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All correspondence should be addressed to:

Chief
Division of Industry, Human
Settlements and Environment
Economic and Social Commission
for Asia and the Pacific
(ESCAP)
United Nations Building
Rajadamnern Avenue
Bangkok 10200, Thailand

ST/ESCAP/1348

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

**INDUSTRIAL DEVELOPMENT NEWS
FOR ASIA AND THE PACIFIC**

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TRENDS AND ISSUES

I. RECENT INDUSTRIAL PROGRESS IN THE ASIAN AND PACIFIC REGION

A. General Overview

In 1992, the world economy seemed to reverse a prolonged recession with 0.5 per cent growth, led by the United States. However, the economic power houses of Germany and Japan plunged into a significant recession from which they have not yet recovered.

In contrast, Asian and Pacific economies continued to maintain an overall economic growth rate considerably higher than that of other developing regions. With world economic growth forecast at less than 2 per cent over the next three years, Asia-Pacific developing countries are expected to enjoy an average 7 per cent growth rate through 1995. The engine of growth in the Asia-Pacific region is pulled by the following factors: the remarkable strength of the Chinese economy, despite signs of overheating and a recent slow-down; the growing importance of intraregional trade and investment, spurred by initiatives like Asia-Pacific Economic Cooperation (APEC) and the ASEAN Free Trade Area (AFTA); the ability to maintain rapid export growth through greater market penetration and diversification; the rising importance of domestic demand; the upgrading of technology and increased productivity as a result of foreign direct investment (FDI) flows, and a policy environment stressing the importance of competition and economic efficiency (*Asian Development Outlook*).

Indeed, the region witnessed a greater emphasis on privatization, deregulation and liberalization of trade and investment regimes and the financial sector while at the same time active measures were envisaged to

stimulate the private sector and effectuate a retreat of the government from economic life. Although these policies have been implemented to various extents and with variable success, the trend seems to be irreversible, even in South Asia and in former centrally planned economies, which for long basked in isolation on a government-led economically self-sufficient basis.

Following high growth rates, the trade performance of the Asian and Pacific region also continued to be strong with an expansion of exports by about 13 per cent, reaching \$555.1 billion or 15 per cent of world trade in 1992. This export growth is twice as fast as world exports. About 35 per cent of the region's total exports come from intraregional trade, which expanded by 23 per cent in 1991 and was therefore an important growth factor.

Allured by high growth rates, FDI poured into the region in 1992, amounting to almost \$20 billion, of which about one fourth went to China. Singapore and Thailand, however, witnessed a sharp decline in FDI. Despite remarkable growth rates and generally lower levels of inflation, major stumbling blocks for industrial development in the region continue to be labour shortages and infrastructure bottlenecks; inflation in some economies will also remain a major concern. Table 1 shows the growth rate of gross domestic product (GDP) of Asian and Pacific developing countries since 1971 while table 2 shows the growth rate of value added in industry for the same countries over the same period (see tables 1 and 2, pp. 78 and 79 of this publication).

B. The Newly Industrializing Economies

The newly industrializing economies (NIEs) as a whole witnessed a significant slow-down in economic growth from 7.3 per cent in 1991 to 5.3 per cent in 1992, the lowest rate recorded since 1985. The slow-down was most marked in the Republic of Korea and Hong Kong. In the Republic of Korea, the decline followed the Government's restrictive policies that dampened demand. Although both Hong Kong and Taiwan Province of China benefit from a rapidly rising Mainland China, they share with the other NIEs the need for heavy investment in skill and industry

upgrading as they face declining competitiveness (compared with neighbouring countries) and appreciating currencies. As a result, NIE Governments have adopted packages to stimulate the private sector, while at the same time, general economic liberalization measures have been implemented.

