlement zones and there is concern that the second generation may face problems of overpopulation and move out. Certainly, to take an example from a different part of the world, in Latin America some long established colonization zones in the Amazon have become significant sources of out-migration to the principal cities, and this situation could easily arise in countries in Asia. It may therefore be necessary to consider resettlement primarily in terms of increasing over-all agricultural production, and of raising the standards of living for a relatively small number of settlers, rather than as a means of changing the over-all distribution of population or diverting migration flows away from urban centres.

[8] M. Weiner, *Sons of the Soil: Migration and Ethnic Conflict in India* (Princeton, Princeton University Press, 1978), p. 34.

[9] Economic and Social Commission for Asia and the Pacific, *Migration, Urbanization and Development in Sri Lanka* (Bangkok, 1980), p. 78.

[10] G.W. Jones, "The transmigration programme and development planning", in R.J. Pryor, ed., *Migration and Development in South-East Asia* (Kuala Lumpur, Oxford University Press, 1979), p. 215.

[11] K. Young, W.C. Bussink and P. Hasan, *Malaysia: Growth and Equity in a Multiracial Society* (Baltimore, The Johns Hopkins University Press for the World Bank, 1980), p. 45.

[12] G.W. Jones, *loc. cit.*, p. 220

Movement to urban destinations

Rural-to-urban migration is often considered to be the major flow of population movement. However, rural-to-rural flows are usually more important and much of the movement that is to urban destinations originates in the urban sector itself. There is relocation within cities themselves in a process of suburbanization, as seen in the Republic of Korea, and there is also movement among cities of different sizes. One of the common themes in the region is the faster growth of the largest cities and the stagnation of the small town. There is certainly a movement up the urban hierarchy from small town to larger town and, as evidence of differential fertility among urban centres is weak, this intra-urban migration is likely to be one of the main factors in the faster growth of the largest towns, direct migration from rural areas to large towns being the other major factor.

The process of migration up the hierarchy had begun in both India and Pakistan, for exmaple, in the decade 1951-1961 and has continued.[13] Whether rural-to-urban migration continues to the smaller towns, albeit on a reduced scale in a process of stage migration, or whether the flow of rural outmigration has become primarily to the largest towns as has been the case in parts of Africa and Latin America is a topic for future analysis in the region.[14] A concern of some Governments is to develop the intermediate cities in the urban hierarchy as the growth centres and as the targets for movement to switch the emphasis away from the largest cities. Whether these policies are succeeding or are viable is the subject of a special paper at this Conference but the problem is that once transport barriers have been lowered the capital region becomes more accessible and it is difficult to divert movement away from a place where economies of scale are greatest. Certainly, a common feature of migration in the regon has been the trend towards the increase in long-distance migration over time as the more isolated parts of the countries are linked to the national migration fields of the larger cities. As education is extended, awareness of more widespread opportunities is diffused too, which accelerates the movement over greater distances.

Although rural-to-urban migration was not the most important recent population flow in the developing countries of the ESCAP region, with the exception of the Republic of Korea among those cases examined above, it still played an important role in the growth of cities and in the composition of their populations. Table 3 shows the proportion of recent urban growth that has been due to migration and reclassification. This ranges from about one third in India to about two thirds in Japan. Unfortunately, as migration and reclassification have been calculated as a residual, it is not possible to separate the two components. However, in the case of Sri Lanka a detailed analysis based upon the very reliable vital registration system has been possible and there it is found that reclassification is the more important part of the "migration and reclassification component and that migration accounted for only about one fifth of total urban growth.[15] Whether this is typical of the countries

Table 3. Estimated percentage of growth attributable to internal migration and reclassification

Country	Percentage
Bangladesh (1961-1974)	55.4
India (1961-1971)	32.3
Indonesia (1961-1971)	35.7
Iran (1956-1966)	43.4
Japan (1955-1965)	64.4
Nepal (1961-1971)	37.2
Republic of Korea (1960-1970)	60.5
Sri Lanka (1963-1971)	48.7

Source: United Nations, *World Population Trends and Policies*, 1979 Monitoring Report, vol. 1, *Population Trends* (New York, Sales No. E.79.XIII.4), p. 130.

[13] A. Bose, *India: Urbanization, 1901-2001* (New Delhi, Tata McGraw, Hill, 1980), pp. 109-116 and M.K. Premi, *Urban Outmigration: A Study of Its Nature, Causes and Consequences* (New Delhi, Sterling Publishers, 1980). See also M.S. Karim and N.M. Shah, "Migration, urban growth and government policies in Pakistan", paper presented at the Conference on Urbanization and National Development, East-West Center, Honolulu, Hawaii, January 1982.

[14] See M.E. Harvey and J.B. Riddell, "Development, urbanization and migration: a test of a hypothesis in the Third World", in L.A. Kosinski and R.M. Mansell Prothero, *People on the Move: Studies on Internal Migration* (London, Methuen, 1975), pp. 51-65, and R. Skeldon, "The evolution of migration patterns during urbanization in Peru", *Geographical Review*, vol. 67 (1977), pp. 396-411.

[15] *Migration, Urbanization and Development in Sri Lanka, op. cit.*, p. 39.

in the region is impossible to say given the data, but it may be that the role of migration in urban growth has been over-emphasized, and natural increase, boundary changes and reclassification of settlements have been the more important components of growth.[16] This is not to deny that in certain countries at certain times migration has been the most important component of growth. In Japan and the Republic of Korea, during the rapid phases of industrialization in the 1950s and 1960s migration certainly was the main factor in city growth; this is also true of countries in the early stages of urbanization, where the urban base population is low, as, for example, in Bangladesh or Papua New Guinea in the early 1970s. Where the natural rates of population increase are high, the urban base population large and the economies sluggish components other than migration are more important.

Although migration to urban centres may not be the most important component in city growth in the region, it still has a profound effect on the urban populations. Although in percentage terms the proportions may seem small, the absolute numbers involved may be large. For example, in Sri Lanka a migration component of 22 per cent represented the net addition of almost 100,000 people to the urban sector between 1963 and 1971: a net addition of about 40 people a day who have to be housed and provided with basic urban amenities. This is in a relatively small country with a low rate of urbanization. Hence in large countries with faster rates of growth the problem of providing adequate services to migrants to the urban sector becomes formidable indeed. Migration also has the important secondary effect that a substantial proportion of the urban natural increase is made up of children born to migrants in the towns.[17] It is not yet known whether migrants have higher or lower fertility than non-migrats and whether they bring higher or lower fertility to urban areas and this will be an important area for investigation in the future.

In the discussion on the contribution of migration to urban growth, the emphasis has been on net migration. The total volume of migration is much greater as there is considerable turnover of population in the cities. As migrants arrive, people born in the cities or rural migrants who have spent some time in the city move out. Migration is not a single unilinear process of moving from A to B but a complex system of circuits and counter-circuits. Policy-makers should be in a position to plan for this continuously shifting urban population and data on its characterstics and rate of turnover are urgently required. Although some idea of this turnover may be obtained from considering the total migrant populations in the countries, it must again be emphasized that the census data used in this paper only capture a certain proportion of the total number of migrants. The true proportion is just not known. Perhaps only "the tip of the mobility iceberg" is captured by the censuses. Many short-term and short-distance movers are not recorded in the data presented and only specially designed surveys can provide the kinds of information required to estimate adequately the volume and characteristics of these types of movers.[18] However, some very crude estimate of the importance of short-term migrants can be obtained from *de facto* censuses where period of residence data exist. When the number of migrants arriving in the 12 months preceding the census is compared with the annual average for those arriving in the four or five years immediately previous to that period, a dramatic falling off is found (table 4). For example, in India, the proportion of interstate migrants with a duration of residence of one year or less in 1971 was

Table 4. Proportion of migrants arriving in years before the census

	Percentage of migrants in year before the census	Average annual percentage of migrants arriving 1-5 years before the census
India	9.7	5.8
Malaysia	18.0	8.0
Papua New Guinea	34.0	10.1
Sri Lanka	17.7	5.2

[16] See M. Lipton, *Why Poor People Stay Poor: Urban Bias in World Development* (London, Temple Smith, 1977), pp. 224-226 and S.H. Preston, "Urban growth in developing countries...", *loc. cit.*

[17] M.P. Todaro, "Urbanization in developing countries: trends, prospects and policies", The Population Council, Center for Policy Studies, Working Paper No. 50, 1979.

[18] The ESCAP secretariat has designed a model set of documents which give an example of the kinds of information required and how they might be collected. These are *Survey Manuals I-VIII,* issued by ESCAP in 1980 for national migration surveys.

much larger than the average of arrivals for each of the four previous years. A more pronounced situation existed in Malaysia, and in Papua New Guinea and Sri Lanka the proportion of most recent migrants was more than three times the average for the other years preceding the census. The implication, assuming that there were no unusual conditions in the years previous to the censuses, is that a substantial proportion of the migrants who arrived in that year would not be expected to "survive" at their destination to the end of a second year: they would either move on to another destination or, more likely, return to their places of origin in system of circulation. *De jure* censuses generally do not show this pattern as short-term movers are classified in their places of origin.

The importance of circulation has been detailed in numerous case studies in India, Indonesia and the Pacific[19] and is the subject of a special paper at this Conference. Suffice it to say here that, given that the actual number of migrants in the countries of the Asian region is still small compared with the potential number of migrants and given the potential sizes of the cities if rural-to-urban migration were to increase, it is likely that this form of mobility will persist in the future. Circulation, in effect, extends the resource base of the villages to the city and provides a temporary, often seasonal, activity that makes the rural subsistence economy more viable. Contrary to the popular stereotype, in the cities may lie the preservation of the rural economy and the village way of life.[20]

Althouth circulation in its various forms occurs in all the countries of the region, it appears to be a more dominant form of mobility in some countries or some areas. For example, in the late 1960s, it was the predominant form in Papua New Guinea and more permanent migration in the Pacific region in general was rare.[21] Although there is evidence of a trend towards increasing permanency excluding marriage migration, it may be that circulation is still the dominant form of mobility in the region, with forms varying from seasonal agricultural labour, through temporary shifts from village to city, to urban commuting.

Characteristics of the migrants

Migration tends to be age- and sex-selective and to be influenced by education and income levels. The demographic and socio-economic characteristics of those who move compared with those who stay behind, or between different types of movers, are of concern to policy-makers. For example, to know the educational levels and the sex and age characteristics of migrants to the city is important for planning the types of jobs that will have to be generated, or housing that will have to be provided. However, it is extremely difficult to generate the kinds of information on the socio-economic differentials that are required. Censuses and most surveys collect the data *post facto* and hence the characteristics of the migrants relate to a period that may be some considerable time after they made the move. It therefore may not be at all clear, for example, whether a migrant who is married moved before or after marriage. Similarly, for a migrant who has a relatively high level of education, it is unclear whether the person moved because he was more educated or whether he moved in order to improve his education. Only a survey specifically designed to gather information on personal status both before and after the move will be able to throw light on this important aspect of migration.[22] Hence the information derived from the censuses is only indicative and must be used with care.

The only common characteristic of migrants throughout the region and indeed throughout the

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[19] See for example, S. Goldstein, "Circulation in the context of total mobility in Southeast Asia", *Papers of the East-West Population Institute*, No. 53, 1978; K.C. Zachariah, "Bombay migration study: a pilot analysis of migration to an Asian metropolis", *Demography*, vol. 3 (1966), pp. 378-392; G. Hugo, *Population Mobility in West Java* (Jogjakarta, Gadjah Mada University Press, 1978) and R. Bedford, "Overview of recent research on the variety and forms of population mobility in Southeast Asia and Melanesia: the case of circulation", in G.W. Jones and H.V. Richter, eds., *Population Mobility and Development: Southeast Asia and the Pacific* (Canberra, The Australian National University, 1981), Development Studies Monograph No. 27, pp. 17-49.

[20] R.D. Lambert, "The impact of urban society upon village life", in R. Turner, ed., *India's Urban Future* (Berkeley and Los Angeles, University of California Press, 1962), pp. 117-140.

[21] R. Skeldon, "Internal migration", in R. Skeldon, ed., *The Demography of Papua New Guinea: Analyses from the 1971 Census*, Papua New Guinea Institute of Applied Social and Economic Research, Monograph No. 11 (Port Moresby, 1980) and M. Chapman, "Tribal mobility as circulation: a Solomon Islands example of micro/macro linkages", in L.A. Kosinski and J.W. Webb, eds., *Population at Microscale* (Christchurch, New Zealand Geographical Society, 1976), pp. 127-142.

[22] The survey designed by ESCAP captures this type of information through the migration history, which relates a person's history of movement to his life, family cycle and employment history.

world is that the majority tend to be young adults. People have a much greater propensity to move when they are between their late teens and their mid-thirties than at other ages. This is clearly associated with the life cycle. It is during these ages that siblings leave the home for marriage, to look for a job and to set up their own family. Before and after this period, family ties restrict mobility.

Table 5. Sex ratios of migrants (latest census years)

	Males per 100 females
Bangladesh 1974	111
India 1971 A (All migration)	47
C (Interstate migrants only)	128
Indonesia 1970	124
Malaysia 1970	104
Pakistan 1973	122
Papua New Guinea 1971	264
Philippines 1970	92
Republic of Korea 1970	93
Sri Lanka 1971	99
Thailand 1970	118

If local migration, which is often dominated by movement for marriage, is excluded, migration in the ESCAP region is generally dominated by males (see table 5). Only in the Republic of Korea and the Philippines do female migrants outnumber males. However, this pattern hides important variations and trends. For example, although migration in Thailand is male-dominated, the flow to the metropolitan area of Bangkok-Thonburi is female-dominated and this is one of the most important long-distance flows in the country.[23] Young migrants to Jakarta also show a dominance of females over males.[24] The recent trend in south-east Asia is towards a much greater participation of young women in migration. The new industry in these countries is generally characterized by light industries which afford opportunities for women. Women are also more easily absorbed into the rapidly expanding clerical and service sectors of the cities and, where the city has been expanding fastest, in the Republic of Korea, the migration has been heavily dominated by women.

Although the mobility of women is increasing throughout the region, there are still important cultural and social barriers to their movement in particular countries and in particular regions, especially in South Asia, where the cities are generally still dominated by men. This is a great contrast to cities in East and South-East Asia.

Generally married people also have a higher propensity to move than single people, which reflects movement specifically associated with marriage but also the circulation of married men who leave their families in the village to seek temporary employment elsewhere in order to improve their income. However, young single people, both male and female, are participating more in the recent migration to urban centres, particularly in East and South-East Asia, reflecting the nature of employment opportunities in these countries.

Another almost universal characteristic is that migrants tend to have higher educational levels than non-migrants. Again, this generalization requires qualification. Migrants reflect the background from which they come and as the levels of education of the population of urban areas tend to be higher than those of the population of rural areas, migrants from urban areas tend to have higher educational levels than migrants from rural areas. Migrants from rural to urban areas may have higher levels of education than those they leave behind in their place of origin but lower levels than those in their places of destination. People with secondary education tend to move further than people with primary education.[25] Rural-to-rural migrants tend to have the lowest educational levels of all, reflecting movement for marriage and the circulation of agricultural labourers.

From the point of view of policy, one of the principal issues in migration research in the recent

[23] Thailand, National Statistical Office, *1970 Population and Housing Census*, Migration Subject Report No. 2, Bangkok, 1976, p. 21.

[24] Economic and Social Commission for Asia and the Pacific, *Migration, Urbanization and Development in Indonesia* (Bangkok, 1982), pp. 118-121.

[25] See, for example, *Migration, Urbanization and Development in the Republic of Korea*, pp. 48-53; National Statistical Office of Thailand, *op. cit.*, p. 24; R.H. Chaudhury, *Urbanization in Bangladesh* (Dhaka, Centre for Urban Studies, 1980), p. 34; and chapters in R.J. Pryor, *Migration and Development in South-East Asia: A Demographic Perspective* (Kuala Lumpur, Oxford University Press, 1979).

past has been the contribution of migrants to unemployment and underemployment in the cities. The spectre of a mass of unemployed and unemployable rural migrants causing chaos in the city has been a concern of governments in countries as different as Papua New Guinea, Pakistan and Thailand. As should already be clear from this paper, the majority of migrants to cities are often not from rural areas and the results of recent studies have shown that migrants generally tend to have lower levels of unemployment than those native to the urban areas. In particular, the activity rates of the younger migrants are much higher than those of urban natives in the same age group.[26] It may be that the migrants must enter the urban labour force as quickly as possible while those born in town have their family networks to depend upon and can afford to remain unemployed until a "suitable" opportunity arises.

Migrants appear to participate more in service activities and to be employees rather than "own-account workers" and they tend to be disproportionately represented in the lower income occupations in the city.[27] Many enter the so-called "informal sector" activities, which include petty trading, pedi-cab driving and the myriad of small-scale services that characterize the Asian city. Even where the informal sector is insignificant, as in the Pacific island countries, unemployment levels are low, with the majority of migrants being absorbed into the urban labour market,[28]

It may be that migrants contribute indirectly to the unemployment levels in urban areas rather than directly by taking jobs that otherwise urban natives could have filled. However, it is equally likely that the migrants occupy jobs that the urban natives would be reluctant to fill. The higher educational level of the towns encourages higher aspirations, particularly in the urban elite, and this may explain the high level of educated unemployed that are found in Asian cities. For example, in India the withholding of labour among the educated is common and this may be typical throughout the region.[29]

Clearly much more research is required on the relationships, both direct and indirect, between education, migration and the levels of employment, underemployment and unemployment. The available data from censuses are inadequate for such analyses, although some particular case studies are now being carried out which confirm the generalizations made above.[30] Much more needs to be done in this field in the 1980s.

The consequences of migration

Migration has often been seen in negative terms: as the result of the urban bias of Western capitalist development. Investment in one or two cities concentrates wealth and draws the best of the rural population away from the villages to the detriment of the rural sector. However, this is only one side of the picture. With the overall increase in population and limited resources in the village sector, the city has become, as seen above, a safety valve that provides the peasant with an alternative resource to harvest. The money and knowledge sent back from the towns and cities by migrants or brought back by return or circular migrants are important for the rural areas. Migrants throughout the region send money back to villages. One study has estimated that on average migrants remitted 38 per cent of their monthly income to their home areas[31] and in another area remittances were shown to account for about 40 per cent of total village income.[32] Although the amounts of money may be impressive and the benefits to individual

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[26] For example, see *Migration, Urbanization and Development in Sri Lanka*, pp. 65-69; *Migration, Urbanization and Development in Indonesia*, p. 133; and *Rural-Urban Migration and Pattern of Employment in India* (Institute for Economic Research, Osaka, Osaka City University, 1980), p. 111.

[27] *Migration, Urbanization and Development in Indonesia*, pp. 138-141.

[28] R. Garnaut, M. Wright and R. Curtain, *Employment, Incomes and Migration in Papua New Guinea Towns*, Papua New Guinea Institute of Applied Social and Economics Research, Monograph No. 6, 1977.

[29] S.F. Richards, "Geographic mobility of industrial workers in India: a case study of four factory labour forces", in D.J. Dwyer, ed., *The City as a Centre of Change in Asia* (Hong Kong, Hong Kong University Press, 1972), pp. 72-95. See also *Migration, Urbanization and Development in Indonesia*, p. 137.

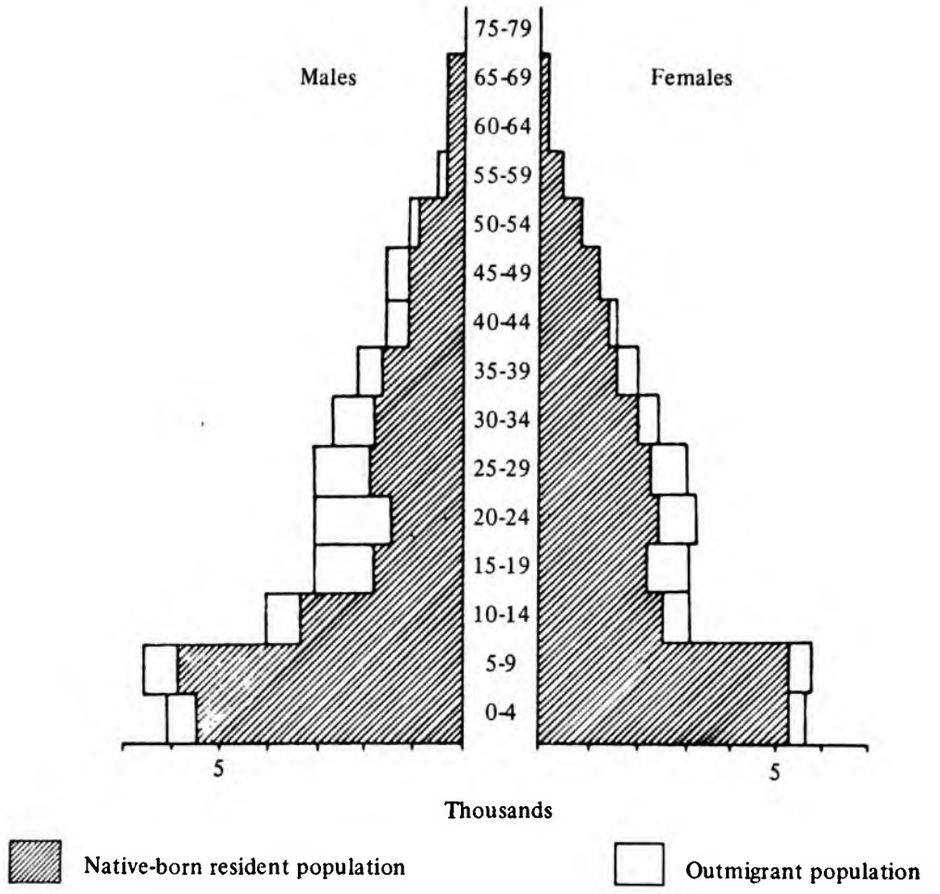
[30] A.S. Oberai and H.K. Manmohan Singh, "Migration, unemployment and the urban labour market: a case study of Ludhiana in the Indian Punjab", International Labour Organisation, Population and Labour Policies Programme, Working Paper No. 113.

[31] A. Mohammad, W.R. Butcher and C.H. Gotch, "Temporary migration of workers and return flow of remittance in Pakistan", Economic Development Reports No. 236, Centre for International Affairs, Cambridge, Mass., Harvard University Press, 1973, p. 10.

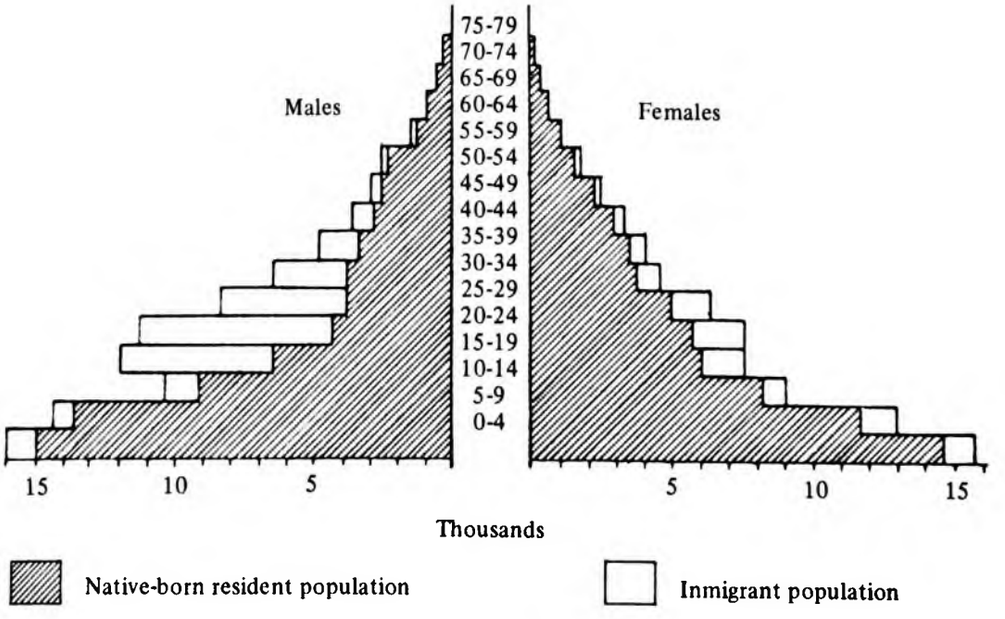
[32] J. Connell and others, *Migration from Rural Areas: The Evidence from Village Studies* (New Delhi, Oxford University Press, 1976), p. 105.

Figure 1 : The impact of outmigration and inmigration on the age structures of areas of origin and destination : examples of provinces in Papua New Guinea, 1971

(a) Outmigration - Gulf Province



(b) Inmigration - Central Province



families considerable, the evidence for the positive contribution of remittances to rural development is debatable. Much, if not most, of the money may be used for consumption rather than investment and the rural areas become more dependent upon the urban centres with villages buying food rather than relying on local resources.[33] Remittances may also exaggerate wealth differentials in the villages and encourage social conflict.

One important investment use of remittances is to cover the cost of education of children left in the village, which may lead to further migration from the villages as aspirations are increased. However, despite the disadvantages, researchers who have closely studied the role of remittances have considered that they are generally favourable to rural development.[34] Income levels are raised and this stimulates demand which can encourage both rural-based and urban -based production.

Migration can have consequences of the demographic and social structure of communities of origin and of destination. As the majority of migrants are young adults, their removal from one community and transfer to another can have a profound impact on the demographic age-sex pyramid, creating a "bulge" in the areas of destination and a "waist" in the areas of origin (see the figure 1). As we have already seen, there does not appear to be any evidence of migrants contributing to dramatic increases in the levels of unemployment in the cities. In the areas of origin, again no evidence can be found for a decline in production that can be directly linked with a migrant exodus. Certainly, the social relations of production may be altered, with women taking on a more important role in household decision-making or through the hiring of labour, perhaps using money from remittances, for tasks in the fields that the migrants would have performed.[35] In general, the exodus of the more enterprising or innovative members of a community cannot legitimately be considered a "loss" if institutional barriers or lack of alternatives in the rural areas deny such migrants access to opportunity, employment and income.[36]

The impact of migration on total population growth is likely to be slight. Apart from small populations on a few Pacific islands, for example, Samoa or Manus in Papua New Guinea, where the population growth rates are low or stagnant principally because of outmigration, migration does not occur at sufficiently high rates to affect significantly the growth of large populations in the areas of origin. Generally, although not universally - Pakistan at least being a likely exception - rural fertility tends to be higher than urban fertility and this tends to offset at least partially the flow of net migration. A more problematic aspect is whether the temporary absence of males from a community can have any significant impact on fertility. Existing data are sparse and contradictory and the problem requires further research, although it would seem unlikely that migration would significantly alter the patterns of fertility. It is more likely that the forces that help to generate lower fertility also produce changes in the patterns of movement, but the relationships between these two demographic variables and between the demographic variables and socio-economic forces are poorly understood.

Migration also has a profound, although as yet poorly understood, impact on health conditions. The mobility of the population, bringing people from different areas together, can facilitate the spread of disease. For example, malaria, which had been almost eradicated from India in the 1960s, has made a strong resurgence and one causal factor has been migration from malarial areas "seeding" *Anopheles* mosquitos in malaria-free areas. Circular mobility has been an important contributor to this renewed spread of malaria. The health of migrants may also deteriorate owing to the movement from one environment to another which is quite different. For example, migration from the cool hill lands of Nepal to the hot humid plains of the terai can give rise to tuberculosis. Movement from the village community to urban society can lead to problems of adaptation and to various types of mental disorders. These aspects of migration and health are of great importance to policy-makers not only with respect to the physical and mental

[33] See, for example, the case of the Pacific: J. Connell, "Remittances and rural development: migration dependency and inequality in the South Pacific", in G.W. Jones and H.V. Richter, eds., *Population Mobility and Development: Southeast Asia and the Pacific* (Canberra, The Australian National University, 1981), Development Studies Monograph No. 27, pp. 229-255.

[34] A.S. Oberai and H.K.M. Singh, "Migration remittances and rural development: findings of a case study in the rural Punjab", *International Labour Review*, vol. 119 (1980), pp. 229-241.

[35] See, for example, Naveed-I-Rahat, "Male outmigration, matri-weighted families and the changing role of women: a case study of a Punjabi village in Pakistan", paper presented at the Conference on Action-oriented Study of the Role of Women in Rural Development, Colombo, 1979.

[36] H. Rempel and R.A. Lobdell, "The rural impact of rural-urban migration in low income economies", Department of Economics, University of Manitoba, mimeo., 1979, p. 55.

welfare of the migrants themselves but for the population as a whole. Information on the distribution of disease and of population mobility patterns is essential to the containment and eradication of various types of illnesses.

The reasons for migration

The motivation for migration has been a major research concern in the past. Generally, people are considered to move primarily for economic reasons, although social reasons such as the influence of friends and relatives are also deemed important. The conventional simple "model" of migration sees people moving in response to a series of "pushes" and "pulls" in the regions of origin and destination.[37] Many studies have compiled lists of reasons why people move or at least why they think they move. The analysis of individual motivations, while intrinsically interesting, is of dubious value for policy purposes. It is already known why people move - because of real and/or perceived differences between one place and another - and if a real explanation of migration is to be made, the forces controlling the allocation of resources, the distribution of political and bureaucratic power and the factors facilitating or retarding the diffusion of power and information will have to be analysed.[38] Migration is collective and societal rather than individual, a group response to changing socio-economic conditions. It is in the linkages between regions, in the networks between different socio-economic systems and in the diffusion of information, ideas or power among them, that the explanation of migration will be found.[39]

Policies and migration and development

In the 1950s and early 1960s, it was almost axiomatic that urbanization and industrialization formed the road to progress and development. The peasantry should be encouraged to move to cities to supply the labour force for the industries that would be the motive power for development. The late 1960s and 1970s brought a very different perspective. The burgeoning slums around the cities and the increase in unemployment upon the inability of industry to absorb the available manpower brought an anti-urban tilt in the development literature. The problems of environmental pollution resulting from the large urban concentrations of population and increasing social problems such as crime and the breakdown of the family were linked to overcrowding and reinforced the image of the city as evil and industrialization as the antithesis of development. This reaction has its counterpart in the anti-urban writing in Europe from late in the last century.

The migrants have been seen by policy-makers as an important contributing factor to the problems facing the city and several policies have been implemented to influence directly the volume and direction of movement. Among these were the "closed city" policies to try to restrict migration to the largest cities, for example, Jakarta and Manila, and policies to divert potential migrants away from urban areas towards zones of resettlement, for example, in Sri Lanka. Another policy was to encourage people to move out of the towns and cities to the countryside, a policy that has been pursued by countries as different as China and Papua New Guinea.[40] At best these policies have met with limited success.[41] Migration is not amenable to control by stopping, diverting or reversing the existing population flows without altering too the forces that have given rise to these flows. It is here that the "urban bias" to development should apparently be changed. As long as investment is concentrated in the cities, generating opportunities there, people, if they are aware of these opportunities, will tend to move towards them. There will be movement from the underdeveloped periphery towards the developing core. Those who favour the urban or core bias to development maintain that the benefits of the core will gradually "trickle down" or through to the periphery, while those against the urban bias

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[37] E. Lee, "A theory of migration", *Demography*, vol. 5 (1955), pp. 47-57.

[38] See J. Friedmann and R. Wulff, *The Urban Transition: Comparative Studies of Newly Industrializing Societies* (London, Edward Arnold, 1975), p. 64.

[39] One of the earliest and clearest conceptualizations of migration as a diffusion process can be found in T. Hagerstrand, "Migration and area", in *Migration in Sweden: A Symposium, Lund Studies in Geography, Series B, Human Geography*, No. 13, Lund, 1957.

[40] For a description of the "rustication" programme in China, see T.B. Bernstein, *Up to the Mountains and Down to the Villages: The Transfer of Youth from Urban to Rural China* (New Haven, Yale University Press, 1977), and for Papua New Guinea, see K.K. Talyaga and C. Olela, "The debate on repatriation of squatters and vagrants from the North Solomons Province (1977-78)", Papua New Guinea Institute of Applied Social and Economic Research, 1978.

[41] For a useful review of urbanization policies, see A.B. Simmons, "Slowing metropolitan city growth in Asia: policies, programs, and results", *Population and Development Review*, vol. 5 (1979), pp. 87-104.

consider that a shift in investment towards the periphery is the only way to generate "real" development.[42]

Leaving aside the consideration of which approach might lead down the path of true development, the Government of Sri Lanka from the 1950s adopted policies that represented a substantial transfer of resources to the rural sector. Through policies that brought services to the rural poor and subsidies in the food and transportation sectors, income disparities between urban and rural areas were kept to a minimum. The resultant migration from rural to urban areas was small and the rate of urbanization extremely low.[43] However, the emphasis on the rural-oriented social policies did not solve the problem of unemployment, which by 1971 accounted for over one fifth of the total labour force, or of increasing production. More recent government policies have been geared to reducing unemployment through the creation of jobs. However, as these are largely urban-based, income differentials are likely to increase and more pronounced rural-to-urban migration may result.

The programme of industrialization in the Republic of Korea that gave rise to one of the most pronounced examples of rural-to-urban migration in the region has already been observed. However, policies that encourage movement to the cities may have been implemented for completely different purposes. For example, in Thailand the introduction of the rice export tax had a profound effect on accelerating movement to Bangkok.[44]

Policies that promote economic goals compared with those that pursue primarily social welfare goals, to the extent that these can be separated, tend to encourage an increase in population mobility with much of this to urban areas. Even in a country where there has been substantial control of migration and the economy, such as in China, "a desirable spatial distribution of industrial development could not be achieved and growth-propelling industries are concentrated in large cities".[45] In India, where a flood of migrants to the cities had been predicted from the 1950s, there was little evidence for such a scenario until the results of the 1980 census showed a rapid rate of urban growth consequent upon the recent programmes of industrialization and the increasing mobility of the peasants in the 1970s.[46]

Given the relatively low level of rural-to-urban migration in most of the countries of the ESCAP region, it is to be expected that those countries which are moving towards the "newly industrialized country" status, particularly those countries of South-East Asia, will experience much greater rural-to-urban mobility in the 1980s. Planners must be prepared for the likely social, economic and political repercussions of the movement in the various countries as the evidence suggests that migration cannot be stopped or reversed (or at least not without unacceptable economic and social cost). The close links between urban and rural areas through circulation indicate a need for a regional planning approach to the problems of population redistribution. Policies must focus on both urban and rural sectors so that the consequences of migration in both sectors can be anticipated and planned for. The circulation of population, the human link between the two sectors, may provide one of the principal media for channelling development from urban to rural areas from core to periphery and from more modern to more traditional ways of life.

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[42] See J. Friedmann, *Urbanization, Planning and National Development* (Beverly Hills, Sage, 1973) and M. Lipton, *op. cit.*

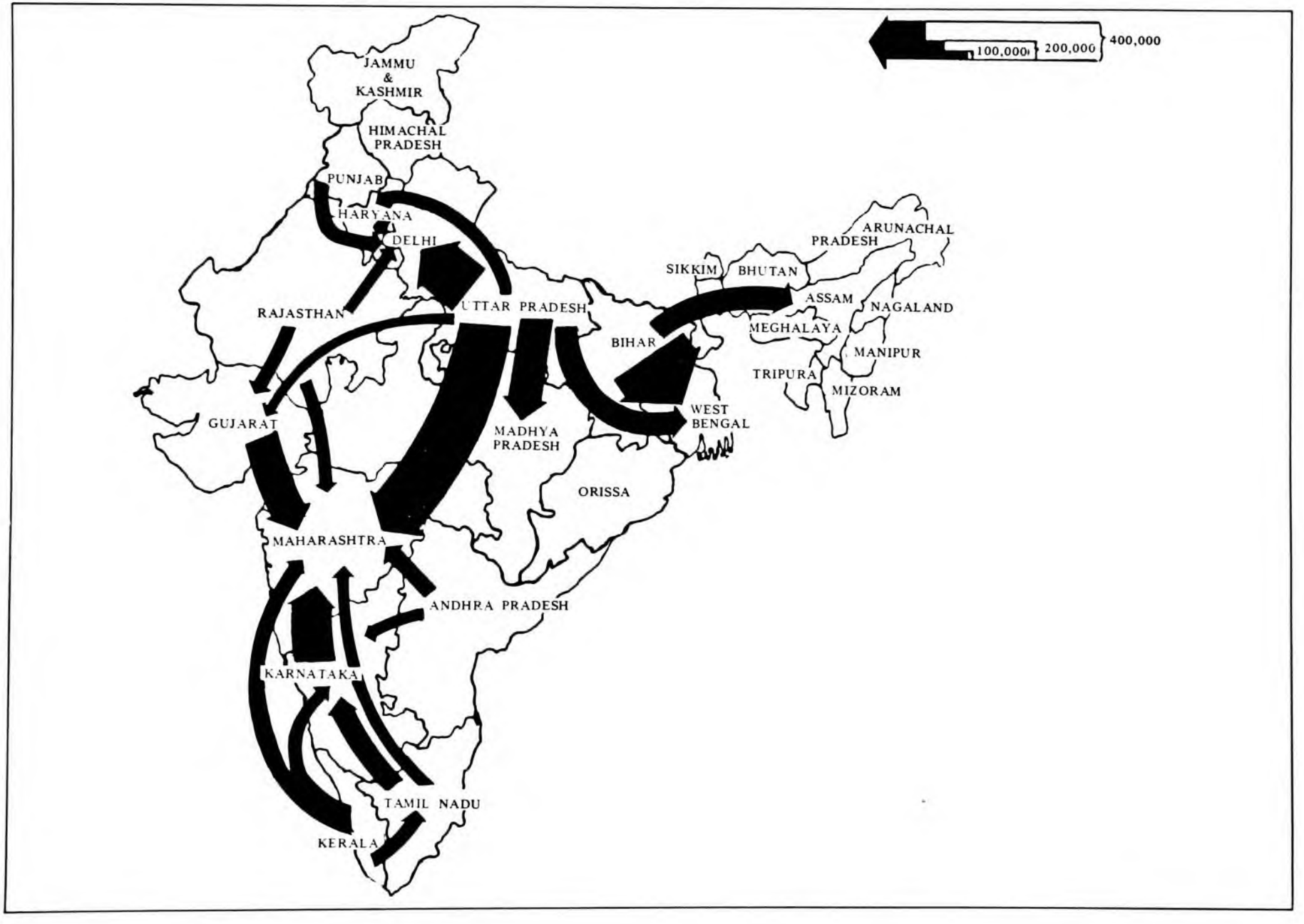
[43] *Migration, Urbanization and Development in Sri Lanka*, pp. 88-90.

[44] W.C. Robinson, "Economic policy and population change in Thailand", *World Development*, vol. 6 (1978), pp. 1261-1269.

[45] See K. Mera, "Population distribution policies: the need for caution", in *Population Distribution Policies in Development Planning* (United Nations publication, Sales No. E. 81.XIII.5).

[46] See R. Turner, ed., *India's Urban Future* (Berkeley and Los Angeles, University of California Press, 1962) and Ashish Bose, quoted in the *International Herald Tribune*, 22 February 1982. The most rapid urban growth, much of it due to migration, appears to have been in intermediate size cities, or those in the range of 100,000 to 750,000 people. See N. Crook and T. Dyson, "Urbanization in India: results of the 1981 census", *Population and Development Review*, vol. 8 (1982), pp. 145-155.

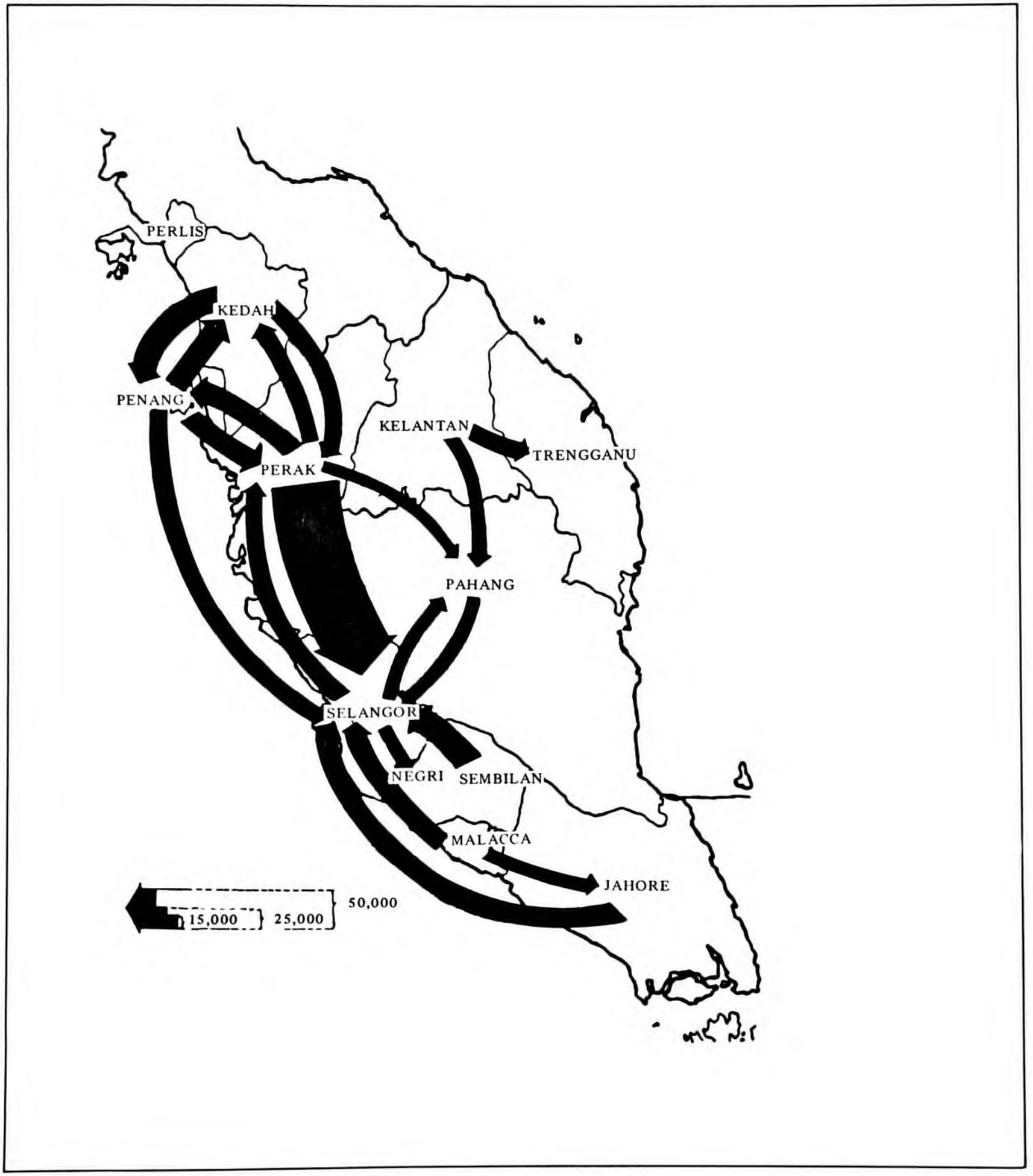
INTERSTATE NET MIGRATION FLOWS OF MORE THAN 100,000, 1971



Note: The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

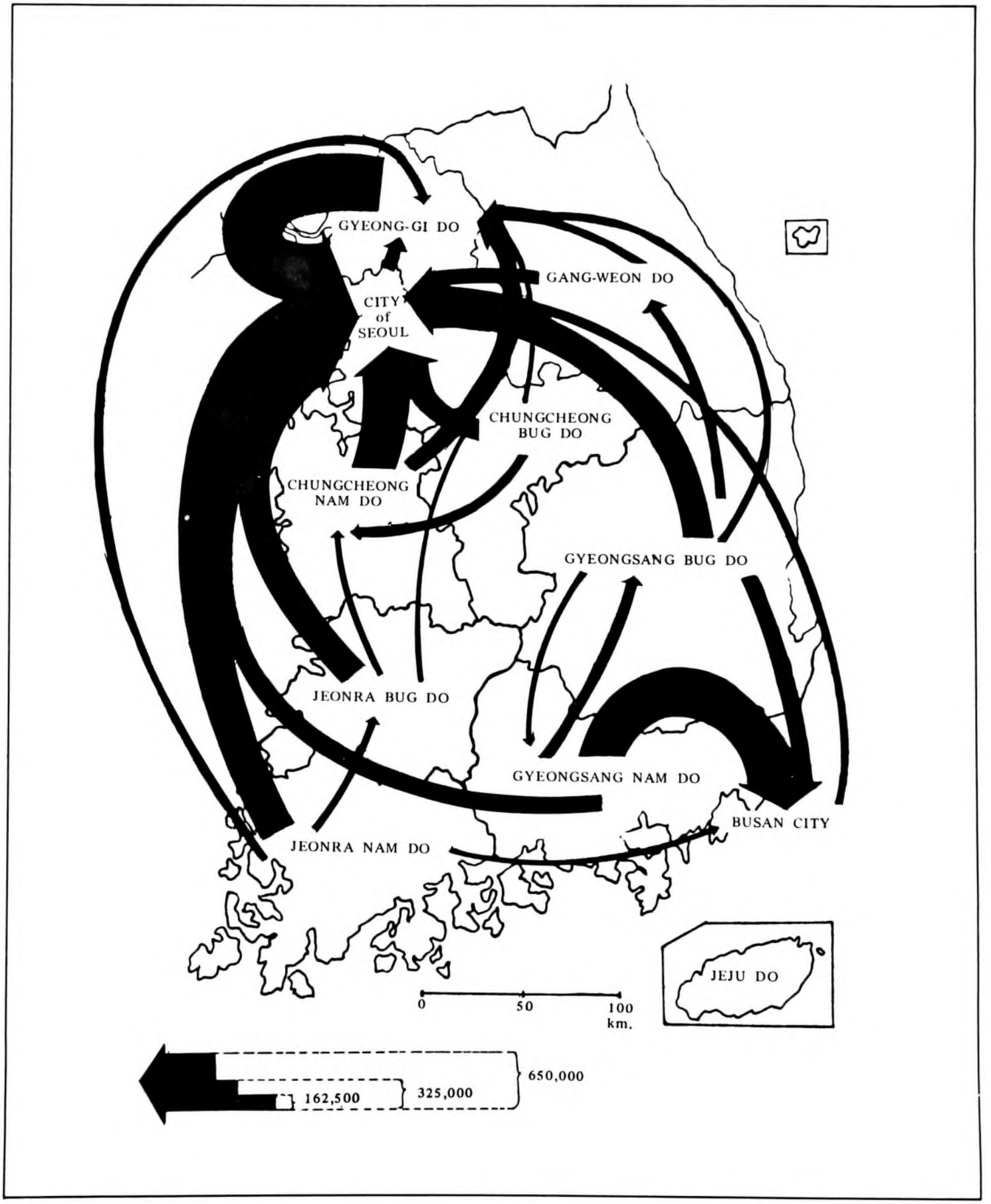
MALAYSIA

FLOWS OF MIGRATION OF MORE THAN 15,000 MIGRANTS FROM PLACE OF BIRTH TO PLACE OF RESIDENCE, 1970.



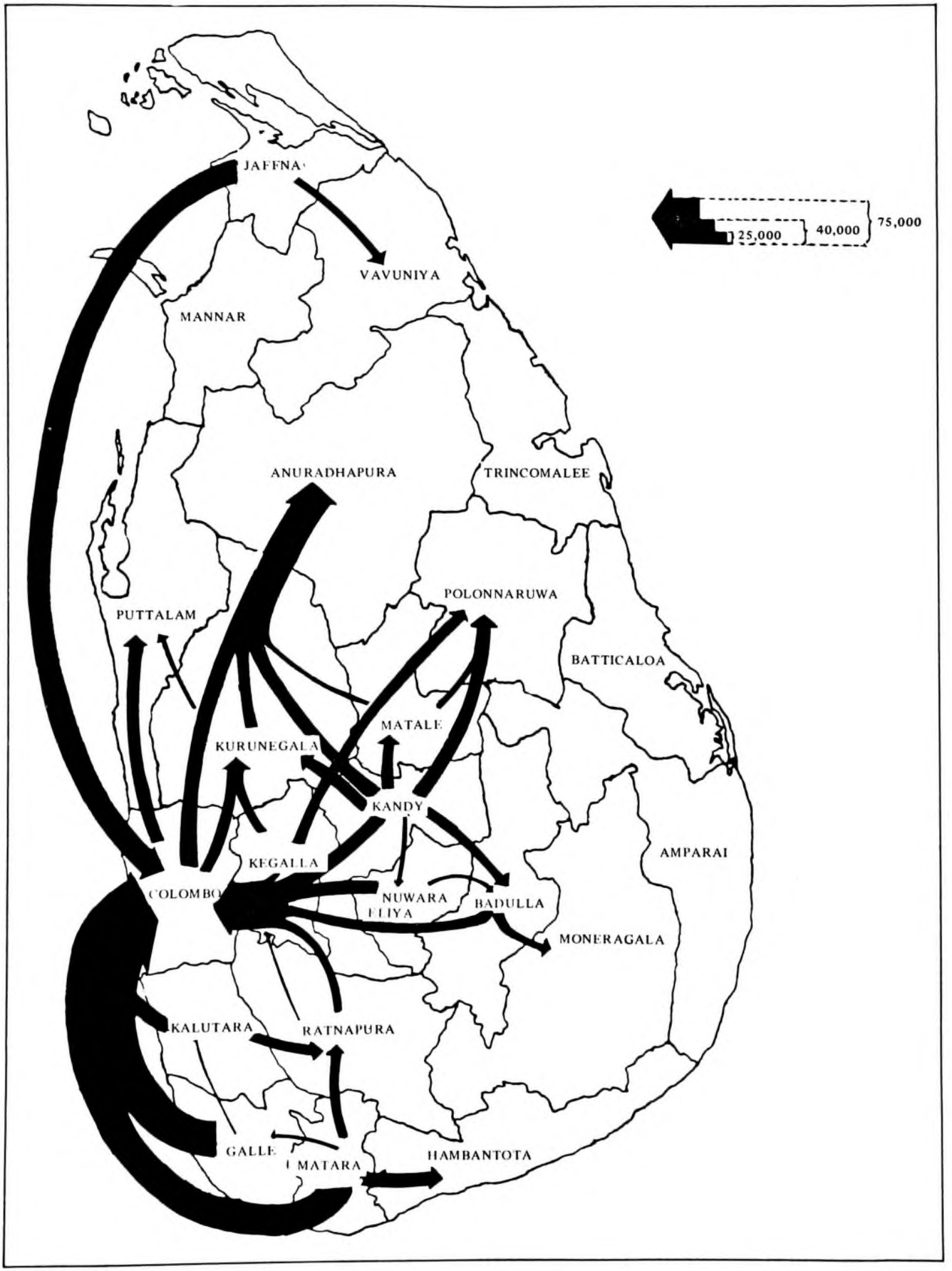
REPUBLIC OF KOREA

FLOWS OF MIGRATION OF MORE THAN 50,000 MIGRANTS FROM PLACE OF BIRTH TO PLACE OF RESIDENCE



SRI LANKA

VOLUME OF NET MIGRATION OF MORE THAN 10,000 FROM DISTRICT OF BIRTH TO DISTRICT OF ENUMERATION, 1971.



4.3 INTERNATIONAL MIGRATION IN THE ESCAP REGION

by

R. T. Appleyard*

Economic migration across national boundaries occurs when individuals' perceptions concerning better opportunities in a receiving country coincide with the receiving government's perception concerning the need for migration to enhance its country's general welfare. Though emigration-mindedness in a sending country may be high, actual migration will depend upon the receiving government's decisions concerning the numbers and characteristics of immigrants required, as well as the conditions under which they will be admitted. Needs are based on a complex of economic, demographic and political considerations; decisions on the numbers and types of migrants admitted in any one year on a non-permanent basis depend mainly on whether there are sufficient indigenous workers with necessary skills to service the country's economic growth.

The migration policies of both sending and receiving countries, as well as the volume, direction and characteristics of flows, largely reflect a country's stage and rate of socio-economic development. A well-known phenomenon in the evolution of migratory flows is their constant transformation linked to the evolution of an economic structure.[1] At one stage in a country's evolution its main need may be for small numbers of key professional transients; at another stage guest workers; and at another no migrants whatever. The process of evolution from developing to developed depends upon a complex of socio-economic conditions: population density, general level of skills, resources, infrastructure, capital formation, trade, government policies and, of special importance, the work ethic. Thus, the permanent loss of highly skilled workers (the "brain-drain") at an early stage of economic evolution could be partially offset in the short term by an intake of professional transients. At another stage, an adverse affect on economic growth caused by the temporary loss of semi-skilled guest workers could be partially offset by remittances, and also by the return of the workers several years later with new skills and experiences. Because ESCAP comprises countries at almost all stages in the evolution of economic structure, and with various mixes of socio-economic conditions, assessment of causes and impacts of international migration should really be done on a country-by-country basis. Overall accounting-type tables of migration, even if available, tell nothing of the specific impact of migration on each country. A first step towards understanding the significance of flows would therefore be to try and classify countries according to their "stage" of economic evolution.

Another indispensible step would be to try and classify movements according to an appropriate typology. While the recent United Nations recommended typology which defines a migrant (for statistical purposes) on the basis of actual and intended residence in or absence from a country, is a step in the right direction, it does not go far enough for our purposes.[2] The report clearly differentiated short- and long-term movers, and recommended classification on the basis of status and intention (e.g. long-term migrants, visitors, nomads, persons in transit. . . . .), but it did not recommend collection of information necessary to identify "purpose" and "type" of migrants. To be fair, the achievement of this objective would require a combination of border collection, registration, census and survey data. Carefully devised questions on travellers' intentions would identify them according to purpose

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[1] Contained in a communication to R.T. Appleyard, Co-ordinator of the CICRED Conference on International Migration in the Third World, held at Perth, Western Australia, November 19-22, 1980. See *A New Approach to Co-operative Research in the Population Field*, vol 4, 1981.

[2] United Nations, *Recommendations on Statistics of International Migration*, New York, 1980. Statistical Series M. No. 58, Department of International Economic and Social Affairs.

and type; appropriate registration statistics would identify past flows and accumulated stocks, and surveys would reveal the migrants' roles in a receiving country's socio-economic development.

In the absence of adequate data on both stocks and flows, judgements must therefore be made concerning the construction of a nomenclature more appropriate for explaining the impact of migration on the development of countries in the ESGAP region. *Permanent immigration* into all countries except Australia is still small and confined mainly to persons with special achievements and/or wealth, and their dependants. Opportunities for *permanent emigration* from most ESCAP countries are, as in the 1960s, still confined mainly to highly skilled and professional persons whose services are in demand in developed countries, and to the dependants of former emigrants. The emigration of *transient/professional skilled workers* into ESCAP countries which have encouraged foreign investment has been significant (in quality if not quantity) since the mid-1960s especially because Japan, a major investor, has favoured utilizing labour in investment-receiving countries rather than inviting (as did West Germany and the Netherlands) guest workers from these and other nearby countries to Japan. Even so, *guest worker* migration between countries in the region has increased enormously during the 1970s, especially from less developed countries (e.g. Pakistan, Bangladesh and the Philippines) to oil-rich, generally small-population countries in the Middle East. *Illegal or clandestine* migration, by its very nature, is almost impossible to assess, although there is no doubt that flows from Indonesia to nearby high economic growth ASEAN countries have increased greatly in recent years.

The application of this functional-orientated typology to explain the evolutionary approach to migration facilitates understanding of both contemporary flows and the accumulation of migrant stocks. The latter has important future implications because many stock migrants *return* home either involuntarily when their work contracts expire, or voluntarily if opportunities for their skills and experiences become available in the homeland when its economy reaches a more advanced stage in the evolution. Meantime, remittances sent by stock migrants can, and do, play an important role in the homeland's economic development. To these various types of economic migration must be added *refugee* migration, the main flows of which during the 1970s and early 1980s were caused by conflicts in Viet Nam and Afghanistan, although smaller flows of minority groups have also occurred across national boundaries within the ESCAP region.