In *Hong Kong*, economic activity was boosted by strong export performance, vigorous consumption demand, a rapid expansion of investment in plant and machinery, and strong growth in China's coastal areas.

where about 3 million Hong Kong people are employed in manufacturing plants. Real GDP growth in 1992 was 5 per cent compared with 4.2 per cent in 1991, while inflation dropped to 9.4 per cent from 12.0 per cent the previous year. Manufacturing re-exports were boosted by a sharp reduction in unit costs as a result of the relocation of industries and the opening up of new markets in, for example, Eastern Europe. However, this relocation also contributed to sluggish domestic manufacturing production. Low value-added goods such as plastics, metal products and textiles witnessed a decline because they can be produced more cheaply in China, while high value-added products such as clothing, machinery and equipment are on the increase, but even these sectors may lose competitiveness to China and ASEAN (Association of South-East Asian Nations) countries. Only the electronic products and electrical machinery sectors have good prospects, as they are the territory's second largest export earner after textiles and clothing. The watches and clocks industry is also important, although its market is threatened by protectionism.

Domestic demand, particularly private consumption and investment in plant and machinery, was a major stimulus to growth in 1992. Labour shortages and sustained high inflation rates have continued to be the major bottlenecks to rapid growth. With the manufacturing sector at about 15 per cent of GDP at factor cost, the service sector is the most important pillar of the Hong Kong economy and mostly responsible for its growth.

In the *Republic of Korea*, the beginning of 1992 witnessed government efforts to cool an overheated economy and dampen import demand without damaging the country's export-oriented industries. The measures had effect. Economic growth decelerated significantly to 4.5 from 8.4 per cent in 1991, but rose again to 6 per cent in 1993. Manufacturing output also declined after good performance in the first half of 1992, thanks to accelerating exports. Heavy and chemical industries showed robust growth, but light industries were stagnant. Chemicals, oil refinery and transport equipment showed particularly rapid increases in output, while the production of clothing, textiles and beverages dropped. Construction was also in decline. The first quarter saw GDP growth of 3.4 per cent but little was attributable to manufacturing. Manufacturing now accounts for 27.3 per cent of GDP and is dominated by the Republic of Korea's large industrial conglomerates, the Chaebol. To boost the industrial competitiveness of business, the Government has im-

plemented policies to curb the growth of Chaebol and force them to reduce the number of their subsidiaries.

Exports face stiff competition by low-end manufacturers from China and South-East Asia which are capturing markets for labour-intensive exports. On the high end of the market, higher quality Japanese products outcompete products from the Republic of Korea. Specifically hard hit is the small and medium industry (SMI) sector. Denied access to credit despite a government requirement that banks set aside 50 per cent of their lendable funds, over 100 small and medium-sized industries failed during the first five months of 1992, compared with 40 in the period one year earlier, mostly in traditional light industries such as textiles, toys and footwear (*Asia 1993 Yearbook*). Successful diversification of export markets has given companies of the Republic of Korea some breathing space. Helped by a strong yen and by booming Chinese demand, exports totalled US\$39 billion in the first half of 1993, up 6.4 per cent from a year earlier. In the meantime, the Government is making available to the business community won 2.46 trillion in new loans and tax breaks (*FEER*, 12-8-93).

There was a distinct slow-down in *Singapore's* economy in 1992 with a growth rate of 5.8 per cent compared with 6.7 per cent in the previous year. Although the decline was partly due to a sluggish financial and business services sector, it was mainly the manufacturing sector that witnessed a major slow-down, with output growth at 2.9 per cent compared with 5.3 per cent in 1991. Singapore is the world's largest centre for making disk drives. They are manufactured mostly by United States corporations, which export them back to the United States and to the rest of the world. The recession in the United States and the slashing of personal computer prices have had an adverse impact on Singapore's manufacturing sector (*Asia 1993 Yearbook*). Electronics is the largest export industry and accounts for about one third of all manufacturing output, and the decline in this industry would have been even worse if not for the slight upturn in the computer disk drive industry in mid 1992. Another leading industry in 1991 was pharmaceuticals, but that stagnated in 1992 as capacity expansion came to a halt.

In sharp contrast to manufacturing, the construction industry expanded by about 20 per cent in 1992, mainly because of public infrastructure projects. But manufacturing is about 27.9 per cent of GDP, while construction accounts for a small 7.9 per cent.

Manufacturing is expected to grow at 7.5 per cent in 1993. Some sectors are benefiting from international conditions. Petroleum refining continues to grow as a result of strong regional demand. Printing and publishing continues to expand its niche in the world market for high quality work. The increase in output of the fabricated metal products sector also owed something to buoyant exports, although strong construction-related demand was probably more important.

There is continuing strong growth in actual investment in machinery and equipment, while FDI has remained high, with record S\$2.8 billion committed to the manufacturing sector in 1992. Dutch electronics giant Philips recently set up its sixth factory on the island. Export performance in 1992 was particularly affected by the slump in oil exports. Despite severe price cutting in the computer industry, exports of computer products remained buoyant.

Taiwan Province of China also witnessed a slow-down in real GDP growth from 7.2 per cent in 1991 to 6.6 per cent in 1992, despite strong domestic demand. Taiwan Province of China's strong pro-development Government aimed much of its policy-making at building confidence among domestic investors and attracting high-technology industries. However, manufacturing investment stagnated, with manufacturing's contribution to gross national product (GNP) slipping to 34

per cent during the year from 40 per cent five years earlier. FDI fell 31 per cent during the first 10 months to US\$1.1 billion. Meanwhile, the trade surplus shrank by 22 per cent for the first 10 months to US\$8.4 billion as exports rose at a modest 7 per cent and imports were up 14 per cent during the same period. Trade through Hong Kong to the mainland was the fastest growing component of manufactured exports (Asia, 1993). As in Hong Kong, output in textiles, plastics and food products fell as they are now being re-exported from Taiwan Province of China instead of produced domestically. The fastest growing category of exports, that of metals and metal manufactures rose by 14.4 per cent in volume terms in the first half of 1993 compared with the first half of 1992.

Manufacturing industry is characterized by small, family-run enterprises. In early 1989, 91 per cent of companies had paid-up capital of less than NT10 million/US\$370,000 and only 600 had paid up capital of more than NT200 million. The Government has actively promoted rural industrialization, and rural factories are generally small or medium-sized (EIU, *Country Profiles*).

In terms of foreign trade value, Taiwan Province of China now ranks as the world's fourteenth largest economy.

C. ASEAN-4

Recession in the industrialized countries and tight monetary policies in some South-East Asian countries led to a slight decline in economic growth for the four ASEAN economies of Indonesia, Malaysia, the Philippines and Thailand in 1992, but on a global basis, growth rates were still impressive. Inflation was generally brought under control and trade cooperation was strengthened under AFTA, while progress on the proposed East Asian Economic Caucus stagnated. Bottlenecks in the ASEAN economies to renewed double-digit growth are generally of an infrastructure nature, like traffic gridlocks in Bangkok and power cuts in Manila, which constrain FDI inflows. However, domestic demand has remained strong and increased intraregional trade has maintained a strong export performance. Continued heavy dependence on Japan for both imports and exports may well adversely affect ASEAN economic growth in the immediate future, given the current slump in that country.

Mainly as a result of the restrictive economic

policies of the Government, GDP growth in *Indonesia* declined to 5.9 per cent in 1992, while high interest rates and infrastructural bottlenecks also had a stagnatory effect. However, non-oil labour-intensive industries showed a surprisingly strong export performance rising 21 per cent in the fiscal year ending March 1992. While output of industry as a whole rose by only 7.5 per cent during 1992 as compared with 9.9 per cent in 1991, manufacturing improved its growth rate from 9.3 per cent in 1991 to almost 14 per cent in 1992.

The 1992/93 budget outturns have exceeded projections. The Government has issued new banking regulations and begun to tackle the issue of credit arrears. A new economic deregulation package has been issued and the Investment Negative List has been shortened.

Manufacturing now makes up 21.3 per cent of GDP. A major expansion of the machinery industry has been planned and the aircraft industry has received

an export order. A new automotive joint venture with a Korean firm has been formed. A new petroleum refinery and fertilizer plant has been announced. The cement industry, which currently consists of nine producers with a combined capacity of 19.9 million tons per annum is continuing to expand rapidly. Furthermore, the past few months have witnessed the first steps towards the emergence of a waste-processing industry in Indonesia (EIU, *Country Report*). The manufacturing sector has responded well to a series of deregulatory measures and continues to outpace other economic sectors. In 1991, Indonesia's manufacturing output exceeded that of agriculture for the first time. In addition, manufactured products accounted for just over half of all 1991 exports. Labour-intensive industries like footwear, textiles and clothing have been the fastest growing industries (*Asia 1993 Yearbook*). By mid-year 1992, monetary policy was somewhat loosened as fears of inflation subsided and, thus, investment picked up in the last few months of 1992. Foreign investment approvals also increased substantially, and reached more than \$10 billion in 1992, in particular in Java. Recent government efforts at moving projects away from Java have had some success, but unfortunately, the opportunities for private investment in many of the islands are very limited (*Asian Development Outlook*).