While the functional-orientated typology is more appropriate than the United Nations-recommended typology for explaining the impact of immigration at different stages of a country's economic evolution, relevant *border crossing* statistics are sadly inadequate for the purpose. Only a few ESCAP countries provide complete and reliable statistics on permanent migration, and even fewer provide statistics of any kind on professional/skilled transient migration. The most reliable estimates of guest worker migration are generally provided by receiving countries. Estimates of the magnitude and direction of illegal migration are, for obvious reasons, little more than "guestimates" when, as will be shown, this type of migration appears to be a significant source of manpower for several countries in the region. Refugee migration under the auspices of UNHCR is well tabulated, but the movement of minority groups between countries, some of it illegal, is not. *Registration-type* data are an essential source for assessing stocks of migrants but statistics vary greatly in coverage and quality; some countries do not even collect the necessary information. *Ad hoc surveys* designed specifically to understand the causes and impacts of migration at different stages of the economic evolution are, of course, an ideal but expensive instrument which only a few countries have undertaken during the last decade.

In sum, there has been little improvement in quality and coverage of migration statistics during the decade. Donald Heisel's conclusion in 1977 that the problems of definition are compounded by widely differing practices of various ESCAP nations, and that many important receiving countries publish very little usable information about flows of skilled migrants, and some sending countries have inadequate demographic data in general, is probably still applicable in 1982.[3] The 1980 United Nations report reached a similar conclusion when it declared that there is ". . . little or no evidence that the quality and comparability of the statistics have improved significantly".[4]

Changing streams and categories of international migration in ESCAP countries

In view of these difficulties, estimates of streams, stocks and categories of migration must perforce be fairly general. Permanent emigration from developing countries in ESCAP to developed

[3] Donald Heisel, "International migration and the ESCAP region, an introduction and overview", a paper presented to the Expert Group Meeting on Migration and Human Settlements, Bangkok, June 1977 (restricted), p. 5.

[4] United Nations, *op. cit.*, p. 2, para 13.

countries outside the region (and to Australia or New Zealand within it) took a new turn after the 1960s when many developed countries changed their selection criteria to favour professional and skilled workers. The new policies were instrumental in changing both volume and characteristics of migration from many ESCAP countries; the resultant loss of professional and skilled workers (and their dependants) was dubbed a "brain-drain". This trend continued throughout the early 1970s, when seventy per cent of immigrants entering the United States and forty per cent entering Canada were of Third World origin, a trend which shows few signs of abating.[5] UNCTAD estimated that between 1961 and 1972, the total capital value of the "brain drain" was approximately $US 50 billion of which Asia accounted for $US 33 billion.[6] Brain-drain -type migration is not large relative to total populations; its main socio-economic effects on sending countries lie in losses of "quality" migrants, either directly when professional workers emigrate, or indirectly when students fail to return after study abroad. Explanation of this type of migration can be facilitated by the evolutionary approach to migration: professional and highly qualified workers in developing countries are attracted to developed countries by higher real incomes, and emigration occurs because the developed countries require them.

United Nations estimates of the major streams of emigration from ESCAP to non-ESCAP countries between 1950 and 1974 are as follows:[7]

	Approx number of emigrants	Main destination
India	450 000	United Kingdom
China and Hong Kong	380 000	United States of America
Philippines	300 000	United States of America
Japan	175 000	United States of America
Pakistan	160 000	United Kingdom
Republic of Korea	130 000	United States of America

The restrictive Commonwealth Immigration Act passed by the United Kingdom Government in 1962 did not affect immigration from the Indian subcontinent as drastically as it affected immigration from the West Indies, mainly because the flow had not become significantly large until just before the passing of the Act.[8] Its main effect, therefore, was to stabilize the flow. Wide economic differentials between the United Kingdom and India and Pakistan had been the main determinant of migration, although the flow had been facilitated by Commonwealth political ties. At the 1971 census there were 322,000 *Indian-born* persons residing in the United Kingdom, of whom 252,000 had arrived after 1949. Between 1971 and 1976 the Indian sub-continent contributed a further 116,000 immigrants. The United States and Canada were the other main destinations of emigrants from India, but until the passing of legislation in the 1960s, quotas imposed by the United States government were based on each sending country's contribution to its population during the nineteenth century. Because India's contribution during this period was very modest, it was accorded only a token quota. After the passing of legislation which favoured immigration of professional and skilled workers and their dependants, the flow of Indians increased greatly. By 1974 there may have been 110,000 Indian-born residents in the United States and a further 68,000 in Canada. Between 1974 and 1978, a further 78,000 persons entered the United States from India. Similar changes in both volume and characteristics of migrants apply to emigration from *Pakistan and Bangladesh* to the United Kingdom and the United States. In 1971, about 140,000 persons born in these countries were residing in the United Kingdom; thereafter professional and skilled workers were attracted to the United States and Canada. Other Commonwealth countries in South-East Asia have experienced similar trends although numbers involved have been smaller.

Emigration from the *Philippines* to the United States after 1950 was substantial partly because of historical ties between the two countries. Between 1970 and 1974, when the United States government favoured professional and skilled workers, annual flows (including relatives) averaged about 30,000. By 1974, there were probably 300,000 Philippines-born residents in the United States to which were added a further 176,000 between 1974 and 1978. Immigration to the United States from the *Republic of Korea* also became numerically important after

[5] Heisel, *op. cit.*, p. 3.

[6] *Ibid*, p. 6.

[7] United Nations, *Trends and Characteristics of International Migration Since 1950* (New York, Sales No. E.78. XIII.5), p. 46.

[8] United Kingdom of Great Britain and Northern Island, Office of Population Censuses and Surveys, *Demographic Review; a Report on Pupulation in Great Britain*, HMSO, Series DR No. 1, 1977, p. 69. Other Estimates of stocks and flows in paragraphs 9 and 10 are from United Nations, *op. cit.*, and United States Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States*, 101st Edition, 1980, p. 93.

1968 and by 1974 there may have been 125,000 Korea-born persons residing in the United States to which were added a further 146,000 between 1974 and 1978. A large proportion of emigration from *Hong Kong* has been second-stage, i.e., persons who had previously entered the Colony from mainland China. The main flows have been to the United States and Canada, and of the 50,000 who entered the United States between 1970 and 1974 declaring Hong Kong as their last place of residence, only 20,000 had been born in the Colony. Between 1974 and 1978 a further 60,000 Hong Kong residents emigrated to the United States. Smaller numbers went to the United Kingdom and Australia. Although 108,000 *Japanese* citizens emigrated to the United States between 1950 and 1974, and a further 60,000 to Brazil, much of the latter flow occurred during the late 1950s and early 1960s; by the 1970s emigration to Brazil had been reduced to a trickle. Between 1974 and 1978 only 24,000 residents of Japan emigrated to the United States. High rate of economic growth and manpower shortages in Japan after the 1960s reduced incentives to emigrate. Although Japan had reached an advanced stage of Economic evolution its government elected not to fill manpower needs with guest workers.

Permanent econonic immigration into the ESCAP region since 1970 (aside from Australia) has been small. Developing countries do not require population *per se* and so have legislated to restrict entry to a few persons with special status or achievements, and to close relatives of citizens. Statistics on permanent immigration are generally available. Less likely to be available, however, are statistics on *professional and highly skilled transient migration*, partly because of diversity in type, purpose and length of stay, but mainly because governments do not normally make the statistics available. Transient professionals are therefore normally "hidden" in tables on short-term migration, even though their roles in the process of economic evolution are recognized as being very important. For example, a trans-national company, on being given permission to establish a factory in a developing country, may then bring in dozens of professional and highly skilled workers to supervise its erection and train local workers to operate it. In another instance, where the recipient country is at a higher stage of economic evolution, the mix of both numbers and skills of transients may be quite different. Indeed, departments of economic development in developing countries fully recognize the roles played by transients in the transfer of technology. They frequently approve packages which combine permission for transient immigration with foreign investment, concessions concerning taxation, repatriation of profits and availability of serviced industrial sites.

Table 1. Migrant workers in the arab region by country of employment, 1975 and 1980.

Country of employment	1975		1980		Annual growth rate, 1975-1980 (percentage)
	Number	Percentage	Number	Percentage	
Saudi Arabia	773 400	42.5	1 023 250	36.3	5.7
Libyan Arab Jamahiraya	332 350	18.3	545 500	19.3	10.4
United Arab Emirates	251 500	13.8	411 000	14.6	10.3
Kuwait	208 001	11.4	378 700	13.4	12.7
Qatar	53 716	3.0	80 250	2.8	8.3
Bahrain	29 285	1.6	67 720	2.4	18.2
Jordan	32 900	1.8	76 000	2.7	18.2
Oman	70 700	3.9	96 800	3.4	6.5
Yemen	2 450	0.1	17 000	0.6	47.3
Iraq	65 700	3.6	125 500	4.4	13.7
Total	1 820 002	100.0	2 821 720	100.0	9.1

Source: 1975: Derived from J.S. Birks and C.A. Sinclair, *International Migration and Development in the Arab Region*. (Geneva, ILO, 1980), tables 10 and 13, pp. 134-137. 1980: Drawn from appendix 1, reproduced without alteration, from Birks and Sinclair, "The socio-economic determinants. . .", p. 4.

Table 2. Migrant workers in the Arab region by country of origin, 1975 and 1980

Country or region of origin	1975		1980		Annual growth rate 1975-1980 (percentage)
	Number	Percentage	Number	Percentage	
Egypt	447 545	24.5	695 650	24.5	+9.2
Yemen	290 128	15.9	336 145	12.3	+3.0
Jordan and Palestine	214 717	11.8	250 350	9.1	+3.1
Democratic Yemen	70 630	3.9	83 845	3.1	+3.5
Syrian Arab Republic	70 415	3.9	83 150	2.9	+3.4
Lebanon	49 661	2.7	61 050	2.2	+4.2
Sudan	45 873	2.5	89 220	3.2	+14.2
Maghreb	41 196	2.3	66 520	2.4	+10.0
Oman	38 413	2.1	33 450	1.2	−2.7
Iraq	20 625	1.2	44 760	1.1	+16.8
Somalia	6 547	0.4	19 700	0.6	+24.6
All Arab	1 295 750	71.2	1 763 840	62.6	6.4
Pakistan	190 718	10.5	371 630	13.0	+13.5
India	154 418	8.5	280 450	9.7	+11.3
Other Asian	14 784	0.8	168 500	6.0	+61.6
All Asian	359 920	19.8	820 580	28.7	+17.9
OECD and East Europe	37 816	2.1	78 250	2.8	+15.0
Africa and other	10 664	0.6	11 200	0.4	+0.8
Turkey	9 537	0.5	30 750	1.2	+26.3
Iran	106 315	5.8	117 100	4.3	+1.9
Total	1 820 002	100.0	2 821 720	100.0	+9.2

Source: 1975: Derived from: J.S. Birks and C.A. Sinclair, *International Migration and Development in the Arab Region*, (Geneva, ILO, 1980), tables 10 & 13, pp. 134-137. 1980: Drawn from appendix 1 Reproduced, without alteration, from Birks and Sinclair, "The socio-economic determinants. . .", p. 4.

Guest worker migration within Asia increased enormously during the 1970s. The main flows have been from countries on the sub-continent and South-East Asia to oil-exporting countries in the Middle East where rapid increases in demand for labour could not be filled from their typically small populations. The estimated 900,000 guest workers in the region in 1970 grew by nine per cent per annum between 1975 and 1980.[10] Tables 1 and 2 (and appendix 1) indicate that in 1980 Saudi Arabia, the Libya Arab Jamahiraya, the United Arab Emirates and Kuwait employed 84 per cent of migrant workers in the Arab region. Although 63 per cent

[9] *Ibid*, table 5.4a, p. 70.

[10] United Nations, *Trends and Characteristics*..... p. 49; J.S. Birks and C.A. Sinclair, "The socio-economic determinants of intra-regional migration", a paper delivered to the Conference on International Migration in the Arab World, Cyprus, May 1981, United Nations, Economic Commission for Western Asia, (limited distribution), p. 3. Both sources warn that estimates are general.

of these workers were from nearby Arab countries (especially Egypt and Yemen), a further 29 per cent came from Asia and especially from India and Pakistan whose nationals accounted for 23 per cent of the total migrant labour market. Migration of workers from the "Far East" to the Middle East is closely connected with investments in the region made by entrepreneurs from the Republic of Korea, the Philippines and Thailand.

As already indicated, *illegal migration,* by its very nature, is almost impossible to asses. Persistent flows from mainland China to Hong Kong are perhaps the most celebrated in the region although these have fluctuated considerably during the last 30 years. Other countries in the ESCAP region, especially some labour-short, high economic growth countries comprising ASEAN, have not discouraged flows of illegal worker migration, the most prominent stocks being an estimated one million Indonesian workers presently in East and Peninsular Malaysia, 300,000 Thais in West Asia, and 120,000 Malaysians in Singapore.[11] The main determinants of these flows are similar to those applying to guest worker migration to the Middle East: high rates of economic growth creating unskilled jobs which cannot be filled by local workers.

Recent *Refugee migration* from and within the ESCAP region derives mainly from the Viet Nam and Afghanistan conflicts. Refugees from Viet Nam have typically made nearby countries such as Thailand, Malaysia and Indonesia their first countries of refuge, permanent settlement being made later in North America, Europe and Australia. Data from the United Nations High Commissioner for Refugees (UNHCR) and the United States Government indicate that between April 1975 and January 1982 there were over half a million boat arrivals and a similar number of land arrivals in nearby countries:

Arrivals by boat at		Arrivals in Thailand	
Hong Kong	107 125	Khmer	212 340
Indonesia	70 328	Hmong	124 586
Macau	7 380	Laotians	150 629
Malaysia	168 367	Vietnamese	23 141
Philippines	27 248		510 696
Singapore	25 409		
Thailand	66 517		
Other	37 222		
	509 596		

[11] Estimates provided by university research workers.

Thereafter, the United States accepted 574,986 refugees from the countries of first asylum (plus 124,547 in 1975 directly from Viet Nam), France 83,926, Canada 81,933, Australia 61,662, the Federal Republic of Germany 21,647 and the United Kingdom 16,313.[12] Reliable estimates of the number of refugees from Afghanistan are more difficult to obtain, although the government of one ESCAP country recently reported that there were probably 2.5 million in Pakistan and a further 1.5 million in Iran.[13]

The relationship between socio-economic changes and the flow and direction of recent migration

Although economic migration between ESCAP and other regions, and between countries within ESCAP, during the last decade has not been large relative to total populations, its main significance lies in the composition and types of flows. Migration of all types has occurred mainly in response to differential rates and levels of economic growth. Heisel explains the main flows simply in tems of richer countries having ample means to attract persons whose skills are useful, and poorer countries being in a comparatively weak position to control emigration, even if they wish to do so.[14] Countries requiring labour to sustain or increase economic growth are assured of supplies from one source or another and have thus invoked immigration policies to obtain the required number of persons from appropriate sources. A country's immediate requirements, as already indicated, depend upon a complex of socio-economic conditions, and especially upon the extent to which these conditions have caused imperfections in the labour market. The "pull" of countries with high per capita incomes and growth rates (including Australia within ESCAP), for persons with professional and highly skilled qualifications has been persistently strong and has occurred under buyer's market conditions. Some countries in ESCAP, especially the newly-industrialized countries (NICs), have reached stages in economic evolution, and have achieved rates of economic growth, which enable them to not only "hold" some of their professional and skilled workers, but also to attract back small numbers of professionals who emigrated when there were no appropriate opportunities at home. Some of these countries have also become providers of transient professional and

[12] Estimates provided by the Department of Immigration and Ethnic Affairs, Canberra, 1982.

[13] Information provided by the Australian Department of Foreign Affairs, 1982.

[14] Heisel, *op. cit.*, p. 3.

highly-skilled workers to less developed countries in the region.

The professional transient is not a newcomer to international migration. In the inter-war years he was the foreign engineer or accountant who served for a period in the company's overseas office, plantation or mine, generally as overseer of construction and production, or perhaps as supervisor of the training of local workers. Decisions on the admission of such persons were made by the colonial power which typically had no hesitation in approving entry if the company was "domiciled" in the colonial homeland. Since World War II, with the achievement of political independence by almost every country in the region, new immigration policies have not necessarily favoured immigrants from former colonial powers. Decisions on the entry of professional and skilled workers for short periods are made on the basis of objectives for economic growth. Despite the general unavailability of information on transient migration, it has almost certainly increased significantly since the mid-1960s into countries which do not eschew foreign investment as a means of accelerating economic growth. Professional and highly-skilled transients are "the conveyors of technology, and while their skills and experiences are directed primarily towards maximizing returns for the investors, they are also instrumental in raising the general level of skills within the recipient country."[15] Economic changes facilitated by this type of migration inevitably affect social cohesion in the recipient country, especially if migration quickens the process of urbanization and internal migration, thus exposing more people to a wider spectrum of ideas and relationahips. Although professional transients may remain in a country for only short periods (usually a condition of their entry), their influence on socio-economic change has probably been greater than any other type of migration to the region.

Guest worker migration from Southern and Eastern Asia to some countries in the Middle East essentially reflects coincidental need for labour to service rapid economic growth, and availability and willingness of workers in parts of ESCAP to fill that need. The volume of this type of migration, especially since the early 1970s, has not been large relative to the populations of sending countries but, as table 1 indicates, it has created significant demographic and socio-economic impacts in the recipient countries. Birks and Sinclair identify several discernable changes in the 1980 pattern of labour migration to oil-rich Middle East countries compared with 1975.[16] First, the emergence of quite large secondary markets for migrant labour in receiving countries where entry conditions, compared with "primary" markets, are less stringent and wage rates are lower. "Replacement" migration has also attracted other migrants who hope to find jobs and whose availability and relative cheapness has encouraged entrepreneurs to establish new industries. Secondly, Birks and Sinclair argue that workers from the Indian sub-continent have not only consolidated the hold that they had already achieved on the market by 1975, but have also become "fairly permanent elements of the migration scene in the Arabian peninsula". Their demographic settling has also made it difficult, perhaps impossibel, to reverse the flow. Thirdly although companies from the Far East have assisted recipient Middle East countries to achieve targets for economic development by providing workers from Eastern Asia, these persons share neither language nor religion with the indigenous inhabitants. Modern economic development is therefore quite starkly foreign in origin and character, and it is not clear "how the fairly traditional societies of the peninsula will be able to come to terms with what must at times seem an invasion by foreign peoples and cultures"

Demographic and socio-economic influences of a kind broadly similar to those experienced by Middle East countries have also probably occurred in countries of the Association of Southeast Asian Nations which have received illegal immigration in numbers large relative to their populations. The determinants of this migration are also similar: high rates of economic growth in countries with small populations creating unskilled job vacancies which cannot be filled locally. Malaysia is a case in point. A recent paper by Lim Lin Lean argues that estates in Jahore, unable to compete for limited local labour with the "pull" of urban jobs in Singapore and opportunities in the Middle East, as well as a strong rural-urban drift within Malaysia itself, have resorted to contract labour composed of retired workers and illegal immigrants.[17] The estimated stock of illegal immigrants(see foot-note 11.)

[15] R.T. Appleyard, "Methods of estimating and analysing international migration" in Economic and Social Commission for Asia and the Pacific, *National Migration Surveys*, vol. 10, *Guidelines for Analyses*, Bangkok, 1982.

[16] Birks and Sinclair, *op. cit.*, pp. 5-11.

[17] Lim Lin Lean, "Labour shortages in the Malaysian rural agricultural sector: a search for explanations and solutions", a paper submitted to a seminar, Australian National University, Canberra, Department of Economics and the Development Studies Centre, January 1982.

seems to warrant Dr. Lim's concern that poor, unskilled immigrants could not only "dictate the poverty levels of their Malaysian host community", but also remove incentives to search for new technology to adjust to the labour shortage situation. On the other hand, she recognizes that Malaysia is at the cross-roads of change-over from a developing to a developed economy, and the present situation should perhaps be seen as an integral part of the rapid development process.

The impact of international migration on sending and receiving countries

Specific impacts depend upon volume and characteristics of migration as well as upon the receiving and sending countries' stages of socio-economic development. While general theory on these matters is well known, there is a dearth of research on specific experiences. Attention will therefore be directed to probable impacts on those countries in the ESCAP region which are presently involved in the main migration flows identified in this paper.

While the "brain-drain" from developing to developed countries has continued throughout the seventies, it has not attracted the same attention in academic and political circles as when it was first raised during the 1960s. The debate rather fizzled out; perhaps because there was little that could be done to stem the flow, short of imposing sanctions on emigration or taxing recipient countries, neither of which was deemed a viable or desirable solution by most sending and receiving countries. Developed countries have continued to accord high priorities to professional and skilled immigrants, and sending countries have generally been unable to stem the flow until they reach a stage of economic evolution where they can offer competitive alternative opportunities to potential emigrants. As already noted, some high-growth, high per capita income countries in ESCAP have recently been able to "hold" potential emigrants, and even attract home professionally qualified countrymen who had previously emigrated abroad. It should be remembered, however, that loss of professional workers at the early stage of a country's economic evolution, however logical for the individual, can deleteriously affect the home country's rate of growth. For, in addition to losing investment made in the emigrants' training over a long period, the sending country also loses, and the recipient country gains, what Heisel calls "innovative and leadership qualities".[18] Some developing countries in ESCAP have partially balanced their losses of professional workers by admitting professional transients for limited periods. As already noted, these workers are typically employed (or under contract) by investors; the receiving country therefore obtains the benefit of their skills in the transfer of technology without having to accord them permanency of settlement.

The assumed benefits from guest worker migration derived by the sending country include acquisition of scarce foreign exchange through remittances, relief of unemployment and underemployment, increase in national income *per capita* and a consequential increase in rate of savings and investment, as well as new skills acquired by workers which may be utilized upon their return for the development of an industrial base.[19] Achieved benefits clearly depend upon a complex of related variables. Remittances by migrants have reached enormous figures. The net flow (excluding remittances in "kind") to all developing countries in the world was estimated at $US 4,600 million in 1972, $US 8,100 million in 1975, and has increased considerably since then.[20] In the case of Turkey, e.g., remittances exceeded $US 1.4 billion in 1974 and in the following year the average amount remitted per worker was almost double Turkey's *per capita* GNP.[21] In the case of Bangladesh, remittances increased from 184 million Taka in 1975 to 1,655 million Taka in 1978.[22] Empirical studies suggest that governments should be careful not only in deciding the uses they make of remitted funds (especially funds from hard currency areas), but also in the use of remittances as a means of dealing with unemployment. Remittance incomes are not assured; instead they fluctuate according to conditions in, and policies of, sending countries. Expenditure of remittances on such non-traded goods as

[18] Heisel, *op. cit.*, p. 8.

[19] Charles W. Stahl, "International labour migration and international development", a working paper in the series *International Migration for Employment*, International Labour Organisation, Geneva, 1982.

[20] J. Wilczynski, "The political economy of the recent international migrations of workers", a paper delivered to the Australian and New Zealand Association for the Advancement of Science, Brisbane, May 1981 (section 28), p. 12. Source cited was Z. Ecevit and K.C. Zacharia, "International labour migration", *Finance and Development*, Washington, December 1976, p. 35.

[21] Heisel, *op. cit.*, p. 12.

[22] World Bank, "Labor Migration from Bangladesh to the Middle East", Staff Working Paper No. 454, April 1981, table 17.

land, housing and education have probably exacerbated inflationary pressures.[23] Empirical studies also question the hypothesis that the sending country automatically acquires useful "free capital" when its workers return home. Many workers return unskilled, having held jobs which offered little opportunity for advancement and skill acquisition.[24] Also, guest worker migration tends to exacerbate rural-urban migration, first by encouraging rural workers to register at city checkpoints, and then if the workers, on their return from abroad, refuse to return to rural areas. If, as appears to be the case in several South Asian countries, guest workers comprise a relatively large proportion of skilled workers in certain trades, resultant shortages require the rapid implemntation of appropriate policies and programmes.[25] There is also, as Heisel notes, the sheer disruption to economic and social life that results from the absence of substantial numbers of young people.[26]

The impact of guest worker (and illegal worker) migration on receiving countries in ESCAP also varies in each situation. The economic benefits generally attributed to guest worker migration for the receiving country are that it reduces shortages in particular occupations, thus allowing better use of industrial capacity, and hence profitability; that the increased supply of labour may prevent wage inflation and postpone costly structural transformation toward capital-intensive production; and that actual intakes can be quickly adjusted according to demand. Even though the extent of economic benefits accruing to the host population from guest worker migration have been questioned, especially the extent of employment multipliers deriving from this type of migration, Stahl for one has declared "with a high degree of certainty that whatever benefits are received far exceed those received by the labour exporting countries".[27] His main argument is that the value of the multiplier is most likely to exceed the value achieved in poorer sending countries that a considerable proportion of immigrants' wages are spent in the receiving country that labour immigration is a stimulant for expansion of output and investment and that the wealthy receiving country is likely to produce more of its own investment goods than the poorer sending country. However, Stahl and others also indicate that there are important costs to receiving countires, the chief being demand for greater expenditure on social infrastructure to which, of course, guest workers contribute through their taxes.

In addition to the economic costs and benefits for sending and receiving countries are the social and psychological adjustments required to be made by immigrants themselves. Guest workers, e.g., are often poorly educated, face difficult cultural and language barriers, may be forced to live in ghettos, are vulnerable to exploitation, and may be greatly resented by local workers especially if economic conditions deteriorate.[28] These circumstances led Miro and Potter to predict that the issues of a new economic order for international labour and the human rights of migrant workers are almost certain to gain increasing attention in international forums.[29] Of special interest to many ESCAP countries is the process of resettlement made in the homeland by returnees. It has already been noted that high growth rates and *per capita* incomes in some ESCAP countries have led to the return of professional workers who emigrated when conditions were not so buoyant, and also that these persons will play important roles in the homeland's socio-economic development. Resettlement by professional workers into a once familiar milieu requires many adjustments. For example, they will have to refrain from frequently comparing local ways of doing things with the ways they were done in the developed country; they will have to come to terms with the truism "you can't go home again" if only because experiences abroad would have given them different viewpoints and perspectives on many issues. Their spouses will inevitably have to adjust to what could be different social milieu, especially concerning their roles and expectations and adjustment to school will probably be especially difficult for children who have reached secondary grades. The problems of resettlement for a poorly-educated guest worker returnee, though different from those faced by the professional, may be just as difficult.

[23] Wilczynski, *op. cit.*, p. 17; K. Griffen, "On the emigration of the peasantry", *World Development*, 4 (5), pp. 353-361; W.R. Böhning, "Migration and policy: a rejoinder to Keith Griffen", in W.R. Böhning, *Basic Aspects of Migration from Poor to Rich Countries: Facts, Problems and Policies*, International Labour Organisation, Geneva, 1976.

[24] Stahl, *op. cit.*, p. 27.

[25] M.T.R. Sarma, "Overseas labour migration needs intensive policy research", *Labour and Population Activities in Asia and the Pacific*, International Labour Organisation, No. 5, September 1981, p. 2.

[26] Heisel, *op. cit.*, p. 13.

[27] Stahl, *op. cit.*, p. 46.

[28] Wilczynski, *op. cit.*, pp. 14-77; Heisel, *op. cit.*, p. 14.

[29] Carmen Miro and Joseph Potter, *Population Policy : Research Priorities in the Developing World*, London, 1981 (cited by Sarma, *op. cit.*, p. 2).

He too will soon discover that you can't go home again and, furthermore, he will be less likely than the professional to return to his pre-migration domicile. Irrespective of how the returnee uses accumulated savings, his exposure to a society with higher standards of living will probably increase his desire for greater access at home to education and health care. As Birks and Sinclair have observed, the objective of migration abroad has changed from simply employment to employment as well as access to social services.[30] The returnee's widened horizon of experiences abroad will almost certainly increase his awareness of other social and political issues which, collectively, could generate strong foreces of change.

Recent changes in migration policies of selected countries in the ESCAP region

While a country's stage of economic evolution appears to be a major determinant of both its immigration policy and the numbers and characteristics of immigrants it admits, countries at similar stages may in fact invoke quite different policies to meet their needs. For example, Australia and Japan are two of the most economically developed countries in the region. Australia admits over 130,000 permanent immigrants each year. Its recent non-racial policy concerning origin of immigrants clearly reflects a combination of economic and political objectives: to fill a need for highly skilled and professional workers to service economic growth, and to obtain political mileage (given the country's geographic location) by providing opportunities to qualified persons in nearby non-Caucasian populations and by admitting over 20,000 Vietnamese and other refugees per annum from the ESCAP region. Japan, on the other hand, with a much larger population on a smaller land mass, has traditionally eschewed large-scale immigration, both permanent and guest worker, as a means of servicing economic growth. Instead, it has favoured the development of efficient capital-intensive industries in Japan and, through investment, has established labour-intensive industries in nearby countries with relatively cheap supplies of labour.

Diversity of demographic and socio-economic conditions has also led developing countries in the region to invoke differential immigration policies according to their special needs, although most of these countries have maintained restrictive policies on permanent immigration and favoured the admission of transient skilled or professional workers whose entry has been associated with foreign investment. Despite inadequate data, it is almost certain that transient migration has increased considerably since the 1960s, espeically into high economic growth countries in East and South-East Asia. Receiving countries appear to exercise tight control over numbers and skills of transients foreign investors being required to justify their requests in terms of unavailability of local workers with similar skills. As a country's economy evolves, many of the workers it once acquired as transients become available locally, probably having been trained at technical schools and universities. While the country's need for transients may not diminish, the skills it requires will vary according to its stage of economic evolution. There is much evidence to indicate that countries which have reached higher stages of economic evolution then provide skilled transient workers to nearby less developed countries. Mobility of this kind has occurred not only in response to job opportunities, but also because governments of receiving countries have insisted that the intake be on a non-permanent basis and demonstrably related to the nation's current needs. While this explanation applies generally to all developing countries in the region, one must be careful to note that "developing" encompasses a wide variety of demographic and socio-economic conditions (see para. 2). For example, Malaysia and Indonesia are both listed as developing in many official documents, but their demographic and socio-economic structures are very different, which is a main reason why illegal unskilled immigrants have moved from Indonesia to Malaysia.

Recent economic growth of oil producing countries in the Middle East has led to policies supporting guest worker migrants on short-term contracts. Transient professionals have also been encouraged by these governments, especially to assist in the construction and operation of new industrial complexes. Guest workers, as already noted, have been recruited in a number of nearby countries and also in India, Pakistan, the Philippines and other ESCAP countries. Although receiving countries have invoked differing types of controls over intake, a salient aspect of all immigration policies is preference for non-permanent immigrants whose contracts require them to return home. Birks and Sinclair believe that nascent fears in 1975 of being "swamped" by immigrants are now being openly voiced. The Gulf states and Saudi Arabia have therefore imposed tighter restrictions concerning residence and work permit regulations; e.g. limits are now defined as to which type of migrant may re-unite with the family in the host country.[31]

[30] Birks and Sinclair, *op. cit.*, p. 16.

[31] *Ibid*, p. 17.

While developing ESCAP countries continue to regret the loss of professional workers on a permanent basis, emigration policies designed to control outward flow are difficult to enforce. Proposals over the years for reimbursement of the education costs expended by developing countries, for the establishment of research institutes in developing countries, and for changes in the curricula of university courses to make their graduates less suited to the labour fource needs of developed countries, have not been implemented. As a result, there is little evidence that receiving countries are prepared to either forego the economic benefits they receive from the brain-drain or "abandon principles of non-discrimination on ethnic, national or racial grounds".[32] Nor have many developing countries been prepared to administer effective sanctions on the emigration of professionals. Policies of developing ESCAP countries concerning emigration of guest workers generally incorporate International Labour Organisation guidelines designed to protect the workers' interests while abroad, especially that they be granted equality of opportunity for employment and social security. However, sending governments find great difficulty in getting policies accepted and enforced once the workers reach their destinations.

Sarma has called for an evaluation of the wide variety of measures that have been taken during the latter half of the 1970s with regard to organized and unorganized export of manpower, pointing out that population policies of countries in South Asia have not explicitly considered the problems of overseas migration in the past. He fully supports Böhning's view that properly designed emigration policies could accelerate the economic development of sending countries and thus reduce population growth through long term economic forces.[33] In this regard, it is interesting to note that the Government of Pakistan has emphasized the need to obtain more demographic data on workers going to the Middle East in order to understand the ultimate impact of overseas migration on fertility behaviour.

Conclusions and recommendations

Though still small relative to total populations, international migration has become an increasingly significant instrument for socio-economic change in the ESCAP region. Professional and highly-skilled transients have an influence far exceeding their numbers; guest workers have caused significant demographic impacts on receiving countries in the Middle East, and through their remittances and eventual return they will influence socio-economic change in their home countries; and permanent emigration still drains many developing countries of professional and highly skilled workers. It is argued that these diverse flows can best be explained in terms of the evolution of each country's economic structure. Most countries do not exercise strict controls over emigration, and so those at early stages of economic evolution are unable to prevent the loss of highly qualified workers on a permanent basis, and lesser-skilled guest workers. Immigration polocies, on the other hand, are firm and unequivocal concerning numbers and characteristics of immigrants, and also largely reflect a country's stage of economic evolution.

Classification or disaggregation of flows, as well as appreciation of their causes and impacts, would be facilitated by grouping countries according to their stage of economic evolution, and by applying a migration typology more functionally-oriented than those presently in use. It is suggested that countries make a careful appraisal of their border crossing, registration and census statistics in terms of efficiency as measures of the impact of international migration. A first step could well be to back the United Nations recommendations concerning comparability of border crossing statistics.

Inadequacy and unavailability of data necessary to reveal the volume, composition and direction of international migration has been a main reason why it has not been possible to identify permanent, transient and guest worker flows with reasonable accuracy. The absence of major empirical studies on the causes and impacts of these flows has made it necessary to rely more heavily than usual upon general theory and argument. These serious deficiencies should be rectified, especially in view of the increasing significance of international migration in the region. Attention should also be given to devising a strategy aimed at developing appropriate management of international migration. It is probably symptomatic of the present state of the art that important questions posed by Stahl, Birks and Sinclair and others concerning the likely impact of guest worker migration on both sending and receiving countries; and questions on the role of transient professional migration at different stages of a country's economic evolution, simply cannot be answered to anyone's satisfaction. Until they are, appropriate management will be difficult to devise.

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[32] Heisel, *op. cit.*, p. 8.

[33] Sarma, *op. cit.*, p. 3.

Appendix

Migrant workers in the Arab region by sending country and country of employment, 1980

Sending country	Country of employment										Total
	Saudi Arabia	Libyan Arab Jamahiraya	United Arab Emirates	Kuwait	Qatar	Bahrain	Jordan	Oman	Yemen	Iraq	
Egypt	155 100	250 000	18 200	85 000	5 750	2 800	68 500	6 300	4 000	100 000	695 650
Yemen	325 000	–	5 400	3 000	1 500	1 125	–	120	–	–	336 145
Jordan and Palestine	140 000	15 000	19 400	55 000	7 800	1 400	–	2 250	2 000	7 500	250 350
Democratic Yemen	65 000	–	6 600	9 500	1 500	1 125	–	120	–	–	83 845
Syrian Arab Republic	24 600	15 000	5 800	35 000	1 000	150	–	600	1 000	–	83 150
Lebanon	33 200	5 700	6 600	8 000	750	300	–	1 500	500	4 500	61 050
Sudan	55 600	21 000	2 100	5 500	750	900	–	620	2 250	500	89 220
Maghreb	500	65 600	–	300	–	–	–	120	–	–	66 520
Oman	10 000	–	19 400	2 000	1 150	900	–	–	–	–	33 450
Iraq	3 250	–	1 200	40 000	–	310	–	–	–	–	44 760
Somalia	8 300	5 000	5 000	500	–	–	–	400	500	–	19 700
All Arab	820 550	377 300	89 700	243 800	20 200	9 010	68 500	12 030	10 250	112 500	1 763 840
Pakistan	29 700	65 000	137 000	34 000	20 770	26 160	4 000	44 500	3 000	7 500	371 630
India	29 700	32 000	109 500	45 000	11 850	12 300	500	35 600	2 000	2 000	280 450
Other Asian	93 500	27 000	20 700	10 000	4 500	10 000	1 000	–	300	1 500	168 500
All Asian	152 900	124 000	267 200	89 000	37 120	48 460	5 500	80 100	5 300	11 000	820 580
OECD and East Europe	30 000	15 000	11 600	5 000	1 250	6 500	2 000	3 900	1 000	2 000	78 250
African and other	6 000	2 200	1 300	300	350	400	–	200	450	–	11 200
Turkey	2 000	27 000	300	600	480	200	–	170	–	–	30 750
Iran	11 800	–	40 900	40 000	20 850	3 150	–	400	–	–	117 100
Total	1 023 250	545 500	411 000	378 700	80 250	67 720	76 000	96 800	17 000	125 500	2 821 720

Source: This table has been derived in large part on the basis of material collected as part of an ILO study. The precise methodology employed was to estimate employment growth in each country of employment by sector, estimate, albeit roughly, the growth of the indigenous labour supply, allocate that supply to economic sectors, and thereby calculate a demand for expatriate manpower. Then, additional migrants were added to a 1975 stock of migrants in such a way as to reflect labour market trends from 1975 to 1980. In this process extant information on labour market trends was of critical significance although the data were not always available. These figures should be seen as first approximations and will require subsequent refinement as time passes. Where the methodology was not applicable, alternative approaches were used, notably in the case of Jordan, where estimates were provided by Ian Secombe, of the Department of Economics, Durham University. See *Ibid, Jordanian Labour Migration; the Impact on Domestic Development* (Durham, unpublished MA thesis, 1980). This table is reproduced, without alteration, from Birks & Sinclair, *op. cit.*, p. 18.

Note: This table does not take account of a small number of migrations which are acknowledged but about which few if any data are available. These include the migration of: Sudanese to Lebanon; West Africans to Sudan; Syrians to Jordan; and Turks to the Syrian Arab Republic.

4.4 CIRCULAR MOBILITY AND ITS POLICY

by

Mei Ling Young*

Introduction

The aim of this paper is not to provide an overview of circular mobility in the ESCAP region. That has been done quite thoroughly elsewhere.[1] Rather, the objective is to raise some of the more important issues on the nature of circular migration, the different conditions which give rise to varying labour regimes and, drawing from the discussion, the policy implications. The paper concludes with an outline of directions for further research.

In order to understand the role of circular mobility and its impact on policy issues, certain points must be clarified. It is critical that the concept of circular mobility be clearly defined. A distinction must be made between daily commuting and the other forms of circular mobility owing to their different characteristics and consequently, implications for policy. The different political, economic and social conditions in which circular mobility occurs must be discussed. There is a great difference between tribal-type societies, where land is communally-owned, individuals having usufructory rights such as those of the Pacific, Melanesia and Africa, and societies of the old, densely populated, somewhat involuted civilizations of Asia. As will be discussed later, access to land is an important factor in circularity. The scale of the economy and all its implications (in its most extreme forms, contrasted between the micro-nations of the Pacific and the large nations of mainland Asia) also bears on the type of circularity, whether internal or international.

Definitions of circular mobility

Circular mobility may be defined as:

> "a great variety of movements, usually short-term, repetitive or cyclical in nature, but all having in common the lack of any declared intention of permanent or long-lasting change of residence."
>
> *(Zelinsky, 1971: 255-6)*

As with the definition of migration, the temporal and spatial aspects vary. The relevant points to bear in mind is that circular mobility is short-term (ranging from a few weeks to a few years), repetitive (where the mover always returns to the source before commencing the next migration) and can be both internal (within the same country as in the studies of Java and Thailand) or international (between different countries such as for Sri Lankans and Pakistanis working in Saudi Arabia, Filipinos in Hawaii and Malaysians in Singapore). The distinction between an internal or international circulation is a fine one (other than the legalities involved in crossing boundaries, remittances going through money exchanges and social problems of language and life-style). In both cases the act of circulating is conditioned by the availability of employment opportunities. The significant factor is that both reflect the response of labour to uneven development on a national or international scale. The distances traversed vary according to the availability, modes and costs of transport.

Circulation is not new (see Chapman, forthcoming: Prothero, 1978). It existed in pre-colonial times in the form of forced labour, (*corvée* in Thailand, *kerah* in Malaysia); as religious obligations (monkship in Thailand); as social obligations and *rites de passage* in the different roles of individuals in a society (Chapman, 1976); and most important, as the movement of seasonal agriculturalists, in the form of independent workers or on a co-operative

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[1] For example, see Goldstein (1978) for South-East Asia and Melanesia and Hugo (1981a) for Indonesia. Chapman (1978) summarized the major points from the seminar on cross-cultural study of circulation at the East-West Population Institute, Honolulu. For the most recent publications on population mobility, see Jones and Richter (1981), and Prothero and Chapman (forthcoming).

basis. But it was with the monetization of the economy during colonial times that the importance of circular mobility as specifically labour mobility became the most significant form of population movement. This is well exemplified by the plantation and mining workers of Africa (Amin, 1974; Elkan, 1967; Mitchell, 1969) Papua New Guinea (Curtain, 1981a; Ward, 1977; Young, 1977) and the Pacific (Bedford, 1973; Bedford and Mamak, 1975). It was only in the late 1960s and 1970s in the Pacific and Asia, when researchers employed large-scale survey techniques to collect migration data that the prevalence and importance of circular mobility was discovered.[2] Previously censuses, being cross-sectional in nature with pre-defined concepts of mobility in terms of lifetime and place of previous residence questions, failed to capture this type of temporary migration.

The defintion of circular mobility in the literature covers all short-term, repetitive movements which are related to a whole range of reasons including going to school, visiting relatives and friends, holiday trips and so on (see Chapman, forthcoming; Mantra, 1977; Singhanetra-Renard, 1981). In some studies it even included return or retirement migration as in the case of Malay (Nagata, 1974) and Minangkabau government servants (Maude, 1979). Commuting is also considered an important form of circular mobility. However, it should be analyzed separately because it is usually associated with workers in the modern wage sector (Hugo, 1975; Maude, 1981; E. Young, 1978; M. Young, 1978). Commuters are in fact merely substituting transport costs for the higher urban costs of living should they migrate to town with their family on a more permanent basis. In this sense it is similar to the journey to work patterns of developed countries. This type of commuting also occurs in Third World countries but it must be distinguished from circular migration which is a different labour response.

Structural aspects of circulation

The argument in this paper is that the most critical aspect of circularity is the form it takes as labour mobility because of its implications on structural change and development. The relationship between circularity of labour and sectoral change suggests structural causality between the state of development (or underdevelopment) of an economy and the pattern of mobility it engenders.

There are three significant aspects of the structure of circulation which need elaboration: first, the relationship between circularity and modernization; second, the form and function of circulation; and third, the characteristics of the circulation streams in relation to rural labour surplus.

In the first case, the interpretation of circularity in conventional development thinking is that it is a feature of the modernization process. However, Zelinsky (1971: 225-6) was incorrect when he associated the growth of "personal mobility" with progressive modernization. In his model, different migration and mobility patterns were associated with different levels of development in the Rostovian sense of a unilinear transformation of the economy. But in fact, circular mobility as it has been defined above exists in many Third World countries as a manifestation of the entrenchment of inequalities, uneven development and incomplete transformation of the economy. This theme will be elaborated further in the paper.

On the second aspect, it should be noted that, whilst the form of circulation has persisted (studies have demonstrated the prevalence of circularity in early times), it can be argued that the functions circularity performs have been modified. This process is a response to the changing patterns of development of a country. While some of the agriculturalists of Africa circulated in pre-colonial times in response to climatic regimes, in colonial times, this circulation became a response to the monetization of the economy (e.g., head tax) and new consumer needs. In the same way, other subsistence agricultural circulators of Melanesia became labour circulators in mines and plantations following the integration of these economies into the international capitalist system. For example, West Javanese circularity has been modified through time, from shifting agriculture in pre-colonial days to working in plantations and mines during colonial rule, until the present pattern of labour mobility into the involuted urban informal sector (Hugo, 1975). In the same way, Bedford (1973: 14-28) traced the changing pattern of New Hebridean circularity, from ceremonial oscillation in pre-contact days to the trade in sandalwood, to working on farms in New South Wales and cotton and sugar plantations in Australia and Fiji. He attributed these changes to a demand for non-indigeneous material goods which could be acquired only by earning money.

The final illustration suggests that circulation, which may have been stimulated originally by economic pressures, through time may become culturally and socially institutionalized. A good example

[2] As early as the 1940s Mitchell was studying circulating labour migrants who worked in mines and plantations in southern Africa.

of this is the *merantau* of the matrilineal Minangkabaus of Sumatra. Their motive for *merantau* is often couched in psychocultural terms, such as tensions due to insecurity created by a matrilineal society on males (Naim, 1974: 26-7). But the main reason for *merantau* is economic (Maude, 1979; Murad, 1980; Naim, 1974; Swift, 1971). Kahn (1976) goes on toe argue that these patterns are mainly the product of colonialism.

The third aspect of the structure of circular migration in relation to sectoral change concerns the characteristics of the circulation streams: rural-rural, rural-urban, urban-urban and urban-rual. To the extent that circulation is a manifestation of labour underutilization, the emphasis will be on rural-rural and rural-urban circulation. The overwhelming proportion of most Asian populations is agrarian and rural and will continue to be so for the rest of the century. Already it is clear that the stagnation and worsening of conditions in the rural areas are displacing people. This is occurring in spite of the intensification of cultivation. The rural areas are becoming a pool of surplus labour. Owing to the more conspicious nature of rural-urban mobility, especially to the largest cities, scant attention has been given to rural-rural movements. Due to the deteriorating rural conditions as well as the urban bias of development, rural-urban mobility will increase. This stream will also throw light on the extent of sectoral change which is elaborated on below:

(a) Rural-rural circulation

The most common form of this mobility is in seasonal agriculture and pastoralism. During the off-season farmers may seek work in other rural areas growing the same crop under a different climatic regime (padi farmers from the East coast of Malaysia circulating to the West coast states of Kedah and Perlis), irrigation (Southern Thai farmers working in the padi-irrigated project of *Muda*) or a different crop. Where there is fragmentation of land owing to inheritance and growing population pressures, a type of circulation where farmers have to spend different periods in different widely dispersed plots (owned or rented), occurs. Traditional co-operative work groups such as *berderau* (Malaysia) and *tebasan* (Java) share their labour during peaks of labour demand. Such groups have now become commercialized, working as paid labour in a gang. Other contract work-groups sell their labour for short-term rural projects such as the opening of land and construction of roads, canals, etc. Because most of the farmers who participate in this type of circulation are unskilled, they work as manual labourers.

The most serious symptom of stagnation in rural areas is the "floating" population found in Madhya Pradesh (Desmukh, 1956) and Gujerat (Breman, 1978-1979) in India. These dispossessed wander around, desperate for work to survive. Mostly "untouchables" and the landless, these circulators, because of their plight, are at the mercy of the capitalists, who would employ them, rather than local labour, at very low wages. It is suspected that they exist in greater numbers but escape conventional data collection techniques which assume certain permanence in households. This will be discussed further in a later section.

(b) Rural-urban circulation

The bulk of circulators from rural to urban areas move into the already involuted urban informal sector.[3] They are probably the best documented. Studies include the works of Hugo (1975) in 14 West Javan villages, Jellinek (1978a; 1978b) of street traders in Jakarta, Mantra (1978) of two rice-growing *dukuhs* in Central Java, and Forbes (1979) of trishaw riders in Ujung Pandang, South Sulawesi, in Indonesia. For Thailand, Textor (1956) studied the *samlor* drivers from Northeast Thailand; Lauro (1979) and Lightfoot (1980) examined circular mobility from a central plain village and Northeast Thailand respectively; while Singhanetra-Renard (1981) analysed different forms of mobility and attitudes to circulation in Chiangmai. Stretton (1979) found that most of the construction workers in Manila were circular migrants. In Malaysia, Maude (1981) demonstrated the significance of circular migration among the depressed Kelantanese and Strauch (1977) among the Chinese New Villages.[4] In contrast, the findings in some villages in the more prosperous Muda agricultural scheme showed that circularity was not as important as commuting (Young, forthcoming). Curtain (1981a) and Young (1971) in their research on mobility in Papua New Guinea showed the striking resemblance of labour mobility there to the African examples. The Pacific and Melanesian islands, being such small states, usually have international labour mobility to New Zeland and Australia (Bedford, 1973; MacPherson, 1981).

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[3] The discussion of this controversial concept is in the section on circulation and the labour market.

[4] New Villages were *ad hoc* settlements set up during the Emergency period, 1949-61, to combat communism. Many are now on the periphery of urban areas.

The extent of poverty varies between these circulators with those from Java being on one extreme and the Pacific Islanders on the other. Again, the most desperate group is the "floating" population, wretchedly wandering from rural to urban areas, recruited or rejected as need arises. This group, as in the case of the rural-rural "floating" population is increasing due to the absolute inability of the urban areas to absorb them (Friedmann and Sullivan, 1974).

Circular migration and the labour market

The previous discussion on the structure of circular migration points to two distinct but related aspects of the phenomenon: first, that circulation is one representation of the adaptive strategies adopted by poor households in response to the state of underdevelopment of the rural economy; and, second, that these household adaptive strategies are determined in turn by the structure of the labour market in urban and rural areas. In this sense both circulation of labour and the fragmented nature of the labour market are a manifestation of the single basic problem, that of regional and economic underdevelopment. Two aspects of the relationship between circulation and the labour market, namely, the characteristics of labour and its household adaptive strategies, and the nature of the labour market itself will be elaborated. The former constitutes the supply side and the latter the demand side which together represent the functioning of the labour market, and hence its vital role in circulation.

An examination of the salient features of circular migrants in the Third World points to one important factor-that they are unskilled, or at best, semi-skilled workers who only have their physical labour to sell. They are mostly illiterate or have only minimal schooling. They move into the informal sector, their work being irregular, insecure, with low earnings and all the typical characteristics of the "casual worker" (see Bromley and Gerry, 1979). They are usually males (although the number of female domestics is increasing), young, able-bodied, from the lower economic strata of the village society.[5] Their meagre earnings prohibit them from taking their family to their workplace. In town they live under extremely makeshift conditions, such as living on the construction sites in the case of construction workers (Lauro, 1977; Stretton, 1977) or the overcrowded *pondok* system described by Jellinek (1978a; 1978b). Unlike the "floating" populations and the *gelandangans* of Jakarta, these circulators are likely to have some access to land (owned or rented) and be cultivating crops which can be handled by their female relatives left in the village. Often they return to the village during peak labour demands, such as the rice harvest. It is the land factor which distinguishes the circulation of the African, Pacific and Melanesian countries from that of densely populated Asia. Most circulators had previously been engaged in agriculture.

From the above summary of the major features of circulators, it is clear that circular mobility is really a strategy of survival, a means of coping. People do not circulate in this precarious manner because they want to taste urban life but enjoy the rural living enough not to want to give it up. Afterall, the immediate resource for the poor household is its family members. These responses are the household adaptive strategies or family attempts at coping with the condition of underdevelopment. The demographic, economic and social descriptions of circular migrants are, therefore but a reflection of underlying processes operating at the family and household level.[6]

Within the rubric of household adaptive strategies are the following considerations: the family size, the "value of children",[7] its interrelationship with inter-generational wealth flows[8] and remittances (not necessarily within the family in just that location, but among the total network of people who are linked to that household by mutual responsibilities and obligations) and their implications for the persistence of high fertility; the allocation of household resources such as income and investment (who to educate and retain in school), the distribution of work among family members (child labourers, circulators, migrants and commuters), its impact on marriage (retention of female children

[5] Those on the higher economic echelons are likely to be better educated and hold permanent jobs which allow them to commute or become migrants.

[6] Harbison (1981) reviewed the links between the household structure and family strategy but did not relate these to the political-economic and social structures.

[7] This basically discusses the positive and negative values of having children. Unlike the experience in Western countries, in most Third World countries, children are assets, contributing to family income and are an investment for parents in their old age. It was therefore irrational for the poor to limit their family size.

[8] See Caldwell (1976; 1980) for a statement on intergenerational wealth flows. Hugo (1981b) examined wealth transfers in the form of remittances by circulators and commuters in Indonesia.

to assist in housework), etc. The analysis of households and families as they condition labour mobility must incorporate the time element,[9] to see how outside forces affect the family in terms of its size, vital events, human resource endowment, dependency burden, job, mobility and income changes. This incorporation can be achieved by studying the household as the basis, the micro-unit, in the form of its changing family life-cycle which is a response to broader socio-economic changes.[10] For example, the study by Curtain (1981b) of two areas of Papua New Guinea illustrated quite clearly the different strategies of survival undertaken by "straddled" households which are located in the rural areas sending out mostly dependants as circulators.

The converse of household adaptive strategies is the nature of the labour market to which households respond. The recent disenchantment with the informal sector model (basically an extension of the dual-sector economy) led Breman (1976; 1977), based on his research of labour relations in Gujerat, and Gerry (1977), to make a strong case for a fragmented labour market approach. The concept of the fragmented labour market suggests that it is formed by the different production and work relations which incorporate labour into the urban and rural economy. These labour relations, defined in a general sense, can be classified into different fractions or fragments of the entire labour market. The conventional way of looking at it is to dichotomize it into the formal and informal sector. But this approach must be used with caution because the relations between the two sectors are critical. The subordinate and dependent position of the informal sector is a distinct characteristic of this fragmented labour market. The production units in both sectors are differentiated not only by these different labour (i.e. wage) relations, but also in terms of their relationship to the state and each other. The labour market is characterized by a complexity of heterogeneous features: horizontal and vertical barriers, unequal access, structurally-determined impediments such as low education, paltry wages, particularistic loyalties and patron-client relationships, to name a few (Breman, 1976).

Circular migrants are in a particular form of labour relations within the context of the fragmented labour market. For the circular migrants of Gujerat (Breman, 1978-1979), their recruitment into the cane-crushing industry is controlled by jobbers. Owing to their desperation for work they have no bargaining power. Thus, the employers totally control the situation. It is not surprising that the employers prefer to recruit these circulators rather than readily available local labour.

This pattern is similar to that of certain parts of Africa (Magubane, 1975) where circular migrants were employed for their cheapness and docility. Because of their temporariness in the work locations, these labour migrants do not form lasting ties with each other and consequently are unable to work together for common interests. For the employers circular migration also obviated the problems of housing and paying welfare benefits to the workers.

Exactly the same pattern of manipulation and exploitation is found for the contract workers of the Pacific and Papua New Guinea who are recruited to work in the mines and plantation secotrs (Connell, 1980; Curtain, 1981a). The major characteristics of this type of labour circulation and relations are also found in the "guest workers" of the developed and industrialized nations of Europe (Turks in the Federal Republic of Germany, Algerians in France) and America (Chicanos and Puerto Ricans in California).[11]

In a different historical context, but reflecting the same concept, is the massive circular migration that occurred during the colonial period when people, were recruited as coolies and indentured labourers for plantations, mines and public works. Thus, Indians and Chinese were sent to as far as Fiji, Guyana, Kenya, Uganda and other British colonies.

On a smaller scale, but illustrating the patron-client dependency is the role of the *punggawa* in providing the trishaw rider with a trishaw in Unjung Pandang (Forbes, 1979) and the *tauke* in the *pondok* system for street traders in Jakarta (Jellinek, 1978a; 1978b).

From the above examples, it is clear that the nature of work of the circulators reflects the structure of the fragmented labour market. It is a dialectical relationship, the response of the individuals as part of the household strategy to the demands

[9] See Pryor (1979) for a compendium of writings on the life-history approach.

[10] See Murphy and Selby (1980) for a case study of the domestic life-cycle of the urban poor in Mexico, as an example of this approach.