The balance of payments has begun to recover. Donors have pledged over \$5 billion in aid for 1993.

The economy of *Malaysia* grew, by 8 per cent in 1992, which, although lower than in 1991, was still among the fastest rates in the region. The manufacturing sector, plagued with labour shortages, was still strong with 11 per cent growth in 1992. But high growth rates have a price. Inflation jumped, in particular food prices, which rose by nearly 7 per cent in 1992, whereas the general inflation level stood at 4.5 per cent. Bottlenecks in *Malaysia's* infrastructure also intensified and contributed to a fall in FDI during 1992 by almost 50 per cent to M\$ 11.8 billion (US\$4.6 billion) from M\$ 20.2 billion a year earlier. However, the decline in FDI has been partly offset by rising domestic investment.

In 1993, manufacturing output and exports rose sharply and inflation started to decline. Manufacturing output rose by 17.4 per cent in the second quarter, following a first quarter rise of 11.7 per cent. Products which showed a substantial increase in output were liquefied petroleum gas (LPG), plywood, telephone and telegraph cables, rubber gloves, television sets, iron and steel bars and rods, and integrated circuits. Malaysian

exports continue to grow vigorously to the extent that the current account is likely to be in surplus in 1993 for the first time since 1988. The export growth is led by machinery and transport equipment (35.6 per cent in the first quarter of 1993) and semi-conductors (34 per cent in the same period) (EIU, *Country Reports*). One of the fastest growing export sectors has been furniture. Furniture exports increased by 40 per cent in 1992, to reach M\$ 660 million (US\$259 million). This is still a long way behind Taiwan Province of China, which exports furniture worth M\$ 5.2 billion; but *Malaysia's* far greater timber resources confer a substantial comparative advantage (EIU, *Country Reports*). To boost local investment in manufacturing the Government has been concentrating on providing incentives to SMIs to set up in ancillary production in such areas as electronics, motor parts and components. Furthermore, nationals are encouraged to invest in export processing zones (EPZs) through joint ventures.

The economy of the *Philippines* continued to stagnate with zero growth in 1992. Industrial production also diminished slightly in 1992, following a sharp fall in 1991. Electricity shortages caused severe losses of manufacturing output, especially in food-processing. Tight fiscal and monetary policies adopted as part of an austerity programme aimed at stabilization, imposed by the International Monetary Fund (IMF) in February 1991, also have depressed the economy. However, they managed to curb inflation from a peak of 20.5 per cent in March 1991 to 8.7 per cent in 1990.

The foreign debt crisis, which seems to have been transformed into a public-sector debt quagmire, continues to put a heavy burden on the economy and is a severe obstacle to recovery. However, there is optimism that the economy is on the road to recovery with tariff and foreign investment liberalization measures being implemented, privatization initiatives launched, and foreign exchange restrictions lifted.

Developments in the manufacturing sector include the extension of Mercedes Benz and Nissan operations in the Philippines and the record profit of the giant food, drinks and packaging conglomerate San Miguel Corporation of P 3.59 billion. Exports surged in the beginning of 1993, largely as a result of buoyant demand for Philippine manufactures and, in particular, electrical equipment and parts. In contrast, import growth slowed markedly. Manufacturing makes up 25.5 per cent of GDP. Consumer goods account for over 50 per cent of manufacturing value-added, with

food processing's share boosted by export demand. A significant component of the machinery sector is electronics assembly, also geared to foreign markets and almost totally reliant on imported inputs (EIU, *Country Profiles*).