[11] See Piore (1979) for an analysis of migrant labour in industrialized nations and the History Task Force (1979) for a historical apprroach to the study of Puerto Rican migrant labour.

of broader political-economic and social structures. We may now turn to these broader issues and see more clearly the relationship between circularity, migration and development.

Circulation, migration and development

Circulation, migration and commuting are intimately linked. They are varying responses within a continuum of labour mobility in the development of a country. This does not imply that migration and commuting result in productive labour absorption. These latter phenomena also have their own problems, such as unemployment among migrants, mismatch of education, entry into the informal sector, etc. But the significant point is that circular mobility, like other forms of mobility including migration, is an integral component of the major processes of structural change in a country. As such, it should not be studied in isolation from the historical and evolving patterns of development of the particular country. In their specific forms and magnitudes, mobility processes reveal themselves as patterned movements of human populations within and between territorial units in response to and at the same time conditioning the economic and social forces which affect significant sectors of a community.

Because of this mutual relationship between mobility and the political economic structures, the extent of the three basic types of mobility may change through time. Skeldon (1977) suggested that, owing to rural and urban transformation in Peru, mobility will evolve from a short-distance circulation to a longer distance, more permanent migration. Evidence from Kenya suggests that rural-urban circulators are staying in Nairobi for longer periods than previously (Elkan, 1976). Maude (1979) made the same observation of the Minangkabaus. A slightly different but related change in rural-urban circularity is occurring among the Malays in Malaysia, characterized formerly by their return to the village on retirement. The new pattern is an emerging class of urban Malays who have servered links with their rural source areas.

A study of mobility and development must have three levels of structural analysis which will extract the processes and the conditioning factors of mobility (see Young, 1982). These three levels are: the world level, the national and regional level, and the local and the family-demographic structure level. The principal contribution of a structural analysis of population mobility, and of circularity as a specific form of it, is to understand the articulation of the different levels of economic, social, and historical determination, and their particular influence on the mobility experience of individuals.

This approach must incorporate two aspects: first, it must identify the structural processes which determine a country's developmental trajectory within the context of a meaningful periodization of society's historical transformation. Second, it must locate mobility processes within this unfolding structure and periodization.

The first part of the analysis involves essentially a specification of the national model of development. This should recognize that national economies exist as integral parts of an increasingly interdependent world economic system, each playing a historically defined role in the development of the system, and therefore become structured in particular ways depending on the articulation of internal and external factors.

The second part of the analysis is to situate mobility processes within this national development model. The specification of mobility phenomena here must be conducted at three levels. The first level is the analysis of mobility streams and their relation to national development processes. To analyse these, particular cognizance must be taken of the sectoral characteristics of these streams as they reflect the processes of national economic transformation. Their form and structure should be related to changes over the different historical periods of economic development of the society, including the underlying social conditions and the policies of the state in response to these changing conditions.

The second level of analysis examines the transformation of particular areas, either as regions of origin or as regions of destination. This examination incorporates a dynamic view of the relations between these areas and the role they play within the national territory, in order to discover the underlying explanations for the persistent growth of lagging regions in spite of mobility, the nature and implications of circular and return migration and the multiple periodic displacements between two or more regions. By the same token, the analysis of rural-urban mobility should be studied through a more disaggregated characterization of the urban economy in peripheral national economies. This is best discussed in terms of the urban informal sector[12] or the fragmented labour market.

[12] See *World Development*, 6, 9/10, 1978, Bienefeld (1975), Breman (1976), McGee (1976; 1978) and Salih (1981) for critical perspectives on the informal sector.

The importance of the fragmented labour market in a structural analysis of population mobility is clear. Besides offering a more meaningful characterization of the Third World urban economy, it allows for the analysis of circularity as a phenomenon of the structure of the labour market. In this way forms of mobility and migration (in particular, circular and return migration) as much as the nature of their absorption into the urban labour market through rural-urban circulation, can be seen as particular responses and adaptations of displaced labour within persistent structures of under-development.

A third level of analysis, which is particularly necessary for a structural framework of analysis of circular migration, involves the study of the decision to move in terms of family-demographic structures and external conditions impinging on the household. Such an analysis includes consideration of household formation, strategies of the household economy and other related matters. Again, the particular configuration of household experiences in this regard is subsumed by the macro-economic and social structures.

These and the earlier issues discussed have bearing on the areas of future research on circular migration and its policy implications.

Policy issues and implications

In examining the policy implications of circular migration, one must distinguish between welfare considerations on the one hand, and developmental issues on the other. This distinction is necessary because circular migration is both a response to, as well as a reflection of the prevailing development situation in many Third World countries. Circularity is the response of labour to a situation in which it is not fully utilized in both urban and rural situations or in any one work location. Policies that are directed at improving the circulator's welfare are therefore necessary, at least in an immediate sense. Such welfare-oriented policies, however, will run into contradictions in the long run, since such policies would tend to cure the symptom rather than the disease itself, that being the underdevelopment of the economy as a whole. Therefore, these policies should not be directed at circularity *per se* with the aims of either promoting or preventing it. But rather the policies should be aimed at improving the conditions for productive employment of labour, that is, at structural change.

(a) Welfare policies

Under this heading may be included those policies aimed at ameliorating the worst effects of poverty associated with circular migration, including the improvment of housing in urban areas, health and other basic services. These policies are merely accommodative. A more positive approach would take the form of policies to provide improved transport, training or retraining facilities and job information or recruitment/placement services, as well as credit, premises and equipment for circular migrants to undertake informal sector-type activities.

These welfare-oriented policies are necessary since it is difficult to stop circulation for the following reasons. First, because so many very poor people depend on circular mobility for survival, to prevent them from circulating would be immoral. Such impediments would further intensify the hardships of the poorest, for it is the more educated and economically better-off villagers who can opt for migration and commuting. Second, the very fact that circulation is a symptom means that whatever policies are applied to curb it will only end in failure. For example, if circular migrants are allowed to circulate only if they have permits this will merely produce masses of illegal circulators. Not only will it make life more difficult for the most destitute but it would also mean a government deployment of funds and labour to policing the restrictions. All of this would be for an ineffectual policy that would have the same results as the "closing off" of cities to rural migrants.[13]

On the other hand, if the government wants to help by providing cheap accommodation in the form of barracks, as contemplated by the administration in Jakarta (see Hugo 1981c: 379-380) there is the fear that this will precipitate an onslaught of temporary migrants. Besides, it could be argued that these basic urban services should be given to the other perhaps more deserving, urban poor.

The effect of better transport on population mobility has been documented in numerous studies (Leinbach, 1978; 1979; Naim, 1971: 61 Mantra, 1979; Hugo, 1981c and Hugo and Mantra, forthcoming). However, its greatest impact is on commuters rather than circulators and migrants. This is because transport costs are a more important

[13] See Simmons (1979) for a review and evaluation of attempts to constrain migration to some cities.

consideration in a daily commuter's budget. Improved transport is likely to widen the commuter's options for work by extending the commuting field. For the circulators, it will facilitate the shortening of the periodicity of movements.

These welfare-oriented policies essentially attempt to solve the immediate problems of circular migrants. They are mere palliatives. They do not solve the problem. If we accept that circular mobility as it exists in most Third World countries and certainly in the ESCAP region is a symptom of incomplete transformation, then the problem is structural. It is a manifestation of a far wider problem, that of persistent and growing inequality in the world system of which the developing Third World economy is an integral part.

(b) Development policies

In view of the basic structural inequalities which have produced labour mobility, this problem has become as controversial as the concept of the informal sector as a policy instrument to alleviate poverty. The question is whether circular mobility should be encouraged. If it is a reflection of under development it will become a counter-productive process further entrenching uneven development in third world economies, producing further dependency and inequality. For example, McCall (1977) viewed accelerated circulation as another mechanism to preserve substantial income and spatial inequalities. In an analysis of the impact of remittances in the South Pacific, Connell (1981) concluded that on the smaller islands, they tended to foster dependence while on the larger islands they tended to generate inequality. These findings are similar to Lipton's (1980), and in direct contrast to Griffin's (1976). Applying to Indonesia Amin's (1974) treatise that unequal capitalist penetration in Africa has caused differential labour mobility, Titus (1978) found that the areas of economic boom attracted most migration while the stagnating regions of Central Java lost the most people. He concluded that inequalities will persist if there is no attempt by the government to decentralize the economy.

From this analysis a whole set of policy issues emerges. Agrarian reform including consolidation of fragmented and uneconomic, multi-owned plots should be implemented. This may involve land rationalization and redistribution. This is an important consideration, for unless these structural aspects are reorganized, whatever agricultural development (higher yields, more cropping, use of machinery, etc.) will only be reaped by those already in an advantaged position. The experience in some "Green Revolution" areas indicates this. More importantly, such development has created new regional disparities within rural areas which encourage rather than prevent circularity of labour. A more inclusive agrarian reform programme, in terms of not only the introduction of technology and new cropping patterns and land redistribution and consolidation, but also programmes such as better policing of tenancy laws including rent control, provision of off-farm employment, and facilities for marketing, credit, etc. will help better to utilize and stabilize rural labour.

Such an integrated approach actually suggests that regional development, rather than rural development, should be a priority policy. By regional development, one conceptualizes an integrated project, taking into account the rural-urban linkages between towns and countryside (Lo, 1981; Lo and Salih, 1978). Owing to the recent disenchantment with the growth pole strategy of regional development, the agropolitan approach has been suggested (Friedmann and Douglass, 1978). It can be described as a way of reducing rural-urban distortions by creating rural-urban linkages on a symbiotic, equal basis at lower territorial scales of interaction. These rural-urban units or "agropolitan districts" would be characterized by the following: a relatively small geographical area; a high degree of self-sufficiency and self-reliance in decision-making and planning based on popular participation and co-operative action at local levels; diversification of rural employment to include both agricultural and non-agricultural activities, emphasizing the growth of small-scale rural industrialization; urban-rural industrial functions and economic structures; and utilization and evaluation of local resources and technologies (Lo and Salih, 1981). Based on these considerations, Friedmann and Douglass (1978) suggested a territorial unit encompassing a rural-urban population of from 50,000 to 150,000, depending upon local population densities, within a one-hour commuting range by generally available transportation.

The choice of the mix of factors in regional development policy is depedent on the historical and prevailing economic-social conditions of the particular country. There is no set prescription for every Third World country. According to Lo and Salih, (1981: 137-40) in the rethinking of regional development a number of important dimensions must be considered and consistently integrated into one framework which allows the analysis of

various interactions between spatial categories and economic processes within concrete social formations which occur at local, regional and national levels.

First, regional policy cannot be separated from considerations of national development policy and alternatives. Regional policy cannot be reduced to spatial development strategies without considering the socio-economic and political processes which influence them. Thought must be given to the structural linkages between the growth pole and its hinterland. The agropolitan approach which takes certain spatial and political forms may focus on rural industrialization geared to the mobilization of local resources and increasing labour and agricultural productivity.

Secondly, regional policy formulation depends on the particular structure of the regional economy in relation to the country as a whole. Whilst certain processes are national in nature, e.g. migration, economic leakage, etc., the formulation of regional policy must be particular to the condition of the regional target group. Thus, an area where there is pronounced circular migration would need different formulations from another area where circularity does not exist.

Thirdly the understanding of regional development processes must be based on rural-urban relations. This is to combat the urban bias in the thinking on regional development strategies. To focus solely on rural development may ignore the urban-type processes such as off-farm employment or marketing channels. In the context of circular mobility, cognizance must be taken of the circulator in both the rural and urban labour market.

Fourthly, the role of the city system must be viewed as a whole, with the different functions of the cities at different levels in the hierarchy being taken into account. Here, the role of the intermediate city as a means to absorb surplus labour efficiently and at the same time, counteract the further development of primate cities such as Bangkok and Manila should be exploited. These lower order centres are also likely to encourage commuting, thus widening the opportunities for employment of the poor.

Fifthly, the agropolitan approach, particularly in the territorial organization and development of rural communities centred on enhancing their rural-urban linkages should be encouraged. This would mean the development of rural industries, marketing networks and better physical access to amenities. These local communities must be involved in greater decision-making, thus building self-reliance.

Finally, the development of poor communities must be of prime consideration. The "floating" population is a good example of this group who must be given extra attention in policy formulations.

Regional development policy is therefore crucial in the solution of the problem of circulation of labour. By approaching the restructuring of the regional economy in a comprehensive and integrated manner, such policies will enable the fragmented labour market to be reintegrated and employment and income opportunities to be expanded both on-farm and off-farm, thus leading to a fuller utilization of labour as well as the provision of basic needs and services.

The essential question in the choice of policies is whether the problems to be solved are transitional in nature and therefore will be overcome with time, or in fact are structural and therefore persistent and which will require more radical policies aimed at structural changes. To accept for the former is to suggest short-term, welfare-oriented type strategies which are likely to maintain circularity. Part of the persistence of the problems as forcefully argued by Lo and Salih (1981), is that much of regional development strategies in the form of growth-pole and "trickle-down" approaches failed to realize that the non-farm sectors in rural areas are dominated by and dependent on the metropolis and overseas areas. This dominance reflects the inherently unequal relations between the North and South. Changes can only come about with such international restructuring as that of the new international economic order. To argue for structural change is to seek alternative strategies toward another development which emphasizes self-reliance; major change such as land reform and rural industrialization; ecodevelopment as a principle of balance between environment and development; and the provision of basic needs and services such as food, health, education, electricity, water, etc. These alternatives are being experimented with in many countries in the Third World. The impact of these policies on circular mobility requires much further research.

Conclusion : research directions

In order to propose meaningful and practical policies, a few points must be borne in mind. While more empirical research of circular mobility is

useful to fill in some of the gaps in our current knowledge, especially for different countries and situations, that research must not fall into the same trap as have so many other migration studies. After its initial interesting findings, migration research became involuted and repetitive, and made little headway. This trend continued because reasearchers failed to realize that all forms of mobility including migration are a response to broader political, economic and social processes which are the structural determinants of population mobility (Curtain, 1981b: Forbes, 1981; Standing, 1979; Young, forthcoming). Studies which examine the behavioural motives of movers as if they were isolated from the family situation, source-destination characteristics, intervening variables and so on will merely continue to provide patterns and characteristics of the phenomenon without explaining why they exist and persist. Bearing those points in mind, the first area of research on the subject of labour mobility is the elaboration of a theoretical framework which incorporates and locates circular migration within the proper perspective of development. It is then possible to identify the historically and nationally specific structure of the mobility phenomenon. Only in this way can it be explained more meaningfully. In this paper it has been suggested that such a study involves several levels of analysis which should be integrated and related to the whole process of development and underdevelopment.

The other areas of research particularly relevant to circular migration, concern the family-demographic structure and decision making. It has been pointed out that the household as an economic unit makes various decisions including the decision to circulate or migrate as part of its adaptive strategies in the face of different economic stituations. It is useful to extract the family conditions which determine the individual's decision to commute, circulate or permanently migrate. These types of research involve very detailed longitudinal studies as well as techniques such as the life and family history approach which permits aggregation and the discernment of various profiles of labour mobility in relation to structural changes in the economy, whether local, regional or national (see Young, 1982).

A final area of research to be identified in this paper concerns the policy area. Various studies should be carried out to determine the impact of implicit and explicit spatial development policies on circular mobility. Implicit policies include pricing and tax policies, subsidies, etc. while explicit spatial policies include industrial location policy, the growth centre strategy, transportation policies and so on. All these can contribute in a positive as well as negative way to the restructuring of the rural economy and thus to processes of labour force formation, utilization and mobility. Policies aimed at the growth of intermediate cities and small towns and the development of critical sectors such as food, energy, and rural industries also have important impacts on household decisions to migrate, circulate or commute.[14] These policies would, of course, vary between countries due to their differing prevailing and historical conditions.

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[14] Interesting ideas on these issues were generated at the Research Workshop on Intermediate Cities in Asia, East-West Population Institute, Honolulu, Hawaii. See Fawcett, *et al.*, 1980.

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4.5 THE IMPLICATIONS OF CONTRACT MIGRATION TO WEST ASIA

by

International Labour Organisation*

Introduction

The international movement of labour on contract work is not new to Asia. But the recent stream of workers from South and East Asia to the oil rich Arab States of West Asia (Middle East) has captured the attention of policy makers and planners as well as the popular media. The size and rate of growth in the numbers of workers taking up temporary work in West Asia are not the only factors behind the present interest. The potential earnings to be obtained from working in the Middle East represent a vast fortune to most families in the sending countries. The remittances that are inevitably repatriated are a welcome source of foreign exchange in countries suffering chronic balance of payments deficits. Moreover, contract migration directly alleviates domestic labour unemployment and underemployment. All in all, it is understandable why the countries of Asia view the phenomenon positively and optimistically. This has been reciprocated with generally favourable attitudes in the capital rich and rapidly developing countries of the Middle East. With the development of 'enclave' of foreign employment, these countries benefit from a relatively low cost supply of labour without associated political and social responsibilities towards these workers. Viewed from both points of view, the present arrangements seem to be mutually agreeable and beneficial (Weiner, 1982).

This optimism also characterized labour exporting countries in other regions of the developing world. Those of Southern Europe and the Middle East originally supported the export of contract labour as an unmixed blessing. But some regarded this as 'misplaced optimism'. In the words of Birks and Sinclair (1980), "while these benefits were in evidence as long as the scale of labour migration was relatively small, they were eroded surprisingly quickly as the scale of migration increased. . . This was perceived by the governments of the labour supplying States, who became increasingly disenchanted with their position" (p. 63). Governments of the Asian labour-supplying countries might consider the experiences of other countries as not fully applicable to their case. But there is currently a growing awareness on the part of policy makers in the labour exporting countries in Asia that contract migration has to be carefully monitored, and its consequences properly understood, if these undoubted benefits are not to be eroded. It remains to be seen whether these adverse effects will ultimately lead in Asian countries to the same disenchantment experienced by earlier labour exporting countries.

As table 1 indicates, the facts of the matter are that there has been a recent surge in contract migration from Asia. Data are both scarce and unreliable, but it is difficult to escape the conclusion that the numbers travelling overseas on contract work have increased rapidly over the past two years or so. There were, for example, more Filipino contract workers placed in 1981 alone than in the three-year period 1976-1978. The trickles of the middle 1970s have become steams in the early 1980s. The exact timing of these changes has varied, of course, by country. Pakistan was an early entrant in the market, with the Bureau of Emigration recording a growth from 23,000 placements in 1975 to 140,000 in 1977. This has since stabilised around 120,000 per annum.[1] The available evidence from other countries shows a surge in placements and related foreign exchange remittances around the turn of the decade.[2]

* The paper is prepared by Lionel Demery, Adviser on Population and Employment Research, ILO, Bangkok.

[1] Figures reported in International Labour Organisation/Asian Regional Team for the Promotion of Labour Administration (1981) p. 26.

[2] The data in table 1 are estimates of gross outflows. They reveal nothing concerning the growth in the *stock* of overseas labour without data on return migration that are not presently available. In general these data underestimate total outflows, since they are taken only from official sources. Note (a) in the table illustrates this point. They do, however, reflect the *growth* in the number of overseas placements.

Table 1. Contract labour placements overseas and related foreign exchange remittances: selected Asian countries 1976-1981.

	Placements overseas on contract work					Related foreign exchange remittances				
	Bangladesh	Republic of Korea	Philippines	Sri Lanka	Thailand[a]	Bangladesh (Taka million)	Republic of Korea ($US million)	Philippines ($US million)	Sri Lanka (Rs. million)	Thailand (Baht million)
1976	6 087	37 912	47 754	526	1 287	353.40	158.71 (1975)	111.26	...	15.00
1977	15 725	69 623	70 375	5 633	3 870	1 236.60	344.05	243.50	132.00	87.70
1978	22 809	101 998	87 762	8 082	15 265	1 655.40	654.38	373.50	342.00	511.70
1979	24 485	120 990	93 404	9 423	8 522	2 300.00[b]	1 158.26	588.70	735.00	1 295.60
1980	30 573	146 436	156 018	...	20 809	3 843.70	1 292.38	1 347.60	2 260.00	4 222.30
1981	55 787	...	227 199	...	24 472	5 594.50	...	...	...	6 732.31

Sources: *Bangladesh* *Labour Migration from Bangladesh to the Middle East,* World Bank Staff Working Paper No. 454; Bangladesh Manpower Planning Centre, *Manpower Bulletin* vol. 1, No. 1, April 1982.

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Notes: [a] Thai data refer only to labour recruited to the Middle East through the Department of Labour. Estimates place total Thai contract migrants at 98,000 in 1980 and 159,000 in 1981.

[b] Estimate based on January - September figure.

Table 2. Percentage distribution of contract migration by region of destination for selected Asian countries.

Destination region \ Sending country (year)	Bangladesh (1977/78 aggregate flows)	Republic of Korea (1980 stock)	Philippines (1975-1981 aggregate flows)	Philippines (1980 flow)	Pakistan (1978 flow)
Middle East	98.75	92.84	77.33	84.59	69.60
Africa	0.50	3.56	1.38	1.03	30.40
Europe	–		2.52	0.53	
Asia	0.75	2.94	13.49	10.42	
Other		0.66	5.26	3.42	

Sources: *Bangladesh* : World Bank (1981) p. 279 (official records of Bangladesh Manpower, Employment and Training).

Republic of Korea : S. Kim (1982) p. 14 (sundry sources).

Philippines : L.S. Lazo *et al.* (1982) p. 22 (official records of Overseas Employment Development Board and Bureau of Employment Services.

Pakistan : Ijaz Gilani *et al.* (1981) p. 10 (estimates by Pakistan Institute of Development Economics International Migration Project (PIDE/IMP)).

Characteristics of contract migrants

This paper addresses itself to contract migrants, otherwise termed "guest-workers". These are defined as those who cross international boundaries in securing remunerative employment with no initial intention of permanently settling in the country of employment. Most of these migrants from Asia take up assignments in the Middle East (see table 2). It is quite possible, however, that a settlement that was originally temporary, may become permanent, as observed by Weiner (1982) in his study of Indian migrants in the Gulf States. He describes the increasing tendency for migrant workers to take along with them dependent relatives, despite the fact that the migrants have few linguistic, religious and cultural links with the indigenous population. Moreover, whilst migration is considered to be "temporary" for the individual migrant, there seems at present to be little likelihood of this migration process being temporary. According to Weiner,

> "If manpower requirements alone determined the fate of the migrants, one could predict with confidence that expatriate communities would remain in the Gulf States through the remainder of this century" (p. 29).

Tables 3 and 4 report a selection of demographic and socio-economic characteristics of contract migrants from five sending countries. Although the tables are based *inter alia* on data reported in recent World Bank Studies in Bangladesh and Pakistan (see World Bank, 1981, and Gilani *et al*, 1981), a number of gaps are in evidence. In some ways, table 3 illustrates the paucity of data that are presently available. In many cases, data are collected on the "gaps", but are not reported or made readily available. With recruitment being conducted in most countries through both private and public sectors, governments have set up registration systems to monitor the flows. These are invaluable data sources, but the data are not always accessible. With improved compilation, storage and retrieval systems in the sending countries, data accessibility and dissemination of information to users (including policy makers) would be facilitated.

Contract migrants tend to be young men,[3] most of whom are married with dependants in the sending country. In the Philippines a recent study reported in Santo Tomas (1981) indicated that on average migrants have three dependent children. According to Ahmad (1982) the two million Pakistanis abroad are estimated to have twelve million dependants in Pakistan, which is approximately 13 per cent of the population. Migrants are usually better educated than the other origin population.

[3] Although the information was not available, most migrants from Bangladesh and Pakistan are certain to be male. For Thailand data refer only to migrants to the Middle East. Official Thai policy does not permit migration of women to this region.

Table 3. Socio-Economic and demographic characteristics of contract migrants from selected Asian countries.

Country	Data/year	Percentage male	Percentage aged 20 - 35	Percentage ever married	Mean number of dependants	Percentage rural origin	Percentage completed secondary school	Percentage contract duration 1 - 2 years	Percentage unskilled workers	Percentage unemployed at recruitment
Bangladesh	BMET Data 1977/78	n.a.	82.61	n.a.	n.a.	77.84	17.16	95.80	28.08	n.a.
Bangladesh	World Bank Survey, 1980	n.a.	70.93	n.a.	3.50	75.40	43.13	78.37	27.47	11.82
India	Special Survey Circa 1977/78	100.00	68.40	52.11	n.a.[a]	n.a.	55.40	n.a.	36.60	50.00
Pakistan	PIDE/IMP Survey 1980	n.a.	75.00[b]	70.00	n.a.[c]	66.70	35.09	63.80	42.60	7.00
Philippines	ILO/ILMS Study 1978	68.40	53.56	71.30	3.58	n.a.	84.80	90.70	n.a.	4.80
Philippines	POEA Data 1980	70.78	70.93	n.a.	n.a.	39.80[d]	84.23	n.a.	n.a.	3.40
Thailand	NESDB/Labour Department Data 1981	...[e]	67.70	89.80	5.86	n.a.	16.80	n.a.	30.44	n.a.

Sources: *Bangladesh* : World Bank (1981).
India : E.T. Mathew and P.R. Gopinathan (1978).
Pakistan : Gilani, *et al.* (1981).
Philippines : Institute of Labour and Manpower Studies (1982); Ministry of Labor and Employment data sheets.
Thailand : Rungchivin and Piyaphan (1982).

Notes: [a] Mean size of migrant household was 5.4.
[b] Percentage less than 30 years of age.
[c] 96 per cent of married migrants are separated from their dependants in Pakistan.
[d] Area to which remittances are sent.
[e] Data refer to Middle East. Officially, females are not permitted to undertake contract work in that region.
n.a. signifies not available in data source.

Table 4. Percentage distribution of contract migrants by major occupational group for selected Asian countries.

	Bangladesh (1977/78 outflows)	Pakistan (1971-1977 aggregate outflows)	Pakistan (1980 outflows)	Philippines (1975-1980 aggregate outflows)	Philippines (1980 outflows)
Professional technical and related workers	7.98	4.10	4.32	20.20	15.90
Clerical and related workers	1.79	3.00	1.52	3.20	3.30
Service workers	8.37	2.50	2.19	16.80	18.70
Production and related workers (including labourers)	71.65	68.10	78.05	57.50	59.70
Agricultural workers	3.64	22.30	5.12	1.40	1.00
Sales workers	1.37		5.95	0.20	0.30
Administrative and managerial workers	—		2.85	0.70	0.90
Other	5.10	—			
Total number/sample size	3 572	181 279	12 500	368 586	156 018

Sources: *Bangladesh* : World Bank (1981), p. 265.
Pakistan : Gilani *et al.* (1981), pp. 23-30.
Philippines : Lazo *et al.* (1982), p. 22.

Educational attainment of contract workers appears to be lower in Bangladesh, Pakistan and Thailand than in the Philippines. Interestingly, most Filipino migrants appear to come from urban areas, which is not the case for Bangladesh and Pakistan. The vast majority of workers are on contracts which extend over only one or two years, indicating a rapid turnover in the migrant labour stock. By no means are the majority of workers unskilled. A significant proportion (especially from the Philippines) are professional and technical workers. The dominance of the production sector indicated in table 4 is due largely to the importance of construction occupations in contract migration from Asia to the Middle East.

The effects on output and skill supplies

As Stahl (1982) has shown, the pure competitive paradigm of economic theory yields the powerful prediction that migration will benefit both sending and receiving countries. What is at issue is the distribution of these gains between the countries. From the point of view of the sending country, the extent of this gain depends crucially on the effects of migration on domestic output. At the one extreme, if migrants are unskilled unemployed workers, the cost of migration in terms of output foregone will be negligible. But in so far as migrants possess skills that are currently being employed, and are not easily replaced, the effect on output could assume significance. Moreover, it is possible (and frequently observed in Asian economies) that there is general unemployment and underemployment of labour alongside a scarcity of certain skills. The fact that labour markets in the sending countries are characterized by a general excess supply does not in itself signify that contract migration will have little or no damaging effect on output. From the evidence available in tables 3 and 4, it is clear that many of the contract workers from Asian countries are skilled workers. Bangladesh appears

to supply the greatest proportion of unskilled production workers, whilst professional and technical Filipinos comprise as much as one fifth of the contract worker outflows between 1975 and 1980.

Furthermore, from table 3 it is clear that few migrant workers were unemployed at the time of taking up overseas assignments, ranging from 3.4 per cent in Philippines to just under 12 per cent in Bangladesh.[4] The available evidence therefore points to the real possibility of output reductions as a result of the loss of skills that are not easily replaced. These effects are difficult to predict, however, because of the many direct and indirect consequences of labour outflow. Factor substitution and demand changes as a result of remittance inflows are among a number of changes which will determine domestic output. Only a general equilibrium framework can reasonably be expected to represent all these changes and trace the net effect on output.

The calculations used to derive benefit-cost ratios of contract migration (given for Pakistan and Bangladesh in table 5) usually critically depend on the assumptions made concerning output loss, or foregone output during replacement training. Estimates derived in table 5 show a high rate of return to production worker (especially semi-skilled and unskilled) mainly because forgone output is assumed to be negligible or zero for these groups of workers.

Table 5. Estimates of benefit-cost ratios for contract migration by labour category.

	Bangladesh	Pakistan
Unskilled/semi-skilled labour	3.15	1.74
Skilled labour	3.03	1.32
Service workers (sub-professional)	1.99	1.58
Clerical workers (sub-professional)		1.42
Professional workers	1.86	1.09

Sources: World Bank (1981) p. 223.
Gilani *et al.* (1981) p. 31-32.

These rates are particularly high for Bangladesh, and indicate substantial economic gains to be reaped from contract migration. But quite apart from the difficulties encountered in measuring social costs and benefits, such calculations are not particularly helpful from the practical view point of policy choice. For example, they provide little guidance about how many migrants of each category should be sent. From the pragmatic point of view, policy makers would be better guided by an analysis of the skill loss arising from out migration in the context of the domestic skills market.

The consequences of contract migration for domestic skills availability need to be constantly monitored. Abella's study (1979), which found no traceable adverse effect on skill supplies, pre-dated the more recent rapid increases in contract migration from the Philippines. As a consequence, the Philippine Government is now concerned to establish whether or not, and in what sectors, skill losses are assuming significance domestically. The lesson is clear-studies at one point of time are simply inadequate in situations needing constant vigilance. The impression from the literature presently available is that, whilst the numbers of contract migrants represent a negligible proportion of the overall domestic labour force, the process is such that certain sectors and geographical areas have suffered losses disproportionately.[5] In all the countries reviewed, skilled labour shortages have been felt in the construction sector which understandably has been the major source of labour. Studies in Pakistan for example, (reported in Ahmad, 1982) indicate some serious skill shortages in the construction sector, particularly masons and carpenters. Similarly, in some countries (such as the Republic of Korea and the Philippines) migrant nurses represent a significant proportion of available supplies.

Moreover, the process of migration is such that migrant households tend to be concentrated in certain communities, and these suffer disproportionate skill loss. In the majority of cases, personal links with friends and relatives are the access points to an overseas job, leading to chain migration and the concentration of migrants in localities. Ahmad (1982) makes reference to certain villages in Pakistan where three quarters of the male population of

[4] For India, the evidence, albeit from small samples, is that contract migrants are more likely to be unemployed than in other countries. Mathew and Nair (1978) put the proportion at about 50 per cent, whilst Prakash (1978) found only one third were unemployed at the time of recruitment. These figures reflect the high incidence of unemployment in Kerala, the State of origin.

[5] Weiner (1982) concludes, "Although there are shortages of labour in the construction industry in Kerala,... emigration from India has not produced the kind of loss of human resources experienced by some of the Mediterranean countries" (p.5).

working age has migrated during the late seventies. This concentration was also noted in Kerala, by Mathew and Nair (1978) and Prakash (1978) and formed the basis of their study samples.

But skill loss has also a qualitative dimension, since replacement workers are not necessarily perfect substitutes for those leaving the country. In an interesting illustration in Ahmad (1982), a qualitative skill assessment was made of non-migrant workers suggesting "skill depletion due to migration which no amount of sophistication can change" (p. 46).

On the other hand additional skills may be acquired and refined qualitatively as a result of overseas work, and might benefit the sending country on the return of the worker. There are serious doubts, however as to whether this is the case. First, many workers underutilize their skills when abroad. There are, for example, instances of trained teachers and nurses working as child minders and housemaids. (See Institute of Labour and Manpower Studies, 1982). This is undoubtedly due to the very wide wage disparities between sending and receiving countries, distorting the returns to skill. Second, Asian workers often perform training functions whilst on assignment, with little likelihood of acquiring additional skill for themselves. Finally, workers often do not take up their existing occupation on return home which brings into question the relevance of those skills acquired (if any). For instance, only 18.4 per cent of construction workers surveyed in Islamabad airport intended to resume their old trades (Ahmad, 1982).

The longer run effects on skill development are difficult to determine. Not only is the degree of skill acquisition by migrants something of an unknown quantity, but the deeper seated effects on education, occupational choice and availability of good quality trainers and teachers at home take time to appear. There are already signs of a drift in preference away from academic education towards technical and vocational training, as a consequence of the contract migration from Pakistan and the Philippines (these issues are also raised in Section V below). The long run situation is further complicated by a likely shift in the demand for skills overseas. With the Middle East construction boom likely to fade, project operation and maintenance will become the major labour requirement. Most likely, the skill level demanded will increase as a result, with fewer semi-skilled and more clerical, technical and professional workers being in demand.

Foreign exchange remittances and their use

The foreign exchange earnings derived from contract migration are the "icing on the cake" as far as the sending countries are concerned. It is because of these that workers and their families are prepared to cope with the social and economic disruption that overseas work entails. According to the evidence from the countries for which data are readily available (Bangladesh, Pakistan and the Philippines) about two thirds of remittances are sent through official banking institutions, although the proportion is usually significantly higher for urban as compared with rural areas of receipt (in Bangladesh, for example, only 48 per cent of remittances are channelled through banks in rural areas compared with 93 per cent in the urban areas). This contrast between rural and urban areas shows the importance of the domestic banking infrastructure in determining the choice of remittance channel. Other channels include black market exchange, cash remittance during visits home and remittances in kind.

The "windfall" nature of foreign exchange remittances could encourage their use for extravagance and conspicuous consumption. This could lead to a consumption orientation not only among migrant families, but also non-migrant households through demonstration effects. At worst, it can lead to social tensions resulting from increasing income and wealth in-equalities in the areas of origin. The evidence from Asia consistently shows that a relatively small proportion of remittances are spent on investment and development related activities. It is likely that between 50-70 per cent of the foreign exchange remittances received in the contemporary Asian countries reviewed are spent on current consumption. Of the remainder, most is devoted to the purchase of land, housing and related improvements. Productive investment in real physical assets usually accounts for only one tenth of remittance expenditure. These approximations (derived from data from Bangladesh, Pakistan and the Philippines) are reasonably in tune with other findings (for example, Connell, *et al.*, 1976 and Connell, 1980). They can most probably be attributed to the general lack of investment opportunities in the villages and localities from which the migrants come – which was probably one of the reasons why they originally sought work elsewhere.[6]

[6] Weiner (1982) implicitly excuses the failure of migrants from Kerala to invest their remittances since "few investors in India have found Kerela an attractive place to invest"

The use to which remittances are put is an important factor governing the effect of contract migration on the origin locality in general and the degree of "trickle down" to poorer households in particular. Poor groups appear to be unaffected directly by migration, since they lack the resources to meet the high initial costs to finance migration. Given present expenditure trends, it is unlikely that remittance sending is benefiting poorer, non-migrant households.

Although these remittances have been flowing into Asian countries for a number of years, countries receiving them lack both an effective short term strategy and long term policies regarding incomes of migrants.[7] In particular, there has been little attempt in Asia to direct or encourage the use of remittances for developmental purposes. Whether or not this can be achieved through policies which do little to change the developmental parameters of the overall social and economic system domestically is open to doubt. The best incentive to invest hard earned savings is the availability of sound, relatively low risk investment opportunities yielding a reasonable return. If these are not available, relatively marginal inducements cannot be expected to be effective. However, given the background and training of most migrant workers, there may be perception lags involved, which appropriate government policies and training-cum-action programmes could shorten. The type of assistance governments could offer to workers to encourage more investment/development use of remittances would include;

(a) The offer of special development bonds to contract workers on favourable exchange terms (as, for example, issued in Egypt and Jordan);

(b) Improved banking facilities to avoid delays and to encourage the use of those institutions which can make funds available for development investment;

(c) Pre- and post-assignment orientation to workers, giving practical advice and direction on the use of their remittances.

The implications for social and family welfare

Conventional rate of return analysis is based only on those considerations that are measurable. Its weaknesses in guiding policy choice are well understood. In the context of contract migration, it cannot take into proper account the economic disruption costs that are entailed. But perhaps more importantly, it neglects the social and family welfare repercussions, which, although not easily measured, are none the less very real. The physical absence of a household member, especially the household head, leads inevitably to changes at the household level which are not always beneficial. In so far as households are aware of these, and given that the decision to migrate is jointly taken by members of the household, the overall effect on family welfare is very likely to be beneficial, as otherwise the decision to migrate would not have been taken.

Yet these conditions do not always apply, and it is possible that households may suffer loss in both the short and long term. The following possibilities are illustrative.

Division of labour in the family

The departure of the migrant often requires additional work from other household members, particularly in rural/agricultural households from which many migrants originate. There are two basic counteracting effects. First, productivity per manhour of work is likely to rise, providing an inducement to remaining members to perform the work previously undertaken by the migrant. However the receipt of foreign exchange remittances will create an income effect, as a result of which households may prefer to work fewer hours and "consume" some of the additional income in the form of more leisure time. The net effect, in theory at least, is uncertain.

With the majority of migrants being married men, female and child/youth dependants will be affected most by contract migration. Female work, and more generally, female status is likely to change, which may have consequences for fertility and marriage patterns. Bilquees and Hamid (1981) observed that female labour force participation in Pakistan was higher in contract-migrant households, although there did not appear to be any noticeable change in attitudes to female status in the villages studied. Child/youth participation in the labour force might also increase, with associated adverse consequences on child education (see below). Bilquees and Hamid however found no evidence of an increase in child labour as a result of contract migration in Pakistan, although child education did appear to suffer.

[7] Labour welfare funds have been set up in Pakistan and the Philippines but so far these have not made a significant continuation of effecting changes in the use of remittances.

Family welfare

The current consumption of foreign exchange remittances is often considered undesirable. In many respects, however, increased household consumption can make a positive contribution to family welfare in general and human resource improvement in particular. Improved nutrition, better health care, adoption of family planning and increased education are among a number of potential benefits which often accompany higher incomes. Whether or not this potential is realized is another matter.[8] Incomes from overseas work are not considered as "permanent" and families enjoying this windfall do not always give proper consideration to their long term welfare. Migrants are often tempted to devote their extra earnings to conspicuous consumption (radios, electrical appliances, consumer durables, etc.) which confer little long term benefit.

The windfall earnings from overseas provide households with a real opportunity for self improvement, particularly the education of children. They may provide an incentive for substituting quality for quantity of children, thereby leading to lower fertility in migrant households. On the other hand, in so far as children may be called upon to work after the migrants' departure, their education may, on the contrary, suffer. The evidence (such as it is) is mixed on this point. Bilquees and Hamid found disturbing evidence that children in migrant households are more likely to drop out of formal education. This is attributed to their intention to seek employment overseas, and that "to continue education seems to them totally useless" (p. 4). On the other hand, fragmentary evidence from the Philippines (Santo Tomas, 1981) suggests a willingness to increase education for migrant household members.

It need hardly be emphasized that there may be even more fundamental effects on the family and social organization. Decisions on the life cycle, including of course the timing of children, have to be made within the constraints of the disruption caused by migration. Little, if anything, is known of this nor about the special needs of migrants and their households in the general area of family welfare/family planning. Concern has also been expressed about the effects on marital stability, but there is little hard evidence that this is a widespread problem among migrant families.[9] There are other potential disruptions of social organization in general. Dissatisfaction with local opportunities, discontent and social tension resulting from increasing income and wealth inequality etc., are very real possibilities about which little is known at present. However some observers maintain that these income-earning opportunities have "de-radicalizing" effects, weakening the case of malcontents and protest movements (Weiner, 1982, fn. 13).

Return migration

One of the most neglected aspects of contract migration from Asia is return migration. Most workers are granted contracts for two years or less, suggesting a rapid turnover in the labour stock. The majority of workers therefore return home frequently, albeit in many cases to apply for another overseas assignment.[10] Some return permanently, or at least, return with that intention. For whatever the period of return, data on returning migrants are urgently needed for three main reasons. First, without such data it is impossible to derive meaningfull estimates of the overseas labour stock. Current estimates are based on reasonable data on outflows, but usually involve *ad hoc* assumptions on the proportion of the existing stock returning. Secondly, returning migrants usually face difficulties of reassimilation, and may require special assistance. Finally, an understanding of return migration would be prudent in view of the uncertainty that surrounds the level and composition of labour demand overseas. Some observers (Birks and Sinclair, 1980) anticipate a relatively sharp decline in labour demand in the Middle East because of the "swollen dimensions" of the construction sector and the anticipated wane in the construction boom. Others (such as Weiner, 1982) do not expect a decline in the manpower requirements of the oil rich countries of West Asia. Quoting World Bank estimates, Weiner expresses the view that demand is likely to continue to be strong throughout the century. The uncertainty (in his view) is attributed to political and social tensions arising from the presence of an overwhelmingly large expatriate community. In Weiner's words, "politics, not economics, will ultimately be decisive" (p. 30).

[8] Bilquees and Hamid (1981) found evidence that migrant households had better knowledge of diet and nutrition, but in practice, there was little difference in migrant household behaviour.

[9] However, the Pakistan Institute of Development Economics International Migration Project study found that about a quarter of migrants returned home because of "family problems". (See Gilani *et al.*, 1981, vol. II, p. 42).

[10] Of the 26,790 Filipinos placed by the Overseas Employment Development Board in 1981, 61 per cent were rehires.

The difficulties of return migration and reabsorption are likely to be compounded for a number of reasons. First, returning migrants will be composed of workers in similar skill/occupation categories – most likely skilled and semi-skilled construction workers given the anticipated change in skill demand in the Middle East. This concentration of returning skills will create serious problems in the domestic labour market. Second, returning workers are likely to have unrealistic and inflated job/work expectations, in terms of both income and status. That only 18 per cent of returning Pakistani workers studied by Ahmad (1982) intended to resume their previous occupation is evidence of this. Discontent and long periods of job search are likely outcomes. Finally, the downturn in foreign exchange remittances which would accompany a significant return flow of migrants, would create additional difficulties in creating the necessary jobs at home by restricting the supply of scarce foreign exchange.

These skill specific movements in labour to the Middle East and back to the domestic labour market create serious problems for manpower planning in the sending countries. In some cases, the uncertainty of contract employment overseas leads to an unwillingness to accommodate these flows in development planning exercises. Weiner (1982) refers to "the precarious political position of the Indian community (in the Gulf). . . that makes the Indian Government reluctant to build remittances into their long-term economic projections of their foreign exchange, or to make any long-term assumptions about the role of emigration in relieving unemployment in selected regions of the country" (p. 30). These uncertainties also create technical difficulties in projecting total domestic and overseas demands and supplies of labour. But manpower and employment planning has never been an easy task, and it is time for the sending countries to take up this challenge.

Concluding observations

It is probably fair to conclude that at present few governments have well defined and fully articulated policies on contract migration. In general, governments have welcomed the opportunities presented in the developing countries of West Asia for relieving domestic unemployment and foreign exchange difficulties. The migrant-sending countries of Asia have understandably been reluctant to attempt to influence the conditions of work and life of their nationals in the countries of employment. However, in most cases, standard or model contracts have been drawn up by government agencies to assit the private sector in protecting the workers' interests.[11]

But there are signs of a growing concern among policy makers, especially over the implications of migration for the sending country. The subject of contract migration was high on the priority of the agenda for the Eighth Conference of Asia and Pacific Labour Ministers held in Manila in 1980. Among the recommendations made were,

> "International and regional in-depth studies should be undertaken on the various aspects and implications of labour migration, taking into consideration the views and the social and economic characteristics of the sending and receiving countries."
>
> "Labour sending countries must strengthen their government supervision and control of private recruiting agencies in order to prevent exploitation of workers in collaboration with the receiving countries, whenever appropriate."
>
> (Eighth Conference of Asian Pacific Labour Ministers, 1980, pp. 16 and 17)

Many of the concerns expressed (including the latter recommendation) arise because recruitment of workers in most Asian countries is the responsibility of both private and public sectors. This not only results in the potential for exploitation and other malpractice, it means that systems of registration of private sector activities are required for governments to monitor properly the flows. Inevitably, a great deal of migration occurs outside this legal framework, though estimates of the extent of such flows are hard to come by.

In some respects, the growth in contract migration has caught many of the sending-country administrations by surprise. They lack the institutional machinery to handle the policy making, planning, recruitment, monitoring and welfare responsibilities that have ensued. Most practitioners are aware of the need for these administrations to be strengthened in order to protect better the migrant workers and to shield the society from potential harmful consequences. Indeed, a number of new institutions have recently been created to handle some of these problems. In the Philippines, recent restructuring of the Ministry of Labour and Employment has included the creation of the Philippine Overseas Employment Administration. In Bangladesh, the newly created Manpower Planning Centre

[11] For examples of such model contracts see Böhning (1982).

is charged with some responsibilities in this field, whilst the Department of Labour in Sri Lanka has recently established a Returnee Migrant Branch.

One of the constraints faced by these new institutions is a general shortage of data and understanding of the effects on the sending countries. There is a need to:

(a) Strengthen the systems of registration and monitoring of contract migration flows, including return flows. Part of the problem at present can be attributed to inadequate data storage and retrieval systems, which could, if improved, provide excellent data even with existing raw data schedules;

(b) Improve techniques to incorporate policies, plans and programmes on contract migration into overall development and human resource planning, and to strengthen the policy formulation and planning capacities of sending country administrations;

(c) Commission special studies on specific aspects of contract migration, which include return migration and problems of reassimilation, post-assignment occupational choice, the effect of contract migration on education and training, the implications for the communities and households of origin, including the important questions of family welfare. At present little is understood about these implications.

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Topic 5.

STRATEGIES FOR MEETING BASIC SOCIO-ECONOMIC NEEDS IN THE CONTEXT OF ACHIEVING THE GOALS OF POPULATION POLICIES AND PROGRAMMES

5.1 WORKING PAPER

by

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An overview of the socio-economic and demographic profiles

The developing countries in the ESCAP region present a wide diversity of national situations with different levels of development and different combinations of socio-economic problems. Of the 21 developing countries in this region, 13 fall into the category of low-income countries with *per capita* incomes in the range of $US80 and $US370. The balance eight are middle-income countries, with incomes ranging from $US590 per head in the case of Thailand, to $US3830 per head in the case of Singapore.[1] The vast majority of the population in the developing regions in Asia (approximately 90 per cent) live in the low-income countries which include the most population countries in Asia – China, India and Indonesia.

Before we discuss some of the key issues relating to the national strategies for the satisfaction of socio-economic needs in these countries, it would be useful in this introductory section to survey briefly the current status of some of the countries in order to underscore some of the typical problems pertaining to development and population which confront the region. Table 1 presents some of the basic socio-economic indicators for these countries.

– With the exception of Singapore, the Republic of Korea, and the Democratic Republic of Korea, more than 70 per cent of the population resides in the rural sector. With 64 per cent of the population in the rural sector, the Philippines has a rural population which is marginally below this figure. The national strategies which are designed to deal concurrently with the socio-economic problems of poverty and deprivation on the one hand, and the demographic problem of rapid population growth on the other, have therefore to focus predominantly on the rural sector.

– In the low-income category, with the exception of Viet Nam, Sri Lanka and China, all countries have an average life expectancy below 55. Most of the countries have crude birth rates over 40 per thousand of the population-with mortality rates in the range between 15 and 23 per thousand.

– With the exception of four countries in this low-income group, all of them have a daily per capita calorie supply which is below the nutritional norm.

– The low adult literacy rates appear to go together with high birth rates and l ow life expectancy. Almost all countries with life expectancies below 55 have adult literacy which ranges from 12 (for Afghanistan) to 36 (for India). The two exceptions are Burma and Indonesia which have adult literacy rates of 67 and 62 respectively.

Therefore, for the majority of the countries in the low-income group the indicators relating to the basic socio-economic needs of health, education, food and nutrition reveal a high degree of deprivation. When these average conditions are placed within the highly unequal structure of income distribution which prevails in these societies (see table 2) it is evident that the lower 40 per cent of the population would not be able to reach the minimum levels for the satisfaction of their basic needs without a development effort which is both qualitatively and quantitatively different from and much more effective than what has been realized in the past.

The problems confronting the middle-income countries in regard to their socio-economic well-being as well as their demographic changes are of a different and more tractable character than what has been described in the case of the low-income countries. With the exception of Papua New Guinea

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[1] The tables do not include ESCAP developing countries such as Maldives, Fiji, Tonga for which the socio-economic and demographic indicators are not available.

Table 1. Basic socio-economic indicators

	GNP per capita	Life expectancy at birth	Adult literacy rate	Education (primary)			Labour force	Urbanization	Daily per capita calorie intake	
	Dollars 1979	(years) 1979	(percentage) 1976	Total 1978	Male 1978	Female 1978	Agriculture 1979	As percentage of total population 1980	Total 1977	As percentage of requirement 1977
				Low-income countries *(per capita GDP 1979 $US 80-370)*						
Democratic Kampuchea	–	–	–	–	–	–	–	–	1 926	85
Lao People's Democratic Republic	–	42	–	92	99	85	76	14	2 082	94
Bhutan	80	44	–	12	16	7	93	4	2 028	88
Bangladesh	90	49	26[a]	72	103	40	74	11	2 100	91
Nepal	130	44	19	69	104	31	93	5	2 002	91
Burma	190	54	67	84	87	81	67	27	2 286	106
Afghanistan	170	41	12	20	33	6	79	15	2 695	110
Viet Nam	–	63	87	122	128	116	71	19	1 801	83
India	190	52	35	79	94	63	74	22	2 021	94
Sri Lanka	230	66	85	94	98	90	54	27	2 126	96
China	260	64	66[a]	93	–	–	71	13	2 453	104
Pakistan	260	52	24[a]	51	69	32	57	28	2 281	99
Indonesia	370	53	62	94	100	89	59	20	2 272	105
				Middle-income countries *(per capita income 1979 $US 380-4,000)*						
Thailand	590	62	84	82	85	78	77	14	1 929	105
Philippines	600	62	88	105	98	102	47	36	2 284	108
Papua New Guinea	660	51	–	60	70	49	84	20	2 268	85
Democratic People's Republic of Korea	1 130	63	–	113	115	112	50	60	2 837	121
Malaysia	1 370	68	60	94	95	92	51	29	2 610	117
Republic of Korea	1 480	63	93	111	112	111	36	55	2 785	119
Iran	–	54	50	101	121	80	40	50	3 138	130
Singapore	3 830	71	–	109	111	107	2	100	3 074	134

Source: The World Bank, *World Development Report 1981*, Washington, D.C., August 1981.

[a] Figures are for years other than 1976.

Table 2. Income distribution

	Year	Percentage share of household income by percentile groups of households					
		Lowest 20 per cent	2nd quintile	3rd quintile	4th quintile	Highest 20 per cent	Highest 10 per cent
Low-income countries							
Nepal	1976/77	4.6	8.0	11.7	16.5	59.2	46.5
India	1975/76	7.0	9.2	13.9	20.5	49.4	33.6
Sri Lanka	1969/70	7.5	11.7	15.7	21.7	43.4	28.2
Indonesia	1976	6.6	7.8	12.6	23.6	49.4	34.0
Middle-income countries							
Philippines	1970/71	5.2	9.0	12.8	19.0	54.9	38.5
Malaysia	1970	3.3	7.3	12.2	20.7	56.6	39.6
Republic of Korea	1976	5.7	11.2	15.4	22.4	45.3	27.5

Source: Same as table 1.

and Iran, all other countries have been able to record a decline in the average growth of the population during the decade of the 1970s, together with a concurrent decline in birth and death rates. Again, with the exception of Iran and Papua New Guinea, the life expectancy in all these societies is over 60 years, indicating a relatively satisfactory health system and average condition of well-being and adult literacy rates which are quite high. Adult literacy rates of Thailand, the Philippines, the Republic of Korea and Singapore are all above 80. Malaysia still lags behind with 60 per cent but has a rate of enrolment in primary education which is above 90 per cent. All countries have a *per capita* calorie supply above the nutritional norm. All of them have recorded a concurrent decline in both birth rates and death rates. In the case of Papua New Guinea and Iran, the rate of population growth has however risen in the decade of the 1970s, whereas in all the other countries there has been a marked decline in the rate of the annual increment of the population.

Although all the middle-income countries start with a high level of well-being and a greater availability of resources, problems facing these countries are of a diverse character and varying intensity. At the bottom of this group in regard to levels of socio-economic well-being and the management of demographic change are Papua New Guinea and Iran. The Philippines with its highly unequal structures of income distribution contains high degree of poverty and deprivation in the lower 40 per cent of the population, although the average indicators are relatively satisfactory. This would apply to a lesser extent to Malaysia where strategies appear to have been relatively successful in reducing poverty. In the Republic of Korea a growth-oriented strategy appears to have neglected the need for social security in a context of rapid urbanization and increasing wage employment.[2]

Table 3 shows the demographic performance of the countries in the Asian developing region. In a number of the poorer countries it would be seen that the average annual growth of population during the decade of the 'seventies rose above that of the 1960s. For example, in Bangladesh the average annual growth of population increased from 2.4 per cent during the decade of the 1960s to 3 per cent during the period 1970–1979, in Afghanistan the corresponding figures were 2.3 and 2.6, in Pakistan 2.6 and 3.1, in Indonesia 2 and 2.3 and in Nepal 2 and 2.2. In all these cases, it would be seen that the decline in the death rate significantly outpaced the drop in the birth rate. Countries in the

[2] The Republic of Korea spends only 1.17 per cent of GDP on social welfare compared to 2.6 per cent of GDP for countries in the income range $US 500-1,000 *per capita*.

Table 3. Basic demographic indicators

	Population (millions) mid-1979	Average annual growth of population (percentage)		Projected population (millions) in year 2000	Crude birth rate per 1,000 population		Crude death rate per 1,000 population		Infant mortality	
		1960-1970	1970-1979		1960	1979	1960	1979	1960	1978
Low-income countries										
Democratic Kampuchea	–	2.7	–	–	49	–	22	–	–	–
Lao People's Democratic Republic	3.3	2.2	1.4	5	44	42	23	21	–	–
Bhutan	1.3	2.0	2.1	2	46	41	28	20	–	–
Bangladesh	88.9	2.4	3.0	148	49	44	23	16	–	130
Nepal	14.0	2.0	2.2	21	46	42	29	20	–	–
Burma	32.9	2.2	2.2	50	43	37	22	14	–	–
Afghanistan	15.5	2.3	2.6	27	50	47	30	23	–	237
Viet Nam	52.9	3.1	2.9	88	47	36	21	9	–	62
India	659.2	2.3	2.1	975	44	34	23	14	–	125
Sri Lanka	14.5	2.4	1.7	21	36	28	9	7	55	37
China	964.5	1.9	1.9	1 239	34	18	11	6	–	56
Pakistan	79.7	2.8	3.1	141	48	44	23	14	135	–
Indonesia	142.9	2.0	2.3	220	47	36	25	13	159	120
Middle-income countries										
Thailand	45.5	2.9	2.4	68	44	31	16	8	–	68
Philippines	46.7	3.0	2.6	75	46	34	16	8	98	65
Papua New Guinea	2.9	2.1	2.3	4	43	37	23	15	159	–
Democratic Republic of Korea	17.5	2.8	2.5	28	41	32	13	8	–	–
Malaysia	13.1	2.9	2.2	20	39	28	9	6	–	32
Republic of Korea	37.8	2.4	1.9	53	43	25	14	8	62	37
Iran	37.0	2.7	2.9	64	47	43	21	13	–	–
Singapore	2.4	2.4	1.4	3	38	18	8	5	35	13

Source: Same as table 1.

low-income group which were able to achieve a simultaneous decline in death rates and birth rates which was also accompanied by a decline in the average annual growth of population were India, Viet Nam, Sri Lanka and China. We will see later that their experience has special relevance for the issues discussed in this paper.

It was stated earlier that a country with a preponderant share of its population existing in the rural sector needs to pay greater attention to strategies of development which are rural-centred. Three scenarios of changes in the composition of the workforce in three typical development situations in the Asian region are given in table 4. Scenario A

Table 4. Scenarios of structure changes in the workforce, 1978

			Share of GDP and workforce			
	Per capita ($US)	Agriculture	Industry	Manufacturing component of industry	Services	
Sectoral distribution and GDP (percentage)						
1. Low-income countries	200	GDP	38	24	(13)	38
($US 300 & below)		Labour force	72	11		17
2. Middle-income countries	1 250	GDP	16	34	(25)	50
($US 360-3,500)		Labour force	45	23		32

	1980	1990	(Percentage share)	2000	(Percentage share)	2010	(Percentage share)	Total increment as percentage of 1980 workforce
Projections of changes in the workforce								
Scenario (a)								
Total workforce	100	122		140		181		81
Agricultural workforce	70	81	(66)	91	(61.5)	103	(57)	33
Industrial workforce	10	15	(12.5)	22.2	(15)	32.5	(18.0)	22.5
Services workforce	20	26	(21.5)	34.8	(23.5)	45.5	(25)	25.5
Scenario (b)								
Total workforce	100	122		140		181		81
Agricultural workforce	55	60	(49)	62.0	(42)	61	(33)	6
Industrial workforce	15	22	(18)	32.5	(22)	48.5	(27.0)	33.5
Services workforce	30	40	(33)	53.5	(36)	71.5	(40.0)	41.5
Scenario (c)								
Total workforce	100	122		148		181		81
Agricultural workforce	50	53	(43)	53	(35)	48.5	(26)	−1.5
Industrial workforce	15	22	(18)	32.5	(22.5)	48.5	(26)	33.5
Services workforce	35	47	(39)	62.5	(42.5)	84	(48)	49.0

Source: The World Bank, *World Development Report 1980* (Washington, D.C., August 1980), tables 1, 2, 19.

corresponds to the situation which is not significantly different from what prevails in India, scenario B is similar to the situation in Sri Lanka, and scenario C to the situation in Malaysia. It is assumed in these scenarios that the total workforce will grow at 2 per cent, the industrial workforce at 4 per cent, and the services workforce at 3 per cent which by themselves are fairly optimistic assumptions of growth for the non-agricultural sectors. The growth is projected for a unit of 100 in the base year 1980 and the projections are carried forward to the year 2010.

The majority of the poor developing countries will have a development scenario which corresponds to scenario A. The preponderant share of the population will continue to work and live in the sector in which agriculture will be the largest single economic activity, i.e. the rural sector. This will be the demographic and socio-economic situation which will prevail in these countries at the turn of the century and in the first decade of the twenty-first century. Countries in which the agricultural workforce will begin to decline in absolute size will be those countries where the trends correspond to scenario C. These are countries in which the structural changes in the economy and the composition of the workforce will lead to a declining share of agricultural labour, until there is no net increment to the agricultural workforce. At this point employment creation in the agricultural sector would no longer pose a major problem. By then the urban industrial and non-agricultural sectors will have greater demographic and economic weight than the agriculture-based rural sector. The development strategies aimed at employment creation and the satisfaction of basic needs would also shift their focus to the non-agricultural sectors. This would be true of most of the middle-income countries in the Asian region.

It is also important to pay attention to the wide disparities that are projected in regard to the development prospects of the different regions in developing Asia. Almost all global projections indicate a rapid growth potential for South-East Asia and East Asia. Almost all these countries are likely to reach *per capita* incomes in the upper level of the middle-income range before the turn of the country. This is foreseen for China as well. The *Global 2000 Report* of the United States Council for Environmental Quality and the State Department see the South-East Asian and East Asia countries reaching *per capita* incomes in the range between $US400 and $US1,200.[3] In this projection Indonesia reaches a *per capita* income of $US 422 (1975 dollars) in A.D. 2000, China $US 540, the Philippines $US 704 and the Republic of Korea $US1,071. South Asia's *per capita* incomes, on the other hand, remain below $US200 (1975) at the turn of the century. The Interfutures projections[4] which are more optimistic see the South-East Asian countries reaching higher average *per capita* incomes, while there would be once again wide disparities with countries like Malaysia, the Republic of Korea, reaching much higher *per capita* income levels, and Indonesia below the average. China is expected to reach a *per capita* income of $US800 (1970 dollars) by A.D. 2000. In contrast, the prospects for the South Asian countries again are much more dismal. On the average their *per capita* income is expected to remain well below $US250 (1970 dollars) by A.D. 2000. The inescapable limits to the rates of growth of many of the poorer countries in Asia require a development quality of life and socio-economic well-being within the *per capita* incomes which they can reasonably hope to achieve by the turn of the century even on the most optimistic estimates. These estimates suggest that the range within which limits of well-being would have to be achieved would be in the region of $US 250-300 (1970 dollars). National development strategies should be capable of achieving the satisfaction of basic socio-economic needs within an economy in which the majority of the population is likely to be still living in the rural sector. Such a level of well-being has to be accompanied by a concurrent decline in the rates of mortality as well as the birth rate at a level which reduced the annual rate of growth of the population.

Basic needs and demographic change
The performance of Asian developing countries

It was in the 1970s that the satisfaction of basic needs was clearly articulated as one of the principal criteria of development. This however does nto imply that the sectors relating to basic needs had been neglected or ignored in the national development strategies which had been formulated

[3] Gerald O. Barney, *et al., The Global 2,000 Report to the President of the United States* (New York, Pergamon Press, 1980) vol. 1, p. 16.

[4] Organisation for Economic Co-operation and Development, *Interfutures Facing the Futures : Plastering the Probable and Managing the Predictable* (Paris, 1979), table 21, p. 89.

and implemented by developing countries in the 1950s and the 1960s. In fact, the survey of development plans during this period would reveal that most of them did allocate substantial resources for the core programmes relating to basic needs-health services, education, housing, water supply and nutrition. Almost all national plans during this period also expressed a strong commitment to reduce poverty and inequality and improve the well-bing of the poor majority in their populations.

However, one important distinction between the recent and the past approaches to the alleviation of poverty and the satisfaction of basic needs lies in the way in which the links between basic needs and the development process as a whole were perceived in the different strategies. It would be correct to say that in the past the satisfaction of basic needs was not often approached in terms of separate section such as health, education, housing, nutrition. These were generally regarded as non-productive sections. Furthermore, they were considered often in isolation from each other and the process of interaction as well as the close structural interrelationships among them were not fully recognized. The sectoral allocation of resources was influenced by this approach. Within such a framework the development of the sectors which were economically productive and contributed to the growth of output received higher priority. In the strategies that are being currently advocated, social well-being and economic productivity are preceived as closely interrelated and mutually reinforcing elements in the development process. The conventional distinctions between the productive and the non-productive sectors are seen as falsifying and distorting the integrated charactor of this process. In such a strategy the relevant social and economic sectors continuously interact with each other both to improve the quality of life as well as to enhance the productive capacity of a society.

In the working definition of "basic needs" that has been provided by most proponents of the basic needs strategy, the indispensable core of material needs comprise health, education, food, clothing, housing and drinking water. The range of material needs is often extended to include a wide range of other non-material socio-cultural needs, the satisfaction of which becomes a precondition for an adequate quality of life. In a more inclusive definition the means and methods of satisfying material needs themselves are regarded as basic human needs. These would then include access to adequate resources and the employment of persons of working age in productive and socially useful activities; a system which guarantees fundamental human rights and security of life and person; a social decision-making process which involves the participation of the people affected by this process; a clean healthy environment and a sound balance between man and nature; and finally availability of and access to services for family planning. However, it would be beyond the scope of this paper to examine the basic needs strategies in terms of this wider definition. It would be adequate for the analysis of the issues that are raised in this paper if we focus on the main core of the material basic needs, examine how national development strategies have been directed at the satisfaction of these needs, and consider their significance in relation to the population goals and policies. Within this context the "basic need" of family planning could also be then discussed.

The performance of Asian developing countries in relation to the achievement of basic needs goals could be appropriately assessed in terms of their condition of well-being as reflected in their physical quality of life. The physical quality of life index (PQLI) as developed by the Overseas Development Council uses three basic indications-infant mortality, life expectancy at the year 1 and the rate of literacy.[5] A significant improvement in any one of these three indicators requires an increase in well-being which is widely distributed among all segments of the population. Taken together, they would be the outcome of a pattern of development in which the satisfaction of basic needs has received relatively high priority. Table 5 provides data available for the developing countries in the Asian region. These indices confirm what emerged from the brief survey of socio-economic and demographic profiles-rise in *per capita* income is not always positively correlated to increase in social well-being and satisfaction of basic needs. According to the rating in this index, eight of the Asian developing countries including India have a PQLI score below 50-well below the level of well-being adequate for the satisfaction of basic needs for the mass of their population. All eight countries are in the low-income category. Four countries have scores between 50 and 60, 2 of them in the low-income category and two countries in the middle-income category. These countries appear to be at an intermediate level in regard to the achievement of basis needs

[5] John W. Sowall, and staff of Overseas Development Council, *The United States and World Development Agenda 1977* (New York, Praeger Publishers, 1977). M.D. Morris, *Measuring the Conditions of the World's Poor*, (New York, Pergamon Press, 1979).

Table 5. Physical quality of life index

	1960	Current
ow-income countries		
Democratic Kampuchea		36
Lao People's Democratic Republic		28
Bhutan		23
Bangladesh		36
Nepal		30
Burma	42.7	55
Afghanistan		21
Viet Nam		73
India	30.0	44
Sri Lanka	73.2	80
China		76
Pakistan	28.2	40
Indonesia	35.3	55
iddle-income countries		
Thailand		75
Philippines		76
Papua New Guinea		–
Democratic People's Republic of Korea		78
Malaysia	60.0	69
Republic of Korea	64.5	85
Iran		57
Singapore		86

Source: Overseas Development Council, *US Foreign Policy and the Third World - Agenda 1982* (New York, Praeger Publishers, 1982).

goals. Nine other countries have scores above 60. Of these eight have scores above 70 and one country, Malaysia, has a score of 69. Of the nine countries with high PQLIs, three are in the low-income category. These are countries which appear to have been relatively successful in eliminating the worst forms of deprivation and have gone a considerable distance towards satisfying basic needs.

One method of evaluating the extent to which countries have been able to incorporate successfully a component directed at the satistaction of basic needs into their development strategies is to examine how the PQLI has moved over the last two decades. However, the information required for computing the physical quality of life index for the early 1960s is available only for a few countries, and even there it is unwise to place much reliance on the available data. From the figures available in table 2 it would be seen that the countries with a low index are having a rate of improvement which is likely to take them to a period which extends far beyond A.D. 2000 before they reach tolerable levels of well-being at which it could be said that they have been successful in satisfying basic needs. At the rate of progress that has been achieved during the last 20 years, Pakistan for example would take another 32 years to reach a PQLI of 70. India will need approximately 25 years. Countries with relatively high rates of improvement include the Philippines and the Republic of Korea. These aggregate indicators however should be treated with some caution. The statistical data on which they have been based are not always comparable or uniformly reliable. Some of the countries which have shown relatively high physical quality of life indices such as the Philippines are known to have structures of income distribution which are highly unequal. These countries could have disadvantaged segments of significant size who are in conditions of acute deprivation. Nevertheless given these limitations, the three indicators which have been selected for the PQLI help to ascertain the average conditions of well-being which reflect the level at which basic needs are being satisfied.

In this context it would be useful to examine the case of the countries in the low-income category which have been able to achieve levels of socio-economic well-being combining the satisfaction of basic needs of the majority of the population with demographic changes of a positive character, both of which seen to be unusual at the *per capita* incomes which they currently enjoy. Countries which fall into this category are (a) China with an adult literacy rate of 66, life expectancy of 64, a crude birth rate of 18 and a daily *per capita* calorie supply of 104 per cent; (b) Viet Nam with an adult literacy rate of 87, life expectancy of 63, a crude birth rate of 36 but with a daily *per capita* calorie supply which is below the nutritional norm and is one of the lowest in the region-83; (c) Sri Lanka which has perhaps the most exceptional performance in this category with an adult literacy rate of 85, life expectancy of 66, a crude birth rate of 28, together with a daily *per capita* calorie supply which at 96 per cent is still below the nutritional requirement; and finally (d) Burma with an adult literacy rate of 67, life expectancy of 54, a crude birth rate of 37 and a daily *per capita* calorie supply of 106 per cent of the nutritional requirements. Indonesia is another country within this low-income group which comes close to this category of socio-economic well-being. It has an adult literacy rate of 62, life expectancy of 53, a crude birth rate of

36 and a daily *per capita* calories supply of 105. We need to identify the key elements in the national development strategies of some of these more successful cases and thereafter examine their relevance for the development efforts of other societies in the low-income category who still have a considerable distance to go before they create a national system which has the capacity to satisfy the basic needs of the majority of the population.

The experience of these countries is invaluable for the light it throws on the relationship between the satisfaction of basic human needs and the direction of demographic change. There is now a considerable body of scholarship which has attempted to demonstrate that the alleviation of poverty and the improvement in socio-economic conditions of the mass of the population have a decisive effect in reducing fertility and population growth. However, the relationship cannot be regarded as a simple unilinear one. When we examine some of the important socio-economic variables relating to the satisfaction of basic needs, such as health, nutrition or productive employment, we see that any single variable taken in isolation may not have the same positive demographic effect in different socio-cultural and economic situations. But taken together, as an interrelated set of variables in a unified strategy they seem to have had a major impact in reducing the annual rate of population growth for several low-income countries in the Asian region. The countries in which the annual rate of population growth has declined in the decade of the 1960s are also those countries which show a relatively successful performance in regard to the satisfaction of basic needs. More striking examples among the low-income countries are China, Sri Lanka, Viet Nam and Indonesia. The major exception is India which has been able to reduce its annual rate of population growth from 2.5 in the 1960s to 2 in the 1970s, despite a comparatively low index of the physical quality of life. We saw earlier that several other low-income countries which have yet a considerable distance to go to satisfy basic needs had an increase in the annual rate of population growth between the 1960s and the 1970s. Two countries which have reached relatively high *per capita* incomes – Papua New Guinea on the one hand and Iran on the other – have not been able to reduce their rate of population growth. Both countries have a relatively poor performance in regard to the satisfaction of basic needs.

However, it would not be correct to conclude that the countries which have recorded an increase in the annual rate of population growth have had negative performances in regard to the satisfaction of basic needs. In their case mortality rates have declined faster than birth rates. The rapid decline in mortality is itself the outcome of an improvement in social well-being. The differences in demographic performance between the group of countries which have been able to reduce their annual rate of population growth and those who have not been successful, however, draw attention to some of the significant features in the relationship between the satisfaction of basic needs and demographic change. Countries which have been successful in reducing their birth rates dramatically, such as the Republic of Korea or China who were able to halve their birth rates between 1960 and 1980, had already low death rates at the beginning of the 1960s which were well below 20 per thousand. This would mean that the countries had already achieved considerable success in reaching the goals for the satisfaction of basic needs and that the significant reduction in fertility and population growth follow in sequence after the basic needs strategy has taken effect and produced certain positive social outcomes.

Among the countries which have been successfull in reducing birth rates, one social indicator which seems to have a highly significant relationship to the reduction in fertility is the rate of literacy. Countries with low *per capita* incomes in the middle range which have low rates of literacy are also those which continue to have low life expectancy and high rates of mortality and fertility, and an overall low physical quality of life. What is also of special importance is that a high average rate of literacy requires a rapid improvement in the rate of female literacy. The countries with a high physical quality of life index which are able to make positive demographic adjustments and contain population growth are also countries which have improved the status and well-being of the female population. An adequate performance in regard to the satisfaction of basic needs therefore seems to move along a path where the widely distributed improvement in well-being includes the female population and alters their reproductive behaviour. The decisive changes appear to be occurring at levels of well-being where mortality rates have declined below 20 per thousand. Many of the low-income countries have now reached a situation in which mortality rates have declined to levels around 20 per thousand and where female literacy rates have been on an upward trend. Most of these development situations are therefore conducive to a concerted strategy aimed at the satisfaction of basic needs and the desired demographic adjustments.

It is however evident from the experience that we have analysed that the combination of socio-economic variables arising out of the satisfaction of basic needs take approximately one generation to register a significant impact on demographic changes. It would certainly be true of variables such as literacy. The development experience of many of the poorer countries which have been relatively successful in attacking the problems of poverty and high mortality indicates that in the first phase of such an effort there is likely to be a pronounced increase in the rates of population growth. In this context, the case of India has special relevance for low-income countries. India has been able to achieve a concurrent decline in birth rates as well as death rates at a pace which has enabled her to reduce the net annual increase in population. This outcome has occurred even though the performance according to criteria relating to the satisfaction of basic needs cannot be regarded as successful. Greater reliance appears to have been placed on programmes and policies which directly attack the demographic problem through family planning services and the improvement of access to such services. Therefore while the example of low-income countries which have been successful in making satisfactory demographic adjustments illustrates that a basic needs strategy is vitally important to bring about and sustain major changes in reproductive behaviour and demographic structure, it is also equally necessary to recognize that during the period that long-term changes take effect, population strategies which produce results in the short term are essential. Access to family planning services is one essential element in a comprehensive basic needs strategy.

Lessons from low-income countries with comparatively high quality of life

When we examine the profiles of socio-economic indicators in those low-income countries which have been relatively successful on both the socio-economic as well as the demographic front, we observe that the key sectors which had to be given high priority in any strategy of development were health, education, and food and nutrition. The development of these vital sectors within an economy which was primarily rural had called for strategies which would reach the mass of the rural poor. Therefore, within each of these sectors the intra-sectoral priorities themselves had to be set in terms of the objectives directed at the elimination of rural poverty. In education, universal primary education had to be the first goal. The Malaysian experience (in the middle-income group) which has been relatively successful in regard to the demographic objectives shows that despite a moderate level of adult literacy, a high rate of enrolment in primary education in the 1960s appears to have been sufficient to act in combination with other socio-economic advancements to bring about a concurrent decline in birth rates and death rates which has reduced the rate of population growth. In health, the low-cost strategy appropriate to a poor country would obviously place the emphasis on primary health care, sanitation, maternal and child health services. In the field of food and nutrition, the strategies to raise the level of self-sufficiency in food would assume high priority.

In societies where the agricultural workforce constitutes the major proportion of the total workforce, strategies aimed at food production serve a dual purpose of raising the levels of food and nutrition in the rural communities as well as increasing productivity, raising incomes and generating empolyment. A strategy of this kind which is directed at the satisfaction of basic socio-economic needs also requires an institutional framework in which there could be a high degree of community participation. The combination of elements which has been described here demands an approach in development planning which would give the necessary emphasis to planning at the micro level which would both identify as well as use all the available human and physical resources to the maximum advantage. This in turn would call for a system which requires a high level of participation by the local community.

The successful cases appear to demonstrate that the strategy which is directed at the satisfaction of basic socio-economic needs and which is also based on a participatory institutional framework has certain other in-built characteristics which enable it to reconcile the demographic objectives with the socio-economic objectives at a relatively early stage of development. First, a strategy which has the well-being of the majority of the population as its objective reaches the male and the female population concurrently. It seeks to protect the well-being of the more vulnerable section of the population such as the mothers and children, opens out new opportunities for the female workforce in the rural sector and increases their social mobility. The improvement of status of women in regard to their health, education and employment, and the enhancement of their social role have obvious consequences in regard to demographic changes. New

income-earning opportunities are perceived, new avenues of upward social mobility through education become available, new values are formed in regard to family size, household formation and age of marriage. On a foundation of social well-being which includes the female population, it is relatively easy to pursue population policies and broadbased family planning programmes.

In this context the most obvious examples would be the socialist countries such as China and Viet Nam. More, the reorganization of production relations and the ideological framework within which this is done would be the key to the increase in social well-being and the change in the status and role of women. The example of relative success emerging out of a different development path is the case of Sri Lanka. It would be seen from the tables that the rapidly with which Sri Lanka has been able to reduce mortality, raise levels of literacy and prolong life has been exceptional for a developing country with a *per capita* income in the region of $US200. These achievements have been an integral part of a process of socio-economic change which from the beginning appears to have accorded a central place to the development of the three key sectors to which we have referred.

The provision of basic needs in the form of free health and free education to the population as whole and the distribution of essential items of food at subsidized or relatively stable prices became the cornerstone of governmental policy for nearly three decades. Government expenditure on health, education, housing and food subsidies rose from about 5 per cent of GDP in the beginning of the 1950s to 12.4 per cent in the mid-1960s.

High priority was given to the achievement of self-sufficiency in the staple food of the population. This meant that the development strategy had to concentrate in raising the productivity of the smallholding peasantry who were among the poorest sections of the rural population. The strategy included a nation-wide village expansion programme which provided state land and subsidized housing to disadvantaged rural families and a programme of agricultural settlements which transferred population from the densely inhabited South-West and central regions to the sparsely populated Noth-Central and Eastern parts.

The social welfare programme created a wide range of employment opportunities which became readily available to the female population. These included teachers in the educational system, midwives, nurses, paramedical staff and doctors in the health system, and various other minor and middle grade positions in the government services such as the postal system. All these contributed to a significant improvement of the status and well-being of women.

Another essential element in those development strategies which have been relatively successful is redistribution of productive assets to the poor and the improvement in their access to resources. The transfer and distribution of productive assets to the poor has taken three forms in the Asian region. There has been, on the one hand, the basic socialist transformation of the system of social relations which has resulted in the social ownership of the means of production. This would be applicable to countries like China and Viet Nam. At another level there is the radical redistribution that has been effected through wide-ranging land reform as in the case of the Republic of Korea. The third strategy for the distribution of assets to the poor has been followed by countries which have large unutilized land resources of the state which are available for distribution. This would be true of countries like Malaysia, Thailand and Indonesia which have considerable land resources, and to a lesser extent, Sri Lanka. All three modalities for the transfer of assets to the poor which have been implemented in the countries in the Asian region have had varying degrees of success. In the case of the private sector economies, these measures needed an adequate flow of capital and credit to the rural sector.

The pursuit of basic needs strategies poes one crucial set of issues regarding the competing uses of available scarce resources on which there has been no unanimity among analysis of development. It has been argued that the focus on satisfaction of basic needs in a national development strategy may divert resources from investment to consumption and that therefore the achievement of basic needs goals may often be at the cost of economic growth and the long-term sustainability of the basic needs strategy itself. The Sri Lankan case where unemployment reached intolerable levels in the late 1960s, and economic growth slackened and failed to keep pace with social aspirations, has been quoted as an example. A more discerning evaluation of the Sri Lankan case however casts doubt on such a conclusion. "Sri Lanka's growth of GNP per person over the period 1960-1977 at 2.0 per cent was significantly above the average of the low-income countries, even while it greatly out-

performed most other low-income countries in human development".[6] China is of course the other example of a country where the satisfaction of basic needs accompanied high economic growth. The experience of these countries seems to demonstrate that the relationship between satisfaction of basic needs and the growth of productivity and output is not a competitive one but is strongly complementary in character. As we noted earlier, the development of human capital through the satisfaction of basic needs results in the intertwining of numerous positive feedback processes. Better health and improved prospects of survival have both demographic and productivity effects. Education particularly as it spreads to the female population begins to change reproductive behaviour and the family environment. Family environment in turn influences schooling, ability and the new entrants to the workforce, and therefore skill formation and productivity. Lower rates of population growth result in higher *per capita* incomes at the same rates of increases in GDP, leading to a better performance in savings and investment.

Key elements in strategies for satisfaction of basic socio-economic needs

This concluding section attempts to redefine the essential elements of the development strategy which could be effective in achieving a sound combination of socio-economic well-being and demographic balance. For the low-income countries which will contain the majority of the population and which will present the most urgent combination of problems, the main elements would include the following.

– The major effort in the national development strategy would have to be rural-centred. For these countries the conventional model of structural change in which the share of the agricultural workforce rapidly declines and an increasing share is transferred to a fast growing industrial urban economy cannot offer satisfactory solutions to their problems of mass poverty and demographic change.

– Any strategy which aims at the satisfaction of basic socio-economic needs within the limits of the *per capita* incomes that would be realizable for the low-income countries would have to concentrate on three key sectors - health, education, and food and nutrition.

– These sectoral strategies should be designed in terms of well-defined intra-sectoral priorities.

(a) The health sector would have to concentrate on maternal and child health services, sanitation and public health, supported by an effective national network of curative services.

(b) The education sector would have to give first priority to achieving universal primary education.

(c) The food and nutrition strategy should be directed at improving the productivity of the small farmer sector, and within the cropping patterns appropriate to this sector, priority would have to be given to production of staple food requirements.

– The implementation of a strategy which gives a central place to an intersectoral development effort of this character would require a sustained effort at the micro level. In an effective exercise of integrated rural devleopment, the primary unit of planning will have to be the small rural community. A major component of the integrated rural development programme would have to consist of integrated village development programmes.

– This in turn would require the effective participation of the community in the formulation and implementation of plans. It is only through a participatory approach of this type that it would be possible to integrate the key sectors which we have identified, in a total development effort. Effective participation at the local level would imply the development of an appropriate institutional framework at the level which can bring economies of scale and the efficiencies of planned and coordinated economic activity to peasant farming through collective or cooperative organisational forms.

– The strategy which is aimed at the elimination of mass poverty would have to concentrate on the creation of employment and income-earning opportunities in the rural sector. This would require an important component of rural economic diversification which would have the capacity to provide an increasing volume of non-farm employment. A strategy of this nature would have to rely upon a widely dispersed and dynamic rural industrial sector.

– A development effort based on priorities of this nature would bring about necessary social

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[6] (i) The World Bank, *World Development Report 1980*, (Washington, D.C., August 1980), p. 90.

(ii) Godfrey Gunatilleke, "Participatory development and dependence", *Marga Quarterly Journal*, vol. 5, No. 3, 1978.

changes in the role and status of women which could have a significant impact on the key demographic variables. For such a strategy of have the desired positive demographic impact, the improvemets in the health and educational levels leading to higher standards of physical well-being, literacy and education particularly for the female population would also have to be supported by the expansion of employment opportunities which would be readily available to the female workforce.

– The strategies of rural economic diversification that have been suggested and have had demonstrable success in countries such as China, have also been able to transmit some of the amenities of urban living into the rural sector. This in turn would help to create the right conditions for the necessary demographic changes, as well as for maintaining a satisfactory rural-urban balance.

– One important precondition for the success of these development strategies is the redistribution or transfer of assets to the poor to enable them to have adequate access to resources. These have taken various forms in the countries in the Asian region and have had varying degrees of success- whether they be collectivisation, radical land reforms or well designed programmes of agricultural settlement which result in the transfer of lands to the landless and the agricultural poor.

– While a basic needs strategy should promote a self-reliant pattern of development at all levels, the state particularly at the early stages of development would have to play a major role in bridging the wide gap between needs and the capacity for satisfying needs in respect of the large proportion of the population which is disadvantaged. This would invariably include programmes of state intervention and selective social welfare.

– Finally, the process of structural change that inevitably takes place with development, progressively shifts the problems pertaining to poverty and satisfaction of basic socio-economic needs to the urban non-agricultural sectors. This is accompanied by the rapid growth of the unorganized informal urban sector mainly resulting from rural to urban migration. An urban periphery with substandard housing, poor sanitation, under-employment and poverty, expands far beyond the carrying capacity of the available urban infrastructures. Policies which deal adequately with urban poverty both in regard to income – generating opportunities in the informal sector and low-cost infrastructure improvement, have begun to recieve increasing attention of government. Any national strategy for the satisfaction of basic socio-economic needs would have to incorporate a well-conceived programme for this sector.

The experience of most developing countries also indicates that they would find it difficult to implement a basic needs strategy without taking account of the international economic framework within which such a strategy has to be pursued at the national level. Most developing countries in the Asian region are highly susceptible to the disruptive effects of international price movements and the changes in international markets. National strategies therefore have to continuously adjust to the developments that are taking place in the international economy. The policy prescriptions that have been advocated in developing countries has been of a very conflicting nature. One set of prescriptions have recommended outward-looking economic policies with greater effort to adjust to external factors through diversification of the export sectors and industrialization for export. The impact of these policies on the objectives of a basic needs strategy is of a mixed character. Countries such as the Republic of Korea have had a fair measure of success. These policies have generated employment in labour-intensive sectors and have had more equitable outcomes than the capital-intensive import substitutions strategies of the earlier phase. They also appear to favour employment of female labour and encourage a higher level of participation of females in the workforce, all of which promote demographic effects which are of a positive character. Thailand, Malaysia and the Philippines have therefore drawn on this experience. Sri Lanka is the latest example of a country which is experimenting with a mix of policies which seeks to combine among other things a labour-intensive export-oriented industrial sector with integrated rural development programmes in the rural sector.

The mix of policies designed to promote more open economies based on foreign investment, import liberalization and export diversification has also been accompanied by high rates of inflation as in the case of Sri Lanka. These policies have therefore tended to affect the poor majority adversely, pushing up the prices of essential goods and depressing the real income of middle and low-income strata, particularly the fixed wage earners. The experience of these countries suggests that liberalization strategies need to be complemented by measures of selective state intervention and public welfare which can adequately protect the poorer and more vulnerable segments against the advance impact of these strategies. What has been said points

to the importance of setting the basic needs strategies within an appropriate macro-economic policy framework which is capable of managing the country's external relations, its terms of trade and its impact on domestic processes and employment. The recent efforts to adjust to the world economic crisis by many of the developing countries also indicate a shift to a more pragmatic mix of policies than was adopted in the past in which various elements ranging from encouragement of foreign investment, outward-looking export diversification, integrated rural development and selective import substitution exist together. Such a mix, however, poses major problems of economic management and orchestration of different and sometimes conflicting development policies and goals. A fuller discussion of these issues however is beyond the scope of the present paper.

Finally, the national development strategies that are aimed at the social and demographic objectives that have been outlined cannot be conceptualized independently of the political processes that would help to guide and direct such strategies. The argument in the paper is based on the underlying assumption that the development strategies will be equity-oriented and would be directed fundamentally towards the reduction of inequalities. Such a strategy would require a particular combination of social forces and the relationships between the political elites and masses which would promote the realization of these equity-oriented objectives. It would be beyond the terms of reference this paper to define some of the essential preconditions relating to the political processes which have to be present for the successful implementation of development strategies. In identifying and discussing the various elements of the desired strategies, it is however important to bear these political prerequisites in mind and recognize the interrelations of political and socio-economic factors which pose a major challenge to the poorer societies of Asia if they are to realize the desired objectives before the end of the century.

5.2 RECOMMENDATIONS OF THE REGIONAL SEMINAR ON STRATEGIES FOR MEETING SOCIO-ECONOMIC NEEDS AND FOR INCREASING WOMEN'S PARTICIPATION IN DEVELOPMENT TO ACHIEVE POPULATION GOALS*

The Seminar concluded its substantive discussions by making two sets of recommendations, one on strategies to meet basic socio-economic needs and the other on increasing women's participation in development.

A. Strategies to meet basic needs

The satisfaction of basic socio-economic needs, including primary health care, safe water, universal primary education and food and nutrition, should be one of the principle objectives of the national strategies of the developing countries of the Asian and Pacific region and should be recognized as a major pre-condition for achieving population goals and the participation of women in development.

The instruments for achieving basic needs goals must include:

(a) A strong public component, i.e. programme and policies, to supply services in the key sectors and establish an adequate infrastructure in the areas in which the poor live;

(b) Measures for the redistribution of productive assets to improve the resource base of the poor;

(c) Creation of income-earning opportunities and productive employment for the poor, which will increase their capacity for satisfying basic needs on an increasingly self-reliant basis;

(d) An institutional framework which promotes a high degree of decentralization and active participation of the local community;

(e) Encouraging social processes which help the poor to organize themselves, identify and articulate their needs, and bring pressure on society to pursue policies to eradicate poverty.

Among the various basic needs, literacy and universal primary education are the key component of all self-sustaining efforts to satisfy various needs and the pursuit of population and development goals. The crucial importance of education should therefore be duly recognized and adequate resources must be allocated to attain universal primary education and the eradication of illiteracy before the end of the twentieth century.

Non-governmental organizations should be encouraged to play an appropriate role in the formulation and implementation of strategies for the satisfaction of basic needs.

Governments in the ESCAP region should recognize differences in basic needs at individual, community and national levels. They should focus on the special needs of the different age groups – children, youth, the economically active and the old, each of which would have different needs. Furthermore, the needs of specific groups of women, such as the widowed, the divorced, should be given special attention.

The planning authorities should identify and strengthen the population-related components of the basic needs strategy which can be the foundation for an effective population and family planning programme.

Some of the major benefits of a basic needs strategy, such as the development of human resources or its impact on fertility, will accure only after a considerable time-lag. In fact, the initial impact of some strategies leading to lower infant and child mortality and better maternal health might cause an increase in fertility and a higher

* Reproduced from ESCAP, *Regional Seminar on Strategies for Meeting Basic Socio-economic Needs and for Increasing Women's Participation in Development to Achieve Population Goals*, Asian Population Studies Series No. 53 (Bangkok, 1982).

rate of population growth. The Governments of the region should therefore set a sufficiently long-time horizon for development goals and orient people's expectations in a manner that avoids frustrations and policy reversals.

It should also be recognized that the promotion of education in the basic needs strategy may accentuate rural urban migration. It would be necessary therefore to launch simultaneous programmes for the diversification of the rural economy, creation of non-farm employment, and rural industrialization.

While pursuing a basic needs oriented strategy, adequate attention has to be paid to the possible imbalances and disequilibria that might arise. These include:

(a) The disproportionate allocation of resources between social investments and physical capital formation;

(b) Excessive emphasis on social welfare at the cost of employment creation and income growth which would increase the capacity of the poor to satisfy their basic needs. To cope with these possible problems the effect of the basic needs strategies on the economy should be evaluated on the basis of intersectoral planning within the general system, and the consistency of the basic needs programmes with other development policies should be continuously monitored.

Satisfaction of basic needs is likely to require a development effort which produces high rates of economic growth both to generate resources for the required social investments and to meet the expectations that are created. Therefore, the right balance between social welfare and efforts directed at the rapid expansion of the economy should receive the highest priority in the national strategy.

The international community must assist the developing countries pursuing basic needs strategies through:

(a) Adequate transfer of resources;

(b) A well-coordinated effort to maintain and raise the volume of international trade along with relatively stable prices.

A sizable international migration from several low-income countries of the ESCAP region has been an important development of the past decade. The subsequent remittances have been a favourable factor for the pursuit of a basic needs strategy. It is important for those countries to monitor the movement of people and remittances continuously. The world community also needs to recognize that international migration promotes a greater harmony between resources and population across different countries with surpluses and shortages of labour, and therefore it deserves encouragement.

The implementation of strategies for the satisfaction of basic socio-economic needs which can simultaneously promote the achievement of population goals and women's participation requires far reaching improvements in the quality of relevant data. The improved data base should include:

(a) More extensive and systematic use of national household surveys for collecting information relevant to basic needs strategies, such as the characteristics of disadvantaged groups;

(b) In-depth micro-level studies about the perceived needs of the poor and the problems of implementation of public programmes;

(c) Action-research which will help to identify replicable models;

(d) Comparative analysis of country experiences.

B. Increasing women's participation in development

The participation of women is integral to the development process which is promoted by a basic needs strategy. On the one hand, the satisfaction of basic needs implies equal access by the male and female population to primary education, food and nutrition and primary health care. On the other, it implies the capacity of women to contribute to the achievement of the goals of the basic needs strategy in all these fields. The participation of women in the processes of decision-making and implementation becomes indispensable for the success of basic needs programme, particularly at the level of the rural community.

In view of the close nexus between women, population and development, women's participation should be reflected in national plans wherein multisectoral strategies and programmes are evolved. Special cells should be created within planning organizations to cover this area. At the operational level, all workers should be given a re-orientation on the interrelationship between women's participation, development and population goals.

Governments must encourage a realistic and just redefinition of the roles of women and men

in society, taking into consideration the historical and cultural factors underlying their current roles and status. The content of education and of the meassages of the media should be scrutinized and reoriented to facilitate the attitudinal changes required for achieving a redefinition of women's roles in relation to those of men and a better intra-household allocation of responsibilities and benefits.

A rapid increase in the levels of literacy and education among women and young girls is the crucial factor in women's participation in development and in fertility decline. For this purpose, in addition to formal education, functional literacy programmes are essential. The Governments of the ESCAP countries must therefore allocate adequate resources to attain universal primary education and eradication of illiteracy before the end of the twentieth century.

To provide additional roles for adult women, special programmes must be launched to train female agricultural extension workers, community development leaders and teachers who can impart and improve the income-generating skills of poor women.

Poor women face the double burden of relatively high labour force participation and the responsibility of supporting and managing larger households resulting from a higher than average level of fertility. It is important to raise the earnings of these women and the productivity of the activities in which they and other members of their households are engaged.

The critical situation encountered by widows or divorced women in many countries of the ESCAP region needs urgent attention by policy makers to ensure that extreme poverty is eradicated through appropriate measures, including a modicum of transfers.

Governments must recognize that migration poses special problems for women. Matters which need to be investigated include the balance between remittances and the pros and cons of increasing voluntary migration of young women to take up unskilled employment in the Middle Eastern countries and the difficult situation of the increasing numbers of unmarried women moving to the cities to enter the informal service sector.

Governments must initiate immediate action to enact legislation to raise the age at marriage, to protect women against discrimination in employment and to ensure equal pay for equal work. Whenever necessary, women must also receive legal aid to be able to fight for their rights against harassment by their relatives, employers and others.

Household work and unpaid family labour need to be quantified properly in national statistics. Alternative series of national accounts must be prepared with an evaluation of housework in terms of the substitution cost of hiring alternate labour or in terms of the woman's opportunity cost and efforts must be made to improve the methodology of such estimates.

The Governments of the region should recognize that family planning can be the greatest force for widening the choices for women. The ability of women to regulate their fertility is basic to the attainment of any real participation. It is therefore important that family planning information and services integrated with health, employment, nutrition, education and other development programmes should be made available to all women in reproductive ages.

In considering women's participation in development to achieve population goals it is important to prepare young people of both sexes for responsible parenthood. Family life education programmes should be integrated into school curricular at all levels and into programmes for young people out of school.

Delivery of family planning services should be integrated with a programme of family health that focuses on maternal and child care, nutrition, family health education and the promotion of breast feeding. Women should also be trained in primary health care, with emphasis on the prevention and treatment of diarrheal diseases and the use of oral rehydration.

Anemia is such a crucial health problem for the women of the region that a special effort should be launched to combat its debilitating effects.

The non-governmental organizations can be effective partners with governments in the effort to strengthen women's participation in the achievement of population and development goals. The capacity of those organizations to function as catalysts and to experiment with innovative localized approaches deserves due recognition and support.

Recognizing the limited translation of women's development concepts into effective programmes, action research and pilot programmes need to be given high priority.

In the area of statistics and research, Governments should:

(a) Take the necessary steps to improve the availability, consistency, coherence and comparability of statistical data for monitoring and assessing the curent status of girls and women in their countries and for evaluating their role and importance in socio-economic development at the national and international levels;

(b) Actively collaborate in and contribute to the work currently undertaken by the United Nations and its specialized agencies towards the improvement of concepts, definitions, classifications and methods for collecting, compiling and analyzing statistics and indicators. This is particularly timely now because the data from the population censuses of the 1980s will soon begin to be available, and their rapid utilization would be of great help to planners and policy makers;

(c) Consider and take full advantage of all ongoing and proposed national surveys and the potential support offered by the National Household Survey Capability Programme currently launched by the United Nations Statistical Office.

The Seminar recognizes that the success of its recommendations depends on an understanding of the structural and dynamic aspects of the society, the support of policy makers and the all-important political will of the decision-makers in the countries of the ESCAP region. It hopes the requisite preconditions for such success will be created.

Topic 6.

EVALUATION OF INTEGRATED SCHEMES AND STRATEGIES IN FAMILY PLANNING/ FAMILY WELFARE/ FAMILY HEALTH PROGRAMMES

6.1 WORKING PAPER

by

R.H. Pardoko*

Introduction

Many countries in the ESCAP region have shown experience in implementing organized family planning programmes in the last three decades. Those programmes vary in size and organizational pattern and there is always some form of integration in which different specialized activities are closely linked together. There has been much time and effort given to examine integration patterns and effects to clarifying the concepts and developing a common language for integration.

Integration has been a popular concept for some time in the field of services delivery programmes. In family planning programmes integration is perceived as an organizationally and politically based effort to improve services delivery effectiveness through structural and functional linkages between family planning services and other socio-economic services. The idea of integration has also been suggested as an approach to solving the population problem through family planning programme. At the World Population Conference at Bucharest in 1974 integration was emphasized through its promotion of the role of population in the context of national development.

Rationale for integration

A strong interest in and commitment to integration has developed in the past decade which is based on fundamental assumptions about both supply and demand. These assumptions argue that integrated programmes are superior to specialized programmes. On the supply side, packages of different services are assumed to be more cost-effective and efficient than are the same services delivered by a variety of separate administrative units, as this larger packaging reduces administrative over-head cost and eliminates duplication and overlapping of services.

On the demand side, it is assumed that people prefer to deal with one provider of a variety of services rather than many. Further, the acceptance of one type of service might lead to greater willingness to accept other services from the same source.

But those are assumptions for which no body of systematic empirical evidence could provide clear and unambiguous support. Individual case studies and experiments can be identified that both support and question those assumptions. It is therefore better to recognize that the assumptions will be valid in some circumstances and not in others. If we can identify these circumstances, we can increase our capacity to provide good services to the people who desperately need them. To identify the conditions under which the integration assumptions are and are not valid, we first need to be clear about the meaning of integration.

Definitions

Integration implies the linking together of different activities or services. Based on the experience with integrated programmes in the ESCAP region, a more specified and formal definition is yet to be developed.

Here perhaps one of the most important distinctions made is that between administrative integration and service integration. In the former different specialized activities are brought together under the administrative and budgetary control of a single organizational unit or structure. In the service integration those activities are left in distinct specialized agencies and brought together only at the point of service delivery. The former refers to structural issues and the latter to actual processes.

It is also common to distinguish between different levels at which activities can be integrated.

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Integration can take place at the level of policy formulation, programme planning, programme implementation, and at the interface between service and client groups. At any level it can be observed in either its structural or process aspects independently of the others. None by itself is an exclusively useful or correct definition of integration.

On the governmental level, formal definitions usually hold that integration implies budgetary and administrative control over the integrated activity. Co-ordination implies distinct organizational identity of activities that are linked together by formal contractual agreement.

Co-operation implies organizational distinctiveness and something like informal patterns of agreement for working together. These definitions, however, appear too restricted to encompass the variety of programmes referred to as integrated programmes in this region.

The fact must be accepted from the experience that there is no fixed formula for integrated programmes. Any definition that does not accomodate the variety of organizatioal designs, levels, mixes of services and actual processes will not prove conceptually useful for dealing with integration in the ESCAP region.

However, it is quite acceptable to work with a concept that connotes broad approaches to linking differentiated functions in interdependent fashion that are adapted to meeting the basic needs of the people in different local situations.

The organizational designs: the programme mixes

At present there is no viable answer to the question of what specific services should be linked together and how that linkage should be organized. There seems to be an agreement that linkages with primary health care, maternal and child health, parasite control or nutrition is perhaps the most common, but there are effective programmes linking family planning with other programmes like women's development, community development, plantation and organized labour.

The specific mix of services that will be linked together and the organizational design by which they will be linked together vary considerably. Therefore there is no simple or fixed modalities that can be proposed.

Most forms of integration require linkages at a number of different levels. At the top levels, policy decisions must set the framework for whatever linkages are to be achieved, at which the distinct value system of the society has to be taken into account.

Existing patterns of integrated programmes, their strengths and weaknesses

In the past 10 years successful family planning programmes have been recorded in the ESCAP region in terms of their impact on fertility, regardless of the degree of social and economic development level. However it is not clear what type of programmes are the most successful and it is not clear whether that success derives from the fact of integration, or from some other conditions within or outside the programme. Even detailed studies and analyses of those programmes have not been able to indicate conditions responsible for the successes with any degree of certainty. Integration however is being pursued among others based on assumptions that integration will bring greater efficiency and cost-effectiveness.

It is likely that these assumptions are valid under some conditions but not under others, and it is as yet unclear just what those conditions are. Due to lack of evidence from large-scale experiences one could accept the validity of those assumptions with some reservation.

The success of most of the family planning programmes in the ESCAP region is associated with two operational strategies. One is the use of specialized family planning agencies that have direct responsibility, authority and resources for family planning and that have direct administrative lines from high levels of bureaucracy down to the individual fieldworkers. In fact such specialized agencies have their strength in their limited goals, their capacity to generate resources and to build their organizational processes specifically for achieving those goals. In addition, due to their strong commitment to the goals of family planning they develop extensive linkages at the point of service delivery with a wide variety of other agencies. These linkages have also been established even in the absence of structural integration.

Another success has also been recorded in cases where administrative structures are integrated, namely where family planning is an integral part of the government public health services. In these cases the increase of the contact points with the local population is made possible through the health service network (examples: Thailand, Singapore,

Malaysia, Sri Lanka). In some cases these programmes were also facilitated by innovative practices of using paramedical personnel in prescribing contraceptives.

This type of integration however requires long and careful planning which involves all participating specialized agencies and therefore it is more complex and demanding. In this structure a number of co-ordinating bodies were developed at various levels which could keep in close touch with the administrative processes and problems that developed.

The problems which have been faced in the structural integration was that of combining different technical skills in the same position. It is difficult to change job descriptions or to add new tasks to a particular position and expect that those will be carried out for structural integration. New orientation, training and supervision have to be carefully planned to ensure that staff have the required skills, direction and motivation to provide good service in all areas.

It is noted from the experience in this region that the thrust for integration has come from specialized family planning groups which seek to broaden their goals beyond that of family planning, namely family health and welfare. The development in these directions has often generated more effective integration than have externally produced standardized integration packages.

The generated ideas for expanded programming call for the need for top decision makers to judge the relative effectiveness of proposed strategies. In family welfare the effectiveness in providing services is more important than efficiency as a criterion for selecting alternatives and at the same time the top administrators are faced with the need to develop some form of cost-effectiveness criteria.

Issues in integrated approaches to family planning and population

Issues related to the integrated efforts in population and family planning can be identified at various programme levels.

(a) At the policy level, integration starts with stating broad population goals and identifying the implications of these goals to the other sectors. Relevant sectoral policy elements then need to be identified for strengthening, synchronization and consideration of their potential impact on the community. At the development planning level it is important to identify the two-way relationship between population and development variables to be used as basis for policy formulation. Any explicit goal for population has important consequences on other sectors of the society and other sectoral developments have consequences on population. When population is adequately integrated into policy planning it becomes possible to identify specific sectoral elements that need to be strengthened.

(b) At the programme planning level, critical issues for integration include the agencies to be linked, the conditions that determine the success of the integrated programme, the identification of the expected problems and the like. In determining the agencies to be linked, it is recognized that a "lead agency" is needed to move and to coordinate the process. It is also recognized that multiple levels of coordination is required for monitoring programme processes and for solving linkage problems.

(c) At the programme implementation and evaluation levels, efforts have to be made to ensure that all activities to be integrated perform equally well and that none suffers specifically from being integrated with others. It is important to be noted that when a number of activities are linked together, care should be taken that all the necessary skills are included in the implementing work. Therefore it needs detailed planning for adequate job specification, recruitment, training, supply and supervision of workers.

(d) At community level, developing and sustaining community participation is one of the most important challenges in population and family planning programme. This challenge implies issues of determining what communities are relevant, what kind of participation is needed, what kind of constraints are to be overcome, and the like. Local leadership and political support are required for sustaining participation and therefore appropriate mechanism for identification and training of those leaders has to be developed.

Local communities can be mobilized to take part actively in integrated programmes and may be directed from above or may be stimulated and encouraged to take the initiative for themselves. In family planning programmes external stimulation and control can be expected. The control however varies from a highly directive form to a more moderate mediative type. The latter appears to be more effective and has a more positive impact on programme implementation.

For an effective participation it is important to ensure that the more powerful members of the

community are not receiving benefits at the expense of the less powerful members. Effective participation is more likely to be found in more homogeneous communities where there is a sense of identity and belonging as well as interdependence among the members. This implies that flexible and adaptive strategies capable of developing programme activities with a wide variety of community groups are important.

There is a great variety of local institutions at the community level which are potentially appropriate to be involved in the integrated programme implementation. Those are of local government, government representatives in specialized activities, non-governmental organizations, and informal groups.

In the ESCAP region those institutions vary greatly in the number, mix and character and the variance exists not only between countries but within them as well. It implies that no single strategy can be proposed for identifying local institutions in all cases.

However, certain minimum criteria will be needed in the selection of those institutions to ensure their effective participation in the programme implementation. Those are among others: influence in the community, potential for resources mobilization, viability, membership, leadership, and administrative or managerial power and competence.

The selection of the local institutions is related to the role they are to play and the responsibilities they are to accept in their participation in the programme. In cases where local institutions are weak in number and strength it is the programme that is responsible for supporting them and assist in creating them if they do not exist. In initial efforts to work with local institutions it is advisable to be flexible in the choice of institutions. Any functioning institution can be used effectively if it is approached with sensitivity and high flexibility in devising integrating procedures.

In the effort to promote greater community participation it is necessary to devolve power to local groups for participation in integrated programmes. Devolution of power would result in increasing the power of a programme to achieve its goal, largely because the participative character of administration gives greater amounts of committed human sources to the programme. A prerequisite for a political devolution is a willingness at the top to give power and a capacity at the bottom to receive and use power. It implies the need for careful planning and well tailored training for both.

With the devolution of political power to non-governmental institutions care should be taken of the possibility of conflict as the NGOs have available to them external sources of support and their programming may not fit with or may run counter to, the orientation of the national programme. This conflict could be minimized through carefully constructed liaison work, initiated especially by the NGOs.

With the provision of greater autonomy and flexibility in decisions over resource allocation to local institutions, the administrators will be severely challenged since it has to be balanced against the demands of public accountability. It could give training for further responsibility and could act to demonstrate the capacities of local institutions to discharge the responsibilities of public accountability.

Methods of evaluation of integrated programmes

The evaluation of integrated family planning programme involves both areas of problems, namely those found in evaluating single purpose programmes and those related to the integration. Not taking into account the problems related to the value systems and the political aspects of integration, four types of issues have been identified in the evaluation of integrated programmes.

With regard to the types of research, the impact assessment tends to be the most common form of evaluation research, since it shows the impact of the family planning programme on contraceptive use or on fertility. It uses large scale survey techniques with areal sampling and data collection at the individual level. However, it does not permit observation of administrative units of the programme and it does not collect data on the degree of integration. Therefore these surveys are of limited use for the evaluation of integrated family planning programmes.

Cost-effective analysis seems to be more attractive to population managers, who must decide on the allocation of scarce resources between an increasing number of programme demands.

However the methodology of cost analysis still has to be further developed. In the analysis, costs are related to output and a methodological work for the assessment of programme output is still needed.

Operations research is of particular importance for the evaluation of integrated programmes since it focuses on actual processes in a programme and

is capable of identifying where, how and how much integrated activities actually take place. It gives managers insights on how a specific programme or a portion of it actually operates, although it is programme specific and cannot be generalized.

With regard to research design, the time series analyses were able to show the superiority of integrated programmes in Bangladesh and Malaysia. The time required for the evaluation however was too long and the reasons of the increasing programme acceptors are subject to a number of competing hypotheses as to create difficulties of using this design for timely and effective evaluation of integrated programmes.

Experimental designs were used to test the utility of integrated programmes in various settings. The disadvantages of this design were the long time required for results, the difficulties in finding matched samples and the danger of contamination of the experimental areas. Further it is often difficult to replicate them in the natural setting outside the experimental area.

Multivariate analyses of areal data seems to be the most effective design for the evaluation of integrated programmes. It requires surveys of selected areas with some variation in the degree or quality of integration, programme inputs and outputs. It permits the imposition of controls since a large amount of data can be collected economically. What this design requires is good measures of integration itself.

The measurement of integration itself is underdeveloped and needs methodological work. In this case specific studies must be done since integration cannot be sufficiently monitored through service statistics. Integration varies in both quantity and quality and requires a number of approaches for its evaluation.

With regard to the utilization of evaluation and research, it is especially important that relevant programme managers are involved in all stages of research since this will be very helpful in tailoring research to the specific conditions of a given programme and the specific needs of the managers and it will allow for translation of the findings into their programmatic implications.

Policies for implementing integrated family planning programmes

Family planning activities and research are mostly focused on single individuals, either males or females as acceptors of contraceptive devices. This simplifies programme activity especially in dealing with the supply side of the problem. It is, however, a serious limitation and felt as constraint by family planning workers whose contact with the community leads to a broader concern with the overall welfare of the family.

The approach to family welfare must be a holistic one and it is important for policies to take into account the broad range of ideological, institutional, technological and resource factors that impinge on the family and the local community and affect its general well being. The welfare of the family is the central point through which fertility behaviour is connected to a wide range of other conditions. This would lead to the elimination of the problem of integration.

The concept of family welfare is easily accepted and the general welfare of the family is more important than any separate element such as level of fertility. However this creates problem if we move from the concept to programmatic action, since no single exising agency of any government can take care of all aspects of welfare. The components of welfare that are given priority will be determined by the specific agency that is designated as the lead agency. Therefore the focus on welfare does not eliminate the need for concern with integrated programming.

6.2 RECOMMENDATIONS OF THE REGIONAL SEMINAR ON EVALUATION OF SCHEMES AND STRATEGIES FOR INTEGRATED FAMILY PLANNING PROGRAMMES*

The 19 recommendations of the seminar are divided into four main categories: those dealing with conceptual issues, those with strategies for integration and community participation, those with policy issues and those with evaluation of integrated programmes.

Conceptual issues

Integration basically implies interactive linkages among specialized activities. The ESCAP region shows great diversity in the programme structures that contain such linkages. No single definition of integration can be adequate for policy planning and programme design and implementation under different conditions. It is sufficient however, to be content with a concept that connotes broad approaches to linking differentiated functions in interdependent fashion that are responsive to meeting the basic needs of the people in different local situations.

Whatever the form or degree of integration, it is necessary to retain a focus on population and family planning goals. For this purpose, explicit responsibility must be assigned to some organized body.

In order to achieve the goals of family planning and welfare, the involvement of local communities and institutions is necessary. Because of the diversity of the ESCAP region appropriate formulas for community participation must be drawn up in each case to meet varying conditions.

Many complex issues arise at policy, programme planning and programme implementation levels for integrated approaches to family planning. These issues must be carefully identified, examined and dealt with by involving all parties concerned with integration.

Decentralization is an essential component of both integrated family planning and community participation. To promote success in both programme strategies, decentralization will be required.

Strategies

A wide variety of local institutions already exist in the ESCAP region, including local self-government, non-government organizations, informal groups and institutions. These local institutions should be actively involved in integrated family planning and welfare programmes. They must be provided with adequate technical, financial and logistical support for strengthening their abilities in initiating and carrying out these programmes. In particular, the self-governing bodies, the NGOs and informal groups must be given coordinated support so that they can play an innovative and supportive role in planning, implementing and evaluating programmes appropriate to local needs.