Investment confidence was severely disturbed in early 1992 in Thailand as a result of the implementation of the value-added tax and political disturbances. Recovery occurred later in the year and the economy managed to grow at 7.5 per cent during 1992. While growth of the industrial sector declined from 11.5 per cent in 1991 to 8.6 per cent in 1992, manufacturing registered a marginal increase from 10 to 10.3 per cent. The lower growth rates are a result of the slow recovery of the world economy, rising labour costs, and erosion of Thailand's manufactured exports (*Asian Development Outlook 1993*). However, exports surged in 1992 as a result of massive inflows of FDI in 1987-1991. New factories were established and old manufacturers added capacity. Traditional exports, such as rice, rubber, textiles, computer chips, gems, jewellery, and frozen chicken continue to grow. Shipments of garments, canned foods, wooden furniture and footwear, particularly sports shoes, rapidly increased (Asia

1993). Exports grew at 17.8 per cent in 1992 to \$33.3 billion.

The Thai economy will face some problems. The growth of FDI is expected to decline. Currently, FDI comprises only about 10 per cent of total investment. Investor confidence has been shaken by the dispute between the Government and BECL over the opening of the second-stage expressway. The need for a long-term plan for industrial development has been made apparent as the textile industry has run into trouble and the petrochemicals sector continues to be concerned about competition from other ASEAN economies. The World Bank has recommended privatization of a number of State enterprises but the Government has not reacted with enthusiasm.

One prominent sector of Thai industry which has been flourishing in the first half of 1993 is the automobile industry. Sales at the half year were 49.1 per cent up on the same period in 1992 to a total of 432,739 units. Sales of passenger vehicles were up almost 100 per cent (EIU, *Country Reports*). However, given the immense traffic jams in the capital Bangkok, this success may be a mixed blessing.

D. South Asia

The economies in South Asia showed a strong recovery in 1992. The region's economic growth rate rose to 4.7 from 2.1 per cent in 1991. Industrial production improved considerably in India and Pakistan, with MVA growth around 6 per cent in 1992. The recovery of industry is also predicated upon an adroit management of the balance-of-payments crisis triggered by the Persian Gulf war and the disappearance of remittances coupled with the loss of trade with the former Union of Soviet Socialist Republics, and the new industrial policy package adopted by the Government of India in 1991, whereas Pakistan has positioned itself as a strategic player between energy-rich Central and Western Asia and energy-poor South Asia (UNIDO, *Global Report 1992/93*). However, Nepal and Bangladesh, severely hit by the Persian Gulf crisis, are only slowly recovering and faced the adverse impacts on their economies of severe floods in 1993. Export performance in South Asia improved significantly in 1992, although it remained low compared with that of NIEs and ASEAN. In nominal dollar terms, South Asia's exports grew by 8.5 per cent in 1992 compared with 3.8 per cent in 1991. South Asia's current account deficit, which fell to \$8 billion in 1991 from over \$13

billion in 1990, deteriorated somewhat in 1992 to \$11 billion.

In Bangladesh, real GDP grew by 4 per cent in 1992 as compared with a low 3.4 per cent in 1991. The industrial sector continued to be adversely affected by sluggish demand, electricity and power disruptions, and strikes and labour unrest. Investment in the productive sector stagnated as a result of the Government's crack-down of the banking sector's chronic bad-debt problems. However, manufacturing output increased by about 7.3 per cent reflecting brisk domestic demand conditions. In particular, production in the export-oriented textile and frozen food industries continued to improve, whereas production of cement, bricks, glass and steel rods slowed slightly because of a decline in construction activity. Industrial units in the Bangladesh Chemical Industries Corporation (BCIC), which includes fertilizer factories, produced goods worth \$245 million in the first eight months of fiscal 1992/93, an increase of 12 per cent on the corresponding period in 1991/92. In contrast, the Bangladesh Sugar and Food Industries Corporation (BSFIC) and the 35 publicly owned jute mills in the Bangladesh

Jute Mills Corporation made heavy losses. The leather industry of Bangladesh is poised for a take-off similar to that achieved by the garment industry over the past decade (EIU, *Country Reports*).

The existing industrial set-up offers limited scope for expansion and diversification of production. Besides, most units are far below their production capacity. The jute industry may recover after a possible restructuring under a major reform scheme. The buoyancy in the garment sector is expected to continue for some time until its own momentum comes to a halt. But even this sector may attract quota restrictions. Only four categories of export – raw jute and jute goods, garments, leather and leather products, and frozen fish – account for nearly 90 per cent of the country's approximately \$2 billion in exports in 1992.