The local institutions should be involved in local-level policy making, with the necessary delegation of administrative and financial authority and devolution of resources to allow adequate programme flexibility to respond to the basic needs of the community. Local communities should also be encouraged to mobilized their own resources. All these will require reorientation, training and retraining at all levels towards the full realization of bottom-up planning.

In order that the benefits of integrated family planning and family welfare programmes reach especially the socially and economically disadvantaged groups, specific measures should be taken to organize them for active participation in all phases of the programme.

Policy

It is generally believed that integrated programmes increase the efficiency, effectiveness and acceptability of services. Multidimensional needs

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* Reproduced from ESCAP, *Recommendations of the Regional Seminar on Evaluation of Schemes and Strategies for Integrated Family Planning Programmes,* Asian Population Studies Series No. 51, Bangkok, 1981.

are better handled by multi-dimensional programmes.

Integration should be developed at the level of policy formulation in view of the fact that integration is consistent with the broad goals of improving the quality of life and the co-ordination of related services.

Since technological change and socio-economic development enhance progress in integrated family planning programmes, these areas need to be considered in formulating policies.

Evaluation

The evaluation of integrated programmes should be conceptualized concurrently with the formulation of the policy of integration. Evaluation should also focus on the assessment of integration itself both in policy and in implementation.

More research on the cost-effectiveness of different family planning strategies should be pursued to indicate the conditions under which integration can be expected to improve programme performance. The belief that integration leads to more efficient and effective programmes is as yet unsupported by systematic research.

More emphasis should be placed on operational research for evaluating integrated programmes than has generally been the case in the evaluation of single-purpose programmes. By operational research is meant research on programme implementation, including both structural and process analysis.

More emphasis should be placed on qualitative research, on organizational functioning and on management to augment the quantitative findings.

Community participation in any phase of an integrated programme needs to be evaluated regarding the extent and quality of the participation itself.

There is an absence of a comprehensive methodology for assessing the nature, extent and quality of integration itself. Efforts should be made to devise such a methodology that provides timely and readily assimilable results for solving operational problems. While it is recognized that complex research methods may be useful, there is a special need for simple and direct methods, including in-house facilities that can be employed by managers themselves.

The planning of research should be co-ordinated in a manner that corresponds to the administrative co-ordination required for implementation of integrated programmes. Participation in the planning of evaluation should involve all levels of the organizations concerned, including the lcoal institutions.

The evaluation of integration is best achieved by special studies. Routine reporting and recording systems need not be encumbered with additional instruments for monitoring integration *per se*. The need for regular evaluation feedback can be met by a system of periodic managerial meetings and conferences, involving both managers and field personnel, designed to monitor the progress of integrated programmes.

6.3 EXPERIENCES IN INTEGRATED FAMILY PLANNING PROGRAMMES IN THE ESCAP REGION

by

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Introduction

The ESCAP region shows a rich variety of organized family planning programmes, often extending back over the past three decades. The programmes display wide variation in content and organizational patterns and their histories shown both natural growth and a great deal of experimentation. A common feature of all these programmes has been some form of integration in the sense that different specialized activities are linked together.

The region has also been active in explicit thinking about programming and especially about integrated programming.[1] Much time and effort have been given to clarifying the concepts and developing a common language for integration and there have been many attempts to examine integration patterns and effects in surveys of natural settings, in controlled experiments and in pilot projects. This is surely a situation from which a great deal can be learned.

Rationale for integration

One of the first things to learn is what is not known about integration. Over the past decade a strong interest in and commitment to integrated programmes have developed. The commitment is based on fundamental assumptions about both supply and demand, which argue that integrated programmes are superior to specialized or categorical programmes. On the supply side, it is assumed that packages of different services are more efficient and cost-effective than are the same services delivered by a variety of separate administrative units. Presumably, this larger packaging enjoys economies of scale, reduces administrative overhead costs and eliminates duplication and overlapping of services. On the demand side, it is assumed that people prefer to deal with one provider of a variety of services rather than many. Further, it is assumed that the acceptance of one type of service leads to a greater willingness to accept other services, or that the receipt of "good" service from one source increases the demand for other services from the same source. (The opposite of this situation—a bad experience with service from one source reducing the demand for other services from the same source—is usually not considered, but it must be counted among the potential costs of integration.)

It is important to note that these are assumptions. There is no body of systematic empirical evidence that provides clear and unambiguous support for them. Individual case studies and experiments can be cited that both support and question these assumptions. Integrated and specialized programmes show striking successes, crashing failures and almost everything in between. The balance sheet is not yet drawn up; nor is it very important that it be drawn up. It is better to recognize that the assumptions will be valid in some circumstances and not in others. If these circumstances can be

* Gratefully acknowledged in the preparation of this paper is the assistance of Professor Gayl D. Ness of the University of Michigan, consultant to the Regional Seminar on Evaluation of Schemes and Strategies for Integrated Family Planning Programmes with Special Reference to Increased Involvement of Local Institutions, Bangkok, 15-22 June 1981.

[1] See, for example, the series of ESCAP publications that began in the mid-1960s, many of which appear in the Asian Population Studies Series (APSS). *Administrative Aspects of Family Planning Programmes* (1966), APSS 1; *Report and Selected Papers of an Expert Group Meeting on Organizational Aspects of Integrating Family Planning with Development Programmes* (1977), APSS 36; and *An Integrated Approach to Population, Food and Nutrition Policies and Programmes for National Development* (1980), APSS 45.

identified, it will be possible to increase the capacity to provide good service to the people who desperately need it.

Types of integration

To identify the conditions under which the integration assumptions are and are not valid, it is first necessary to be clear about the meaning of integration. As the ESCAP discussions have shown, integration implies the linking together of different activities or services, as when family planning becomes an integral part of maternal and child health service. This linkage can be accomplished in many different ways and under many different organizational designs. Here perhaps one of the most important distinctions made in the ESCAP discussions is that between administrative integration and service integration. In the former, different specialized activities are brought under the administrative and budgetary control of a single organizational unit. The most common forms of this type in the ESCAP region are those in which family planning is an integral part of maternal and child health care programmes or of primary health care services, especially in rural areas. India, Singapore, Thailand and more recently a portion of the Malaysian programme provide good illustrations. Service integration, by contrast, implies maintaining the administrative integrity of specialized activities, but bringing them together at the point of service delivery. In Indonesia, Malaysia and the Republic of Korea, family planning has been the responsibility of distinct organizational units which have often provided services at the same time and place at which ongoing and administratively separate health services are provided.

Effectiveness of integrated programmes

It is safe to say at this time that service integration has proved quite successful in family planning programming. It is also felt that it has been more successful than full administrative integration, but there is no hard empirical evidence for this. Nowhere has there been any study of comparative cost-effectiveness analysis necessary to judge the relative effectiveness of these two integration strategies. None the less, a review of some cases can be helpful both to support the judgement of the superiority of service integration and to provide an explanation for its superiority.

One of the oldest and most successful programmes in the region is found in the Republic of Korea. Although it provides services along with and through the regular national health service, it has distinct family planning administrative systems that run in unbroken lines from the local field-worker up to high sub-ministerial levels. The same is true for Singapore, which has another very successful government programme, whose success, however, may be attributable as much to socio-economic factors as to organizational strategies.[2] The Malaysian programme also began and achieved its initial successes with a distinct administrative system running directly from the National Board down to clinic-level workers. Finally, one of the more successful multinational programmes promoted by the Population Council, the international post-partum programme is a case where distinct units responsible for family planning promoted the provision of services and information along with obstetrical services.[3]

The lesson to be learned from this experience is both simple and important. To achieve success in fertility limitation it is necessary to organize specifically and directly for fertility limitation. This task must be the responsibility of an organizational system that has resources and authority to perform that task. Success will not, or will not readily, be achieved by entrusting this task to organizational units that have some other major task to perform. This argument is supported by a major review of family planning experience recently conducted by the World Bank.[4] It is now evident that family planning programmes have a substantial impact on fertility. Further, "No matter how backward the country, some results can be obtained by establishing strong programmes, and regardless of how advanced the country is in socio-economic terms, if it has a high birth rate, the decline in that rate will be very slow unless a supply system is established"

Two observations from India and one from China provide further support for this argument. With a prevalence rate of less than 10 per cent after

[2] This is not to underestimate the effectiveness of Singapore's organization, but merely to draw attention to its very favourable socio-economic setting. The Republic of Korea faced a far less favourable setting, implying that success was more powerfully determined by organizational conditions.

[3] It is interesting that the post-partum programme is seldom mentioned in discussions of integration, although it was one of the earliest and probably most successful of attempts at integration.

[4] Roberto Cuca, *Family Planning Programs: An Evaluation of Experience*, World Bank Staff Working Paper No. 345, (Washington, DC, The World Bank, July 1979), p. 52.

decades of activity, the family planning programme in Uttar Pradesh can hardly be called successful or even significant. In its extensive analysis of the over-all state programme, the Kanpur Institute of Technology team documents some of the reasons for programme's failure.[5] At the front lines of action, in the primary health centre, family planning workers receive little direction or support from the medical personnel, whose major task is health delivery services, not family planning. Much of the reason for this front-line failure lies in the break in the administrative system between the district and the block. From state to district there is administrative authority and responsibility for family planning. Below the district, however, family planning is fully integrated into the primary health care system. It is simply one more task laid upon an overworked and undersupported (and some would add inappropriately organized) government health delivery system. However, the success in family planning achieved in the Malur (Karnataka) project, appears to be in large part due to the responsibility for family planning given to a distinct family planning agency, working at the front lines in the primary health centre.[6] Finally, the recent successes of the Chinese family planning programme are due in part to removing responsibility from the Ministry of Health in 1972-1973 and placing it in the highest political unit with direct political support down to the lowest levels.

The lesson is simple and important. If fertility decline is desired, there must be a definite organized effort to provide contraceptive services and information to the population. Amitai Etzioni provided a theoretical basis for this lesson in the recent UNFPA decennial review volume.[7] Organizations are constrained by mandates, resources, technology and orientations. There are effective tools of action, but they are also specialized tools. An organization designed to perform one task often cannot be effective in performing a different one, whether it is ordered to do so or not. There is a long history of organized activities which have demonstrated the value of creating a specialized organization if it is desired to achieve a particular goal.

The recent successes of the Thai programme, which is closer to the administratively integrated type, appears to contradict this general lesson. It is believed that there are three general reasons for the Thai successes, which tell us something about both the limits of integration and the rules for successful integration. First, the relatively autonomous status of women in Thai society, coupled with widespread exposure to mass communication and transportation, produced a socio-economic setting with very high demand for contraceptive services. Second, the supply of those services was recently vastly expanded when contraceptives were offered free through the government clinics. Finally, the integration of the Thai programme was built up gradually with a great deal of detailed planning and much training of workers at all levels. Only the last concerns integration, but it says something important about how success in integration is achieved. It requires careful planning, good administrative leadership and ample resources.

The recent successes of the Malaysian integration strategy support this line of argument.[8] From 1971 to 1973 the Malaysian programme worked on a pilot and demonstration integrated project. During this period there were intensive discussions between the National Family Planning Board and the Ministry of Health to work out the details of responsibility, authority and resources needed to include family planning as an integral part of the rural health services. When these details have been worked out, the Ministry of Health began gradually to expand family planning service offerings on a staged basis, for which the required training and other resources were made available. The expansion required until 1977 to be completed. As the expansion took place, the number of Health Ministry acceptors increased from about 5,000 to 25,000 per year, without a corresponding decline in acceptors recruited by the National Family Planning Board or other agencies. In effect, the rural health services had been used as an additional supply outlet for programme services. It is important to note, however, that this was not achieved simply by directive from above. It required careful planning by both major parties, with resources and much of the initiative flowing from the National Family Planning

[5] G.R. Simmons, R.A. Simmons, B.D. Misra and A. Ashraf, *Organization for Change: A System of Analysis of Family Planning in Rural India* (University of Michigan, Centre for Population Planning, no date).

[6] K. Seshagiri, "Integrating family planning with rural development, Malur project: India", case study report presented at the Regional Seminar on Evaluation of Schemes and Strategies for Integrated Family Planning Programmes with Special Reference to Increased Involvement of Local Institutions, Bangkok, 15-22 June 1981.

[7] Amitai Etzioni, "Beyond integration, toward guidability," in Philip Hauser, ed., *World Population and Development: Challenges and Responses*, (Syracuse, NY, Syracuse University Press, 1979), pp. 538-565.

[8] ESCAP, "Integration and family planning programme performance: an interpretative summary," *Population Research Leads*, No. 12, 1982.

Board to the Minsitry of Health. Integration entailed calculable costs, those costs were calculated in a rational fashion and the costs were met by the agency with primary responsibility for family planning.

A study of integration in the programmes of Malaysia and the Republic of Korea offers some additional insights.[9] In the integrated portions of the Malaysian programme, staff inputs into family planning were positively correlated with recruitment of acceptors; and staff inputs into MCH were positively correlated with MCH performance. This is an indication of a properly functioning organized supply system. But family planning inputs were not correlated with MCH achievements. While this is hardly conclusive evidence, it casts some doubt on the assumption that integration is most cost-effective because of the spill-over effect from one service to another. The Malaysian success in the integrated programme apparently comes only from using an existing network to increase the supply of contraceptive services. It does not appear to come from the synergystic effect of linking two disparate services. In using that existing network, however, the Malaysian programme also plans for and achieves some interaction at the clinic level between health and family planning personnel, and more the interaction occurs the higher is the performance in both family planning and health services. These findings are made more significant by contrasting Korean observations. With a service integration strategy, the Korean programme does not specifically plan for full administrative integration. None the less, the list of services for which local field staff are responsible is large and varied, with the actual responsibilities determined by local clinic and administrative conditions. In this case it was found that more local interaction between family planning and other health staff reduced family planning performance. Further, although there was some attempt to integrate family planning with the recent community development movement *(Saemaul Undong),* the study found a negative association between family planning inputs and community development achievement scores. There was also a negative relationship between MCH and TB inputs and family planning achievements. That is, where integration is not fully and carefully planned, the various services involved will be in competition, so that work on one will detract from achievements of the other.

The recent Indonesian success in family planning also reveals something about integration strategies.[10] As in many countries, family planning in Indonesia is the primary responsibility of a national-level body, the National Family Planning Co-ordinating Board. Originally, the Board was to induce other specialized agencies to promote family planning. In fact, the Board ultimately had to undertake the service delivery responsibility itself. Its successes were achieved when the Board moved out beyond the health service clinics to the village-based system. Here the mobilization of community groups, or the outreach strategy, was conceived of, promoted and for the most part paid for by the specialized family planning Board. Health service personnel were used, but were often drawn away from health to family planning work by the Board's mobilizing efforts and remuneration. The Board also developed provincial and district-level co-ordinating committees to provide the required leadership and initiative at the local level. The initiative of the national Board has not stopped with family planning. There is currently an experiment under way in which the family planning programme is attempting to include child nutrition services along with family planning. Integration is coming, but it is under the initiative of the specialized family planing organization and is being built into the effective supply network created by family planning.

The Indonesian case raises another question about alternative integration strategies. Mojokerto, in East Java, was the scene of one of the major international experiments in integration, the Population Council's integrated MCH/FP programme. The experiment went on for some years with substantial inputs from abroad, including funds, personnel and not a small amount of prestige. Undoubtedly much was learned from the experiment, but it can scarcely claim to have provided the outreach model that has been responsible for the Indonesian successes. That model was developed in Indonesia more or less by a specialized family planning programme attempting to solve its own problems of service delivery. While it is perhaps not correct to call the Population Council's Mojokerto project a failure, it would be useful to know why that fully administratively integrated project did not provide a viable model for success. The question becomes more pointed if the Population Council's experience with the same experiment in Bohol in the Philippines is

[9] *Ibid.*

[10] See T. Hull, V. Hull and M. Singarimbun, "Indonesia's family planning story: success and challenge", *Population Bulletin*, vol. 32, No. 6, November 1977; and J. Heiby, G. Ness and B. Pilsbury, *AID's Role in Indonesian Family Planning: A Case Study with General Lessons for Foreign Assistance*, (Washington, DC, USAID, 1979).

also considered. Even the most generous interpretation of that project cannot claim much success. However, the Philippines programme is currently moving to an outreach strategy similar to that adopted by Indonesia. And again this major international experiment in full administrative integration of family planning with maternal and child health is being bypassed as a national programme attempts to expand its supply network by mobilizing local communities to take a hand in service delivery. It is argued above that service integration strategies which retained distinct administrative responsibility and authority for family planning were often found associated with successful programming in the region. The experience with the Population Council's use of an administrative integration strategy lends support to the tentative suggestion that service integration is more effective than administrative integration for linking different services without weakening any of them.

Conclusion

Over-all, there seem to be two important, though relatively simple, lessons to be learned from integration experiences in the ESCAP region. First, if it is desired to achieve some success in fertility limitation, there must be some specific and distinctive organization for fertility limitation. A specialized organization is needed to carry the responsibility and the initiative for work in fertility limitation. It can often enhance its chances of success by working together with other human services at the point of service delivery or by developing new community-based delivery and support networks. Still, these service integration and outreach experiences appear to require a distinctive organizational unit whose primary, if not exclusive, responsibility is fertility limitation. Second, if fuller integration of fertility limitation with other services is desired, for whatever reason, that integration must be carefully planned. For that planning to be effective, representatives of all specialized services to be linked must be involved in the planning and there must be an equitable distribution of resources to go with the responsibilities for services. Where integration has been simply dictated from above, laying additional work for different services on the shoulders of a specialized agency, the typical result is failure. Where all parties to be integrated take part in the planning and work out an agreeable plan of action and resource allocation, integration often achieves considerable success.

Topic 7.

INCREASING INVOLVEMENT OF NON-GOVERNMENTAL ORGANIZATIONS, LOCAL GOVERNMENTS AND LOCAL INSTITUTIONS WITH A VIEW TO PROMOTING GREATER COMMUNITY PARTICIPATION IN FAMILY PLANNING/ FAMILY WELFARE/ FAMILY HEALTH PROGRAMMES

7.1 WORKING PAPER

by

M.A. Sattar*

Introduction

Following the Bucharest theme that population policy is an integral part of general development policy, family planning is considered as an important means towards social and economic development, while recognizing that overall development also benefits family planning programmes. In this context a new trend of integration of family planning has emerged, beyond MCH and health services, with broader development efforts, particularly in rural and community development,

In the ESCAP region several countries have successfully mobilized community participation in family planning, by involving local governments and non-governmental or voluntary organizations. Large national population programmes have been supplemented by local efforts having easier outreach access for motivation and service delivery. Countries in the ESCAP region which have been able to mobilize nation-wide rural communities for family planning are China, the Republic of Korea and Indonesia. Most other countries have achieved some localized successes.

It is generally accepted that community mobilization for participatory democracy and development is a good thing in itself, and community participation in family planning has a positive contribution towards its success. In this context this Conference is examining the current position in the region with a view to proposing measures for enhanced involvement of local governments and non-governmental organizations (NGOs) in family planning programmes.

As a preparatory effort, the ESCAP secretariat commissioned a number of experts to contribute papers and organized a Regional Seminar on the topic. This working paper which is primarily based on the report of the Regional Seminar, available for the Conference, as well as the special paper on the topic prepared for the Conference, states briefly various issues and problems connected with increasing involvement of local institutions in promoting community participation in family planning. The new approach of involving local institutions for community mobilization is a shift in emphasis from top-down to bottom-up development strategy for family planning as well as development. To implement this community-based strategy presents a challenge to policy planners and programme managers. Planning, programming and implementation styles have to be adapted; devolution of responsibility, decentralization of powers, delegation of authority to local institutions and new modes of accountability have to be worked out. The task is difficult. The risk of not trying may be the continuation of massive rural poverty and impending population crisis.

Community participation in family planning – concept and experience

We may accept for working purpose the definition of community as suggested by the ESCAP Regional Seminar, "A Community is generally conceded to be characterized by some territorial limits, by a sense of identity or belonging and by some interdependence among members." It has been assumed that community participation that is more effective in implementing family planning programmes is likely to be found in homogeneous communities or in homogeneous sub-groups within a given community.

Community participation in family planning covers a wide spectrum of responsibilities. At one end members of the community may be passive partners only reacting to activities initiated, planned, directed and implemented by outside agencies or

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authorities from above. In other cases communities may initiate, design and take total responsibility for action programmes. In all cases an important element of community participation is the nature of the intermediary or link organization between the community and the national programme. The intermediary organizations such as the elected local government institutions (e.g. municipality, village council), non-governmental or voluntary organizations (e.g. the family planning association, cooperatives, mothers' clubs) and informal local groups, in which the members of the community are generally represented, are basically different from a central or state government agency with its hierarchical bureaucratic system. The community's sense of belonging to the local institutions is more direct and there are possibilities of greater interface and interaction for a more flexible adaptation of family planning to local conditions.

Family planning to be effective must be adaptable to an individual community's social and religious value system and life-styles. The new technology must find its place within acceptable community institutions. Family planning programme planned and implemented by outside agencies which may not be sensitive to the traditional value system may be rejected by the community. To make the family planning services delivery appropriate, the local organizations must be involved both in planning and implementation stages.

The family planning programme must be flexible enough, within the broad national policy outlines and priorities, to adjust its various components locally. In any community participation programme the local pre-conditions such as an awareness of, and respect for, the traditional organizations and existing social and religious value system, the support of the civil administration and local religious groups must be fulfilled. The community mobilization in each case must start small and projects must benefit the community economically. The programme must have support politically and administratively from the central and state governments.

The community's role in motivation is extremely important. Where family planning is based on community participation, practising family planning will be considered responsible behaviour among its members. All traditional and modern channels of communication - traditional community leaders, birth attendants, and organized groups of women and youths - should be used to strengthen community motivation for family planning.

The family planning through MCH services and health facilities in the community must be fully utilized so that the concept of family planning benefiting health of the family gains acceptance. Community based distribution system of non-clinical contraceptives has now been generally accepted. But its effectiveness varies from region to region and country to country.

From the point of view of a national family planning programme, services integration rather than administrative integration with local governments and local community organizations provides more appropriate support linkages. One important lesson learned from the region is that to achieve success in family planning the responsibility must be given to an organization which has resources and authority to perform the task rather than to organizational units which have some other major functions to perform. Countries with significant successes in fertility reduction such as China, Singapore, Indonesia and Malaysia, have organizations specifically responsible for family planning. However, these organizations have been appropriately integrated for service delivery with other government agencies and local institutions. The integration strategy for mobilizing support of local institutions for community participation must be carefully planned and implemented involving all the agencies, government, local government and NGOs, from the planning stages regarding respective tasks and resources allocation to grass-root level implementation.

The role of local institutions

A wide variety of local institutions can be identified in the ESCAP region. These range from elected local government bodies, local offices of central or state administration, non-governmental organizations to many types of informal groups (for details see list in the appendix).

The selection of the local institutions to be used in developing community participation must be based on flexible and realistic criteria. Generally it is better to select viable groups that have legitimacy and influence in the community, some stable resource base and effective linkages with other institutions and groups. If strong local institutions already exist, it might be relatively easy to involve them in programme participation. Where established local institutions are weak or almost non-existent, external assistance will be necessary to act as a catalyst to help organize potential groups into action.

Local institutions as the links between the national programme and community may play a wide range of roles such as advisory roles in initial programme planning and coordination; implementing roles such as training, information, motivation, service delivery; and supportive roles involving women, children and disadvantaged target groups.

Local institutions have an immense task in effective family planning motivation and service delivery. The national programme and other outside agencies may have to play a catalyst role, and assist in the training of local workers. They also need to provide back-up technical services, financial resources, supplies and logistics.

The government and national or international non-governmental organizations have separate roles to play towards elected local government institutions and non-governmental organizations. The elected local government institutions are parts of a government institutional hierarchy with specified local spheres of activities and usually have some resources including infrastructure facilities. Funds and other resources can be transfered under normal government rules.

But NGOs stand on a different footing. Many of these organizations are externally funded. For example, Family Planning Associations organized locally are federated nationally and in turn internationally. In the ESCAP region 21 national Family Planning Associations(FPA) are members of the International Planned Parenthood Federation (IPPF). In 1982, IPPF allocated $18.7 million to FPA's, which constituted the bulk of their financial resources. There are numerous such NGOs now involved at community level family planning activities.

Effective coordination and mutual support among the NGOs, local government institutions and government family planning programmes at community level is a challenging task. Most of the smaller NGOs need organizational, financial and training support, and technical back-up. In Bangladesh, the Government with support from certain donor agencies, sponsored a Family Planning Council of Voluntary Organizations and a Family Planning Services and Training Centre to co-ordinate NGO activities and provide technical support, and training to local institutions. Although similar efforts have been made in some other countries, mutually satisfactory coordinating organizations are yet to be fully developed.

Strategy for greater mobilization of community participation

Decentralization of administrative and financial powers, delegation of authority and responsibilities, greater involvement of local government and non-governmental organizations and the organization of, and support to, women and disadvantaged groups, are now considered necessary for effective family planning programmes. The government family planning organization had limitations of relative lack of flexibility and adaptability to innumerable local needs and conditions. In this situation the local government institutions and non-governmental organizations particularly at community level can play a powerful intermediary and complementary role for achieving programme objectives.

Decentralization of powers, organization of disadvantaged groups and coordination of multi-organizational activities at local level are difficult tasks for family planning programmes as well as development programmes in general.

Political devolution of powers from central/state governments to lower levels, to local governments and decentralization of authority and responsibility to field officers require both political will at the top to give powers and authority and a capacity at lower levels to receive and use powers and authority responsibly and effectively. Both require careful planning, orientation and training.

The existence of a large number of NGOs in family planning presents both opportunities and problems. Local institutions to discharge legitimate responsibilities need necessary administrative and financial autonomy. Many NGOs also receive direct external assistance and have affiliation with international NGOs. On the one hand it is necessary to reduce control on them to gain advantage of their flexible and innovative efforts. On the other hand, there are possibilities of conflicts and overlappings. These problems are amenable to solution through careful coordination and selective controls and a generally accepted code of public accountability.

Problems and issues arising from community participation in family planning

The IPPF special paper, the ESCAP Regional Seminar on increased involvement of local institutions in family planning and other background

documents have identified a number of problems and issues. There are numerous. Attention of the Conference is drawn to important ones with suggestions for possible solutions.

No single model

The idea of integrating family planning with development programme, specially community development, and increasing involvement of local institutions with a view to mobilizing community participation has gained wide-spread support in the ESCAP region. Its practice has produced successes and shown limitations and impediments. One important fact is that because of the diversity in the region there cannot be one single model of community participation in family planning.

Every country and possibly every region or community within the country will have to evolve its own operational strategy and patterns of community participation. Each successful project has its unique situation, needs and solutions. Each success itself is an indication of its innovative, adaptive and active involvement of the community in solving its unique problems. This poses the problem of transfer of technology and experiences from one region to another and from country to country. Lessons learnt from one country or region within the country can at best provide general guidelines to another country or region. The present organizational mechanism and technical cooperation within each country and among the countries of the region need to be further strengthened for meaningful mutual help.

However, experience in the region shows that the following actions are generally supportive to community participation:

(a) Encourage and assist existing local community institutions to provide family planning information and motivation, and services to members of the community;

(b) Delegate more resources and responsibility for design and operation of family planning services to community groups by decentralized planning, decision-making and management of family planning programmes;

(c) Involve community groups in a manner of partnership that both respects and builds upon their local values, customs, institutions, experiences and community resources.

Political and administrative support

Strong political commitment of the Government and administrative support to the family planning programme, particularly from the civil administration and closely related ministries such as health, education, agriculture, local government and rural development are crucial for sustained success of community participation in family planning. Few of the programme managers have easy access to the chambers of political power and still fewer are senior and prestigious enough in the government bureaucratic hierarchy to influence and gain political and administrative supports for the programme and its new strategy of community participation in family planning.

How do programme managers induce or win such political and administrative support from the government and respective ministries? The multisectoral approach and allocation of resources to supportive ministries may be of some help. But if the political system is not convinced of the need for family planning and willing to provide the necessary support, the national programmes may not make much headway. In such an environment, the local NGOs may make some pioneering efforts, but they also will need the government support if the programme has to have any significant national impact.

There may be another political dimension of popular community participation particularly involving the poorer and disadvantaged groups of people. First, the local communities, particularly the rural poor are not organized. It is difficult to organize them, but once organized they become more aware of their needs, rights and possibilities and they place organized demands for services and benefits; their skills of organizational strength in negotiation and influence may threaten the established local power structure. Their demands and influences going beyond the immediate programme objectives can be channelled in a positive way leading to more meaningful development. Otherwise they may be frustrated leading towards violent reactions.

Limitations of communities to participate

Communities have their own organic operational system, Local decision-making usually follows the internal socio-political power structure. In many cases resources allocation and benefits may not be done equitably. Therefore, careful consideration has to be given to the community's

power structure and distribution of benefits. For successful community participation local leadership is extremely important. In an elective body the leadership is determined by the system itself. But among the elected persons some flexibility can be introduced for the selection of the programme leader who should be a locally well-known, respected, and motivated person.

Such leaders are not easily available in most communities. Here training becomes important. In many rural communities few people may have the leisure and resources to give time and energy voluntarily for community work. In certain communities there are restrictions on women playing a leadership role or even participating in community activities. However, it is likely that most communities have some resources of spare time, energy and enthusiasm, particularly among the youth and natural community leaders or elected local government functionaries. These resources, persons and groups in the community must be carefully identified, encouraged, trained and supported for playing leadership roles and carrying on development activities including family planning. There must be something which these people could do initially to benefit the community members to sustain their interest. Some entry points must be identified, which will attract community interests. It could be a village road or an irrigation channel, children's education, a mothers' club, repair of mosque or temple, treatment of parasite infections or scabies among children. Community participation will gather strength once there is a point of congruence of interests among organizers and community leaders. The community centered development approach must learn and understand the limits, what can or cannot be done under different conditions.

Local institutions as channels for community participation in family planning activities

In ESCAP region there are various types of local institutions including local governments, non-governmental organizations and informal groups. Experience shows that there is no single formula for using any particular local institution. The choice depends, among others, by the type and degree of political and administrative support, the stages of national economic and social development, the available infrastructure, the contraceptive methods used and the stage of development of the family planning programme itself. The patterns in community participation should be chosen with consideration to specific conditions in each location. But in any partnership the existing village organization must be fully involved as the core organizational support. Another important issue is that in any partnership arrangement, willing and active support of the upper level of administration and political organization must be ensured. With this support the problems and issues arising from integration of family planning with local institutions such as, inter-organizational conflicts, rivalry, non-cooperation, misuse of resources etc., can be more easily tackled through continuous dialogue, training, information, and joint planning, resources allocation and implementation. At the initial stages this approach may not be cost-effective as more resources may be needed to meet the priority needs of the community which may be different from family planning, and likely to be related to education, income generating activities, etc.

Management issues of community participation

The approach of bottom -up operational planning and implementation with community participation requires greater emphasis on central policy planning, resources mobilization, coordination and provision of continuous training and technical back-up services; while operational programming and implementation and local decision-making must be highly decentralized. In such a system more effective supervision of functionaries of central government and local government; monitoring, information flow, localized training, and flexibility in programme priorities and services are essential. These problems become more acute as the number of institutions involved increases and the scope of their activities become broader. In such situation a family planning programme by itself cannot cope with the problems unless powerful political and administrative umbrella support is provided. The Indonesian case is an example in point.

Public accountability

Broad national and organizational priorities and financial accountability (meaning that funds are used cost-effectively for agreed purpose) may come into conflict with local autonomy, flexibility and community priority. This is basically an issue of creating public awareness of national priorities and financial discipline. Closer supervision, monitoring, coordination and training may lead to a more balanced approach and respect for public accountability. Moreover, involvement of local institutions and community leaders from planning, budgeting and programming to operational stage may lessen possibilities of gross violation of public accountability.

Research and evaluation and their uses

The traditional service statistics, survey reports and evaluation reports cannot be of much use to policy makers, programme managers and community leaders involved in a complex and new community-based approach of development and family planning strategy. Research and evaluation must be useful for improvements in policy formulation, planning and programme implementation; statistics and information must be useful for decision-making, and improving efficiency and programme effectiveness. Research should be more of participatory nature or action oriented so that results could be directly used for training, and improving efficiency in programme management and performance. Research in community participation should concentrate more on social and anthropological aspects so that the complex nature of community mobilization could be understood. The transmission belt between such researchers, and policy makers, planners and programme managers must be close and direct. For this purpose an in-house research unit directly under the programme manager for research assimilation and utilization, may be useful.

Conclusion

The organization for mobilization of community participation in family planning is primarily a political process and secondarily a technical process. We have devoted our attention, for obvious reasons, more to the technical aspects of promoting community participation in family planning.

The implication of all our deliberations is that our ideas may be sold to the political and governmental leaders, and professionals. One simple fact is that people's participation is an essential factor of development and of successful family planning programmes. This is a relatively new approach, which deserves professional examination for policy decisions and better management.

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Appendix*

TYPES OF LOCAL INSTITUTIONS

Local government – Administrative officials

Government representative in specialized activities – health, agriculture, nutrition, etc.

Non-government organization (with examples)

- Social (women's groups; youth; welfare/service)
- Political (political parties; subgroups)
- Economic (cooperatives; credit associations; unions; professional organizations)
- Religious (religious groups, subgroups)
- Other (kinship groups; sport and recreation; specialized activity groups).

Other groups

- Schools (government/private)
- Market, commercial sector

Informal groups

- Specialized traditional personnel (birth attendants, healers, entertainers, etc.)
- Other informal groups (mothers, mother-in-law) and individuals (religious leaders, charismatic individuals)

* From V.J. Hull, *The Roles of Local Institutions in Integrated Family Planning Programmes: Steps Towards Community Participation,* ESCAP, May 1981.

7.2 COMMUNITY PARTICIPATION IN FAMILY PLANNING: ROLE OF NON-GOVERNMENTAL ORGANIZATIONS

by

International Planned Parenthood Federation

Rationale

Until fairly recently, programmes and projects aimed at improving the socio-economic and health conditions of the poor tended to be initiated, designed and implemented from the "top-down" by agencies and institutions without systematic consultation and involvement of the intended beneficiaries. The basic idea was that the introduction of modern technology and science would automatically lead to a decent standard of living for all and that the availability of modern health services would defeat illness and disability.

However, with experience has come the awareness that top-down approaches to development create an increasing dependence of the people on outside resources and also sharpen social divisions. Moreover, the cost of this approach to welfare and development is so high that no government in any low-income country can reasonably expect to meet the needs of all its people in the near future. It also became clear that the intended beneficiaries of development and health care do not necessarily share the perception outsiders have of their priority needs. As a result services offered to the people were often rejected or under-utilized because they did not meet their needs, or did not respect their sensitivities.

Meanwhile grass-root movements were quietly pioneering the community-centred approach to development, based on principles and initiatives coming from the people themselves. In Asia, in particular, there are many examples of the successful merging of self-help traditions with modernization and development. Recognition of the shortcomings of the top-down approach to development and an increasing awareness of the potential of "self-help" are causing governments and agencies worldwide to re-examine their assumptions and priorities.

As a result the approach to development has begun to shift from top-down to bottom-up, from specialized to integrated, from lecturing to dialogue, from modern technology to appropriate technology. Development agencies, and some governments, have adopted new policies to guide their activities based on the principle well expressed in the old Chinese saying: "Start with what the people know, build on what they have".

To implement this community centred development approach presents a challenge. It requires a great deal of new learning and adaptation on the part of development planners and institutions. Attitudes and styles have to be adapted, responsibilities decentralized and new modes of accountability developed. The difficult but worthwhile task ahead has just begun.

The concept of community participation

"Community participation" combines two concepts which are in themselves ill-defined. "Communities" vary from tightly knit rural villages to urban areas where few people know each other. The term also applies to professional groups, members of a church etc. It denotes a group of people who share a feeling of belonging and have interests and needs in common.

"Participation" varies from active to passive as well as in its intensity and implies a voluntary decision. Within the development context the term "community participation" generally denotes a group of people within a specific geographical area who have common interests and needs and who take an active part in furthering one or more of those through voluntary collaboration.

Community participation covers a wide spectrum of responsibilities which members of the community voluntarily take upon themselves to fulfil.

At one end of the spectrum, communities may initiate, design and take total respnsibility for action programmes to meet their common needs. Alternatively, members of the community may take part in some of the deliberations and actions initiated, designed and implemented by others from outside the local area.

Community participation in family planning programmes

Adapting the programme to local needs

The idea of "family planning" is not in itself a new one. All human societies, throughout time have known and utilized at least some practices having an influence on the fertility of the group. These practices vary from delayed marriage, temporary abstinence and breastfeeding to induced abortion and infanticide.

Most groups also "know" some means of regulating the timing of births. They may relay on prayers, charms, devices and concoctions. Effective means of regulating the timing of births, however, have become available only fairly recently through new technology.

If family planning by modern effective means is to be fully accepted, it needs to adapt to people's life-styles. The new technology must find its place within familiar and respected community institutions and not violate the traditional values and sensitivities of the people.

Family planning programmes designed and implemented by outsiders not aware of the underlying cultural forces at the local level are likely to violate traditional systems of decision making. They might ignore local power structures and traditional relationships within the families. Communities might react with scepticism if not fear and reject the new technology as foreign and alien to their way of life.

Obviously no outside body can be aware of all the different facets of life at the village level. Even if the facts were known, it would not be able to develop the most appropriate service model to meet the variety of needs of each different situation. To ensure that the programme and its activities meet the local needs, the communities themselves must be involved from the beginning, in planning the programme and in its implementation. They are the vital partners in any such undertaking.

Participation of the community in all aspects of programme planning ensures that the new technology is adapted to people's life-styles. During implementation, the programme is more likely to draw on available local resources (traditional healers/midwives, formal and informal leaders etc.). In that way the new technology finds its place alongside familiar and respected community resources and becomes part of the indigeneous way of life.

The community's role in motivation and support for family planning

All human communities have norms and values shaping the behaviour of its members. These are particularly strong in the areas of sexual relations and reproduction. Members who deviate from the established norm may be subject to rebuke and disapproval depending on the severity of their actions and the cohesion of the community itself. Where contraceptives are offered through channels alien to the community, early acceptors might be confronted with ridicule and misapprehension by their fellow-members. In this climate rumours on the perils of modern contraception tend to thrive and find willing listeners.

Where a family planning programme is based on community participation, however, the community itself recognizes the value of family planning and the benefits to be derived from its practice. As a consequence, practising family planning will be considered responsible behaviour to which its members should adhere. The prestige and influence of the leaders who actively support the programme and perhaps participated in the process of planning and implementation helps to overcome fears and doubts which may be held about the use of contraceptives.

Traditional health practitioners in the community such as traditional birth attendants (TBAs) are trusted by the people and relied upon during times of crises, be it childbirth, illness or death. They are aware of the living conditions affecting their clients and know when family planning becomes a need and a benefit to a particular client. They are potentially powerful allies in the cause of family planning and should be familiarized with the aims and means of the programme and encouraged to incorporate this knowledge into their work. Community based groups such as women, youth, specific interest groups etc. who have organized themselves to enhance their social and economic goals are also conducive channels to ensure genuine democratic participation in welfare programmes and to further the inclusion of groups which are marginal to the decision-making process at the community level.

Community channels for family planning education and service delivery

Traditionally, family planning programmes have delivered services through medical/clinical channels. In many cases, medical doctors were the pioneers of family planning in their countries. They were intimately aware of the problems women faced as a result of excessive childbearing and the health consequences associated with it for mother and child. They also had a prestigious voice at the national level in advocating the benefits of family planning and urging the government to adopt policies and provide services. As a result family planning services became associated with MCH services through clinical channels. This approach contributed enormously towards gaining acceptance for family planning as an important and legitimate service benefitting the health of the people.

It also became clear however that integration with clinical health services has serious limitations. Medical establishments and personnel are distant to the majority of the people in the developing world in every sense of the word. Large proportions of the world's population have never consulted a medical doctor either because there are none within a reasonable distance, a consultation is too expensive or the thought simply never occurred. Others only consult a doctor in cases of extreme urgency when all other sources of help have failed. Not surprisingly for many "consulting-a-doctor" is associated with serious disease and death: a frightful experience to those involved.

As contraception concerns healthy people who take an interest in the consequences of their actions, the traditional linkage between the medical profession and contraception can be counterproductive and is unacceptable to many. The fact that in many countries a large amount of contraceptives, in particular the pill, are sold over the counter of pharmacies, drug-stores and other retail outlets without prescription, testifies to the fact that many people prefer to get their supplies from familiar neighbourhood sources.

Community based distribution programmes of contraceptives, a non-clinical strategy for the delivery of family planning education and services, have been in operation since the early seventies in many countries: proof of the acceptability of this approach is in the increase in their number, scope and diversity and the significant degree to which they have generated community participation and co-operation in family planning.

Dependency versus self-reliance in family planning programmes

The co-operation of communities in activities for the common good has deep roots in history. People have always had to work together to achieve ends beyond the means of individuals. Evidence of such community ventures are found throughout the world in the form of places of worship, roads, terraces, irrigation systems and wells to name but a few. However modern or specialized high cost technology has worked against community self-help. Formal institutions under state sponsorship replaced community action, officials took over from natural leaders. Experience has shown that specialization breeds fragmentation of services and that a system dominated by officialdom generally functions less well than any broadly based community group.

Family planning services are eminently suited to integration with community self-help activities. The idea of family planning is not new and the administering of modern contraceptives such as the pill and condom requires no complicated technology: natural leaders in the community can be given the necessary technical expertise. Such leaders understand the values and beliefs of their people and can provide services which are socially and culturally appropriate as well as medically correct. Contraceptive methods such as IUDs and sterilization can be provided through referral from community channels to the nearest family planning clinic. By integrating family planning into local self-help activities, dependence on external aid and other forms of assistance can be minimized and the need for an outside presence in the community is diminished: using this approach local resources and capabilities are used fully and with less likelihood of duplication of services.

The role of NGOs in community participation in family planning

Background

The full dimensions of the immense task of making family planning knowledge and services available to all can be understood when one considers that:

- Family planning relates to the intimacy of family life which is not easily discussed.
- The achievement of a desired family size means long-term preventive measures and

these often entail daily self-medication or taking precautions when spontaneity is at its peak.

- The population to be reached with family planning education and services is very large, i.e. all women and men of reproductive age; their number increases daily and fastest where the need is greatest.
- Family planning services must be available on a continuous basis providing stability and familiarity of service outlets while at the same time be flexible and adaptable to changing mores and technological advances.

Given these facts it is vital that communities be helped to meet their own family planning needs so that their quality of life may be raised in a culturally acceptable way. However, communities need to be enabled to cope with the challenge ahead. Outside agencies may have to play a catalyst role, and assist in the training of local workers. They also need to provide back-up services and the necessary supplies.

Co-operation between communities and agencies in this task must be as genuine partners with the community participating as fully as possible and the outside agency filling in the gaps in resources.

Governments and NGOs have separate parts to play in developing such partnerships with local communities as well as with each other. The work of the communities and governmental and non-govermental organizations should be co-ordinated and complement one another. The goal is: optimal use of resources for 'people-centred' development. The specific contributions each can make will differ in their national contexts.

Frequently NGOs themselves have emerged from indigeneous efforts to find acceptable solutions to local problems. They are generally founded on the principle of self-help and volunteer involvement. Local NGOs organized into a national or international structure provide channels through which grass-roots aspirations and needs flow upwards and outwards, while new information and experience flows back to stimulate and reinforce local actions.

Family Planning Associations (FPAs) provide examples of such grass root organizations, initiated locally, coalescing into national associations and coming together at the international level in a Federation. The International Planned Parenthood Federation takes pride in being the umbrella organization of 108 autonomous national affiliates. The *raison d' être* of FPAs is to be pioneers and pathmakers for family planning within their own countries, to serve those people less likely to be served by others and to initiate new approaches to service provision based on local initiatives. In so doing they can assist governments by demonstrating culturally acceptable ways of delivering services.

Flexibility

Since they are grass-roots organizations, decision-making by NGOs is carried out near the action. Often the activities to be developed are initiated by local groups who seek assistance from organizations which can respond speedily and competently to their particular needs. NGOs are frquently in a better position than governments to respond to grass-roots initiatives because of less stringent bureaucratic procedures and an inherent sympathy for innovative action and local enthusiasm.

An example illustrating the co-operation between NGOs and a local community is in Panabaj, Guatemala, a rural neighbourhood of 3,000 people where mothers felt the need to have a local centre for prevention and treatment of malnutrition. They approached ASECSA (La Asociacion de Servicios Comunitarios de Salud) an association of NGOs in Guatemala who enlisted the help of Project Concern, an NGO based in the United States of America. The centre was established within a short time, and operated with considerable input from the mothers themselves. They take turns to deal with the tasks in the centre and by doing so not only contribute to the service but also learn about the importance of food hygiene in all its aspects to health. Each mother who learns in the centre returns later and teaches others for a specific period of time, her teaching being enriched by the experience she has gained. In contrast to the 40-50 per cent recidivism rate at other nutrition centres the rate at the Panabaj centre is only 5-10 per cent.

Demonstration

Many activities undertaken by NGOs are specifically intended to be experimental: trying out new approaches in different surroundings. Imaginative project ideas are frequently originated and implemented by a specific community.

If the new approach seems to be successful it can be tested further, either by expanding the original project geographically, or by replicating it in

several different places. Testing out new ideas is necessarily risky. However the risk is lessened by good local participation, motivation to succeed, flexibility of response and willingness to absorb the lessons of experience.

As voluntary organizations, NGOs are not able to provide their services at a national scale because they do not have the necessary resources - financial or human. Nor, for most NGOs, is this their goal. They are there to use their particular strengths to test and demonstrate, to share lessons learned with governmental and other agencies, and assist in efforts to duplicate successful projects.

The approach of the Japanese Organization for International Co-operation in Family Planning (JOICFP) well demonstrates this function of NGOs. Specific experience in post-war Japan indicated that family planning services are more acceptable if they are provided alongside other measures which have an immediate and visible effect on the health and quality of life of the people involved. Parasite control and nutrition education were the partners chosen to enhance family planning acceptance and to generate a spirit in which people would come together to improve environmental hygiene and community development. First tests of this approach in Asia strongly indicated that it not only enhanced family planning and lowered parasite-infestation rates but also stimulated community action to deal with environmental sanitation: a root cause of high child mortality. These projects were replicated in co-operation with IPPF affiliates throughout Asia and, subsequently Latin America. IPPF affiliates in the Middle East and Africa will shortly initiate similar projects while the activities in Latin America are expanding both within and outside the IPPF structure. National steering committees play a vital role in demonstrating the achievements of the projects and in sharing their experience with governments. These national committees draw on key personnel in governments and NGOs and always include a parasitologist. Locally there is a steering committee of influential local leaders and staff which oversees the project and ensures co-ordination with the national level.

Co-operative approach

NGOs, like government departments, usually specialize in offering specific services. In the community however, people have many needs which are complex and interrelated. Thus to provide specialized services, each one attending to a fragment of the interrelated needs is not only wasteful of resources but also insensitive to the community's needs. Many NGOs have a long tradition of meeting such needs through co-operation with other groups and institutions with expertise in related and relevant fields.

The Shadab project (Pakistan) illustrates the value of tripartite co-operation (national government/local institution/NGO) which provides the delivery of a totally integrated rural development service with a large measure of community participation. The Shadab project covers an area of 47 villages and seeks to improve agricultural production and general living conditions. Components of the project are community development, agricultural education and assistance, banking and credit schemes, adult and child education and family planning. What distinguishes Shadab from other rural development projects is that it manages to co-ordinate the services of government agencies and NGOs into one local agency in which the community itself participates to a large degree. The Pakistan FPA provides the family planning component through its training of all project staff i.e. agricultural development assistants, volunteers and provincial government officials. Local leaders, teachers and welfare workers become involved in the family planning activities after orientation sessions. The villages form small representative management committees to ensure that local needs and priorities will be the guiding force in the activities to be developed. The linchpin of the project is organization: co-ordinated under one umbrella are all relevant government agencies as well as quasi-official ones, private organizations and commercial concerns of interest to the project. The villages are linked through Union Councils and the system is supervised by a project manager who is assisted by the secretaries of the Union Councils. The agencies co-operating in the venture are barely visible at the local level: they make their specialized input only where and when required and leave the project implementation to the local people.

Stability

Unfortunate though it may be, it is a fact that the lives of innocent people are disturbed time and again by unforeseen and unsuspected events. Natural disasters, wars and political strife have caused millions of people to abandon their homes and seek safety elsewhere. Generally there is no national plan to meet the needs of the people affected because of the sheer unpredictability of these events; also the government itself might not be able to function normally.

NGOs, because of their flexible nature and grass-root structure, have been instrumental in responding quickly and effectively to many disasters and their broad local networks enable them to muster forces very quickly. Many a family planning volunteer or field-worker has been converted into a general relief worker in times of need. A basic knowledge of health issues combined with access to a channel for relief supplies place them in an excellent position to temporarily fill gaps in the official structure. Grass-root networks are better able to withstand upheavals than supper-structures.

Examples abound throughout the world. For instance the FPAs of Thailand, Hong Kong and Singapore were the first to offer vitally needed help to those seeking refuge on their shores. The Association brought nationals from those countries on to their staff to reduce language and cultural barriers. Because of their early involvement, they were able to advise their governments on the needs of the refugees.

It is not only violent disasters that bring out the best qualities of voluntary organizations. Services can disappear or be badly affected by changes in government or its policy. Experience has shown that voluntary organizations are sometimes the only ones left to provide services, to demonstrate the benefits of family planning and to represent the people's needs in such, regretfully not infrequent circumstances.

FPAs in Latin America suffer particularly from the ambiguity their governments maintain towards family planning. Several governments have a history of at times permitting family plannig as part of the official health services and at times attacking, prohibiting or preventing services from being given. Waves of approval and disapproval alternate due to political perceptions and the position taken by the national Roman Catholic hierarchies. In most cases FPAs, being relatively independent, are able to defend the cause of family planning and demonstrate that people want and need to have access to family planning services.

Issues arising from community participation in family planning programmes

While the idea of community participation has gained widespread acceptance, its practice has revealed limitations and impediments as well as produced successes. Progress towards implementing the participatory approach can only be made if developers critically assess the "limits" of participation and find out what can realistically be achieved in the different field conditions. So far, experience has indicated a number of factors that restrict or complicate its application. While the extent and intensity of these limiting factors is not yet known, it is clear that developers cannot adopt one single, uniform model, i.e. the participatory one, and expect it to be the complete answer in all conditions and circumstances.

Family planning may not be a felt need. A crucial and most vital factor in achieving community participation in any development effort is that the people must want the particular service. The use of modern contraceptives is by no means universally accepted as desirable by the client-population.

In many instances, if not in most, family planning is not included when communities express their needs and allocate priorities. They may not recognize the benefits of family planning to mother and child health, and the contribution it makes to the quality of life. If activities are not consciously desired, one cannot expect enthusiasm and eagerness towards participating in them. In such cases family planners look for so called "entry points", offering family planning in conjunction with other services which are meeting expressed and identified needs e.g. income-generating activities, general health services. In these situations it is anticipated that once people have faith in the programme personnel and their activities, they will become more informed and open to the idea of family planning.

The IPPF Planned Parenthood and Women's Development Programme (PPWD) is one strategy which has been used to give effect to this idea. Projects funded under the programme are small and experimental, designed and implemented in partnership with the women on the basis of needs identified by themselves. Family planning is rarely a strong feature at the initial stages but experience has shown that while women undertake group action to bring about the desired changes, they realize that regulation of births is a relevant component in the process of self-development and determination. At that point family planning information and services are actively pursued and participation in family planning activities is generated.

Communities are not homogeneous entities. Some kind of ranking by class or caste, sex or age group, political affiliation or religion, affects even the smallest and poorest of communities. These internal divisions are not immediately apparent to visiting programme personnel, but have important consequences for programme implementation.

Local decision-making, in particular in rural areas, conforms to the internal socio-political hierarchy. In some cultures the hierarchy is a traditional one, with the "elders" making the major decisions for the rest of the community. Some groups such as women, young people, and the landless, have no or little influence in this process and thus their interests are not likely to receive much attention. In socialist communities a party cadre may be the decision-making body and, although it may be more representative of the age and sex groups in the community, it is guided primarily by policies and priorities from the centre and these may differ from local perceptions.

Family planning may or may not rank highly in the needs as expressed by the community depending on who has a voice in identifying those needs. Concerns of the leadership might well take priority over the concerns of the majority, particularly of women and youth.

Thus, even working within the community's decision-making system and using, as a starting point, needs identified by the community, is in itself no guarantee that the interests of all its people will be served. Careful consideration is required to achieve an effective balance between respect for community structures and ensuring that all community groups receive a fair share of the benefits of programme activities.

Identifying a person to be responsible for the family planning programme locally may be a vital factor in ensuring broad access and participation. Experience indicates that no hard and fast rules apply to the selection of a programme leader. It can be a man or a woman, a formal leader or a natural one, an old or quite young person, educated or illiterate. What seems to appear as a common denominator is that the person must be well-known, highly respected and that he or she be motivated beyond an interest in self-improvement. Above all, he/she must be able to relate to people.

Limitations to the ability to participate

Even where people are committed to the idea of family planning they can only participate in programme activities within their means and abilities. Unrealistically high expectations are sometimes put on the ability of people to dedicate time and effort on programme activities. Participation presupposes that people have spare time and surplus physical energy. However the poorest groups particularly suffer from bad health and live on inadeauate diets; they need all their energy to scrape together a living. Mothers of large families who can gain most benefit from family planning also have the least time to spare.

Those who are developing programmes must realize that community participation is not a magic solution to development and health problems everywhere and always. Community participation counts on the resources of the poor, i.e. their time, energy and enthusiasm, and looked at realistically these resources are limited! Not everybody is able to participate in programme activities beyond being recipients of the services. Only some of the people are in a position to contribute some of their energy and time at certain stages in their lives. For instance a mother of 14 children in rural Colombia whose husband objected to family planning throughout the marriage, volunteered her services to the FPA's (PROFAMILIA) community based family planning programme after the death of her husband. Her youngest child had entered school and her elder sons contributed to the family's income; this enabled her "to help other women not to suffer as much as I did". This woman would have benefitted from a community based family planning programme if it had existed in her time. However her contribution could only have been as a recipient of services until she was freed from a total involvement in household duties.

No doubt most communities do have some resources of spare time, energy and enthusiasm which can be tapped. However, to be successful the community centred development approach must learn and understand what can or cannot be done under different conditions. Above all, development agencies need to ensure that no conflicting and overburdening demands be made on the people in the decade ahead.

The existence of community organizations as channels for family planning activities

In some areas of the world, particularly in Asia, there is a long tradition of group action to achieve a common goal. Such actions vary widely and are pursued by groups which range from highly structured organizations to informal, temporary groups. There are numerous and varied examples of participation by such groups in family planning promotion and service delivery, either for their own benefit or for that of the community at large. This approach of working through existing community channels has proved to be highly acceptable, cost-effective and efficient in terms of manpower.

However, community channels suitable for integration with family planning do not exist in all situations. The fringes of large cities which receive immigrants from the surrounding areas, are particular examples of where local structures are either non-existent or they are in a state of perpetual flux and change. In societies where by tradition women are kept secluded in their homes, organizations with a sexually mixed membership just do not exist and exclusively female organizations are rare. Not surprisingly it has proved to be far more difficult to generate community participation in family planning programmes where working in a group is unusual and no suitable community structures exist.

In such cases the involvement of the community may still be achieved, for instance through participation of key local individuals in the family planning activities or through the generation of new groups. The individuals participating may be traditional health providers such as TBAs, healers etc. or they may be people who have had no previous involvement with health but are trusted and well-known in the community.

Also family planning and related activities initially provided by outsiders, can generate support from clients to such an extent that active participation results. "Acceptor clubs" initiated in that way frequently branch out in mutual assistance groups and undertake a variety of activities benefitting the members and their families.

There is a need to carry out and carefully analyse different approaches to involve communities in programmes in order to identify promising ways of achieving this. Experimentation will be required with a built-in capacity for research and feedback.

Political vulnerability of popular movements

While there is a strong case for community participation in all development activities, such involvement can also go beyond the immediate objectives of the programme. People who have become aware of their needs, and have proved to themselves that they can act to meet these needs, also learn to recognize the barriers and obstacles put in their way by structured systems. For example, nutrition education generates a regular demand for a variety of foods. The landless and jobless, confronted with the problems of obtaining those foods in sufficient quantity, might question why their needs cannot be satisfied and demand jobs or land. Small scale community participation projects might develop into popular movements. Such participation, going beyond the immediate objectives of programmes, can be channelled in a positive way leading to meaningful development. In many cases this will require a restructuring of socio-economic and political systems which might involve loss of power by some social classes.

Often, therefore, popular movements (i.e. community participation on the larger scale) are tolerated while they are still powerless but are seen as a threat by some social classes when they grow in skills and influence. Ultimately, such realities have to be faced and accommodated.

Liaison/co-ordination at the local level between government and NGOs

While NGOs are often community based or have a high level of local autonomy, government decision-making tends to be more centralized. Although there are numerous examples of good co-operation between the two, where the best possible use is made of resources, in many instances the full potential of co-operation is not achieved because of structural conditions. Local action aims to achieve results quickly. Local government workers are often not free to participate in collaborative efforts because they receive instructions from departments not involved in the particular programme and their loyalities understandably are with their particular departments. Therefore much can, and should, be done to remove the obstacles to collaboration through national and international consultations between governments and NGOs.

Community participation in family planning programmes: some implications of the new approach

The community participation approach to development has profound implications for all aspects of programme planning and management. In order to harness the potential of the approach and to stimulate its expansion, policy makers and programme planners need to adapt management structures and administrative procedures as well as develop training programmes and information systems appropriate to the task ahead.

It would be unwise to assume that any one management model or programme design can be appropriate for all country and cultural situations covering the requirements of all situations: the problems involved are too diverse and, to some extent, time and culture bound. However some common areas that need attention are pointed out here for consideration and discussion.

Management

The community-centred approach requires a decentralized management system and greater decision-making authority at the community level. Managers and donors will need to release progressively more responsibility while maintaining the overall co-ordination and logistical support to the programme. Back-up services and technical expertise must be provided to supplement the community activities. Managers need to provide the structures in order to avoid duplication and to respond to community needs in an integrated fashion.

Middle-level managers and field co-ordinators must acquire or improve skills which stimulate rather than stifle community self-help activities. They may have to assume the role of catalysts to make communities aware of their own potential, and stimulate self-reliance rather than dependence. Middle-level programme staff and administrators are the key people to be entrusted with maintaining a sound two-way information flow and to bridge the gap between grass-root perceptions and values and concerns of the wider society. They need to identify ways in which communities can be helped to meet their own needs e.g. training, supplies, loans, information and access to specialized skills. It is likely that middle-management more than before needs generalist rather than specialist skills in order to respond to community needs and to enhance integration.

Local programme managers may or may not be of the local people. In some cases a newcomer with the right personal attributes can provide the wider perspective conducive to innovation and assertive action. In other cases the local community can provide its own leadership with the skills to accommodate the requirements of the wider programme such as administration, finance and reporting. In either case, building up the capacity of the community to progress through self-help will be vital.

It is likely that discrepancies will arise between priorities as identified by the community and the speed with which local action proceeds and the expectations of policy makers and national planners. If so, allowance must be made for local perceptions and goals. It may take a community some time to decide on ways to proceed but, once the point has been reached when the community decides to act, progress will be on the basis of concensus and shared determination.

Policy decisions must also be made on whether or not community participants should be remunerated, receive incentives or volunteer their contributions totally. This decision has to be in line with the policies established for other development programmes such as rural extension, home economics etc. and will have major implications for the way the programme will proceed.

Accountability

Governments and other donors are justifiably concerned that when people organize around viable local projects, they focus on narrow issues which are not clearly related to national or larger problems. For example, a government might have formulated a population policy on the basis of economic and other forecasts, which has set target totals for family planning acceptance rates. The logical consequence is that local action must fit into the broader national objectives and cannot be totally left to local perceptions and priorities. A balance has to be achieved and a partnership developed. The people must be made aware of the wider perspective without having views and solutions imposed on them from the outside.

Any institution that finances programmes and projects is accountable for what it sets out to do with its funds and for whether the objectives have indeed been met. This applies to governments as well as NGOs. If responsibility for programmes is devolved to the communities, then the funding agency's control is reduced: particularly as regards the day to day running of the project. This is as it should be but it carries certain obligations as the local level.

It is also particularly ironic that the new approach to development, i.e. through community participation, happens to coincide with a decline in the world economy. When financial resources are shrinking in real terms competition for funds tends to be fiercer. More than ever donors need to justify their expenditure and to ensure that the objectives of the funding have been met. They are therefore undertandably concerned with targets and cost-effectiveness. While community participation may be the way to achieve this there is so far no hard evidence to support that assumption. Therefore, will donors be able to allow the operational flexibility required to stimulate and develop the new approach? Time needs to be allowed to demonstrate and document the case for community participation in family planning.

Research and evaluation

The new approach to development which recognizes that meaningful action can only take place in partnership with the beneficiaries, also indicates that responsibility for information gathering be shared in such a way that the necessary feedback will be generated for the different levels involved. The usual information system i.e. programme statistics, scientific research and evaluation, must be adapted to and complement the community centred approach.

As a logical corollary, new methodological techniques identified as "participatory research and evaluation' are currently being developed. Examles of participatory research at the local level are not yet numerous and so far are not conclusive enough to provide general guidance for policy makers on effective measures to stimulate the participation of the people in information gathering.

However, progress in participatory action research so far made, indicates that enabling the people to analyse their own situation can in itself produce fundamental changes in their outlook on society and in the contribution they can make.

Participatory research departs from traditional scientific practice in as far as the tools of science i.e. the methods and techniques are no longer considered to be the monopoly of the specialist researcher.

The action researcher incorporates people from the social groups with which he/she works as active participants in investigative tasks. It is supposed that participants, by so doing, recognize the power of research, master the basic approach to research and thus gain autonomy for their investigative needs. The action researcher is therefore fundamentally a trainer, his task as researcher is meant to become redundant through enabling the participants in his research task to become independent of his skills.

While the developments in the action research field are eagerly awaited, it must be understood that in action research the emphasis is mainly on understanding social reality through direct human contact and empathy. Excellent qualitative data from the perspective of the people themselves may well result. However there will still be a need for quantitative data in the research and evaluation situation.

Qualitative data do not provide the programme manager with the information required for, for instance, estimating needed supplies or to measure impact on health, socio-economic situation etc. It will also take considerable time before the action research field has developed sufficiently to carry the knowledge acquired to more general levels of codification and theory, suitable for managers and policy makers.

It is therefore of importance to give equal emphasis to developing and refining socio-economic and health indicators which provide feedback on achievement on a regular basis. This kind of more traditional research should, however, more than used to be the case, work with and for the people. Research findings should be communicated and discussed with the people whose lives they affect and their views be sought on the validity and applicability of the findings.

Once again, the people-centred approach to development requires adjustment and change on the part of the professionals.

Conclusion

Of late it has been recognized that harmonious development can only be achieved if people are not seen as recipients of development activities but become full partners and active participants in the process. Participation is a vital factor in the acceptability of services, and in motivation and commitment on the part of the people.

Governments and NGOs both have a role to play in facilitating this partnership approach, working in co-ordination and co-operation. Joint initiatives, involving an increasing measure of decentralized responsibility to local levels, are essential if community participation is to gain momentum and impact.

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Topic 8.

INTERRELATIONSHIP BETWEEN DEMOGRAPHIC FACTORS AND POLICIES AND PROGRAMMES INFLUENCING WOMEN'S INVOLVEMENT IN THE DEVELOPMENT PROCESS

8.1 WORKING PAPER

by

Attiya Inayatullah*

Women's involvement in the development process on any significant scale is far from being a contemporary reality, although uneven progress has been achieved since 1975. A clear definition of women's role in development must take into account the interrelationship between demographic factors, population policies and programmes and their impact in turn on women's participation in development. In examining this relationship and its impact a brief view of the world and ESCAP demographic trends, the demographic characteristics of Asian women and other demographic variables are presented to establish linkages and define the issues on various aspects of women's involvement in development.

World population trends

The third quarter of the twentieth century saw an acceleration of population growth. In these 25 years the total world population has risen from 2.5 billion to nearly 4 billion. The average growth rate is 1.8 per cent, but is higher in less developed countries. Although acceleration has been arrested, the trend has not been substantially reversed in the less developed countries, and a slow decline has started in the 1980s.[1] The expected growth in world population will take place almost entirely in developing countries and the potential implications of this trend for development must be given due consideration particularly in the context of integrating women in the development process.

Demographic characteristics and trends of women

The combined population in the ESCAP region is approximately 2.5 billion persons, with two thirds of it being concentrated in China and India. Birth rates in excess of 40 per 1,000 population have been recorded in 10 countries, Bangladesh and Afghanistan having the highest rates.[2] The majority of the countries had growth rates of over 2 per cent. Five countries had a growth rate of 3 per cent or more. The two largest countries China and India had estimated growth rates of 1.2 per cent and 1.9 per cent respectively.[3]

The female population in ESCAP member countries; according to United Nations 1980 estimates was approximately 1,216 million which is more than half of the women of the world. Of these, 90 per cent are in the developing countries, of which the largest numbers are in China, India and Indonesia. Some 46.7 per cent of the women are in East Asia, 14.9 per cent in Eastern South Asia, 37.5 per cent in Middle South Asia and 0.9 per cent in Oceania. The age structure of women in this region is comparatively young, except in the more developed countries of the region such as Japan, Australia and New Zealand.[4]

As a whole in the ESCAP region, the proportion of women under 15 was 39.3 per cent in 1970 and 38.4 per cent in 1980.[5] Age structure reflects the history of fertility, mortality and migration. Fertility reduction makes a population older and decreases the proportion in the younger ages. Thus the declines in the population of women under age 15 from 1970 to 1980 reflects recent fertility declines in the region

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[1] United Nations, *World Population Trends and Policies: 1979 Monitoring Report*, vol. I, Population Trends, New York, 1980.

[2] United Nations, *Demographic Characteristics of the ESCAP Region for 1981* (printed data sheet), 1982.

[3] *Ibid.*

[4] ESCAP, *Women's Health and Demographic Trends*, Bangkok.

[5] *Ibid.*

Population policies and programmes

Recognition at national levels of the close relationship of population issues with economic and social development has been accompanied by growing international and regional concensus of the one world for all thinking. Population problems are not merely those of population growth; almost of equal importance is the spatial distribution issue and the mortality levels in developing countries.

The growth of population is also influenced by the net balance of international migration. A few of the smaller countries and areas like Hong Kong and Brunei where there has been heavy immigration showed much higher growth rates than would have been if based on natural increase only. Conversely several small Pacific countries experienced a net outflow of emigrants and this was the main factor in moderating their growth rate.

Demographic factors including fertility, mortality, migration from rural to urban areas and international migration, age structure and female participation in economic activity together with population policies and programme will influence the involvement of women in the development process and in turn influence these variables.

Fertility

Fertility remains high in most developing areas of the Region. Gross reproduction rates of 3.4 prevail in most Western South Asia. In Middle South Asia the rate is commonly about 3.0 per woman, and with some exceptions, birth rates of 40 per thousand population or more are common. However, fertility declines of significance have been achieved in some countries of East Asia, and Sri Lanka in South Asia.[6]

Significant trends have been: the steady increase in the use of fertility control; family planning practice in developing countries with methods other than the traditional methods with limited effectiveness is a new phenomenon; fertility decline in developing countries has been mainly concentrated in countries in the higher ranges of economic development; elsewhere there are instances where changes in fertility appear to have occurred independent of changes on selected socio-economic variables (e.g. Sri Lanka).

[6] United Nations, *World Population Trends and Policies: 1979 Monitoring Report, op. cit.*

Mortality

Rapid mortality decline, a significant component of the accelerated population growth rate in the third quarter of the twentieth century is slowing down in the developing countries. Mortality appears to have fallen most where there have been large improvements in the availability of primary health care and education, as in China, Sri Lanka and Malaysia. Substantial declines in mortality are likely over the next decade, even with the slowing down of the pace of the decline. There is, however, increasing recognition of the importance of the role of economic and social factors to combat diseases associated with poverty and their linkage with women's development.

Age structure

A population's age structure reflects its past history of fertility, mortality and migration. Fertility reduction makes the population older. In many developing regions, recent fertility declines have offset the effects of mortality declines with the result that the proportion of the population below age 15 has fallen. However, in parts of Africa and Western South Asia the fraction in childhood ages is estimated to have risen, reflecting the effects of mortality declines and in some cases of fertility increases. Such changes in a short period are only suggestive of long-term trends. They are however, significant in this case as they reverse a long standing history of stability or increase in the youthful fraction. For example between 1950 and 1970 the proportion of the population in less developed regions aged 0-14 years increased by 2.2 percentage points. The recent reversal of long standing demographic trends is likely to continue and may accelerate during the remainder of the century in developing regions.[7]

Women's economic activity

Growth of female participation in labour force is one of the most important labour force trends in the past decade and a half. According to the ILO between 1950 and 1975 female labour force in the world increased at an average annual rate of 2.1 per cent compared with a corresponding rate of male labour force increase of 1.4 per cent. As a result the proportion of females in the total labour force increased from 31.3 to 34.9 per cent and the

[7] *Ibid.*

female crude activity rate from 27.5 to 29.0 per cent between 1950 to 1975.[8] The more rapid growth of female labour force was found in both the developed and developing regions. The share of females in total labour force increased between 1950 and 1975 from 36.7 to 39.7 per cent in the more developed regions and from 28.2 to 32.7 per cent in the less developed regions.

These trends in female participation in turn have to be associated with changing patterns in participation rates affecting in particular participation in intermediate age groups (25-54). Participation rate for females in the younger and more advanced age groups did not change much but substantial increases were found in the extent of participation of the central ages.

Significant shifts took place in the industrial structure of the female labour force due to rapid growth of the female labour force and changes in its age structure. In the less developed regions the proportion of women engaged in agriculture declined by 11.5 per cent from 85 per cent in 1950 to 74 per cent in 1970. In the more developed regions the proportion of female labour force in tertiary sector rose most steeply from 34.4 per cent in 1950 to 52.3 per cent in 1975. In the less developed regions the major increase was observed in secondary sectors. Between 1950 and 1970, the percentage of women active in secondary sector rose from 5.6 to 12.4 per cent, whereas the corresponding change in tertiary sector was from 9.1 to 13.8 per cent.[9]

Spatial distribution and migration

In the developing countries internal migration from rural to urban areas by people in search of employment is a trend which rural development programmes have not been able to reverse. The proportion of people living in urban areas is expected to grow from 28 per cent in 1980 to 40 per cent by the end of the century. The imbalance between the availability of basic services and amenities and the population in urban areas is constantly increasing and generating squatter settlements, slums, poverty, unemployment and initially higher fertility. Women together with the children are the most vulnerable group and the main sufferers.

Linked to migration are the spatial distribution policies of governments which attempt to direct the settlement of the population into under populated sectors, where utilization of hitherto unexploited resources could assist in reducing the negative effects of high population growth rates, and remove the pressure from areas of high population concentration such as Java. Policies in this region directed at changing the urban and rural structure of the population vary from Viet Nam's redistribution of its population to relieve the urban swell, to Malaysia establishing and developing new urban centres and Papua New Guinea attempting to overcome the excessive growth of the capital city by creating other urban centres.[10] Changes in socio-economic conditions of the migrants or of the areas of emigration can also have an impact on fertility and mortality and subsequently influence the involvement of women in the development process.

International migration

International migration is a demographic variable which has a significant impact on both sending and receiving countries because of the economic, social and humanitarian aspects which are involved. In the developed countries there have been unprecedented declines in fertility, and labour supply has been augmented by migratory labour bringing social and political problems in its wake. Only a few countries are affected. Official policies are now directed at reducing future immigration. In the Gulf States and Middle East oil rich countries, both unskilled and skilled labour from Asian countries are still finding jobs, but here too restrictive policies are coming into force.[11]

Interrelationship between development and demographic variables

The interrelationship between socio-economic variables and population change was first recognized in the Second Asian Population Conference held at Tokyo in 1972. It has been reiterated that some of the common factors in the ESCAP region affecting demographic conditions were improvement in health and nutritional conditions; improvement in educational opportunities, industrialization, more equal distribution of food and income and the

[8] ESCAP, *Women's Health and Demographic Trends*, Bangkok.

[9] United Nations, *World Population Trends and Policies: 1979 Monitoring Report, op. cit.*

[10] United Nations, *World Population Trends and Policies: 1979 Monitoring Report*, vol. II, Population Policies, New York, 1980.

[11] *Ibid.*

changing roles of women and their level of participation in labour force.[12]

The World Population Plan of Action (WPPA) adopted at the World Population Conference held at Bucharest in 1974 recommended that countries wishing to affect their fertility levels should give priority to implementing socio-economic development programmes. It was emphasized that educational and health programmes in particular, while contributing to economic growth, quality of life and higher standard of living, would have decisive impact upon demographic variables including fertility. The WPPA further recommended and laid emphasis on the full integration of women into the development processes particularly by means of greater participation of women in education and social, economic and political fields. It emphasized that national levels and policies, as well as relevant international recommendations should be reviewed in order to eliminate discrimination in, and remove obstacles to the education, training, employment and career advancement opportunities for women.[13]

Women are, therefore, a very important component of society, and are one of the most crucial and fundamental strength of any socio-economic development processes of the society. The level of their educational attainment and participation in educational, social, economic and political opportunities and developmental processes creates favourable conditions to the pursuits of population goals. In view of this it is essential to investigate and assess the interrelationship of women's participation in development and population variables including the various components of population change discussed earlier.

Women's involvement in the development process

Participation of women in the development process involves the identification of women as a social category with the objective of changing the relative position and power of women so that the benefits of development – improvement in the quality of life and levels of living, decrease in the inequality of income distribution and a role in decision-making and in the formation of the strategy of development – are also accessible to them. Till now women have appeared in the context of a subordinate and dependent group together with children; with the women's social role being defined almost exclusively in terms of motherhood and this persistent traditional attitude remains prevalent today in many ESCAP countries.[14]

In the development process, the alteration and regulation of demographic patterns through population policy and programme interventions are important instruments having differential impacts on men, women, regions and age groups during the demographic transition. The involvement of women thereby becomes a crucial factor in the linked population-development process through their actual and potential contribution. Women in the ESCAP region generally lag behind men in participation in political affairs, education, health and employment. The attitudes and cultural definition of women's roles in society continue to prevent full participation of women in development.

The effect of demographic factors upon women's participation is usually seen as high fertility impeding women's participation in the labour force. Dropping out of the labour force during the childbearing years also reduces women's subsequent income. The relationship is complex with many variables, such as women with larger families being impelled to work out of economic necessity. The age structure and composition of the family are also of significance.[15]

Migration is another demographic factor influencing women's participation in development activities. Only 3 per cent of women are economic migrants, yet in Malaysia, Indonesia, Thailand and Philippines single women in search of employment are a significant component. In some age groups and areas they are the majority of the rural-urban migration streams. In contrast, in cultures which discourage female employment, movement to the cities may result in a further decline in female participation in labour due to constraints of working away from home.

Integration of women in development with its interrelationship to demographic factors must

[12] United Nations, *Population Strategy in Asia: Report, Declaration and Selected Papers,* Second Asian Population Conference, Tokyo, November 1972, Asian Population Study Series No. 28, Bangkok, 1975.

[13] United Nations, *Review and Appraisal of the World Population Plan of Action,* New York.

[14] Mere Pulea Kite, *Participation of Women in Development in the Small Island Countries of the ESCAP/SPC Region,* paper submitted to ESCAP/SPC conference on small island countries of the ESCAP/SPC region, February 1982, Noumea, New Caledonia.

[15] United Nations, *World Population Trends and Policies: 1979 Monitoring Report,* vol. I, *op. cit.*

cover the whole social, cultural, political and economic spectrum. Lasting impact and meaningful social change implies conceptual, attitudinal and institutional change.

Issues

1. Representation and Policy and Planning Formulation:
   - Establishment of appropriate representative national bodies of women for ensuring their participation in policy, planning and decision-making at national, provincial and local levels.
   - Non-governmental women's organizations should be represented in the national bodies.
   - Accessibility to key decision makers at the highest levels.
   - Programmes for promoting attitudinal and institutional change of women's roles.
2. Legislation:

   Not only *de jure* equal legal status be ensured, but steps taken to remove *de facto* discrimination. Public information campaigns to ensure that both men and women understand their legal and civil rights, and machinery to safeguard these rights should be available.
3. Need to find measures which are cross-culturally accepted as reflecting women's position.
4. An ESCAP compendium of statistics on women covering basic information on health, education, labour force participation etc. is needed. Such compilation would permit study of the issues such as the impact of common religious or cultural traditions upon women's roles and the extent to which socio-economic development has entailed progress for women.

Trends in women's health

The status of women defined by social customs and attitudes towards women affects their health and nutritional status and access to health care. Their economic and education levels affect their own health and the health of their children. In turn women's health affects their status and participation in development. Women's health issues are a priority as they are an imperative factor in raising their socio-economic status, their role in development and the health of their family.

Most women in Asia and Pacific live in the rural areas and the issue of women's health should focus especially on the needs of rural women without disregarding the urban women's needs. The impact of women's health on demographic trends is through changes in fertility and mortality. Improvement of mothers health through better family planning programmes and services has a direct impact on fertility reduction. Improved provision of health services, water, sanitation and nutrition reduces infant and child mortality, which in turn reinforces belief in survival of children and reduces the urge for large numbers of children to ensure the child-survival hypotheses.

Health conditions of women in this region are relatively poor. Only two countries have comparatively much better health conditions, Singapore and Sri Lanka, apart from the developed countries in Oceania and Japan. Six countries with very poor health conditions are Lao People's Democratic Republic, Afghanistan, Bangladesh, Bhutan, Maldives and Nepal. The countries with relatively poor health conditions include Burma, Democratic Kampuchea, Indonesia, Viet Nam, India, Iran and Pakistan. In Oceania, of the seven countries and areas for which data are available, four belong to the poor health group: Kiribati, Papua New Guinea, Tonga and Tuvalu, while the rest are relatively better off.[16] The countries in East Asia are comparatively better off in terms of availability of medical care when compared to the rest of the countries in the region.

Issues:

1. Basic lack of sex-specific data on provision and access to health services to women.
2. Increase in population in the developing countries with inadequate health services has aggravated the situation. Limited finances, trained manpower and material resources combined with maldistribution of health facilities and personnel present critical conditions.

[16] ESCAP, *Report of the Subregional Follow-up Meeting for Pacific Women on the World Conference for the United Nations Decade for Women*, 29 October - 3 November 1980, Suva, Fiji.

3. Focus on the health of rural women, the young and the children–the rural family.
4. High fertility, high infant, child and maternal mortality, hazards of pregnancy and child birth and the related interaction of malnutrition.
5. Nutrition.
6. Improvement of sanitary and environmental conditions.
7. Supply of safe water.
8. Immunization.
9. Underutilization of health facilities and ineffective information, education and communication concerning health and family planning.
10. Urban women's access to health facilities and occupational health needs, e.g., in construction industry, manufacture and service sectors.
11. Recognition of the key role or women in their families as educators and health care providers.
12. Provision, knowledge and skills for more effective self help.
13. Containing health education for children and adults – sex education, nutrition and family health.
14. Revision of health education programmes with emphasis on preventive measures.
15. Better delivery services of contraceptives.
16. Raising the age of marriage - there is evidence that this has contributed significantly to fertility decline in some countries.
17. Better contraceptive technology.

Women's education and fertility trends

Education amongst women appears to make a significant difference to family planning practice. The correlation between family planning and education has been fully documented. Low levels of contraceptive use are usually associated with low levels of education. Literacy and primary education make a critical difference in facilitating communication and understanding of concepts hitherto new to the receivers. Higher illiteracy rates among women reduce the impact and influence of population policies and programmes and hamper women's participation and contribution to development.

Recent empirical studies indicate that the threshhold of women's education beyond which fertility declines may have been lowered. In general women in the ESCAP region lag behind men in education. In several countries there has been considerable progress with regard to literacy and education; in others progress has been slower than anticipated and in yet others the educational position relative to men has worsened.

Issues:

1. Equal opportunities and access to education at all levels needs to be provided.
2. Encouragement given to parents to allow girls to continue their education beyond the primary level.
3. Adult and functional literacy programmes to eradicate illiteracy be devised in terms attractive to women over-burdened with work in the house and in the fields.

Training and skill development

Training is an integral adjunct of education for women to attain an improvement in their economic status and facilitate involvement in development. Training in skills and upgrading in traditional vocations may prove a crucial factor.

Issues:

1. Provision of vocational training in traditional skills to improve quality for purposes of commercial marketing.
2. Training in women's traditional agricultural tasks which is provided to men and received second-hand by women.
3. Training in new occupations to provide increased job opportunities to women to work away from home and provide a broader spectrum of choice.

Employment

There is distinct world-wide trend for increase in the female labour force but high fertility impedes women's consistent participation and is one of the bases for discrimination. But employment itself does not necessarily imply reduction in fertility; self employment is often associated with high fertility, while professional employment is generally associated with lower fertility. The interaction between education, employment and fertility is influenced by a number of demographic and socio-economic variables such as type of employment, distribution of employment between sexes (in Sri Lanka employment of urban women has increased despite high level of unemployment among young men), levels of education and advent of agricultural technology and migration. Quantification of women's economic contribution by domestic work and non-remunerative family work also requires attention.

Issues:

1. Provision of child care services for working women to ensure their ability to continue their employment.
2. Provision of maternity leave and related benefits.
3. Ensuring women participate in agricultural technology and its benefits rather than be deprived of their participation in agricultural activity.
4. Quantification of women's unpaid labour in the home and outside.

Conclusion

Women's involvement in development is inevitably influenced by the demographic factors and their relationship to population policies and programmes. They can be beneficial and promote the progress of women or be a retarding factor. The choice and facilities of regulating their fertility will imply for women, a higher status, greater productivity and a share in decision making. This must, however, go with overall societal behaviour change and the political will to change traditional attitudes, customs and legal restrictions which act as barriers to women achieving equal status and full participation in development. It is only in a free and informed society "where individuals participate actively in making decisions about their own life, the community and the society that this desirable state will be achieved. Development is an attempt at achieving progress in the social, economic and political spheres as determined by the persons affected and not by a group of elites and planners"[17]

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[17] ESCAP, *Report of the Regional Seminar on Strategies for Meeting Basic Socio-economic Needs and for Increasing Women's Participation in Development to Achieve Population Goals,* 27 April - 3 May 1982, Pattaya, Thailand.

8.2 REVIEW OF PROGRAMMES FOR INTEGRATING WOMEN INTO DEVELOPMENT PROCESS

by

ESCAP Social Development Division

Mandates for women

The twentieth century has been notable for its many watershed events and developments. From a long-term perspective of social evolution, however, nothing may equal in significance the declaration of 1975 as the International Women's Year and the ensuing 10 years as the United Nations Decade for Women. A culmination of many centuries of struggle and suffering by countless women and men, the Year and the Decade marked the first global and official indication of resolve to eliminate the entrenched and pervasive prejudice against women and their systematic oppression.

The mandates stemming from the World Conference of the International Women's Year and the mid-Decade World Conference of the United Nations Decade for Women are explicit in their stipulations that all forms of discrimination against women, whether social, cultural, economic or political, contradict the universally acknowledged notion of human rights as contained in the United Nations Charter, and that they hinder the cause of development seriously by excluding at least one half of perhaps the most vital segment of population from participation in development and thus perpetuating a built-in developmental bottle-neck in the form of a huge number of uneducated, under-fed or starving, sickly and unproductive women. Furthermore, to the extent that development is an essential condition for peace, and development cannot be fully achieved without drastic improvement in the status of women, the prevailing discrimination against them serves as a serious obstacle to world peace. This recognition of a close linkage between the situation of women and some of the most overriding concerns of the present time is reflected in the theme of the Decade: Equality, Development and Peace.

More specifically, the mandates urge actions designed to promote the participation of women in the solution of such issues as population growth; food production; health and education; industrialization; science and technology; the choice of patterns of production and consumption; environment; and the reduction of tension and aggression among individuals, groups and nations. They also give importance to the establishment and/or the strengthening of national machineries, the development of a data base, the evolvement of appropriate instruments for monitoring and evaluation, interdisciplinary and multisectoral approaches and legislative action as central strategies for pursuing these objectives.

The regional mandate

The women of the ESCAP region imbued the global concerns for women such as the above with their own significance. Gathered at the Regional Preparatory Conference for the mid-Decade World Conference held at New Delhi in 1979, they viewed equality, for instance, in terms of substantive equality of rigths, responsibilities and opportunities for participating in development as active agents and as beneficiaries, with equal access to resources and power, including the power to make decisions on matters relating to the allocation of resources and other matters affecting their lives.

Development was viewed as a total concept encompassing economic, social, cultural, political and other dimensions of human life. Since all changes occurring in society affected women perhaps more than men, development of women should be an important concern not only of social development but of all other sectors of development. Indeed, only thus could development result in the realization of social objectives as well as economic ones.

Peace was a crucial pre-condition for development since development, defined in terms of the

elimination of all forms of human suffering, most notably mass poverty, socio-economic inequities and discrimination, and political oppression, was the only viable and lasting foundation of peace in the region.

On the subtheme of the Decade, i.e., employment, education and health, they recommended the following:

Employment

(a) A quota for women in all training programmes;

(b) Special protection of employed women as required by their particular physiological conditions;

(c) Support facilities and services designed to strengthen the family even while promoting the employment of women;

(d) Removal of barriers to the employment of women, including the stereotyping of jobs as "male" or "female";

(e) Promotion of the employment of women by all development agencies and the earmarking of resources to that end;

(f) Incorporation of the employment needs of women in all development plans and the study of possible negative impacts of proposed development programmes and projects on the employment situation of women;

(g) Promotion of trade unions, associations and co-operatives among and/or for women workers as a means of protecting them against exploitation and obtaining access to credit, training and other income-generating facilities and resources;

(h) Training by Governments and non-governmental organizations, including trade unions, development institutes and women's organizations, of a corps of mobilizers and specialized intermediaries to assist poor women in organizing for collective strength, for obtaining access to all types of developmental assistance and for articulating their needs before planning and policy-making agencies;

(i) Land reform/redistribution policies and measures providing women with equal or joint title to land and equal access to credit, information and other resources for agricultural development;

Education

(j) Educational goals that do not discriminate against women;

(k) Education of women to serve the socio-economic and cultural objectives of national development;

(l) Greater priority to the education of women in general and of women in rural areas, urban slums and other disadvantaged groups in particular, and allocation of the necessary resources;

(m) Review of curricula, learning materials and methods of instruction to promote awareness among women and girls of their status, as well as review of the role of women's organizations in reinforcing their awareness;

(n) Separate targets for women's education to redress their unfavourable educational status;

(o) Reorientation of family, community and government decisions toward encouraging girls and women to participate in planned educational programmes;

(p) Opportunities for participation by women in the decision-making related to their education;

(q) Greater emphasis on scientific education and employment training;

(r) Incorporation of elements of health care, nutrition and population education into the curriculum for men as well as for women;

(s) Consumer education and education on marketing and business management;

Health

(t) Inclusion of family planning as a major component of health care and the provision of pertinent services, especially to women in the poor sector;

(u) Nutritional programmes to prevent and/or combat anaemia commonly suffered by pregnant and lactating women;

(v) Improvement of the quality of drinking water and other conditions of sanitation through village self-help programmes, with women as the prime movers;

(w) Emphasis in health training courses on the prevention of disease and on self-help;

(x) Involvement of women in health programmes as leaders;

(y) Establishment of mobile health service teams to extend services to rural women;

(z) High priority to the education of women in maternal and child health care and to improving the health status of the family through environmental sanitation, better nutrition and other measures of hygiene.

The women addressed a number of recommendations to the United Nations and to ESCAP as well, which resulted in the formulation and adoption by the latter of resolutions 203 (XXXVI) on integration of women in the development process and 211 (XXXVII) on strengthening the Commission in the promotion of the integration of women in the development process. These resolutions called upon the ESCAP secretariat to: strengthen its programmes for the integration of women in development at the national and regional levels; redeploy a senior regular post for women's programmes within the secretariat, pending the transfer of such a post from the regular budget of United Nations Headquarters; establish mechanisms for inter-divisional and interagency co-ordination; and seek programme resources in addition to those provided by the Voluntary Fund for the United Nations Decade for Women, such as extrabudgetary funding and programme support from the regular budget of the United Nations.

Toward fulfilling the mandates: Past action

Information on the status of the implementation of the global and regional Plans and Programmes of Action in the ESCAP region is extremely limited so that, for anyone attempting to assess it, the only thing that emerges clearly is this fact. It is possible, however, to offer the following impressions based on selective observations and information materials available from a number of Governments:

(a) There is an active interest in most countries of the region in pursuing the objective of advancing the status of women and integrating them in the development process;

(b) A small number of countries have established high-level national machineries for formulating and implementing programmes for women, such as ministries and bureaux, while many others have created lower-level focal points within the existing government structure;

(c) A large number of organizations concerned with women have mushroomed in the years following the International Women's Year;

(d) Many countries of the region have evolved functioning mechanisms for co-ordinating the policies and activities of all governmental and non-governmental organizations/agencies alike in the field of women, such as national commissions on the status of women or national co-ordinating committees;

(e) Activities for women on the part of various intergovernmental and international organizations/agencies in the region have intensified over the past few years and there is increasing concern with more effective and substantive co-ordination and collaboration among them.

ESCAP has pursued its objectives in the field of women in two major directions: assistance to member countries in connection with their efforts to advance the status of women along the lines of the global and regional mandates and the strengthening of ESCAP's own capacity towards the same end.

With reference to the first, ESCAP has carried out a substantial number of activities geared to assisting member countries in identifying, formulating and implementing projects for women and establishing and/or strenthening national machineries for integrating women in development. A significant number of regional projects designed to strengthen women's capacity as income generators, project managers, planners and leaders of women have also been carried out in collaboration with member Governments, non-governmental organizations and, to a limited degree, other United Nations agencies. While these have been regional projects, most of them addressed the needs of poor women in rural areas and were undertaken on intercountry and TCDC bases.

It should be mentioned that the above activities have been supported, almost exclusively, by the Voluntary Fund for the United Nations Decade for Women.

As to the second aspect, the steps taken by the ESCAP secretariat up to now include the augmentation of its programme staff,* the establishment of an interdivisional task force on the integration of women into ESCAP's priority concerns and the

* One regular post was redeployed for women's programmes within the secretariat in September 1981 and another regular post is expected to become available shortly.

shifting of programme emphasis to the strengthening of national machineries and other institutional infrastructure, the development of a data base and direct advisory services to member countries, with a view to achieving a greater impact on the situation of women with the limited resources available to the secretariat. The establishment of a standing mechanism for interagency co-ordination is also due in the near future.

Comments on past action

While the above actions on the part of all concerned have been in earnest and to the best of their capacities and resources, their impact on the status of the women of the region has been, at best, marginal. This assessment is supported by the fact that, taken as a whole, certain important aspects of the situation of women in the region actually deteriorated, rather than improved, during the first half of the Decade. Women's lives by and large are still characterized by hard and unremitting physical labour, poor diet, frequent child-birth and illness without access to health services; their literacy rate is further behind that for men than previously; the mortality and morbidity rates for a significant sector of women are higher; while more women have come to engage in gainful employment and their work hours have been extended, they are still disproportionately represented among the poorest and the unskilled; and there is no significant increase in the number of women in high-level leadership positions, whether in the public or the private sectors, or in decision-making positions at the local and national levels.

Any number of factors may be responsible for this relative lack of progress in achieving the objectives of the Decade in the region. Those most often cited, however, are: lack of political will at the national level, traditional attitudes and customs that inhibit both men and women from understanding the problem and taking the necessary action to solve it, lack of initiative on the part of women due, in part, to their inadequate education and training as well as to their limited free time, lack of financial resources and a paucity of pertinent knowledge.

Proposals for the remainder of the Decade and beyond

Given the massive needs of women still untouched and the myriad constraints under which they must be addressed, the prospect of attaining the objectives of the Decade in the near future is not very encouraging. During the years of the Decade up to now, however, the region has gained valuable understanding and experience in the field to be able to map out and implement more cohesive and strategically sound plans for eventually doing so in the foreseeable future. In other words, the region is in a position to move away from the hitherto tentative and experimental approach to activities for women to a more purposeful and measured one. In this connection, the areas of focus suggested by the existing situation, as reviewed above, include the development of instruments for promoting the advancement of women, such as national machineries, legislation, information and a knowledge base; the development of women's organizations, institutes, co-operatives and other institutional infrastructure to provide linkage among all women and concerned men in pursuit of their common goals and to support their collective action; expansion and intensification of educational and/or training activities to promote attitudinal changes in society in general and among women in particular, and to increase the latter's potential for participation in the economic, social and political fields; and the securing of resources for such activities and measures.

While the major responsibility for undertaking or instituting the above activities and measures lies squarely with the decision-makers of the member countries, ESCAP, as a leading intergovernmental body of the region dedicated to development, proposes to play an increasing role in advancing the cause of women. It proposes to do so:

(a) By undertaking systematic and region-wide monitoring of the situation of women in its social, economic, cultural and political aspects and assessing the status of implementation of the World and Regional Plans and Programmes of Action. Towards this end, the ESCAP secretariat has embarked upon a project to develop appropriate indicators for assessing the situation of Asian and Pacific women. Through the use of these indicators, ESCAP hopes to produce a solid and reliable status report on the situation of Asian and Pacific women and on the extent of fulfilment of the Decade mandate in the region by 1984;

(b) By developing more long-term and comprehensive strategies and programmes based on the outcome of the regional inventory and monitoring referred to above. Being more factually based, these strategies and programmes could be specifically geared to the needs and situations of individual

countries as well as to those of the region as a whole;

(c) By expanding technical assistance to member countries in their priority areas for women, within the above framework;

(d) By developing subsidiary instruments such as training materials, guide-lines and manuals for project monitoring and project models;

(e) By facilitating information exchange;

(f) By continuing to strengthen the capability and role of the secretariat in the promotion of the status of women and in the integration of women in development both within itself and in relation to other development agencies of the region;

(g) By broadening its resources through more active search for both regular and extrabudgetary funding sources.

Small beginnings in connection with all of the above proposals have already been made in that they have, in part, been reflected in the new medium-term plan of the secretariat and that the sources of current programme support are slightly more diversified than previously. Whether these beginnings can be nurtured into a full-fledged development of the ESCAP secretariat as an effective agent for change in the field of women remains to be seen. There is no doubt, however, that success in doing so will be of great significance for the fate of many women in the region and for regional development as a whole.

Topic 9.

POPULATION PROBLEMS OF SMALL ISLAND COUNTRIES OF THE ESCAP REGION

9.1 WORKING PAPER

by

Ian Pool*

Small island countries in the ESCAP region: setting the problem

The ESCAP region comprises three radically different sub-regions:

(a) China and India, and their mainland or big-island neighbours;

(b) Australia and New Zealand, two developed countries with populations predominantly of European origin; and

(c) Immense areas in the Pacific and Indian Oceans in which are located many of the world's smallest countries. This sub-region, termed here "Pacific-Maldives", comprises 23 countries but has only 5 million people, of whom 3 million live in the one macro-nation, Papua New-Guinea. Yet, this sub-region covers 10 per cent of the earth's surface.

The most critical population problem in this last sub-region can be summarized in one phrase-population in relation to limited resources. Thus, relative population densities are high in many (but not all) of the countries in the sub-region. Paradoxically, however, the small population size of most of the countries in the sub-region also poses severe developmental constraints.

There is a second and related paradox. Throughout most of the sub-region, growth has been so rapid that an approach to "Malthusian" limits was recently being portended.[1] By contrast, over the last decade emigration has produced negative rates of population growth in some countries, notably in some where Malthusian checks had seemed imminent.

These two paradoxes are partly a function of the restricted environments and dependent status of small island countries. Until recently almost all Pacific-Maldives countries have been linked politically in various ways to different metropoles, but as is shown in table 1, today most are independent or quasi-autonomous.[2] The people of the sub-region have overcome many disadvantages through innovations in technology, and social and political organization. Yet, the dominating issues of development remain the twin problems of a restricted environment and of socio-economic dependency, in the face of both over population and under population.

Beyond this, countries in the sub-region also face many of the development problems seen in other Third World nations. Trends in the sub-region are a microcosm of those found throughout the entire ESCAP region. To take merely one example, cohort changes are particularly rapid in some small island nations, presaging similar changes elsewhere in the region. For this reason, discussion of this sub-region is not just of intrinsic importance, but also because the small size of most of its countries magnifies problems which may as yet be less apparent in larger populations.

To analyse the issues raised above, this presentation will summarily review the geographical and political setting of the Pacific-Maldives. Then major demographic parameters will be briefly outlined.

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[1] W.D. Borrie, (1967) "Malthusian reflections on the South Pacific", *Transactions and Proceedings Royal Society of New Zealand.* (General Series, 2, 2, pp. 19-29).

[2] Constitutional negotiations are currently underway in several cases, but regardless of political status all nations and territories will be referred to summarily here as "countries". Metropolis include/have included recently Australia, France, New Zealand, United Kingdom, United States; and historically also Germany, Japan, and Spain. The sub-region covered here is that delimited for the South Pacific Commission (SPC) plus the Maldives. It thus excludes Western New Guinea (Irian Jaya, Indonesia) the societies of which are similar to those in Papua New Guinea, Easter Island (Chile), and Hawaii (United States).

Table 1. Background information and key demographic indicators: Pacific countries, Maldives, Sri Lanka and Thailand

	Political status[a]	Present or past metro-pole	Major physical feature: (Atoll = A High = H Large = L)	Major oceanic culture: Polynesian (P), Micronesian (Mic) or Melanesian (Mel.)	Land area km²	Total population census (provisional)	Population density (per km²)	Population in capital city or largest urban agglomeration	Growth rate (percentage)	Rate of natural increase (percentage)	Crude birth rate (per 1,000)	Total fertility rate (per woman)	Infant mortality rate (per 1,000 live births)	Life expectation at birth in years	Most recent census
American Samoa	Terr.	U.S.	H	P.	197	29 190 (32 395)	164	10 614	1.8	2.8	33	5.4	19	67	1980
Cook Islands	Aut.	N.Z.	A, H.	P.	240	18 127 (17 695)	74	4 862	−0.5	1.8	27	4.5	33	65	1981
Federated States of Micronesia[b]	Aut.	U.S.	A, H.	Mic.[c]	701	62 731 (76 974)	180	No data	3.1	2.4	29	No data	28	No data	1980
Fiji	Ind	U.K.	A, H, L.	Mel.[c]	18 272	588 068	32	117 827	1.8	2.4	31	4.0	46	62	1976
French Polynesia	Terr.	France	A, H.	P.	3 265	137 382	42	76 112	2.2	2.4	31	4.4	47	62	1977
Guam	Terr.	U.S.	H.	Mic.	541	84 937 (105 816)	196	77 229	2.0	2.2	26	3.8	22	76	1980
Kiribati	Ind.	U.K.	A.	Mic.[c]	690	56 213	82	18 116	1.6	2.1	35	4.7	87	52	1978
Marshall Islands[b]	Aut.	U.S.	A.	Mic.	70	(31 045)[d]	444		3.0	3.2	35	No data	25	No data	1980
Nauru	Ind.	Aust.	H.	Mic.	21	6 966[e]	332	All "urban"	No data	1.5	20	No data	No data	No data	1977
New Caledonia	Terr.	France	L.[f]	Mel.[c]	19 103	133 233	7	70 616	0.9	2.2	27	4.1	25	64	1976
Niue	Aut.	N.Z.	H.	P.	259	3 578 (3 298)	13	765	−1.6	1.9	26	4.3	33	62	1980
Northern Marianas[b]	Terr.	U.S.	H.	Mic.	478	(16 862)	35	No data	3.6	2.8	35	No data	38	No data	1980
Palau[b]	Aut.	U.S.	H.	Mic.	494	(12 173)	25	No data	No data	1.7	21	No data	46	No data	1980
Papua New Guinea	Ind.	Aust.	L.[i]	Mel.	462 243	2 489 935 (3 006 779)	7	76 507	2.5	2.8	44	7.1	125	49	1980
Pitcairn Island	Terr.	U.K.	H.	[h]	5	57	11	All "rural"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1981
Samoa	Ind.	N.Z.	H.	P.	2 935	151 983 (158 130)	54	33 000	0.8	2.9	37	6.4	36	63	1981
Solomon Islands	Ind.	U.K.	L.[i]	Mel.[c]	28 530	196 823	7	14 942	3.4	3.3	45-50	7.3	46	54	1976
Tokelau Islands	Terr.	N.Z.	A.	P.	10	1 575 (1 572)	157	All "rural"	0.0	1.7	24	n.a.	45	n.a.	1981
Tonga	Ind.	U.K.[g]	A, H.	P.	699	90 085	129	18 312	1.7	2.2-2.5	32-35	4.8-5.3	60	58	1976
Tuvalu	Ind.	U.K.	A.	P.	26	7 349	283	2 191	2.0	0.9	24	2.8	42	59	1979
Vanuatu	Ind.	France/ U.K.	L.	Mel.[c]	11 880	(112 596)	9	12 514	3.2	2.8	45	6.6	97-107	50-60	1979
Wallis and Futuna	Terr.	France	H.	P.	255	9 192	36	All "rural"	1.0	2.6	37	6.5	54	65	1976
(Trust Territory of the Pacific Islands)[b]	(Terr.)	(U.S.)	(A, H.)	(Mic.)[c]	(1 832)	(132 500)	(72)	(None)	(2.3)	(3.2)	(43)	(5.0)	(59)	(61)	(1970)
Maldives	Ind.	U.K.[i]	A.	n.a.		143 000	477	30 000	2.4	2.4	40	No data	106	47	
Sri Lanka	Ind.	U.K.	L.	n.a.		14 168 000	216	621 000	1.6	1.9	25	3.4	51	66	
Thailand	Ind.	None	Mainland	n.a.		45 100 000	88	5 126 000	2.4	2.4	32	4.9	55	64	

Sources: Sundry papers and country statements ESCAP/SPC and ILO/SPC Conference, Noumea; ESCAP, *Demographic Trends and Policies in ESCAP Countries*, (Bangkok, 1979); Jean-Louis Rallu, "Les Wallisiens à Wallis et Futuna et en Nouvelle - Calédonie", *Population*, janvier février. 1982, Vol. 37, No. 1, pp. 167-75; South Pacific Commission (SPC), *South Pacific Economies: A Statistical Summary* (Nouméa, 1980); Data from various sources provided by Ko Groenewegen, Demographer, SPC, and staff members after checking in detail an earlier draft of this table.

Notes: n.a. = Not applicable, including where small numbers render rate and life-table construction impossible (e.g. Pitcairn).

[a] Aut. = Virtually independent, but with metropole planning minor role in government.

Ind. = Totally independent.

Terr. = Some form of dependence, including colony; integral overseas component of metropole; overseas "territory" with some internal self-rule; etc.

[b] As constitutional negotiations were only at a final stage it is difficult to obtain data on the separate countries into which the Trust Territory of the Pacific Islands is being divided. Thus data on Trust Territory of the Pacific Islands are also provided.

[c] Either Polynesian minorities or influence usually in outlying islands which are themselves, Polynesian "outliers".

[d] Includes military and their dependents.

[e] Excludes 288 absentees and people unable to complete form.

[f] Outlying dependencies (Loyalty Is.), A and H.

[g] Some outlying islands A and H.

[h] Descendents of *Bounty* mutineers and their Tahitian spouses.

[i] Protectorate status only.

Attention will be paid in this paper to development issues seen in relation to demographic patterns.[3]

Background to Pacific-Maldives

Geographical and political characteristics are summarized in table 1. Comparative data are included on Sri Lanka and Thailand.

In terms of both population and geographical size PNG is the only macro-nation in the Pacific-Maldives region, and in some senses its problems are unique. Yet, aspects of Papua New Guinea's geography, and its cultural patterns resemble those of the neighbouring areas of Melanesia.

The remaining countries in the region are small in area and of three basic physical types (with variants):

(a) Coral atolls, the most restricted environments;

(b) "High" islands, normally volcanic; and

(c) "Large" islands found exclusively in the South-West Pacific.

The Pacific-Maldives sub-region lies almost entirely within the intertropical zone,[4] although there are some climatic variations by season, location and altitude. The physical geography has influenced economic patterns: subsistence agriculture and fishing, extended today to include cash fishing and farming, ranching and mining. Productivity varies in range, intensity and cost-efficiency.

The indigenous Pacific societies fall into three broad Oceanic sub-groups:

- Polynesia, in the east, delimited by Hawaii, New Zealand and Easter Island,[5] contains linguistically and culturally similar societies, today Christian.
- Micronesia, in the north-west is culturally and linguistically related distantly to Polynesia, and is Christian, but is, perhaps, less homogeneous than Polynesia.
- Melanesia in the south-west (see also footnote 2) is linguistically very diverse, yet many cultural traits extend across the area; the population is mainly Christian, but some Animist groups are found.

Maldives is the only ESCAP small-island nation in the Indian Ocean. Socially and economically, they often resemble the Pacific, but ethnically they are related to South India and Sri Lanka. Because of Arab influences Maldives is almost entirely Moslem.

The Pacific-Maldives consists of discrete island groups which were first colonized in the nineteenth century, subsequently becoming independent. Most Pacific-Maldive countries are culturally viable, for, unlike in Africa, there are few instances where colonially imposed fronters have cut through ethnic groups. Many of the countries are also ethnically homogeneous, although in the larger countries of Melanesia, there is more diversity.[6]

Demographic situation: Implications for development

Data: sources and quality

Relative to other areas of the Third World data collection is well developed in Polynesia, less so in Micronesia, and weak in much of Melanesia and Maldives. All parts of the sub-region must rely,

[3] Detailed data are not presented here. These are available in the following documents:

ESCAP/SPC, "Report of Conference Seminar on Population Problems of Small Island Countries of the ESCAP/SPC Region", Noumea, New Caledonia, 15-19 February 1982. (Also background papers and country statements presented at the meeting. List referenced in the Seminar Report).

ILO/SPC, "Report of a Conference on Migration, Employment and Development in the South Pacific", Noumea, New Caledonia, 22-26 February 1982. (Also background papers and country statements presented at the meeting. List referenced in the Conference Report).

[4] Exceptions are Pitcairn Island (population about 60 persons) and Austral Islands (population: 5,208) in French Polynesia.

[5] Outside the sub-region, but having indigenous Polynesians; New Zealand and Hawaii are prime destinations for sub-regional Polynesian emigrants.

[6] Indigenously and by immigration. Thus migrant contract workers, particularly Filipino and European are found, for example, in Papua New Guinea, but also outside Melanesia in Guam and the French Territories. Larger scale permanent immigration, in the past, has included Indians (to Fiji), and Europeans and Asians (French Territories). Intraregional migration has included movement of contract labour to Guam and Nauru; and Wallisians, Tahitians and Vanuatu residents to New Caledonia.

Table 2. Resident Palauan population, 1973-1995

	Population enumerated				Population projected under				Percentage change 1980-1995	
	1973		1980		Assumption (a)		Assumption (b)			
	N	%	N	%	1995		1995		(a)	(b)
					N	%	N	%		
0-4	1 860	15	1 560	13	2 770	15	1 401	9	+77	−10
5-14	3 765	31	3 522	28	4 020	22	2 224	15	+14	−37
15-24	2 564	21	2 487	20	3 220	18	3 220	21	+29	+29
25-44	1 960	16	2 625	21	4 970	27	4 970	33	+89	+89
45-64	1 372	11	1 550	12	2 030	11	2 030	13	+31	+31
65+	596	5	711	6	1 390	8	1 390	9	+95	+95
Total	12 160	99	12 451	101	18 400	101	15 535	100	+48	+25
					(19 302)		(16 437)		(+55)	(+32)

Source: Feliaciana E. Udui, (1982), "Country statement - Republic of Palau", ESCAP/SPC Conference, Noumea (see footnote 3).

(a) Assuming continuation of average 1974-1978 birth and death rates.

(b) Computed by the present writer assuming that a rate (20 per 1,000) approximating the 19.8/1,000 reported for 1978 (see *Source* above) continued from 1980 to 1995.

Note: This same source, drawing on the *Quarterly Bulletin of Statistics*, Trust Territory of the Pacific Islands (to be replaced by four countries with varying constitutions), gives a rate of 40 for 1973. This would imply a population (aged 0-4) of 2,189 in 1973, constituting 18 per cent of the total population.

Figures in brackets suggest the population size and change if the equivalent of 50 per cent of overseas Palauans were to return home.

Comment: The proportionately wide difference in the estimates and rates shown here as a result of small changes in absolute numbers demonstrates the critical effect of small size on data collection and analysis.

however, on censuses, as there are few (6-8) countries with "adequate" vital registration, despite the fact that registration is everywhere on the statute books. Census analysis, particularly indirect estimation of vital rates, is difficult because the populations are so small (see comment, table 2), while most countries subject to significant emigration do not have satisfactory data on arrivals and departures. The small population size also affects *per capita* sampling costs thus limiting the utility of larger-scale general surveys.

Strengthening of data collection and analysis: a development strategy

The strengthening of data collection and analysis is itself an important development strategy in the sub-region. Thus some emphasis is being given in the region to census[7] planning, along with consideration of ways in which census data can contribute to integrated planning. In this context, the small size of many of the populations renders it almost impossible for countries to maintain both skilled census specialists, particularly analysts, and large computers. Micro-computers could permit *in situ* analysis of demographic data, but the utility of this strategy is limited by the availability of training, particularly in the use of sophisticated indirect estimation techniques. Communication satellites could permit in-country training, the sharing of

[7] Enumerations vary in terms of the number taken; frequency; quality (e.g. in 1981, Papua New Guinea took its first full "modern" census, yet in parts of Polynesia censuses have been taken throughout much of this century); and the influence of metropoles on the design and format of schedules, timing of censuses etc.

experiences and linkage with experts located within and outside the region.

Population trends

Pre-contact environments were relatively "benign" except for the malarial zone of western Melanesia and the Maldives. Thus although mortality was high it may not have been as high as elsewhere in the ESCAP region. Fertility was probably high, although some anti-natal controls may have been practised. Inter-island migration was a key "Malthusian" check.

European and American contact led to the introduction of many diseases and societal disruption, particularly of subsistence economies. Thus, mortality was high with epidemic death rates reaching 200-300 per 1,000,[8] and many populations suffered negative growth until somewhere between 1900 and the Second World War.

Since 1945, when mortality and fertility were both high, most countries have passed, at least in part, through a rapid mortality transition. Thus the east and centre have some of the highest levels of life expectation (60+ years at birth) in the ESCAP region (see table 1). Yet in the west, in Kiribati and in Maldives levels are low. Papua New Guinea and Maldives have among the lowest levels in the ESCAP region.

Rapid declines in the crude birth rate (from 40+ – 30 per 1,000) have occurred/are occurring in most countries, this often being followed by a plateauing out in the high 20s/low 30s. In a few countries,[9] however, crude birth rates are now in the low 20s.