Real GDP growth in *Bhutan* was 5 per cent in 1992. Industrial growth rose to over 9 per cent from about 7 per cent in 1991, mainly because of the increased value of electricity exported to India. Potential donors to *Bhutan's* seventh plan (1992-1997) pledged initial aid of US\$ 57 million. Major industries in *Bhutan* consist of cement, distillery products, minerals, veneer/plywood, and high-density polythene pipe.

The economy of *India* grew at 4.2 per cent in 1992, which is considerably better than the 1.2 per cent noted in 1991. Liberalization of trade and industrial policy regimes helped to stimulate output and reduced import prices. The performance of the industrial sector was uneven, however. The strongest recovery was in capital and intermediate goods and consumer durables, following strong domestic demand. Overall industrial growth in 1992 is estimated at about 4 per cent in 1992 after a decline of 0.3 per cent in 1991. Civil disturbances in December 1992 and January 1993 adversely affected manufacturing output (*Asian Development Outlook*). Basic industries including steel, cement, fertilizers and crude petroleum have had static or declining production. By contrast, the infrastructural and service sector has been the engine of the economy, with output strong in the power, coal, oil refining and railway industries. Developments in the steel industry stepped up following the lifting of 36 years of price controls on steel products in December 1991. Delicensing has injected new competition and dynamism into the private sector, but so far the industrial sector's response has been weak. Liberalization of foreign investment rules led to the approval in the first five months of 1993 of \$1.07 billion in FDI. The latest batch includes Coca Cola, General Electric, Morgan Stanley and Peugeot.

The evidence of industrial recession was still around in 1993 with inventories 30-40 per cent higher on average over a year ago. Steel stocks are piling up and the vehicle industry is still in decline. For the second successive year, there has been virtual stagnation in the cement industry. More positive developments occurred in textiles, chemicals and a few other sectors. The Government has shown less enthusiasm for privatization than for almost any other aspect of public-sector reform. So far, its efforts in this area have been confined to some desultory and not very successful attempts to sell small amounts of public sector shares (EIU, *Country Reports*).

Inflation continues to ease, with wholesale prices in the last week of June 1993 posting a 6.1 per cent year-on-year increase, compared with the 16-17 per cent inflation rate two years ago. Exports are estimated to have grown by only 3.5 per cent in 1992 while imports grew rapidly at 16.5 per cent. As a result, the trade deficit increased from \$3.1 billion in 1991 to an estimated \$5.9 billion in 1992. Textiles (including carpets and handicrafts) were by far the biggest export earner. For 1993/94, textile exports are expected to account for 35 per cent of targeted total exports of \$22 billion.

In *Nepal*, output growth declined to 3.1 per cent in 1992 because of a poor monsoon. In contrast, floods caused heavy damage to the economy in 1993 with infrastructure in shambles. However, industrial production increased by nearly 30 per cent in 1991 and 16 per cent in 1992 partly because of the resolution of trade and transit difficulties with India, the favourable impact of the July 1991 devaluation, and the introduction of partial convertibility of the rupee in March 1992. Industrial production is expected to decline owing to power shortages. The carpet industry is facing a recession and is also expected to decline. In an apparent bid to enhance trade, the Government announced some delicensing measures for a large number of export industries and the majority of industries will receive a seven-year tax holiday. Manufacturing and cottage industries make up only 5.8 per cent of GDP. Major industries are cement, steel rods, jute, sugar, cotton textiles, synthetic textiles, beer, soap, vegetable ghee, tea, and cigarettes. Inflation is a major problem for *Nepal*, with the consumer price index rising 26 per cent in the 1991/92 fiscal year (*Asia 1993*).

Exports such as carpets, garments and handicrafts have increased rapidly reaching about 70 per cent of total exports worth \$313.0 million in 1992, while total exports as a whole rose by 35 per cent.

In *Pakistan*, growth of GDP accelerated to 6.4 per cent in 1992 from 5.6 per cent in 1991. Deregulation and a favourable policy environment led to an increase in industrial output by 7.3 per cent, while manufacturing grew by 7.4 per cent in 1992 from 5.5 per cent in 1991. The textile industry, particularly cotton spinning, and industries such as sugar, chemical and vegetable ghee and small-scale manufacturing showed significant output increases. Deregulation, privatization and import liberalization policies of the Government, along with the recently enhanced fiscal incentives, boosted investment in manufacturing by over 30 per cent in 1992 (*Asian Development Outlook*). However, manufacturing's share of GDP remains relatively low at 17.4 per cent.