Completed family size was above 5.0 births per woman prior to about 1965 to 1970. Since then in the east and centre levels have dropped to as low as 2.8 in Tuvalu. By contrast, high birth rates (44-45 per 1,000) and completed family size as high as 7.0 are found in Vanuatu, Solomon Islands and Papua New Guinea (see table 1).

High rates of natural increase persist throughout the sub-region,[10] for even where crude birth rates have declined a high vital balance is maintained by low crude death rates. In a number of Polynesian and Micronesian countries[11] high rates of natural increase have been counterbalanced by emigration, mainly to New Zealand and the United States, although recently both flows have diminished. In terms of the total size of the populations concerned, the effect of emigration has been marked: the Cook Islands and the Tokelau Islands, for example, shifted from strongly positive to negative rates of growth. In samoa, with a larger base population, emigration has reduced a 3 per cent per annum rate of natural increase to a 1 per cent growth rate.

Finally, every country in the sub-region is affected in some way or another by patterns of internal migration, notably rapid urbanization, although the effect of this may be exaggerated because of rapid growth from small base populations. By mainland Asian standards none of the Pacific-Maldives cities would appear highly congested, but some centres have high densities – e.g. 2,000+/sq km in Tarawa (Kiribati) – relative to the availability of water, sewage and similar facilities in fragile environments.

Issues for national development

The population dynamics just discussed have produced a number of problems in terms of both growth and structure. Some are unique to the Pacific-Maldives; others are shared with many developing countries. The major issues are:

(a) Population growth in general;

(b) Cohort changes;

(c) Emigration (for some countries);

(d) Internal distribution and migration.

Population growth, as has been noted, is generally rapid creating problems for the provision of services, nourishment and shelter. In much of Polynesia and Micronesia crude and relative densities are high, but this is seldom the case in Melanesia. In all areas densities must be seen in terms of restricted environments, whether atoll or the intense local relief of most high and large islands.

[8] McArthur, N. (1961), *Introducing Population Statistics*, Melbourne, Oxford University Press, pp. 17-19. A key factor was the lack of immunity among these isolated populations.

[9] Nauru, Palau, Tokelau Islands and Tuvalu (see table 1).

[10] Higher than 20 per 1,000 per annum in all but six countries, and above 15 per 1,000 in all except Tuvalu.

[11] American Samoa, Cook Islands, Federated States of Micronesia, Guam, Marshall Islands, Niue, Northern Mariannas, Palau, Samoa, Tokelau Islands, Tonga, and Wallis and Futuna. Emigration from Kiribati is for contracts (see foot-note 6).

A critical population problem is that growth trends are not constant. Natural increase has fluctuated in response firstly to mortality declines, then to fertility declines. Both transitions have been rapid and sudden. Fluctuations are also due to migration, a factor which is subject to uncontrollable, exogenous determinants. For example, emigration to New Zealand fluctuated wildly during the 1970s as migration policies changed.

High rates of natural increase produce the sub-region's youthful age-structure (often 40+ per cent of the population is aged 0-14 years). This has severe implications for planning, such as in the provision of educational and paediatric health services, and the creation of employment for burgeoning labour force entrant cohorts.

Because of out-migration many sub-areas, indeed countries as a whole, have lost populations at labour force age groups, thereby increasing further the dependency burdens on the remaining workforce. This magnifies the common third world paradox of a labour force dependency burden occurring in the face of heavy levels of overt and hidden unemployment and underemployment. Labour force cohorts are not large enough or sufficiently diverse to produce the range of skills available in a macro-nation. It is unlikely that most countries will be able to train, recruit and retain a cadre of nationals to implement specialized development tasks.

The youthful age-structure obscures other changes in cohort structure. Firstly, following fertility declines, age-groups 0-4 have declined proportionately and absolutely over a few years (e.g. table 2, 1973, 1980 and note). Paediatric services for peak demands will be superfluous, and this presages later declines in the size of labour force entrant cohorts. At older ages new demands are surfacing as cohorts grow rapidly, and will have doubled in size by early next century. Table 2 illustrates these trends with Palauan projections.

Rapid youth cohort changes may result in costly "on-off" educational and employment planning. At the same time attention must be given to geriatric policy. At present, the elderly are the responsibility of families except where the social security system of a metropole pertains. Throughout the sub-region, however, the family may find support increasingly difficult because of the growth of older cohorts, when migration has often dispersed family units.

The final demographic factor is geographical distribution resulting from sub-national growth differentials due to differences in natural increase and internal migration. Heavy influxes to capitals, are refelcted by a decline in the proportions living in distant areas, notably outlying islands. Clearly this must result in an "urban bias" in development funding because no country can afford to ignore basic urban amenities, or urban employment. Moreover, the populations remaining in areas of origin are disproportionately young and old, and female, often creating a shortage of workers in both the subsistence and the cash sectors.

Population, development and women

Data collection relating to labour force participation focuses on "gainful employment" and/or employment outside the family economic unit, (e.g. the farming and small business sectors). As a result participation in the subsistence sector and the contribution of women have both been downplayed statistically and perhaps in the perceptions of development agencies. Development has often emphasized larger scale cash sector projects which may be inappropriate for small-island societies. Certainly such strategies may disregard the key role of the extended family in the economy (landholding and primary production) of the Pacific-Maldives.

In general demographic change has had a marked impact on women. First, in high fertility populations women bear a disproportionate burden in terms of mortality[12] and childbearing. Women have played a major role in adopting family planning (almost entirely female methods). Furthermore, in pro-natalist societies childbearing is a resource of women, so that the adoption of family planning may take this resource away from them, particularly where survivorship at younger ages is also low. This affects both the status of women in general and the roles of individual women.

Secondly, women have been disproportionately affected by migration. For example in areas of origin they have often had to take over subsistence tasks previously carried out by men, while in urban areas women outside the labour force but married with children may lack a kin and community support system.

[12] If direct techniques of life table construction could be employed it would be found that there are still age groups at which male survivorship probabilities exceed female. Indirectly computed tables do, in some cases, show this (e.g. Solomons, 1976).

Non-demographic factors in development

General constraints

Constraints on the economic and social development of ESCAP's small-island countries can be briefly listed:

(a) Their small size, geographically as well as demographically;

(b) Their fragile environments, particularly where population growth and densities are high;

(c) Their narrow resource base, by contrast with the diversified resources available to macro-nations;

(d) The vulnerability of their undiversified economies to fluctuations in international commodity markets, and the reciprocal problem of a lack of purchasing power for import commodities; cash sector developments are thus risky ventures;

(e) Their isolation and yet their tremendous geographical spread, together creating enormous inter-country and intra-country problems[13] of communications and transport;

(f) Dislocations associated with a transition from subsistence to cash production;

(g) Their degree of *de facto* socio-political dependence, a factor of declining significance;

(h) Their high degree of economic dependence, for these countries have some of the highest *per capita* levels of aid anywhere in the world; and

(i) For most countries, low *per capita* incomes.

In many ways these countries do not fit normal models of underdevelopment. For example, Polynesian levels of development are "low" when measured by indices such as *per capita* income (low) and *per capita* aid (high), yet mortality levels are relatively low, and fertility is declining, so that natural increase has decelerated. Moreover, Polynesian levels of literacy are extremely high, a factor which deviates from some general development models. Thus, population-development relations are more complex than in some other third world regions.

In general, the list of development constraints presents a dismal picture. This is further reinforced by the severe restraints on development planning imposed by demographic factors.

Indeed, the question of economic viability is sometimes raised in the Pacific-Maldives context; in some cases, as for Niue and the Tokelau Islands, there is even the issue of demographic viability. Against such concerns must be rated the high degree of cultural viability.

The countries of the sub-region are, however, adapting modern communications and computer-based information-retrieval technology in order to overcome problems of isolation. The use of such tools may also have another effect: an increase in continuity in planning and the sharing of policy experiences, thus overcoming common third world problems exacerbated in the Pacific-Maldives, where small pools of skilled manpower create severe burdens for administrators.

Development strategies having demographic effects

The constraints effected on development by demographic change are clearly identifiable (see Section 3(d)). But the influence of some development strategies on population change is often less obvious. The more readily evident include strategies which are responses to immediate problems, examples being:

(a) The need to upgrade urban amenities, a strategy which may accelerate in-migration; and

(b) The need to recruit high school and university graduates into newly established civil services, a factor which may have distorted age and career structures in some occupations (e.g. rapid promotion of those joining at early stages, but blocked paths for later recruits, or an absence of openings once demand is satiated).

Other development strategies have less obvious effects. For example, tourism or the development of some other cash sector production (e.g., fish canning) could unintentionally precipitate internal migration towards growth centres. These developments may also necessitate the recruitment overseas of highly skilled manpower.

Population policy responses

Demographic analysis in development planning

Table 3 summarizes the plans available for selected Pacific-Maldive countries. Key demographic characteristics are analysed as a component

[13] From the capital of Kiribati to one "outlying region", Christmas Island, the distance is 3,200 km; Maldives stretches 1,000 km north to south; etc.

Table 3. Population analysis, recognition of problems and formulation of policies: selected island countries

Country: Plan period		Demographic data analysis in development plan					Recognition of one or more aspects of a problem in terms of:			Policy formulation related to:		
		Growth, size and/or density	Fertility and/or mortality	Some aspects of age structure	Emigration	Rural/urban distribution	Natural increase[a]	Migration		Fertility and growth[d]	Migration	
								Internal[b]	International		Interval[e]	Overseas
Cook Islands	: 1980	x	x	x	x		x	x	x			
Fiji	: 1981-1985	x		x	x	x	x	x		x	x	
Guam	: 1980	x	x	x			x					
Kiribati	: 1979-1982	x	x			x	x	x	x	x	x	x
New Caledonia	: Long-term						x	x				
Niue	: 1980-1985	x	x	x	x		x		x	x		x
Papua New Guinea	: 1979-1982			x			x	x	x	x		
Samoa	: 1980-1984	x	x	x	x	x	x	x	x	x	x	x
Solomon Islands	: 1980-1984	x	x	x	x	x	x	x		x	x	
Tonga	: 1975-1980	x	x	x	x	x	x	x	x	x	x	
Tuvalu	: 1980-1983	x		x			x	x	x	x	x	
Vanuatu	: 1981	x				x	x	x	x		x	

Source: David Lucas and Peter Waddell-Wood, (1982), "Population policies of the small-island countries of the ESCAP/SPC region", ESCAP/SPC Conference, Noumea (see footnote c).

Notes: [a] One or more of: growth of working-age population; school-age population growth; effects on economic growth; population pressure on services, housing welfare, agricultural system; dependency ratios; population density.

[b] One or more of: urban bias; urbanization; urban services; urban jobs.

[c] One or more of: reduced opportunities; reliance on remittances; reliance on expatriate staff; selective migration (or "brain drain").

[d] Includes aspects of growth, family planning, fertility reduction.

[e] Schemes to discourage urbanization.

of most, but not all development plans. Such analyses are likely, however, to be summary, and deal normally with factors of growth and/or natural increase, to a lesser degree with age-structure, and to only a limited degree with external and internal migration.

It will have been apparent from the previous two sections of this paper that there is a two-way interrelationship between population and development and that policy analyses must therefore be multivariate. Moreover, demographic factors are placing severe constraints on development. Yet, until now population growth, labour force, emigration and internal migration have normally been included as incidental factors in other development plan chapters such as those on "national (economic) growth", "labour and employment", "urbanization", and "regional development", and the analysis of "labour and employment" may be restricted to discussion of the "gainfully employed" or the monetary sector of the economy. Few countries have attempted to make a comprehensive assessment of population in their development plans. The Pacific UNFPA *Basic Needs Assessment Missions*[14] have recommended that countries pay greater attention to this factor, in particularly by writing separate plan chapters on population. This recommendation is further evidence of a point raised earlier that the strengthening of demographic data collection and analysis is a key development strategy in the sub-region, a pre-requisite to integrated planning.

Recognition of issues

It follows from what has just been said that the recognition of demographic issues in planning exercises (see table 3) is often general and without a full appreciation of interrelationships. Recognition has usually been at two levels:

(a) General issues of population growth and structure;

(b) Demographic correlates of social policies in areas such as health care, education, housing and social welfare.

In each case, these issues have been further viewed in terms of their consequences for development plans enabling the improved provision of basic needs. Beyond the provision of basic needs, two frequently noted underlying issues are national self-sufficiency and the diminution of disparities in levels of development between regions of the country.

Some caution must be urged in interpreting table 3 (column titled: "Recognition...") as, necessarily, the data are in summary form. The umbrella categories employed in the table may imply a more comprehensive perspective on each of the three issues noted there than is usually found in the plans.

Policy formulation and implementation

The policies formulated in response to the above issues (table 3) tend to be dispersed across a range of sectors running from education, health, and housing through to agriculture and labour and employment, and involving a wide set of strategies. There are, however, four initiatives which are evident in the policy formulation of a considerable number of the countries in the sub-region.

First, those countries which have recognized growth problems either formulate a family planning programme, or establish the conditions under which voluntary programmes can thrive. The intensity and effect of these programmes vary as several examples will show. Tonga, one of the earlier countries in the ESCAP region to introduce a programme (clinic, 1958; policy, 1962; actual programme, 1965), still has fertility levels which in 1976 were higher than those of some other Polynesian populations. Vigorous programmes were also implemented in the Gilbert and Ellice Islands (1968) (now Kiribati and Tuvalu respectively) and Fiji (1962), the birthrates fell[15] and then the rates plateaued out. Cook Islands, which has not legislated a programme went through a dramatic birth rate decline, but again this appears to have plateaued out at about 27 per 1,000. Pacific programmes have employed hormonal methods for contraception, either as a pill or an injectable.[16] Because of

[14] The missions were: Solomon Islands (28 November-13 December 1979); Tonga (17-28 June 1980); Samoa (2-16 June 1980); Kiribati (17 November - 3 December 1980); Fiji (12-26 January 1981). Not all reports have yet been endorsed by the countries and published, while UNFPA does not necessarily endorse the views of missions. Nevertheless, this recommendation has been remarkably singular.

[15] See David Lucas and Helen Ware, "Fertility and family planning in the South Pacific", *Studies in Family Planning*, August-September 1981, 12, 8/9, pp. 303-315. Other factors were also operating, notably changes in the age at marriage among Fijian Indians.

[16] There is considerable controversy in the sub-region about this method. See David Lucas, "The debate about Depo-Provera in the South Pacific", *New Zealand Population Review*, 8, 1, April 1982, pp. 44-46.

rugged terrain on large islands and the highly dispersed islets of many countries in this sub-region, and their very small populations, family planning delivery has posed a problem to administrations.

Secondly, health, a development priority encounters the same programme constraints, although the South Pacific has long-established paramedical services which have extended delivery to outlying islands. There have been few "mass" programmes, but one example, malaria eradication in western Melanesia, has met with some success, for malaria has declined in Vanuatu and Solomon Islands. There is, however, evidence of the spread of malaria and even of reinfection resulting from internal migration (Papua New Guinea and Solomon Islands). There are, as yet, no campaigns directing a systematic attack on (a) chronic non-communicable diseases, the rates for which may be increasing because of changes in life-styles, particularly diet, or (b) the respiratory diseases, which appear to be problematic throughout the sub-region.

Thirdly, the recognition of international migration as a problem frequently comprises concern over reliance on expatriate staff and on remittances from emigrants, rather than addressing the actual problems of emigration; and, in Kiribati, the issue is seen as reduced opportunities for emigration. Policy formulation *per se* has been limited to three countries (see table 3), which discourage emigration.

Finally, there has been wide concern over internal migration and a range of not unrelated devolution policies have been formulated. Generally, these involve economic and community development in outlying islands/areas. For example, Kiribati is attempting to settle people on Christmas Island (see also foot-note 13).

Integration and evaluation

Integrated planning

In small-island economies and societies development planning must be complex, yet will be based on fragile infrastructures (e.g. in most sub-region countries "population commissions" would be impractical). Consequently, although "an integrated approach" (in its broader sense) might well be a feature of population and development policy, this has not yet occurred. UNFPA *Basic Needs Assessment Missions* have advocated such an approach and have suggested strategies to achieve it, such as locating "Population Co-ordinators" within central planning units. This would also be a parsimonious use of small reservoirs of skilled people, thereby overcoming a problem referred to earlier.

Family planning policies have tended to use an "integrated" MCH/FP approach. This has the further advantage that it can be incorporated within a primary health care policy and can utilized well developed para-medical services. The last factor plus improved transport (e.g., ambulance planes), has, in some countries, permitted the extension of basic health services.

Evaluation

Integrated planning requires frequent evaluations. Yet, there has been relatively little evaluation of aspects of population policy. Reviews of family planning have occurred, such as the UNFPA sponsored *Basic Needs Assessment Missions.* There is, however, generally a lack of data on contraceptive use, and those available are unreliable. For example, acceptance rates bear little relationship to fertility levels.[17] In-service evaluations often cannot be attempted because of the lack of highly skilled people to undertake such tasks.

The lack of skilled personnel has produced a stated need on the part of some small-island countries for training programmes adapted to their particular requirements. These could be reinforced by greater utilization of communication networks. Statistical and analytical skills are in urgent demand, plus those needed for integrated planning.

The future

In some ways the Pacific-Maldives have an optimistic future. Their populations are often highly literate and have a high health status. The possibility exists for emigration from some of the countries facing rapid population growth, although this depends on policies of host countries. Finally, small amounts of aid in absolute terms can make a significant impact on perceived problems of population and development.

At the same time there are also severe problems. The total population of the sub-region may have doubled by early next century, although this is largely a function of the early stage reached in its demographic transition by the one macro-nation (Papua New Guinea), which is entering a phase of high natural increase. A number of the small-island

[17] Lucas and Ware, *op. cit.*, table 6, notes.

nations will have similar levels of high natural increase in the immediate future, with attendant problems of youth dependency and pressure on the labour force. Furthermore, the aged populations will soon double. In some cases general palliatives have been rapid reductions in fertility and heavy emigration. These apparent panaceas have, however, also produced their own problems: rapid changes in cohort sizes and, in some cases, negative growth. These are the substantive issues of development; a clearly delineated interface between population growth and social and economic change.

There is, however, another aspect to this. As the entire population of the Pacific-Maldives subregion is less than that of metropolitan Bangkok (see table 1) it is easy to overlook its critical needs. This is exacerbated by the image of the Pacific-Maldives as the "Bali-Hai" of the fictitious "South Pacific" of Hollywood musicals or travel brochures. The reality is of resourceful people faced, however, with some of the most severe development problems of any of the populations of the ESCAP region.

The factors of small size and limited, often fragile, environments and infrastructures create tremendous challenges for policy makers working in small-island nations. Mini-errors, by macro-nation standards, can produce maxi-disasters in human and environmental terms; the degrees of freedom are few. Moreover, lessons learnt in macro-nations almost certainly have limited validity or application in the Pacific-Maldives, a particular problem for international agency experts, who must commute between these two worlds. These problems are further exacerbated by the fact that many methods of data analysis, population policies and development strategies are macro-nation, mass-population in orientation.

It is entirely appropriate, therefore, that the conference has paid special attention to this ESCAP sub-region. This permits questions to be raised about the particular problems of small-island nations and this paper has suggested some ways and means of dealing with them:

(1) To secure adequate and relevant data for demographic policy analyses.

(2) To integrate these data into development planning.

(3) To coordinate population and general development policies.

(4) In the light of these first three issues, to establish and maintain cadres of qualified planners without being reliant entirely on visiting "experts", a factor of passing significance in macro-nations but perhaps perpetual in micro-nations, and yet contrary to goals of national self-sufficiency.

(5) To plan for rapid population growth in restricted environments, or, in some cases, seeking emigration as an answer, after considering its effects.

(6) To plan for radical changes in cohort structure; notably determining how to absorb on-off social planning.

(7) To deal with rapid urbanization, assessing whether devolution is the answer and whether it can be achieved when areas of origin are "outlying islands", which are always difficult to service.

(8) Finally, to recognize that the above suggestions involve implementing projects in countries which, in terms of geographical spread in relation to land area and population size, are the world's most extensive.

9.2 RECOMMENDATIONS OF THE CONFERENCE SEMINAR ON POPULATION PROBLEMS OF SMALL ISLAND COUNTRIES OF THE ESCAP/SPC REGION*

The Conference Seminar concluded its substantive discussions by making the following recommendations:

(1) Since censuses constituted the fundamental data base in the small island countries, every attempt should be made to strengthen census programmes and to ensure that all census data were processed and analysed expeditiously.

(2) In the 1980s round of censuses in the small island countries with inadequate registration, particular attention should be paid to including demographic questions permitting the indirect computation of ranges of vital rates from which "best estimates" of fertility and mortality could be obtained.

(3) Attention should be given to improving the coverage of vital registration in order to overcome three problems which particularly affected small island nations: (a) because of their small population base, minor data errors assumed a far greater magnitude than was the case in macro-nations: (b) a number of those countries were undergoing rapid changes in patterns of natural increase and urgently required an accurate base from which to assess intercensal trends; and (c) sample surveys and other alternative means of obtaining vital data could not be effectively employed in those countries because of the need to have large sampling fractions and because of high *per capita* sampling costs.

(4) High priority should be given to promoting in-depth and cross-comparative analysis of fertility and mortality drawing on the available data of the region.

(5) Since international migration was an important component of population trends in a number of countries, attention should be paid to the systematic collection and analysis of external migration data.

(6) Since concepts of economic activity currently adopted in the censuses of the small island countries might not adequately reflect the contribution to the economy of workers, especially women, in all sectors, particularly the subsistence sector, attention should be paid to evolving concepts suitable to the small island countries.

(7) In order to accelerate the movement towards a fuller degree of self-reliance in small island nations, greater emphasis should be placed on the utilization of human resources, particularly of skilled persons, nationally and within the region.

(8) Because of its contribution to training and the eventual strengthening of national statistical and planning units, there should be an increase in local involvement in all phases of demographic data collection, analysis and utilization.

(9) In order to promote technical self-reliance and to expedite locally based in-service training for statistical and planning officials in the small island nations, attempts should be made to utilize fully existing regional communication networks and educational facilities.

(10) Urgent attention should be paid to integrating demographic factors into policy analyses and to co-ordinating population policy with other aspects of national development planning both intersectorally and within sectors.

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* Reproduced from ESCAP, *Recommendations of the Conference Seminar on Papulation Problems of Small Island Countries of the ESCAP/SPC Region*, Asian Population Studies Series No. 52, Bangkok 1982.

Topic 10.

FINANCIAL AND TECHNICAL ASSISTANCE IN THE FIELD OF POPULATION THROUGH THE PROGRAMME FOR TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES AND OTHER CHANNELS TO SUBREGIONAL GROUPINGS AND TO COUNTRIES NEEDING SUCH ASSISTANCE, ESPECIALLY IN THE AREAS OF INFORMATION, COMMUNICATIONS, TRAINING AND RESEARCH

10.1 WORKING PAPER

by

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Introduction

ESCAP countries, as a group, have long recognized the existence of serious problems generated or exacerbated by rapid population growth. They have been the first to formulate concrete policies to address this issue. The accomplishments of Asian population programs have been substantial but, as noted in the Secretariat's report to the Commission's thirty-eighth session, they have not been uniformly successful.[1] While there is ample evidence of declines in average fertility levels in several ESCAP countries, population growth is still rapid enough to increase materially the cost and difficulties of achieving fundamental development objectives. Population/resource imbalances are made graver by serious maldistribution of the population within countries; ESCAP governments share a particular concern over rapid urbanization.

The persistence of population problems is, to some extent, a consequence of an incomplete understanding both of the socio-economic implications of population growth and of factors which determine the reproductive behaviour of families. Operationally, population and family planning issues are frequently treated as a sub-category of the health sector, rather than as a component of a comprehensive development strategy. Furthermore, population programmes often suffer from shortages of trained technical and administrative personnel, limitations of existing contraceptive technologies, and inadequate financial resources, both domestic and from foreign and multilateral donors.

[1] "Consideration of issues in various fields of activity of ESCAP," Note by the secretariat for the Commission's thirty-eighth Session, E/ESCAP/260, 13 January 1982.

Components of assistance

International support

Regional population activities over the last three decades have been greatly aided by international assistance. In 1982, two distinguished institutions celebrated thirty years of operation in the population assistance field, namely, the International Planned Parenthood Federation and the Population Council. These and other private agencies played the major role until governments began to develop bilateral and multilateral aid programmes. The Government of Sweden began to support family planning projects in Sri Lanka in 1958 and in Pakistan in 1961. In the mid-1960s, the United Kingdom, the United States, and Denmark started providing aid. The Netherlands, the Federal Republic of Germany, Finland, Canada, Japan, and Norway soon joined as donors.

In the 1960s, international agencies also began to respond to needs for population assistance. The creation of the United Nations Fund for Population Activities (UNFPA) in 1969 provided an invaluable central focus for global activities in the field of population. This institution has pioneered population programmes in many countries throughout the world. Expanding and gaining impressive expertise in the ensuing years, UNFPA is currently active in over 100 countries, and has a recently renewed priority for family planning-related activities.

The World Bank has been an active lender to population projects in the ESCAP region since 1972 and works with other donors to strengthen global efforts in the population field. For example, it chairs annual consortia and consultative groups of bilateral and multilateral donors; population has been and should continue to be an important subject at these meetings. The Bank also undertakes training for economic planners, and carries out

population research, with particular attention to the complex relationships between socio-economic development, family planning programmes, and fertility declines.

International organizations, private agencies, and individual donor country programmes fulfill different roles. This diversity is useful because of the varying levels of development of recipient countries and the complexity of population issues. For example, private agencies can be major innovators, while international organizations are often more politically acceptable sources of assistance and more likely to support large-scale programmes. The various donors provide enough diversity to allow each country to pursue a mix of programmes which meets its particular needs.

In 1980, roughly one half billion dollars were committed to population aid programmes by donor countries, international agencies, and nongovernmental organizations. The UNFPA, the United States Agency for International Develppment (AID), the IPPF, and the World Bank are the major providers of population assistance. The United States for many years provided over fifty per cent of international population assistance. Although its share has gradually declined to 40 per cent, the United States absolute contribution has grown to $211 million. Several countries have increased their share of population aid in recent years: in 1981, Japan and Sweden each contributed over $30 million, Norway over $25 million, and West Germany over $18 million. Italy now plans to earmark one per cent of its development assistance for population programmes.

Asia has traditionally received the largest amount of population assistance, and more funds flow into the Asian region than all other regions combined. In 1979, Asia received 60 per cent of all population assistance, followed by Latin America (20 per cent), Africa (12 per cent), and the Middle East (8 per cent).[2] UNFPA contributed more than $52 million in population assistance to the Asian region in 1981, nearly 40 per cent of its total worldwide outlay.[3] The United States channeled approximately 55 per cent or $116 million of its total population funding to Asia in 1982.

These high funding levels reflect the large population of the region—Asia contains eight of the eleven most populous developing countries in the world—and the long history of Asian programmes. Table 1 shows that the major portion of assistance to Asia (85 per cent) is channeled into family planning services and purchase of commodities, with smaller amounts going to institutions and training, research, policy development, information and education, and data collection.[4]

Developing country support

The commitment of developing countries is critical for the success of population programmes. Developing countries are currently contributing about two-thirds of total funds spent for population activities, and this proportion appears to be rising.

There is evidence that developing countries commit larger amounts of their own resources as population programmes mature, a trend particularly relevant in Asia where programmes have been in place for a number of years. For example, in 1968, Indonesia provided from its own resources five per cent of its total family planning budget; by 1980, it was funding 65 per cent. Many other Asian countries, including Bangladesh, India, Malaysia, Nepal, the Philippines, South Korea, and Thailand, are contributing more than 50 per cent of the funds needed for their population programmes; apart from recent selective assistance from UNFPA, China has provided for all of its needs.[5]

Recommendations of the 1972 and other conferences

In evaluating past performance and establishing goals for the future, it is useful to reexamine recommendations of the 1972 ECAFE (now ESCAP) and subsequent regional and international conferences. Those particularly relevant to the discussion of external assistance concern strengthening research and training, improving communication and dissemination of information, expanding international cooperative activities, and increasing financial resources for population programmes.

[2] *World Population and Fertility Planning Technologies: The Next 20 Years,* Office of Technology Assessment of the United States Congress, United States Government Printing Office, Washington, D.C., February 1982.

[3] *United Nations Fund for Population Activities: 1981 Report.*

[4] *World Population and Fertility Planning Technologies: The Next 20 Years, op. cit.*

[5] *Ibid.*

Table 1. Kinds of population assistance by region, 1979

(in $US millions of US dollars, not including regional, interregional, or global funding)

	1979	Percentage		1979	Percentage
Africa			*Latin America*		
Family planning services	22.2	58	Family planning services	55.5	81
Data collection	7.1	18	Data collection	2.3	3
Information, education, and communication	2.3	6	Information, education, and communication	2.5	4
Policy development	1.8	5	Policy development	3.2	5
Institutions and training/research and evaluation	4.9	13	Institutions and training/research and evaluation	4.9	7
Total	38.3	100	Total	68.4	100
Asia			*Middle East*		
Family planning services	152.9	85	Family planning services	17.0	65
Data collection	4.4	2	Data collection	3.3	12
Information, education, and communication	4.2	2	Information, education, and communication	1.1	4
Policy development	5.6	4	Policy development	0.3	1
Institutions and training/research and evaluation	12.3	7	Institutions and training/research and evaluation	4.9	18
Total	179.4	100	Total	26.6	100

Source: Office of Technology Assessment.

To strengthen research and training, the 1972 ECAFE Population Conference recommended that population materials and courses be incorporated into school courses at all educational levels, providing advanced degrees at the higher levels. Training of indigenous researchers, demographers, and specialists was also recommended—to the extent feasible, at institutions within the region. Studies of factors which determine family size were to be undertaken within each country. Attention was to be given to training of teachers and to evaluation of training. Governments were to establish career structures for family planning workers that provided promotion opportunities and job security.

The Conference also recommended that communications be improved by establishing clearing houses, regional translation services, and courses for technical and scientific writing. ESCAP was to be the focal point both for regional information dissemination and for international cooperation. The Conference also recommended greater efforts in:

- Data collection and analysis, and dissemination of data in more useful forms;
- Biomedical research; and
- Action-oriented regional seminars and workshops.[6]

Other conferences held in the Asian region since 1972 have made comparable recommendations. Emphasis on strengthening training was called for at the International Conference of Parliamentarians on Population and Development (Colombo, 1979),[7] at the Convention of ASEAN Parliamentarians (Kuala Lumpur, 1980),[8] and at the Asian Conference of Parliamentarians on Population and Development (Beijing, 1981).[9] More dialogue between developed and developing countries, in order

[6] "Report of the Second Asian Population Conference," United Nations Economic and Social Council, E/CN.11/1065, 13 December 1972.

[7] "Colombo Declaration on Population and Development," International Conference of Parliamentarians on Population and Development, September 1979.

[8] "The Kuala Lumpur Declaration," Reconvention of ASEAN Parliamentarians on Resources, Population and Development, September 1980.

[9] "Report: Asian Conference of Parliamentarians on Population and Development," United Nations Fund for Population Activities, Beijing, October 1981.

to effect a more equitable sharing of technology and expertise, was recommended at Kuala Lumpur and Beijing. The latter Conference also called for a strengthening of cooperation among the countries of Asia. The International Conference on Family Planning in the 1980s (Jakarta, 1981)[10] stressed local community involvement in the initiation, design, management, and evaluation of programmes.

Perhaps the most important recommendation to come out of these conferences urged that funding be substantially increased by both developing countries and donors, in order to extend and strengthen family planning services. For example, parliamentarians at Colombo endorsed a goal of one billion dollars in outside contributions, to be matched by corresponding developing country allocations, by 1984. This goal was reaffirmed at Beijing and at Jakarta.

Successful initiatives in technical assistance

A number of international and regional activities have been undertaken in response to many of these recommendations.

At the international level, the Population Information Network (POPIN) was established by the United Nations secretariat as "a decentralized network of libraries, clearinghouses, information systems, and documentation and reference centres for the purpose of improving the flow of information among countries."[11] In the Asian region, POPIN works through ESCAP's Population Division to share information and assist countries in developing their own information networks.

In the field of research, UNFPA began funding in 1979 a comparative study of the impact of urbanization and migration on development in the Asian region. The project includes analysis of census data and migration surveys to develop information for use in policy formation and national development planning.[12]

The ASEAN Population Programme, created in 1976, exemplifies another successful regional initiative. The programme is comprised of twelve projects, five of which are funded by UNFPA with FAO as the Executing Agency, and seven by the Government of Australia. These projects cover a wide spectrum of population issues within a regional context, including integration of population and development, training for teachers, effects of migration, institutional development and personnel exchange, women in development, information systems and networks, and analysis of health care delivery systems.[13]

Several other Asian regional organizations and agencies provide population assistance. These include:

- The Asian Development Bank, which, since its first direct involvement in population programmes in 1978, has approved loans and provided technical assistance for buildings, equipment, and supplies totaling nearly $115 million.[14]

- The Asian and Pacific Development Centre in Kuala Lumpur, which undertakes training and research.

- The 21 independent Family Planning Associations in the ESCAP region that are members of the International Planned Parenthood Federation. The work of these associations varies according to local conditions and priorities. In many countries, governments have formally taken the local family planning association into partnership, assigning to it specific roles within the national programme.[15]

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[10] "Family planning in the 1980's: challenges and opportunities," Report of the International Conference on Family Planning in the 1980s, Jakarta, April 1981.

[11] *POPIN Bulletin*, No. 1, United Nations Department of International Economic and Social Affairs, January 1982.

[12] *Inventory of Population Projects in Developing Countries Around the World: 1980/81*, United Nations Fund for Population Activities, May 1982.

[13] Benjamin D. de Leon, "The ASEAN Population Programme in the ESCAP Region," ESCAP Third Asian and Pacific Population Conference, POP/APPC.3/GP/4, 24 June 1982.

[14] "The Bank's policy and assistance to the population sector," Note by the Asian Development Bank for the ESCAP Third Asian and Pacific Population Conference, POP/APPC.3/GP/1, 24 June 1982.

[15] "Population and family planning activities undertaken in the ESCAP region by IPPF and financial and technical assistance to national population family planning programmes," Note by the International Planned Parenthood Federation for the ESCAP Third Asian and Pacific Population Conference, POP/APPC.3/GP/2, 20-29 September 1982.

- The Gandhigram Institute of Rural Health and Family Welfare Trust in India, whose goal is to advance health and family planning programmes through training, research, and development of methods for service delivery.
- The Institute of Southeast Asian Studies in Singapore, which seeks to develop a programme of problem-solving, action-oriented research in population policy.
- The Population Center Foundation in the Philippines, which, in addition to working within that country's population programme, serves as a resource institution for population activities in the Asian region.
- The Press Foundation of Asia, which publishes *Depthnews,* a weekly news feature which focuses on themes of development, general economics, and population.
- The South Pacific Commission in New Caledonia, which assists governments in obtaining information about their populations for use in development planning.[16]

Many examples of successful initiatives within these regional organizations could be cited. For example, the Gandhigram Institute developed training programmes which include a year-long postgraduate diploma course in health education. The Institute of Southeast Asian Studies established in 1974 a Population Research Awards Program,[17] to encourage research activities among Asian social scientists and to provide them with technical support and guidance. The Press Foundation of Asia developed a "Let the Public Speak" programme, which provides a forum for regional experts to express views on population issues.

In the United States, the Johns Hopkins Programme for International Education in Gynecology and Obstetrics (JHPIEGO), established in 1974, makes reporductive health technologies available to medical schools in the developing world, trains physicians and other health personnel, and helps develop similar training centres in developing countries.

Another promising initiative in technical assistance is Paramedical, Auxiliary and Community Family Planning Personnel Training, initiated by the United States Agency for International Development in 1979, and administered in Asia by the University of Hawaii at Manoa. Its purposes are to train personnel, other than physicians, who are needed to provide family planning services, and to expand and improve in-country and intra-regional capability for such training.

Technical co-operation among developing countries (TCDC)

The Buenos Aires Plan of Action for Promoting and Implementing Technical Co-operation Among Developing Countries views TCDC as "a vital force for initiating, designing, organizing, and promoting co-operation among developing countries so that they can create, acquire, adapt, transfer, and pool knowledge and experience for their mutual benefit and for achieving national and collective self-reliance, which are essential for their social and economic development."[18]

Asian countries have much to offer to and gain from each other through technical co-operation in the population field. Of all the regions, Asia is the most experienced in matters of population policies and programme. The region possesses numerous expert individuals and excellent national and regional institutions. These varied resources are well suited for international co-operation in technical assistance for service delivery, information, education, communication, training, and research. The World Population Society (United States) and the Population Center Foundation (Philippines) organized the first major TCDC International Population Conference in Manila in 1978, focusing on "Increasing Community Participation in Population and Development Programmes."

If technical co-operation is to reach its maximum potential, identification of available resources and a means of systematic dissemination of this information merit high priority. Existing focal points, such as ESCAP's Regional Centre for the Transfer of Technology, could be the most cost-effective locations for these activities.

[16] *Guide to Sources of International Population Assistance 1982,* United Nations Fund for Population Activities, May 1982.

[17] This project, funded by the Ford Foundation and the International Development Research Center, was completed in May 1982.

[18] "The Buenos Aires Plan of Action for Promoting and Implementing Technical Co-operation Among Developing Countries," United Nations Development Programme, September 1978.

Lessons learned

In the ten years since the last ESCAP Conference, many lessons have been learned about population policies and programmes. The most encouraging of these is that the effective provision of voluntary family planning information, education, and services can accelerate the pace of fertility decline.

Several conditions enhance the effectiveness of family planning services--perhaps most importantly, the attitudes and motivation of participants. Family planning should be viewed as a natural ally of other developmental services. It must have political endorsement and socio-cultural acceptability. Commitment to and advocacy of population programmes are essential at all levels, from the national leadership to the individual health care provider. In addition, programmes have been even more successful when both the public and private sectors have worked together. Imperative for the success of any population programme is the involvement of women through education and the organization of women's groups and support services.

Another important lesson is the necessity for local leaders to be involved not only in carrying out programmes but in planning and designing them as well. This is essential not only in ensuring sustained attention and resources, but also in tailoring programmes to fit local conditions. The Japanese Organization for International Cooperation in Family Planning found that local community participation increased significantly when family planning programmes were integrated with other services benefitting the community.[19]

The importance of training and effective communications has also been proven over the past decade. It has been shown that it is not enough to train one or two individuals; rather, a "critical mass" of persons within a given organization should be trained. It has also been found desirable for training to take place as close as possible to the real work situation of participants, which also facilitates greater participation of women.

[19] "From worms and family planning to development by the people," Note by the Japanese Organization for International Co-operation in Family Planning for the ESCAP Third Asian and Pacific Population Conference, 20-29 September 1982.

Future of financial and technical assistance

In the current worldwide situation of belt-tightening and budget cutting, the future of financial and technical assistance warrants careful consideration. New and/or supplemental aid must be sought. At the same time, more than ever, hard choices must be made and priorities established in order to use limited resources most effectively. There will be a premium in coming years on efficient, goal-oriented management and programming, and on innovative technical assistance.

In terms of overall priority, the central population issue for the foreseeable future continues to be the lowering of population growth rates through reduction of high fertility levels. This has been recognized by the global community at numerous international meeting--for example at the biennial United Nations Population Commission in 1981, which recommended the convening of an International Population Conference in 1984. Similarly, the Governing Council of the United Nations Development Programme unequivocably mandated, at its 1981 and 1982 sessions, that voluntary family planning programmes and related activities be accorded highest priority in UNFPA planning for the 1980s. While this does not mean that other necessary and worthwhile activities in the population field should be ignored, it does imply relative concentration of attention and resources on those activities that are most relevant to lowering of population growth rates.

Some major areas for future international cooperation and assistance can be summarized in the following categrories.

1. *Regional collaboration.* The promotion and intensification of collaboration among regional family planning organizations can foster exchange of information, ideas, and expertise. The benefits of a continuing interchange of population policy and information among member countries were noted at the March 1982 ESCAP session. Many of the organizations discussed previously could provide vehicles for regional alliances, the role and importance of which should grow in the future.

One way to increase the productivity of limited population assistance is for geographically close and socially/economically similar countries to exchange acquired knowledge and expertise, as well as engage in joint efforts to probe previously untried strategies.

Efforts should be made to facilittate more field observations of successful family planning programmes, including commercial marketing of contraceptives. IPPF is currently investigating possibilities for technical assistance among its member family planning associations, which would supplement co-operation among governments.[20]

2. *Integration of population and development aid.* Technical assistance in the population field should be co-ordinated with programmes designed to reduce mortality, promote education, and otherwise advance social and economic development. Technical assistance programmes should seek to build family planning into the work of other relevant government and nongovernmental agencies.

3. *Training.* Training is clearly a major priority: for medical and non-medical family planning service personnel, for demographers and statisticians, for managers and development planners, and for communications specialists. (UNESCO foresees a shortage of 10,000 trained population communications personnel in the ESCAP region during the 1980s).[21] Technical assistance will be needed in the development of more effective training curricular, in evaluating training, and in improving teaching methods. Short-term, intensive on-site training can be particularly cost-effective. At its March 1982 session, the Commission urged the ESCAP secretariat to assist countries in organizing local training courses—a particular necessity in a time of leaner assistance budgets.[22]

University curricular could be upgraded to the master's and doctorate levels, in order to raise educational and research standards. Training should also be oriented toward greater participation by women in designing and implementing family planning programmes.

4. *Biomedical research.* Collaboration within the region and with scientific communities of other nations needs to be strengthened, in order to expand research and development of better, safer, and more acceptable methods of contraception.

5. *Social science research.* Action-oriented research, particularly of direct relevance to policies and programmes aimed at accelerating fertility reduction, can be substantially strengthened through international assistance and intra-regional collaboration. Studies on determinants of fertility behaviour, on urbanization and migration, and on the dynamics of change at the community level have particular importance at this time.

6. *Demographic data.* There is need for further aid in census and sampling techniques, and in use of computers for a more rapid processing and dissemination of census data.

7. *Contraceptive availability and distribution.* Availability of contraceptives may become a critical issue in the next decade. Many Asian countries rely on foreign donors for contraceptives manufactured in developed countries, where costs are steadily rising. Therefore, receiving countries will have to raise more revenue or more aid for contraceptive purchases, or develop indigenous or regional contraceptive manufacturing capabilities. In addition, innovative ways must be sought to achieve wider distribution of family planning methods and services. An increasingly promising concept, already used in such countries as Bangladesh and Sri Lanka, is the subsidized sale of contraceptives through various retail outlets, supported by advertising techniques.

Finally, ESCAP countries might consider future opportunities to express, through diplomatic activity, the seriousness with which they view technical assistance as a means to help solve their population problems. For example, at its third session in 1983, the High-Level Committee on the Review of TCDC will consider a draft resolution which calls for increasing TCDC specifically in the field of population.[23] The support of ESCAP members could greatly improve chances for passage of such a resolution, the first of its kind.

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[20] Note by the IPPF, *op. cit.*

[21] "Information, education and communication in support of population programmes: the Asia and Pacific experience," Note by the UNESCO for the ESCAP Third Asian and Pacific Population Conference, POP/APPC.3/GP/6, 20-29 September 1982.

[22] Draft annual report of the thirty-eighth session of ESCAP, E/ESCAP/L.72 (No. 15), 3 April 1982.

[23] "New policies, creative and innovative approaches to further the development of technical co-operation among developing countries," draft resolution submitted to the High-Level Committee on the Review of TCDC, TCDC/2/WG.I/L.3, 4 June 1981.

10.2 ASSESSMENT OF NEEDS IN THE FIELD OF POPULATION ACTIVITIES IN THE ESCAP REGION

by

ESCAP Population Division

General Background

This paper presents a brief account of the status and needs, in the region, of the collection, analysis and utilization of population data in development programmes, population and family planning policies and programmes, migration policies and programmes, population information, and population research and training. The needs mentioned are illustrative and not exhaustive, and are gathered from national documents, government responses to inquiries, appraisals and needs assessment reports of international agencies and mission reports of ESCAP staff members.

Population data collection, analysis and utilization

Among the less developed regions of the world, the ESCAP region has taken the lead in the collection of population data through censuses, vital registration and special surveys; in the analysis of population data; in population research; and in the formulation and implementation of population policies and programmes. One or more modern type population censuses have been conducted in all countries of the region with the exception of Democratic Kampuchea and the Lao People's Democratic Republic (in which only a partial census was conducted in 1973). Since 1979, 20 countries have conducted the 1980 round of censuses.

Legislation exists in most countries making vital registration obligatory on the part of the public, but effective systems of registration exist only in ten of them. There are several deterrents to establishing or strengthening nation-wide registration systems, such as generally low levels of education, the heavy investments needed indefinitely for the organizational structure, and the lack of trained persons to work at various levels of the system.

Thirteen countries participated in the World Fertility Survey (WFS). Of the countries which did not participate, a few, such as Australia, India, New Zealand, Papua New Guinea and Samoa, have conducted either periodic or *ad hoc* demographic surveys to obtain data on one or more components of population change. Some of these countries have had a history of conducting such surveys over a period of time whereas others have embarked upon them rather recently.

Although a large body of demographic data is available for several countries, a clear understanding of the demographic situation and its implications for development planning is unfortunately handicapped mainly by three factors. These are: (a) lack of data of the quality required for the periodic analysis of the demographic situation in countries which do not have either good vital registration systems or demographic surveys; (b) where the needed data are available, inadequate analysis and utilization of them in formulating or revising overall development policies and programmes, including population policies and programmes; and (c) a general lack of adequately trained persons for the collection, analysis and utilization of population data in most countries.

Population policies, including family planning

The ESCAP region has the distinction of having the earliest established, most massive, most successful and most numerous national population/family planning programmes aimed at reduction of fertility. Since 1950, an increasing number of Governments in the ESCAP region have adopted population or family planning programmes. At present, 26 out of the 39 member and associate member countries have official policies and national family planning programmes. Four countries (Australia, Maldives, New Zealand, and the Trust Territory of the Pacific Islands) do not have stated policies but support or permit family planning activities. Five other countries (Bhutan, Brunei, Burma, Mongolia, and Nauru) neither have a stated policy nor support family planning activities. In the remaining four (Afghanistan, Democratic Kampuchea, Iran, and the Lao People's Democratic Republic)

information on the current position is not available. Almost 98 per cent of the region's population lives in the first two groups of countries.

The reasons for adopting family planning as a national programme have varied from country to country. In general, all of them have kept in view the ultimate goal of balancing the size and growth of population with the resources available for improving the levels of living of their people. Other common reasons relate to social development, such as improvement of the health of mothers and children, educational opportunities for dhildren, nutrition, and the status of women.

The rate of success of family planning programmes reckoned in terms of fertility reduction has varied among the countries of the region depending upon their ability to implement the programmes as well as upon the strategies and components of programmes. Declines in percentage terms were higher during the period after 1965 than before then. During the period 1965/70 to 1975/80, the reduction in the crude birth rate for the countries of the region as a whole was 20 per cent. There was a reduction in all countries with the exception of Papua New Guinea, where the crude birth rate did not change. It was over 20 per cent in China, Indonesia, New Zealand, the Republic of Korea, Singapore and Thailand; 10-20 per cent in Australia, Fiji, Hong Kong, Malaysia, the Philippines, India, and Sri Lanka; and less than 10 per cent in other countries. The recorded reductions of 30 per cent in the crude birth rate in Democratic Kampuchea and 11 per cent in Mongolia were perhaps due mainly to reasons other than family planning.

Far from developing a sense of complacency with such achievements, most of the countries have been vigorously implementing social and economic development programmes which would have the indirect effect of reducing fertility. In addition, they have been continuously exploring innovative approaches most suited to local conditions for reducing fertility further. In several countries, family planning is integrated with maternal and child health services. In a few countries, family planning is also integrated with some selected development programmes such as education, nutrition and parasite control. The concept, scope and pattern of integration varies from country to country.

Since the Second Asian Population Conference (1972) and particularly after the World Population Conference (1974), there has been an increasing recognition of the need to consider population policies and programmes as integral parts of social and economic development. This implies that population policies and programmes should be conceived in a broader perspective encompassing all population variables, such as population size and density, fertility, mortality, age structure, education, employment, geographical distribution and internal and international migration, and their interrelationships with development variables.

Migration

Several governments have recognized various problems that already exist and which are liable to become more serious in the future because of the ever-increasing rate of internal migration and urbanization. In order to tackle the current problems as well as those that are emerging, some steps have been taken, such as resettlement programmes in two countries, development of subsidiary growth centres in a few others, and integrated rural development in some. Family planning services are provided in all such programmes. In small island countries, internal migration has resulted in considerable overcrowding in the capital cities or capital islands, necessitating increased investments in the social and economic infrastructure.

Another demographic phenomenon which is of considerable concern to some countries is international migration. With the recent increase in employment opportunities in the international job market, the Asian and Pacific countries are losing a considerable proportion of their educated and skilled citizens to countries where economic opportunities are better. The Asian countries have rather high rates of net emigration, mainly to the Middle East and to a lesser extent to selected Western countries, while in the Pacific sub-region the emigration is mostly to Australia and New Zealand. Although such a movement of labour is often seen as an important source of foreign exchange for the countries of origin, it also represents a "brain drain" from these countries. However, countries of the region have not so far initiated any organized efforts to cope with the problem.

Research utilization

There is growing recognition in ESCAP member and associate member countries, both by researchers and planners, of the fact that the formulation of viable development policies and strategies is hardly feasible without a strong information base and that research is an essential prerequisite for such information. Nevertheless, even in those countries where the capacity for population research is

substantial and the quality of its output of a high order, the utilization of its findings for the formulation and implementation of integrated population and development policies is rather limited. Several reasons can be adduced for this state of affairs.

Management and co-ordination of research efforts is rather inadequate with very little direction from the users of research findings – Government agencies – regarding the kind of research needed for the country's development programme. Consequently, not all studies carried out by researchers have had much relevance to the national needs and problems. Even where studies have relevance to national programmes, the implications of the findings for action programmes are not adequately analysed and interpreted or are lost in voluminous reports in scientific jargon, thus being of little use to programme administrators. Furthermore, there is little communication between research institutions and researchers on the one hand and the programme implementing agencies and programme executives on the other, with the researcher not understanding the needs of the administrator and the administrator not appreciating the potentials of the researcher. The result is that the studies become mere academic exercises, no doubt enriching knowledge, but as far as the needs of the country are concerned, a national loss.

There is also a tendency for the population researchers to stay within their group, with the result that there is little communication or co-ordination between the population research centres and the development studies centres on the broader aspects of population-development research.

In some of the less developed countries, where there is little indigenous capacity for research, whatever research is done is generally carried out by persons who are based in other countries and who follow their own academic pursuits and collect data solely with the objective of adding to the body of knowledge. There is no attempt to develop or strengthen local research expertise and the studies have little or no relevance to the needs of the host country. Many times the Government is oblivious of what research has been carried out and for what purpose.

Manpower development

Reference has been made in the foregoing to the lack of trained manpower to undertake systematic collection and analysis of data and to promote their utilization in the planning process, as well as to the depletion of the limited numbers of trained persons, through migration to economically more advanced countries. This has created problems in a region which is generally short of adequately trained personnel at different levels of national administrations, especially in those countries where, to start with, the manpower base was rather low. A review of national efforts for manpower development in the ESCAP countries would provide information on the current status and the future needs for training in the different aspects of population.

(a) Demography

An examination of the institutional situation in the countries of the ESCAP region shows that several of them have population training and research centres, either as national institutions or as university departments or as part of national social and economic development institutions; in some countries all three situations obtain. Australia, Bangladesh, China, Hong Kong, India, Indonesia, Japan, Malaysia, Nepal, New Zealand, Pakistan, the Philippines, the Republic of Korea, Sri Lanka and Thailand have one or more such centres.

Institutions in some of these countries offer a regular academic programme leading to a master's degree in demography or population studies and provide facilities for working towards a doctoral degree. In others, the intitutions offer programmes of population studies of varying concentration as part preparation for a baccalaureate degree in statistics, sociology, economics or geography. In developing these programmes, ESCAP member countries have received assistance in the form of overseas fellowships for advanced training, visiting teachers, equipment and library books from a variety of international and governmental agencies, from private foundations and from universities having reputed population studies programmes.

Academic and research programmes of the institutions in some countries such as the Australian National University and the University of the Philippines Population Institute have attracted students from other countries of the ESCAP region for master's and doctoral degrees. Since 1957, the United Nations has been offering fellowships to middle-level personnel working in governmental agencies and teaching and research institutions for the one- and two-year postgraduate programmes in population studies at the International Institute for Population Studies (IIPS), Bombay, India which is among the earliest established institutions in the region. Between 1957 and 1982, IIPS has trained

244 persons from 22 countries of the Asia and the Pacific region in addition to 429 Indian students and a few from countries outside the ESCAP region.

(b) Family planning

Some ESCAP countries have established a national family planning training and research institution, and, in the case of countries that are large in size or population, a chain of secondary and tertiary level (state, provincial, subprovincial, local etc.) training centres. Usually, all of them are engaged in family planning training, with the national and sometimes the state or provincial level institutions carrying out biomedical, communications, social science, management, and field operations research related to family planning.

The training of trainers in family planning has attracted considerable attention in several countries of the ESCAP region. The first generation of trainers in most of the countries were drafted from existing health training programmes, and many of them had been trained in institutions abroad. Gradually, some of these countries started developinig their own capacity for training trainers. Initial training of trainers of secondary and tertiary level training centres, their refresher training, and re-training when programme emphases changed have been important functions of national family planning training centres. Some of the countries which have not established such facilities have developed their trainer manpower through subregional arrangements, study tours, specially organized training courses under bilateral arrangements in those countries of the region which have well established trainer-training programmes, and/or training in countries outside the ESCAP region, Yet others do not have any cadre of trainers specifically trained for this purpose and depend entirely upon part-time teachers.

Several international agencies, bilateral donor countries, private foundations and non-governmental organizations have contributed to national efforts in training and in developing trainer manpower. These organizations include the United Nations the International Labour Organization, the Food and Agriculture Organization of the United Nations, the World Health Organization, the Population Council, the Ford Foundation and the International Planned Parenthood Federation (IPPF).

Perhaps the first regional effort was made in 1970 by ESCAP (then ECAFE) when it organized the Working Group on Training of Personnel in Family Planning Programmes for a group of countries which were in the process of establishing national family planning programmes. With a view to sharing the experience already available in the region, persons of demonstrated competence from those countries were invited to participate as discussion leaders in the meeting as well as to serve as resource persons for the working groups for planning national training programmes. In the non-governmental sector, IPPF through its Southeast Asia and Oceania Regional Office established in 1964 a regional training centre in Singapore with a view to training persons from different disciplines at high echelons to administer, train and promote family planning and to assist member countries to establish their own national and, where required, subsidiary training centres.

Within the region, at the intergrovernmental level, the erstwhile Intergovernmental Co-ordination Committee for Co-operation in Population and Family Planning in South-East Asia (IGCC) conducted several activities to strengthen the training capacity in its nine member countries. Among national institutions which have contributed a great deal to the training efforts of other ESCAP member countries by organizing special trainer-training programmes are the Central Family Planning Institute (now the National Institute of Health and Family Welfare) of India since the middle 1960s, and more lately the Centre for Education and Training of the Indonesian National Family Planning Co-ordinating Board. The Japanese Organization for International Co-operation in Family Planning Inc., in collaboration with the Government of Japan, has been organizing every year special training programmes for senior officials and trainers of national family planning programmes.

(c) Population information

Organized training facilities for population information are rather limited. Training is usually *ad hoc* in nature, of varied duration and content, almost always tailored to meet the needs of specific groups of persons working or recruited to work in population information centres. The National Institute of Health and Family Welfare of India and the Population Center Foundation of the Philippines do offer set courses, but these are not done on a regular basis. The Population Division of ESCAP has devised a modular training programme which is offered at ESCAP headquarters to small groups from member and associate member countries whenever there is a demand or, upon request, as an in-country training programme. Training by attachment is also arranged in the Reference Centre of the ESCAP Population Division.

NEEDS OF COUNTRIES

Collection of data, analysis and utilization

The priority needs in the 20 countries that recently conducted censuses are to analyse the census data expeditiously and fully, and to utilize the findings of the analysis in the formulation or revision and implementation of integrated population development policies, plans and programmes. In the countries which have yet to undertake the 1980 round of censuses, there will be immediate needs for cartographic maps and communication support for improvement of the coverage and quality of census data, and later for the complete analysis and full utilization of the data in the planning of programmes.

While endeavouring to establish or strengthen effective vital registration systems over a period of time in countries where such systems do not exist or where they are inadequate, there is an imperative need at the same time to make use of alternative, feasible and low-cost ways of obtaining adequate data to make reliable estimates of vital rates which are essential for the planning process.

Intercensal demographic sample surveys are needed in several countries to obtain estimates of vital rates. In countries which are experiencing considerable internal migration there is a need to obtain data on this aspect from such surveys or through special surveys undertaken for the purpose.

Having stressed the point that there is a need in some countries to collect up-to-date and reliable data, it is also necessary to emphasize that in some others population and related data continue to be collected on a regular basis through censuses, vital registration, sample surveys, family planning service statistics, and other administrative records. However, only a few of these countries have attempted to analyse these data systematically for use in the formulation and implementation of development plans and programmes. Hence, it needs to be underlined that both the development of a reliable data base and the improved analysis of existing data are necessary to obtain a clear picture of the demographic trends and their implications for development planning.

International assistance will be required to establish or strengthen facilities for the rapid processing of data from censuses, vital registration and special surveys in countries where such facilities either do not exist or are inadequate.

The range of training needs in this area in the countries of the ESCAP region is wide. At one end there are countries which need to undertake a systematic analysis of the professional staff structure for the collection and analysis of data, in the light of the needs of national development planning, so as to strengthen further that structure in selected specialities. At the other end are countries whose needs are in the area of basic essentials such as the training of field level workers and their supervisors in the collection of data. Needed immediately, as a short-term measure, in some countries are more demographers trained abroad at master's and doctoral levels who, on their return, can train persons in their own universities and institutions. The need in some countries is to train a technician category of demographer/statistician in addition to those trained at higher levels perhaps, to obviate the loss through migration to economically advanced countries. In yet other countries a pressing need is to train the staff of the bureau of statistics and census at provincial and lower levels.

There would appear to be a pressing need in some countries to augment the staff strength of the bureau of statistics and census at the national or central level, as well as, perhaps in much greater measure, at the provincial and lower levels in order to make decentralization really meaningful. This would generate an enormous need for a sustained training programme in most of the countries as very few of them have adequate peripheral organizations.

In order to ensure better utilization in the planning process of data which have been collected, analysed and interpreted, it is essential to provide short-term training in the interrelationships between population change and development planning for administrators and planners both in the sectoral ministries and in the planning ministry itself.

Population policy

In those ESCAP countries that have a population policy, there is invariably a need to broaden it to allow for consideration of the interrelationships between population and development in addition to fertility control, which is the main focus of most of the existing policies. Evolving a consistent set of national development objectives which should be based on demographic goals is a matter of high priority. In order to achieve this, action needs to be taken along several lines.

A national commission needs to be set up at the highest possible level which would include in

its composition the several development-oriented agencies that have an impact upon population and whose programmes are affected by population variables. It will co-ordinate and formulate a comprehensive and effective population policy within the framework of the country's over-all development policies, plans and programmes, and evaluate its implementation. The national commission should be supported by an adequate and effective multidisciplinary secretariat. In several countries the national plan organization itself needs to be strengthened in order to bring together population and development planning. Population issues also need to be integrated into the development plans of all related sectoral ministries; interministerial or interdepartmental population committees at the several levels of national administration need to be set up in those countries where they do not exist at the present, to oversee implementation of programmes.

Some of the countries do have an organization at the national level which is either a part of the health ministry or a separate ministry or an intersectoral body. However, the primary focus of these organizations is family planning. Other population matters are the concern of different ministries. In the context of comprehensive and integrated population and development policies and programmes, it is imperative that all population matters should be the responsibility of a single inter-sectoral body having a very close relationship with the national development council and the national plan organization. Such of those countries which do not have a population policy will need to consider taking steps to evolve comprehensive and integrated policies, and set up an organization to co-ordinate and evaluate population policies, plans and programmes.

Given the trends towards decentralization of planning and implementation in order to make the programmes more effective by relating them to smaller groups of people, thereby ensuring their participation in the activities, it is essential that organizations similar to that recommended at the national level (the national commission) be set up at the secondary and tertiary levels of the administrative hierarchy. These would draw up policy options for consideration by the national commission as well as plans and programmes for the local area within the framework of national policy.

Such a development would entail increasing the awareness of population processes among (non-demographic) researchers, planners, administrators and others whose positions require deeper insights into the interrelationships between population and development. It would be necessary to arrange training for such persons at the regional, national and sub-national levels through technical seminars and workshops on population dynamics in general, and in such particular areas as data collection, analysis and interpretation, implications of demographic levels and trends, and the interrelationships between population and development.

Also needed to assist in the formulation and implementation of integrated population and development policies, plans and programmes, is the strengthening of teaching and research in the field of population and development. There is an imperative need in several countries for regional and extraregional post-graduate training in this area for qualified personnel working in national, regional and local universities and institutions. Such training should strengthen research on the interrelationships between population variables and development processes at national and local levels. Furthermore, after the training of such persons, who will eventually become trainers, there is a need to develop training programmes to emphasize the interrelationships between population variables and development processes at the undergraudate and post-graduate levels in national, regional and local universities in order to develop the required manpower for the country as a whole.

Population research

(a) Research needs

In most countries of the region, population research needs to be policy-oriented in order to provide governments with well-tested policy options. Research should be action-oriented, with the specific needs and goals of the governments in view so that the findings may serve as a practical tool for planning and programme development. Needing to be studied further is the interplay of social, economic and demographic variables in development processes with special attention to the influence of social and economic measures on fertility, mortality and population growth. Micro-level studies using anthropological techniques to understand behavioural patterns at small community levels need more attention. Studies are also needed on how programmes not directly related to family planning contribute to fertility reduction and on the demographic impact of development projects. Most of the countries will need a considerable amount of assistance in the form of fellowships, equipment, books and access to information. In the case of some, external assistance will be needed even for the national and subnational training programme.

Even in those countries where demographic research is well established, areas other than fertility are largely unexplored. In view of the negative correlation generally observed between the level of infant mortality and the acceptance and effectiveness of family planning, family planning programmes may reach a point of diminishing returns unless mortality, particularly infant mortality, is reduced quickly. Studies are therefore needed to assess the causes of infant mortality in those sections of the population where it is high, so as to obtain leads for further efforts to reduce infant mortality. Such efforts would constitute a socially desirable measure which could also promote increased acceptance of contraception.

Studies are needed on the social and economic impacts of international migration on the countries of origin of the migrants.

(b) Organization and utilization of research

Although there has been considerable population research in the ESCAP region, it would appear that some countries need to have a more systematic approach to research. Priorities for research have to be identified and a research agenda drawn up. Obviously, this agenda should be linked to and should reinforce the development of national population policy. Since most of the countries have ethnic, cultural and linguistic differences, national research ideally should be divided among several competent regional research facilities, with each one being responsible for a geographical or ethnic area. It would be necessary to identify such institutions and strengthen their human, financial and material resources.

In order to accomplish all this a national research organization, as a part of the national population organization, needs to be set up or strengthened. This organization should have a multi-disciplinary staff representing all the specialities that are needed for research on population and development. It will be responsible for managing, co-ordinating and funding research in the country. It will maintain a roster of research institutions and researchers in the country and ensure that requests for research proposals are publicized widely among these institutions. It will also ensure that national research is equitably distributed among regional or provincial institutions so that the government can have an idea of the needs of the whole country.

The national research organization will need the assistance of a clearinghouse to serve as a repository for all information concerning population research. Periodically, the clearinghouse will prepare a research agenda which would be in the nature of a state-of-the-art docement, indicating what studies have been carried out in the country, what relevant information is available from other countries, and what more needs to be done in the country to provide answers to problems that programme administrators face. The clearinghouse will evolve mechanisms for the prompt and selective dissemination of the findings of population and related development research to policy makers, planners and administrators and thus promote their utilization in the formulation of policies and programmes. It will further ensure that mechanisms for continuing communication between researchers and policy-makers are developed or strengthened.

(c) Manpower development for research

The country interests point to the need for each country to train its own professional research staff. This is best done by linking training and research, thus providing scope for mutual reinforcement as well as for efficient utilization of limited resources. The professional competence of the staff of universities and governmental institutions, especially of those which are away from the national capital, should therefore be strengthened with advanced training in reputed institutions abroad. Once an adequate core group of competent researchers has been trained, the country can become self-sufficient in its research and training programme. Some of the countries, as a first step, will need a large number of fellowships for advanced training in different countries to develop its core group. A few countries which have already made progress in this direction will need assistance only for the training of their researchers in highly specialized fields.

Gradually these core groups can organize national and, where necessary, sub-national training programmes for researchers until the target set for the country has been met. Thereafter, periodical seminars for population and related research workers from different institutions and universities, in which planners and administrators should also participate, would not only help to strengthen their research competence but also improve their appreciation of national research needs.

Family planning programme implementation

Improvement in over-all management at all levels would appear to be a common need in most of the national family planning programmes in the

ESCAP region. Procedural and organizational changes that would improve administration and supervision are needed, accompanied by co-ordination with training or re-training activities.

(a) Decentralization

In several countries there is over-centralization of administrative and decision-making authority, which tends to delay action and limit initiative in the field. Therefore, decentralization and transfer of more authority to secondary and tertiary levels of administration should either be introduced or intensified. A functional analysis needs to be carried out to determine in what way and to what extent the central organization can best support the subsidiary ones. This analysis would help in evolving a more efficient and less top-heavy organization at the central level. Decentralization would also facilitate functional integration of family planning with other development programmes at operational levels.

Real decentralization of planning and implementation of the different aspects of the programme is also necessary. Each province should set its own targets in the context of over-all national targets as well as determining the course most suitable for achieving them. Educational and communication material should be designed at district level or lower, and related to the needs of the area and of any special target groups in the area. Regional population information and educational centres should be established and research that brings out regional differences and their solutions encouraged.

(b) Integration

Integration of family planning with maternal and child health (MCH) services has been an accomplished fact in some countries, with encouraging results. Better infant and toddler care, including nutrition, immunization and timely and adequate care for the ailments of childhood, contributes to the lowering of infant and childhood morbidity and mortality and to improved acceptance of family planning. There is an imperative need to strengthen rural and urban MCH services and to integrate fully family planning education and service with those services. The under-five and under-three programmes, involving supplementary feeding, nutrition education, immunization, general health education, and family planning education, have potential for improving family planning acceptance and should be introduced on a wide scale.

Most of the countries in the ESCAP region are striving to reach the target of "Health for All by the Year 2000" being promoted by the World Health Organization. Since this is a community-level programme, manned by persons selected by the community and covering health education as well as preventive and simple curative health services, it is a very promising channel for carrying the message of family planning and providing non-clinical family planning services. Those countries which have not yet included family planning in the primary health care programme and which are interested in family planning need to integrate family planning with primary health care.

Pilot studies in some countries have shown that, when family planning is integrated with programmes that are designed to improve the status of women such as home economics and home management, pre-school child care, promotion of literacy, and income-generating activities, it has motivated women to space or limit their families. Countries which have already conducted such pilot studies need to utilize their findings as a national programme, and those that have not, need to launch pilot studies with a view to obtaining guide-lines for initiating nation-wide women's programmes, with family planning as an integral part of such programmes.

Integration of family planning – education and services – with various other programmes is possible and needs to be pursued vigorously. Examples of such programmes are the integrated rural development programmes, co-operatives, agricultural extension, the Applied Nutrition Programme, adult and functional literacy, and workers' education. Wherever integration with these programmes is sought, community-based pilot studies which would combine selected activities of the programme with family planning need to be carried out, with the ultimate objective of applying their findings on a national scale. It would be very useful to try out different approaches within different sub-regions of the country so as to evolve the most effective approach for that area. It is expected that the pilot programmes will be evaluated rigorously. However, when these are adopted or adapted on a national scale, it is essential that a mechanism for the continuous evaluation of the programme be built into it.

(c) Organizational development

Strengthening and expansion of the planning, organizational and managerial capabilities at all levels, through training and augmentation of staff,

continues to be a need in many countries. Joint programming on a vertical plane at different tiers within the organization (decentralization) and on a horizontal plane at all levels with related agencies (integration) needs to be developed in some countries; the latter is especially important with integrated programmes. Since the health organization in a country, especially the MCH component, is a *sine qua non* for the effective and efficient delivery of family planning services and for attaining a more extensive coverage, there is a compelling need for the family planning organization to develop a very close working relationship with the health organization at all levels. Local-level committees of officials and non-officials will assist in obtaining community participation in programme activities in order to promote acceptance and continuation of contraception, identify local service delivery problems, and convey service demands.

(d) Personnel management

Personnel policies need to be reviewed to increase the emphasis on aptitude and merit in recruitment and promotion of staff rather than on seniority or other considerations. The management of the field worker structure needs to be streamlined with adequate provision for effective supervision, periodical refresher training and, when necessary, re-training, as well as a system of rewards and career development.

(e) Financial and material management

In some countries there is a need for change in financial management to improve the efficiency of programme operations. Greater freedom in financial decision-making needs to be given to the subsidiary levels of administration. Accounting and reporting procedures need to be strengthened in some countries. Also needed is a review of inventory systems to ensure the adequacy, suitability and efficiency of the systems in operation, accompanied by the training of personnel in stores management.

(f) Management information system

The management information system needs to be strengthened in many countries. There is a need to review the system in order to ensure greater accuracy of incoming data as well as their timelines and more effective analysis, so that they can be used for monitoring and evluating the programme and for redirecting programme implementation strategies.

(g) Manpower development

Extensive and effective training in the management of family planning programmes is a pressing need in almost all the countries of the region. It is needed at all levels and on a wide range of management themes, appropriate to the role of a particular level or a particular group in the management process. Some of the themes are: planning and coordination, goal setting, analysis of organization and design, information systems and decision-making, evaluation, personnel motivation and development including supervision, costing and budgetary methods and financial management in general, and stores management.

More effective integration of family planning with MCH services calls for strengthening of human resources in both aspects of the integrated service. This has a quantitative as well as a qualitative dimension. In some countries, although there is budgetary provision for a high ratio of field-level workers to the population that they serve, there are so many vacancies that the objective of achieving extensive as well as intensive coverage is defeated. Given the unemployment in most ESCAP countries, it stands to reason that an intensified recruitment drive, accompanied by the offer of better pay, living accommodation at place of work, and transportation within the area covered, would considerably improve the situation. Simultaneously, training facilities will have to be augmented, training and placement co-ordinated, and curriculum reforms effected. It follows that the supervisory mechanism will have to be strengthened by maintaining an optimum ratio of supervisors to those supervised and by better training of supervisors.

At the higher echelons, there is a need to train physicians and public health nurses in the concepts of integrated MCH/family planning programmes, in all accepted methods of contraception, and, wherever it is allowed, in male and female sterilization and in the medical termination of pregnancy. Apart from the technical aspects of family planning, there is a need to train the staff, appropriate to their roles, in management, communications and education, data collection and analysis, supervision, and training. Initial training has to be reinforced by refresher training and, where necessary, by retraining.

Until such time as trained field-level MCH workers are available in adequate numbers, basic MCH and family planning services will continue to be provided by trained traditional birth attendants (TBA). A few countries have had extensive experience in the training and use of TBAs. This

experience could be adapted to suit the needs of those countries wishing to use TBAs, where they may be tried on a pilot scale, and ultimately extended to cover the entire country. Even after a country becomes self-sufficient in field MCH staff, it will be necessary to involve TBAs in the programme, perhaps in the context of primary health care.

(h) Studies

Studies on the organizational aspects of family planning programmes are needed in order to strengthen, expand or reorganize the programmes. The need for analytical studies to effect real decentralization has already been mentioned. Studies are also needed to develop organizational models for integrating family planning with other development programmes. Operational research on the deployment of MCH staff at the field level, and the optimal work load that each can carry without detriment either to MCH or family planning, needs to be carried out in each region of the country in order to strengthen both the programmes. As a corollary to this, studies on the supervision of field staff in order to enhance their efficiency will be needed. A great deal of research is still needed to strengthen the communications and educational component of national family planning programmes.

Summing up

The foregoing represents an attempt to review the current status of population programmes in the countries of the ESCAP region and the immediate and future needs for initiating, expanding or strengthening population programme activities. The diversity of the needs is obvious.

Some of the countries have already made considerable investments – human, financial and material – in the population sector. They have carried out a great deal of research, launched and sustained viable programmes, developed the required manpower and established their own facilities for maintaining and increasing the tempo of training and research. The future needs of such countries lie in sophisticated training in specialized areas and prompt technical assistance of a high order.

The needs of the majority of the countries, however, are more basic and cover a wider sphere. Some of these countries will continue to need financial and technical assistance for some time to come in the areas of organizational development, including the establishment of the infrastructure, improving indigenous research competence, and manpower development.

10.3 PROMOTION AND SUPPORT OF TCDC IN THE FIELD OF POPULATION

by

ESCAP ECDC TCDC Services

Introduction

Co-operation among developing countries is recognized as an integral part of the International Development Strategy for the 1980s. With respect to population, the demographic aspects have provided scope for exchange of knowledge, experience and expertise and co-operation among research and training facilities; the process of such co-operation can be further strengthened. There is also scope for more active functional collaboration among developing countries in the form of exchange of appropriate technology, as in the case of family planning programmes. The required informational and institutional support deserves continuous consideration, keeping also in view the probable financial constraints.

Promotional and supportive activities for TCDC

A focal point for promotional and supportive activities for TCDC is the Regional Centre for Technology Transfer (RCTT), which works through a system of networks and focal points designated by the Governments of the participating countries: Australia, Bangladesh, India, Indonesia, Iran, Malaysia, Nepal, New Zealand, Pakistan, the Republic of Korea, Sri Lanka, Thailand, Tonga and the United Kingdom of Great Britain and Northern Ireland. It also maintains close links with United Nations bodies and specialized agencies and with institutions engaged in scientific and technological development.

Many developing countries of ESCAP, especially the least developed ones, feel the need for strengthening and streamlining institutional structures for technology transfer and development. Where such institutions already exist, RCTT provides advisory services, and where they do not, RCTT gives advice and options on their establishment.

It may be mentioned here that the Third ESCAP Population Correspondent Workshop for network members from India and Sri Lanka was held at RCTT in 1979, utilizing the nascent facilities of the Centre.

Scope for further intensification: some illustrations

Exchange of expertise

Developing countries by now have accumulated a wealth of expertise in the holding of censuses, the analysis of data and the utilization of data for development planning and policy purposes. Exchange of experience and expertise and co-operation among research and training facilities has to be a collective process, one developing country with a specialization in a particular aspect learning from another developing country's specialization. Systematic identification of each developing country's particular expertise is necessary to make TCDC a meaningful and broad-based invaluable instrument for development.

Areas for intensification of TCDC are:

(a) Country reports on census results, with experts from developing countries participating in their preparation, evaluation and analysis;

(b) Analysis of the census data, assistance in computerization, with maximum uniformity in format, particularly with respect to fertility trends, economic characteristics of the population, vital statistics etc.;

(c) Sampling design and sample surveys to cross-check census where necessary and to elicit inter-census data.

Field study and on-site work clinics

It is generally recognized that exchange of experience and expertise through seminars has to be reinforced through field level observation and study. Two possible areas are outlined below:

(a) In the field of family planning, on-the-spot study of successful country experiences in

China, the Republic of Korea and Thailand would be of great benefit with respect, among others, to the devices adopted, the means of propogating their acceptance, the governmental and other institutional machinery, and, last but not the least, the socio-economic environment, particularly the status of women in the society;

(b) Studies in transmigration and land settlement, a field of Indonesia's experience, for instance, can embrace:

(i) Methodologies of drawing up land settlement programmes, including identification of target groups for migration and areas of immigration, financial implications of inducements and transport requirements, preparation of land areas for settlement, administrative and infrastructure support, production planning in newly settled areas, supply of inputs and extension services etc.; policy options with respect to self-financed settlement through the homestead system and government-assisted settlements;

(ii) Integration of broader objectives in land settlement, beyond increasing national production and income of settlers, like equitable income distribution and asset holdings, avoiding agrarian problems, ecologically improved use of resources, and promotion of harmonious relations of "new" with "old" settlers;

(iii) Assessment of the success of land settlement programmes; a purposive selection of areas (and households) can be made in terms of pioneer, consolidating and mature stages.

Collaboration among research and development institutions

It is increasingly recognized that national institutions of excellence must be concerned not merely with conducting seminars, training courses and the preparation of lecture materials. They should increasingly be mutually agreed sites for investigation and comparative study of specific instance of development and adaptation of technology. For instance, a topic for such active collaboration among research and development institutions in the field of population is indigenous family planning methods and devices and the benefits, and side effects of the currently adopted family planning methods, in the context of developing countries in the ESCAP region.

Technology transfer

There is a growing recognition that TCDC should increasingly transcend the familiar syndrome of seminars and study groups and move on to functional collaboration in development/adaptation of technology. To mention an instance in the field of population, joint ventures in the manufacture of family planning devices could be promoted, as could joint negotiations with transnational corporations for technology transfer and bulk purchase by developing countries with regard to imports of, for example, birth control pills.

Institutional and other support

Focal point for TCDC

Focal points for TCDC have been established by most of the Governments of the developing countries of ESCAP. Their effectiveness, particularly with respect to interdepartmental/inter-ministerial co-ordination for purposes of TCDC, needs in most cases to be strengthened. Focal points for TCDC in the national Governments, both as providers of inputs and as disseminators of information at the national level, have a vital role to play in ECDC/TCDC information systems at the regional and global levels.

Identification of TCDC capacities and needs

There continues to be a need for systematic identification of TCDC capacities and needs through specifically oriented regional/subregional seminars, operation of a TCDC information system etc. The sectoral intergovernmental committee meetings on population in ESCAP as well as other meetings on population and development could specifically include in their deliberations the identification of TCDC capabilities and needs in the field of population, as outlined earlier. Detailed inventories need to be prepared on the experts and institutions involved in all aspects of population. Collection and dissemination of information requires forging of links with information systems at the national, regional/subregional and interregional levels and interagency co-ordination in the United Nations development system. The relevance, speediness and usefulness of information systems require that the referral nature of the information systems be transformed into an inquiry service, supported by appropriate computer/communication systems.

Co-operation among research and training facilities

Although the inter-country exercise in the context of the UNDP Inter-country Programme for 1982-1986 and the deliberations and decisions in the Commission Sessions have identified institutions of excellence, there is a continuing need for such a process to cover more areas in the field of population, in view of the intimate links between population growth and all aspects of development. Increasingly, it has been found advantageous to establish networks of national centres of excellence instead of creating new regional institutions. It has also to be kept in mind that UNDP assistance will increasingly be in the form of programme support rather than support for institutional costs. The process of identification of national centres of excellence, in view of national susceptibilities, will have to be at an expert impartial level and yet meet with a concensus among national institutions involved. Supplementary funding may be necessary to assist the identified national institutions of excellence to disseminate information on their facilities and to arrive at agreed modalities of active co-operation among themselves. The institutions so identified can be upgraded not only through national resources but through regional IPF (indicative planning figure), country IPF, particularly through the portion earmarked for TCDC, or by assistance from developed countries in the form of financing the training of personnel from more than one developing country in a national institute of excellence.

Funding

The need for adequate funding for TCDC activities, in particular the aspects concerning regional IPF, country IPF, country IPF earmarked for TCDC, and financial support from multilateral aid agencies and developed countries, has been under intense consideration at various forums.

In the context of identification and financing of inter-country projects in the field of population, it is to be noted that UNDP proposes, in consultation with ESCAP, to convene a meeting of government development assistance co-ordinators with UNDP and United Nations officials during 1983 in order to examine the implementation of the inter-country programme and, equally important, to consider also the ever evolving needs of the region and to advise on how the United Nations development system could make the optimum contribution to meet them. The proposed programme review meeting in 1983 would also take note of the ideas and proposals being made for future support.

10.4 UNFPA FINANCIAL AND TECHNICAL ASSISTANCE TO THE ESCAP REGION

by

United Nations Fund for Population Activities

Introduction

The relationship between the United Nations Fund for Population Activities (UNFPA) and the countries and territories of the Economic and Social Commission for Asia and the Pacific region has been a long, continuing and close one. It was the deliberations of the first Asian Population Conference, held at New Delhi in 1963 and the recommendations adopted unanimously at that meeting, that led directly to the historic decision of the United Nations Economic and Social Council in 1964 to authorize the United Nations to give technical assistance to action programmes on population. The Council decision itself led to the General Assembly resolution in December 1966 on "Population growth and development" (2211, XXI), which emphasized the necessity for accelerated action to implement the expanded population programme recommended by the Population Commission and endorsed by the Council. This action by the General Assembly provided the impetus for the establishment by the Secretary-General of a Trust Fund for Population Activities in July 1967 which in May 1969 became operational as the United Nations Fund for Population Activities.

The significance of the first Asian Population Conference as a landmark in the history of population programmes was underscored in 1972 by the Executive Director of the UNFPA:

> "The decision to hold the first Conference was characteristically bold. It came at a time when the international community was deeply divided on population questions. During the 1950's and early 1960's, the majority of member states of the United Nations were reluctant to face up to the implications of rapid population growth. It was the Asian countries which kept population issues alive in international forums and which began an international laboratory for the formulation and implementation of strategies to deal with population problems."[1]

There is no doubt that the deliberations of two Asian Population Conferences not only spurred population activities in the ESCAP region, but did so in other developing regions as well. Furthermore, the proceedings of these conferences have influenced the momentum and character of international population assistance to the developing countries.

Population policies in the ESCAP region

The ESCAP region has been a leader in official population policy formulation and government-supported action programmes dealing with population problems. Since the early 1950s, rapid changes have taken place among a large majority of countries in the region regarding demographic dynamics, political independence and identification of national concerns. Consequently, massive efforts have been made in country after country to programme socio-economic development and with a slight time lag, starting in the 1960s, organized activities have been initiated in the population sector as well. Historically, such a development is unique.

By the early 1960s only two countries in Asia – India and Pakistan – had formulated population policies and programmes to help reduce the rate of population growth. By the end of the 1970s, however, most of the countries had formulated specific policies.

According to the findings of the Fourh Population Enquiry of the United Nations, 16 countries of the region consider their rates of population increase too high, 8 countries consider their rates satisfactory, 5 countries feel their rates to be low

[1] R.M. Salas, *Asia: An Area Assessment*, statement to the Second Asian Population Conference, Tokyo, Japan, 1-14 November 1972.

and there are no data for the 10 remaining countries. It should be noted that invariably fertility reduction is the policy in countries which perceive their rates of population growth to be high, while mortality reduction is the official policy among those which perceive their growth rates to be low. An overwhelming majority of countries (about 83 per cent) consider that technological development and socio-economic restructuring would help solve the problems of population growth in their countries.

A majority of countries (63 per cent) consider their levels of fertility to be too high and almost all of them have policies to reduce fertility. An additional 28 per cent consider their fertility level satisfactory and only two countries – Democratic Kampuchea and Lao People's Democratic Republic – consider their level of fertility to be too low. The latter countries maintain policies to help increase the level of fertility.

An equal number of countries (63 per cent) perceive their levels of mortality as not acceptable. While there is no specific population policy in any of these countries to help reduce mortality, it is generally believed that almost all development and health programmes undertaken in these countries would contribute to a reduction of overall mortality. The level of mortality is considered acceptable in eleven countries of the region, including eight developing countries (Fiji, Malaysia, Nauru, Pakistan, the Philippines, Republic of Korea, Singapore and Sri Lanka).

Of particular interest is the fact that spatial distribution is emerging as the number one population issue in the ESCAP region, as is the case in some other regions. With the exception of Nauru and Singapore, all the countries for which population policy data are available consider their spatial distribution as inappropriate. The universality of inappropriate spatial distribution as a demographic problem is noted for all countries, small and large, developed and developing, and Asian or Pacific. In fifteen countries the policy is to decelerate the migration flow by attempting to reduce out-movement from rural to larger urban centres and metropolitan areas; and in an additional seven countries attempts are being made to reverse the migration flows by inducing out-movement from larger urban centres and metropolitan areas to smaller urban centres and/or rural areas.

The enormity of variations in demographic situations and population policies among countries of the ESCAP region has had implications for the nature, type and degree of interventions both official and unofficial. As such, it has also meant a variation in country needs for international population assistance.

UNFPA assistance to ESCAP countries, 1969-1982

Regional overview of national activities

The Asian region has been a major recipient of UNFPA's funds in view both of the critical nature of population issues and national commitments to population programmes in the region. Indeed, during the early years of the Fund's operations, many of UNFPA's comprehensive country programmes were only in the Asian region. For instance, during the 1969-1973 period seven out of ten country programmes were undertaken in Asia – Indonesia, Iran, Malaysia, Pakistan, Philippines, Sri Lanka and Thailand. During the period 1977-1980, eight of the twelve major country programmes (with cumulative expenditures of over $US5 million) were again undertaken in Asia-Bangladesh, China, India, Indonesia, the Philippines, the Republic of Korea, Thailand and Viet Nam.

The Fund's support for both national and regional population activities of ESCAP has consistently grown over the years. Beginning with a modest $US28 million during 1969-1972, the level of assistance has since grown to approximately $US50 million per year. As can be seen from table 1, major increases have been noted for the years

Table 1. UNFPA assistance to ESCAP region by type of programme, 1969-1981

($US millions)

Year	Type of Programme		
	Country	Regional	Total
1969-1975	40.4	12.1	52.6
1976	17.8	3.0	20.8
1977	18.8	3.5	22.3
1978	29.0	4.0	33.0
1979	42.4	4.7	47.2
1980	47.0	4.4	51.4
1981	44.6	6.2	50.7

1974 and 1978: the former representing the beginning of several first country programmes in the region and the latter reflecting the funding of a large number of new country programmes, as well as of second country programmes in many countries. From 1969 to 1982, the ESCAP region has accounted for about 33 per cent of all UNFPA programmes and for over 36 per cent of total cumulative assistance provided by the Fund.

While there has been an increase in absolute levels of assistance to both country and regional population programmes, the proportion devoted to regional activities of the region has been declining over the years reflecting increasing support and commitment by countries of the region to their own programmes. During 1969-1972, the percentage of support to regional activities was 26.7 per cent. By 1981, the proportion successively declined to about 10 per cent. The absolute amount, on the other hand, has more than doubled during the same period of time.

The Fund's programme of assistance is based upon a multisectoral approach encompassing the various facets of population policies and programmes. The "core" programme defined in a later section largely includes these facets. Programme differentials by sectors of assistance are generally indicative of the nature of perceived population needs and policy priorities accorded by national governments. The findings in table 2 clearly reflect the greater emphasis that countries of the ESCAP region place upon programmes related to family planning, population education and communication. On the other hand, the ESCAP countries seem to have given lesser emphasis in their multilaterally-supported projects to data collection and population research activities. These findings are somewhat consistent with the Asian experience in census-taking, the region's fairly well-developed population programme infrastructure, and the national efforts to reduce the rates of population growth through family planning programmes.

Table 2. UNFPAs cumulative assistance by work plan categories (WPC), ESCAP region and total UNFPA programmes, 1969-1981

(Percentage)

WPC No.	WPC	ESCAP region	Total UNFPA
100	Basic data collection	10.9	17.0
200	Population dynamics	2.9	9.8
300	Formulation and evaluation of policies	2.4	5.0
400	Implementation of policies	1.6	0.8
500	Family planning programmes	62.4	43.0
600	Communication and education	11.7	11.5
700	Special programmes	0.8	1.8
800	Multi-sector activities	7.3	11.0
	Total	100.0	100.0

Of the 35 developing countries and territories of the ESCAP region, almost half (17 countries) were included as either the Fund's priority or borderline countries during 1977-1982 (Afghanistan, Bangladesh, Democratic Kampuchea, India, Indonesia, Kiribati, the Lao People's Democratic Republic, Maldives, Nepal, Pakistan, the Philippines, Samoa, Solomon Islands, Thailand, Tonga, Tuvalu and Viet Nam). By the end of 1981, 22 needs assessment missions had been completed in the ESCAP region and consequently many country programmes have been developed.

A detailed analysis of all UNFPA-supported projects (numbering 1049) during 1969-1982 in the ESCAP region was undertaken and the following paragraphs are devoted to a description of that analysis by major sectors of population assistance.

Population data

No population policy and, indeed, no serious economic and social plans can be formulated unless they are based upon sound demographic and statistical data. Recognizing the vital importance of population data, the Fund has supported a number of activities related to the collection of basic population data: censuses, vital registration system and *ad hoc* demographic surveys. In its efforts to help improve national capacities in the field of data collection, the Fund has provided assistance at three distinct levels. First, the establishment of infrastructure facilities for the collection of data; secondly, training of personnel to handle and analyse the data; and finally, building up a cadre of officials who understand and have the ability to take demographic conditions into account when formulating national and sub-national development plans.

The analysis shows that the Fund has provided assistance to 60 projects amounting to about $US 35 million for the census programmes of countries in the region. Among these, the Fund has supported

any or all of the following activities: preparation for censuses, actual enumerations, data processing, publication or institutional development to help enhance national capacities. Relatively, the Fund's support to the improvement of national vital registration systems has been modest. In all, $US2.3 million for 15 projects have been expended for such activities. Major activities related to population data collection have been supported in about two dozen countries: Afghanistan, Bangladesh, Burma, China, Fiji, Indonesia, Iran, Kiribati, the Lao People's Democratic Republic, Maldives, Mongolia, Nepal, Pakistan, Papua New Guinea, the Philippines, the Republic of Korea, Samoa, Sri Lanka, Thailand, Tonga, Tuvalu, Vanuatu, and Viet Nam.

Training

Training and institutional development are the two most critical elements in the building of national and regional self-reliance for population programmes. It is clear that population programmes now require persons with multidisciplinary skills who can formulate, implement and evaluate activities relating to population welfare, public health, education, city planning, employment, unemployment and the like. These require a cadre of well-trained population planners, physicians, nurses, demographers, educational specialists, motivators, communicators, management experts, administrators, census statisticians and many other professionals. In view of its great significance, the Fund has always accorded a high degree of priority to training activities especially in the ESCAP region.

Population training is not only multisectoral in nature, but also a multi-level activity. The form of training can range all the way from an informal on-the-job training to formal graduate degrees in a population-related field through workshops, seminars, conferences and the like. The Fund has supported over 270 projects costing over $US58 million for population training activities in the ESCAP region. While almost all the projects supported by the Fund have some training element, a number of activities specifically devoted to training have been undertaken in Afghanistan, Bangladesh, China, India, Indonesia, Iran, Kiribati, Malaysia, Nepal, Pakistan, Papua New Guinea, the Philippines, the Republic of Korea, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Trust Territory of the Pacific Islands and Viet Nam.

In addition to supporting national training activities and building national institutional capacities for training, the Fund has also provided assistance for several regional facilities for training in population and family planning. In the specific area of basic demographic training, the Fund continues to fund selected activities of the International Institute of Population Studies (IIPS), a regional training facility for the ESCAP region. During 1957-1981, about 250 persons from the following countries of the ESCAP region have been trained in basic demography at IIPS: Afghanistan, Bangladesh, Bhutan, Burma, China, Fiji, Territory of Hong Kong, Indonesia, Iran, Japan, the Lao People's Democratic Republic, Malaysia, Nepal, Pakistan, the Philippines, the Republic of Korea, Samoa, Sri Lanka, Thailand and Viet Nam.

Several other fellowship and training programmes have also been supported through the activities of United Nations Department of Technical Co-operation for Development (UNDTCD), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Statistical Institute for Asia and the Pacific (SIAP) and the Association of South East Asian Nations (ASEAN). In this connection, it should be noted that the ESCAP has played an important role in meeting the population training needs of the region.

Population research

There is, in most countries, and even in different regions of large countries, a need for applied and operational research on the interrelationships between population trends and social and economic factors, on human reproduction and epidemiological factors, on the organizational and administrative aspects of family planning programmes under different administrative systems, and on policy implications of population, environment and resource factors. The need for demographic studies on the determinants and consequences of fertility, mortality, migration, population growth, urbanization and population distribution is equally urgent in many developing countries. Recognizing the importance of analysis and policy studies for the formulation of population policies and programmes, the Fund has supported population research endeavours in a number of population sectors—census, vital registration, population dynamics, family planning, population education, communication, information, contraceptive research and development and related aspects.

As with population training, population research is also a multi-sectoral actoral activity. The Fund has provided assistance for *ad hoc* research

studies and/or for the strengthening of national and regional institutional capacities to undertake population-related research. During 1969-1982, the Fund has supported about 150 individual projects amounting to some $US15 million in about fifteen countries; Afghanistan, China, India, Indonesia, Iran, Malaysia, Mongolia, Pakistan, Papua New Guinea, the Philippines, the Republic of Korea, Sri Lanka, Thailand, the Trust Territory of the Pacific Islands and Viet Nam. Additionally, many research activities have been undertaken through the auspices of the South Pacific Commission, International Committee on Applied Research in Population, International Committee on the Management of Population Programmes and the ASEAN group.

Population policy

The Fund has supported national efforts to formulate population policy measures within development plans and programmes, including the preparation of legislation and the establishment of policy units within the planning infrastructure of governments. During 1969-1982, thirteen countries have been provided assistance by the Fund for their activities in this area. Approximately $US8.8 million were provided for 55 individual country projects and 35 regional projects in this sector. The specific countries which have been assisted are: Afghanistan, Bangladesh, India, Indonesia, Iran, Malaysia, Pakistan, the Philippines, the Republic of Korea, Singapore, Sri Lanka, Thailand and Tonga. As a part of the activities of the ESCAP, several policy studies have been supported.

Family planning

Family planning is the largest dimension of national population programmes in the ESCAP region. Given both the intensity of demographic pressures and national commitment to modify population growth rates, a large majority of ESCAP countries and territories have official family planning programmes. UNFPA has provided assistance to family planning activities whether undertaken for demographic change, for human rights consideration, for improvement in family health or for socio-economic reasons.

The Fund has supported the provision of family planning services through a variety of approaches: health-related systems of delivery; integrated MCH/FP system; independent single purpose family planning programme; community based systems of delivery; and commercial channels. However, the major focus of UNFPA's programme of technical and financial assistance for family planning has been within the context of maternal and child health services. Its objectives has been to assist governments in creating the national capacity to undertake all aspects of family planning programmes, including institutional development and improved service coverage.

The Fund has given full-range support to maternal, child health and family planning programmes in a large number of ESCAP countries in accordance with their national population policies. During 1969-1982, the Fund has assisted 175 individual projects dealing with various aspects of service delivery in 27 countries. The cumulative assistance to this sector is about $US122 million, representing approximately 40 per cent of all assistance to the region. Additionally, the Fund has supported over 80 projects with a total cost of $US9.3 million for activities related to evaluation and management of family planning programmes. In all, over 62 per cent of total assistance to the ESCAP region is for activities related to family planning programmes.

Population information and communication

While it is expected that interpersonal communication will continue to be combined with mass media to deliver population information, modern communication techniques are likely to play an increasing role in population programmes. UNFPA has been supporting activities designed to identify suitable means, methods and training. Whether the specific project deals with the taking of a census or the dissemination of research findings or the need to create awareness of population issues among policy makers or an improvement in the utilization of family planning and MCH services, activities related to communication are important. This is the reason why the Fund has consistently committed, in accordance with the mandate given by the General Assembly, a considerable amount of its assistance to communication and education and has supported the creation of population information institutions in the ESCAP region. Altogether the Fund has supported about 50 projects costing $US14.4 million for communication activities in the region. The countries receiving UNFPA assistance for such activities include Bangladesh, China, Indonesia, Iran, Malaysia, Nepal, the Philippines, the Republic of Korea, Singapore, Solomon Islands, Sri Lanka, Thailand and Viet Nam.

Population education

Population education includes population studies, family life, sex education and family planning education. Population education in schools and in extension programmes is a feature of many national population programmes. Population education activities have been integrated with education programmes with more comprehensive objectives: adult literacy, agricultural extension, labour and trade union education, community development, vocational training, home economics and rural development, for instance.

The education of future generations of parents on the dynamics of population growth and its socio-economic implications, on responsible parenthood, and on the effectiveness of community participation in population activities is a priority activity in most countries of the ESCAP region, given its potential momentum of population growth and its youthful age structure. In view of the importance of this sector, both as a short-term and as a long-term strategy in dealing with population problems, the Fund has assisted over 120 individual projects amounting to about $US14.4 million. While almost all countries receiving the Fund's major assistance have some activities in the population education sector, the following seventeen countries have undertaken substantial activities with UNFPA support in this sector: Afghanistan, Bangladesh, Fiji, India, Indonesia, Iran, Malaysia, Nepal, Pakistan, the Philippines, the Republic of Korea, Solomon Islands, Sri Lanka, Thailand, Tonga, the Trust Territory of Pacific Islands and Viet Nam.

Overview of regional activities

In addition to providing assistance to national population activities, the Fund has been supporting a major programme of regional activities in the ESCAP region. Regional activities are necessary in view of both their supportive and complementary character with national activities. It should be noted that many national programmes of population have evolved as a result of regional activities. During 1969-1982, the Fund has supported about 280 individual projects amounting to over $US 43 million for a wide range of regional activities in the ESCAP. A large proportion of these activities have been undertaken by the ESCAP and such activities have not only helped the development of national efforts in several countries, but have also been crucial in the rapid attainment of regional self-reliance, which is underway in the ESCAP region.

The functional emphases of regional activities are on the provision of technical advice, holding of seminars and conferences, undertaking of training, preparation of instruction materials and conducting of methodological and substantive research on important aspects of population. Most of these regional activities have been undertaken by organizations of the United Nations system such as the ESCAP, ILO, FAO, UNESCO and WHO. Moreover, many non-governmental institutions such as Press Foundation of Asia, ICOMP, the South Pacific Commission, ICARP, JOICFP and ASEAN have also undertaken regional population activities in the ESCAP region.

The sectoral emphasis of regional activities is markedly different from that of national activities. While family planning and data collection activities absorb most of the Fund's support to national activities, population education, communication, and population policy activities dominate the regional programme. Furthermore, the nature of regional activities has shifted over a period of time from its earlier focus on collection of demographic and family planning data and case studies of population growth to training of personnel, analysis of demographic data, migration policy research and management of family planning programmes.

The role of training in the development of national and regional self-reliance has always been recognized in UNFPA-supported programmes. In addition to providing assistance for a large array of national training activities and institutional facilities, the Fund has supported activities of a number of regional training and research facilities like the Statistical Institute for Asia and the Pacific in Tokyo; the International Institute of Population Studies in Bombay; and the Asian and Pacific Development Centre in Kuala Lumpur.

In view of both the enormity of intra-regional variations and the physical spread of countries and territories in the ESCAP, a separate sub-regional programme for the South Pacific has been developed. Sub-regional advisory services have been established at Suva, Fiji in the areas of MCH/family planning, population education and population and labour. The UNFPA-supported population programme at the South Pacific Commission continues to serve the sub-region in the areas of census, demography, population statistics, migration, employment and family life education.

It should be emphasized that the relationship of complementarity between national and regional

activities is an important aspect of technical co-operation in population. As countries become more and more reliant, the need for technical assistance to individual countries will diminish. However, the regional or sub-regional advisory services can be and are being utilized to initiate and/or backstop national activities involving conceptual or methodological innovations.

UNFPA experience with technical assistance in population

Technical assistance or co-operation has played a major role in fostering better understanding of population problems and promoting population programmes in the developing countries. While such assistance programmes have been in existence since the days of the League of Nations, a new era in technical assistance began in the late 1960s when the United Nations and several of the Specialized Agencies became active in promoting a wide field of population activities including population data collection, improvement in methodology and population statistics, demographic analysis of data, planning and organization of family planning programmes, policies to deal with migration and population distribution problems, information, education and communication on population issues and programmes.

While it is true that external assistance, be it bilateral or multilateral, is only a marginal addition to the total devleopment resources of aid-receiving nations, it is an important contribution and in most cases acts as a "spur" in population and development efforts in developing countries. In this context, the technical co-operation aspects of external assistance programmes assume assume greater significance.

When the United Nations Fund for Population Activities became operational in 1969 to help developing countries undertake population activities, there was very little knowledge regarding programmatic aspects of international population assistance. Over the years, the Fund has developed various principles and procedures of programming population assistance. While it would be beyond the scope of this paper to describe each of them in any detail, a few major ones are described below.

As a subsidiary organ of the General Assembly, the UNFPA has a a major aim and purpose, "to extend systematic and sustained assistance to developing countries at their request in dealing with their own population problems; such assistance to be afforded in forms and by means requested by the recipient countries and best suited to meet the individual country's needs."[2]

The UNFPA programme of activities is based upon certain general principles to be applied in making allocations of its resources, which were endorsed by the General Assembly[3] in 1976. These are:

(a) To promote population activities proposed in international strategies, particularly the World Population Plan of Action (adopted by consensus at the World Population Conference held in Bucharest in 1974);

(b) To meet the needs of developing countries which have the most urgent need for assistance in the area of population activities, in view of their population problems;

(c) To respect the sovereign right of each nation to formulate, promote and implement its own population policies;

(d) To promote the self-reliance of recipient countries; and

(e) To give special attention to meeting the needs of disadvantaged population groups.

Core programme of UNFPA assistance

The multidisciplinary character of population studies and the multisectoral significance of population variables have necessitated a broad approach to population assistance. The Fund provides assistance to many, but not all, population activities specified in the World Population Plan of Action (WPPA). Most of its asistance is allocated with a "core" programme defined as including activities in the following sectors:

(a) Basic data collection – population censuses, vital statistics registration, surveys;

(b) Population dynamics – analysis of demographic data, demographic projections, determinants and consequences of population trends, interaction of demographic and socio-economic variables, including modelling;

(c) Formulation of population policies and programmes – policy formulation, evaluation of policies, integration of demographic factors into social and economic plans;

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[2] Economic and Social Council resolution 1763 (LIV).

[3] General Assembly resolution 31/170.

(d) Implementation of policies and programmes – implementation of beyond family planning" programmes: law and population, status to women, economic policies, programmes to influence demographic trends: morbidity and mortality, internal and international migration, sterility;

(e) Family planning – deliver systems, programme management, fertility regulation techniques;

(f) Communication and education – communication for family planning motivation, population education in schools, out-of-school programmes;

(g) Special programmes – women, children and youth, aged, programmes to promote social justice and social welfare through participation in development, disadvantaged: the poorest of the poor, the handicapped;

(h) Multisector activities – population conferences, documentation centres, clearing houses, interdisciplinary training.

The Fund understakes its programme of population assistance through a network of approaches – the priority country system, the needs assessment enquiries and the intercountry strategy.

Priority countries

A major aspect of the strategy for the allocation of UNFPA resources is the identification of developing countries which should be given special attention because of their urgent population problems in accordance with the general principles, already outlined. On the basis of certain demographic and economic criteria, a group of 40 countries were designated in 1977 as priority countries for population assistance. Furthermore, a group of 14 additional countries were designated as borderline countries. Among them, 17 are in Asia and the Pacific region: Afghanistan, Bangladesh, Democratic Kampuchea, India, the Lao People's Democratic Republic, Maldives, Nepal, Pakistan, the Philippines, Samoa, Solomon Islands, Thailand, Tonga and Viet Nam; Indonesia, Kiribati and Tuvalu were to be given special consideration for UNFPA assistance.

In accordance with the decision 81/7 of the Governing Council at its twenty-eighth session, the Fund proposed, at the twenty-ninth session of the Council held in June 1982, a set of minor modifications to the system of priority countries. The Council endorsed the modified system and as a result, a group of 53 countries are now eligible for priority assistance. Among these, 16 are in Asia and the Pacific: Afghanistan, Bangladesh, Bhutan, Burma, China, Democratic Kampuchea, India, Indonesia, the Lao People's Democratic Republic, Maldives, Nepal, Pakistan, Samoa, Solomon Islands, Sri Lanka and Viet Nam. The Council has reaffirmed that up to two-thirds of total programme resources available to UNFPA for population assistance at the country level are to be devoted to assisting programmes in the 53 priority countries.

Needs assessment

As a funding organization in the field of population, the Fund essentially responds to requests for assistance, bearing in mind the general principle of respecting the sovereignty of countries on matters of population policies. In this connexion, a methodology has been developed by the Fund for assessing the needs of a country for population assistance from external sources. The government concerned is fully involved in the needs assessment, the findings of which have become the principal tool for programming UNFPA resources at the country level. Taking into account the country's requirements and capabilities, the needs that would have to be met to enable it to become self-reliant in the formulation and implementation of its population policies and programmes are identified. Moreover, the specific programme areas where external assistance would be required are outlined. Thus, the findings of such a needs assessment provide the framework within which multilateral and bilateral donors may provide coordinated, coherent population assistance to a country. By the end of 1981, needs assessment enquiries were completed for the following countries: Afghanistan, Bangladesh, Bhutan, Fiji, India, Indonesia, Kiribati, Malaysia, Maldives, Mongolia, Nepal, Pakistan, the Philippines, the Republic of Korea, Samoa, Solomon Islands, Sri Lanka, Thailand, Tonga and Viet Nam.

Intercountry strategy

The term intercountry activities refer to activities undertaken at the regional, intercountry and global levels. In the Asian and Pacific region, the Fund has provided assistance to a number of intercountry activities through agencies of the United Nations system, as well as through various non-governmental organizations. Examples, among others, include a multi-country project on migration and urbanization, a comparative analysis of

data from the World Fertility Survey, and population monograph of various Asian and Pacific countries, all executed by the ESCAP; several comparative studies of urbanization, migration and population policies through the ASEAN population programmes; and various training activities undertaken at the International Institute of Population Studies, and Statistical Institute for Asia and the Pacific.

It should be noted that many of the intercountry activities undertaken in the early years of the Fund's operation have not only strengthened the international capacity for population programmes, but were also instrumental in promoting "population consciouness" among developing countries and in shaping the modalities of support to population activities at the country level.

Channels of assistance

UNFPA has provided assistance to population activities in the ESCAP region through a number of channels such as, the agencies of the United Nations system, non-governmental organizations, multi-bi channels, and direct implementation by governments.

United Nations agencies

In view of the multisectoral nature of population programmes, a number of specialized agencies of the United Nations system have a special role to play in national and regional activities in population. The types of population activities implemented by the various United Nations agencies in the ESCAP region are as follows: (a) Economic and Social Commission for Asia and the Pacific for activities relating to the formulation of more effective population policies, evaluation of family planning programmes, regional advisory service and dissemination of population information to the countries in the region, and studies of determinants of internal migration; (b) ILO in the field of labour and population; (c) UNESCO in the field of population education; (d) FAO in the field of rural development; and (e) WHO in health and family planning.

Non-government organizations

In addition to the agencies of the United Nations system, several non-governmental organizations (NGOs) have also played an important role in implementing population programmes in the ESCAP region. The NGOs have not only helped in the initial legitimation of population programmes, but have also been instrumental in initiating innovative and experimental projects. In this context, mention may be made of the activities of the Japanese Organization for International Cooperation in Family Planning (JOICFP), Western Consortium, Australian National University (ANU), Programme for the Introduction and Adaptation of Contraceptive Technology (PIACT), Press Foundation of Asia and the like.

Multi-bilateral programmes

The Fund has also been able to help finance population activities in ESCAP beyond its own regular funds through multi-bilateral channels. Examples of this include the support by the Government of Norway to strengthen family planning services in Sri Lanka and Nepal; the Danish Government's assistance for the family planning programme in Bangladesh; a feasibility study for local production of contraceptives in Bangladesh and a health manpower training project in Nepal, both by the Dutch Government; and support to some of the aspects of population programme of Pakistan by the OPEC Fund for International Development.

Direct execution

As countries develop their own institutional capacities and acquire the required technical and managerial skills, they increasingly become self-reliant and are able to implement their population programmes.

In view of the long experience of Asian countries with population programmes and population assistance, many UNFPA-supported programmes are being implemented by the countries themselves. The type of population activities most suitable for direct implementation include procurement of equipment, workshops and seminars and training programmes. The countries undertaking population activities by direct implementation include Afghanistan, Bangladesh, China, Fiji, India, Indonesia, Malaysia, Nepal, Pakistan, the Philippines, the Republic of Korea, Sri Lanka, Thailand and Viet Nam.

National implementing agencies

The types of national implementing agencies for UNFPA-supported programmes are as diverse as are the channels of assistance. In view of the wide variations in administrative and bureaucratic practices. in the critical nature of population issues, and the sectoral emphasis of the population policies and programmes, an array of national implementing agencies have collaborated with the

Fund in the execution of projects. They include for instance, national population commissions or boards; ministries of health or family planning; ministries of foreign affairs or external assistance; and a combination of several of the above. It should be noted, however, that while sectoral ministries are generally responsible for implementing sectoral activities, it is usually the agency designated as the co-ordinating body which is in charge of the overall programme.

Funding co-ordination

The Fund not only co-ordinates its population activities implemented by various national agencies at the country level, but also co-ordinates its funding strategies with other funding agencies in a number of ways. Illustrative examples, among others, are the cases of joint financing with the World Bank in Indonesia; of parallel financing with World Bank in Thailand, Bangladesh and Pakistan; of regular donors' meetings; of inter-agency meetings at the country level; and of field staff meetings at the operational level.

Technical co-operation among developing countries (TCDC)

Technical co-operation has, in recent years, undergone several important changes. Increasing attention is being given to promoting technical co-operation among developing countries themselves. TCDC is a significant force for initiating, designing organizing and promoting co-operation among developing countries so that they can create, acquire, adapt, transfer and pool knowledge and experience for their mutual benefit and for achieving national and collective self-reliance, which are essential for their social and economic development.

The Fund has supported several TCDC endeavours in the ESCAP region – the programmes of ICOMP, ASEAN population programme, activities of ICARP, efforts of the South Pacific Commission and projects by JOICFP – and experience to date suggests that such activities are not only useful for the countries and/or sub-regions concerned, but have proven to be a cost-effective and goal-oriented approach in the provision of technical assistance in the population sector.

Conclusion

The Fund's experience with technical assistance has shown that population is programmable like other sectors of development. While most technical co-operation activities have been successful, a few obstacles have been encountered in implementing such activities: in the recruitment of technical advisers and delivery of equipment; frequent transfers of government counterparts; problems in logistics, e.g., distribution of supplies; delays in implementing training activities due to lack of qualified staff; and difficulties in releasing trainees from their daily work. Efforts are being made by UNFPA to alleviate these problems, especially through strengthening the monitoring and review process in the implementation of projects in close collaboration with governments and executing agencies.

Technical co-operation will no doubt continue to play a crucial role in international population assistance and development efforts in the developing countries. The present and the expected financial constraints in the near future make it more necessary than ever to be selective in promoting technical assistance activities.

The national population programmes of Asia and the Pacific are becoming not only more comprehensive but also in many ways more sophisticated. It can be expected that the need for technical co-operation in traditional sectors like census, training, research, population education and the like will diminish in the future. On the other hand, the needs in the areas of integration of population policies with development planning, management aspects of population action programmes and contraceptive research and development can be expected to assume a greater share of international assistance.

It should be noted that in the face of constrained international population assistance, technical co-operation needs to be made more goal-oriented, cost-effective and result-producing. These can perhaps be achieved by fostering a sense of true partnership between donors and recipients, between trainers and trainees, between planners and participants and between national governments and local communities.