With the target of privatizing 100 specified public-sector companies the Privatization Commission announced at the end of October 1992 that it had sold off 57 units and was set to privatize another 30 over the following couple of months. Ensuing political unrest and the recently newly installed government put question marks on the continuation of the privatization thrust, however.

Foreign investment, jumping in 1989-1991, declined to 25 per cent in 1991/92, almost back to square one. Investors list the low industrial growth rate, low literacy rate and high population rate, inadequate infrastructure, scarcity of skilled workers, and inconsistency in policy as major impediments to investment in Pakistan.

Industrial growth, buoyant as it was in 1992, came to a halt in 1993. Investment in manufacturing increased by only 1.8 per cent during 1992/93. In particular, the textile industry suffered as a result of a crisis afflicting the cotton sector. The industry had shut down 20 per cent of its capacity in the six months to March 1993.

Among exports, particularly garments and non-traditional exports continued to grow strongly, but the decline in cotton yarn exports as a result of a reduction in implicit subsidies, led to an overall lower growth of exports in 1992 of 16.6 per cent compared to 19.8 per cent in 1991.

The economy of *Sri Lanka* continued to grow strongly in 1992, with GDP increasing by 4.6 per cent, slightly lower than in the previous year. The industry and service sectors were the principal sources of GDP growth in 1992. Industrial output increased by 6 per cent, much of which is attributable to sustained growth in manufacturing such as textiles and garments for exports, fabricated metal products, and food, beverages and tobacco products (*Asian Development Outlook 1993*). However, industrial growth is dampened by high interest rates as the central bank continues its efforts to curb inflation; the trade gap is growing, reflecting the strength of imports; and the Government is still struggling to control its own financing deficit.

Sri Lanka has been pushing the advantages it has to offer to foreign investors, notably a highly literate, low wage work force. In the first five months of 1993, a total of \$173 million in FDI was approved. The foreign investment boom of the last two years is one of the most hopeful signs for the future of the country. It is enabling Sri Lanka to expand and vary its industrial base and importantly, diversify its exports.

Expansion of the investment promotion zones in 1992 had a positive effect on private investment. Though exports grew by 13.9 per cent in 1992, imports rose more rapidly, by 18.8 per cent, and the trade deficit widened as a result.

As yet, the manufacturing sector's composition remains unbalanced. Food (including beverages and tobacco) and textiles and clothing account for nearly two thirds of total value added. The clothing sector has been the country's main success. Gross output of the textiles, clothing and leather industries now exceeds that of any other sector though food, beverages and tobacco is larger in value added terms. Clothing overtook tea to become the country's largest export earners in 1986. However, success has been concentrated in the clothing industry and has not been matched by the domestic textiles industry. The latter does not in general produce the type of materials required by the clothing manufacturers, most of whose inputs have to be imported (EIU, *Country Profiles*).

E. East Asia's Economies in Transition

Although the economies in transition of China, Viet Nam, Mongolia, Lao People's Democratic Republic and Cambodia continue to struggle with the problems of establishing a market economy, reforms have yielded positive results. In particular, China's economic growth accelerated to an impressive 12.8 per cent in 1992 but the economy was characterized by overheating. Foreign investment is pouring into China and Viet Nam though concentrated in only a few areas. The Lao People's Democratic Republic and Mongolia have more difficulty to attract FDI owing to their land-locked position.

In *Cambodia*, a boom in the construction sector boosted economic growth. New transnational economic links have been forged, for example in the Mekong Delta and Tumen Delta regions and in the triangle formed by southern China, Hong Kong and Taiwan Province of China which offer good prospects for economic growth in that region. GDP in Cambodia is estimated to have grown by 7 per cent in 1992. After a strong recovery in 1991, the industrial sector is estimated to have expanded by a further 16 per cent in 1992, mainly spurred by the construction boom. Manufacturing is estimated to have grown by approximately 3 per cent in 1992, well below the 7 per cent growth in 1991. The shortages of power and raw materials and the poor quality products are major obstacles. Rampant inflation and a huge budget deficit add to the problem. However, with the power vacuum now filled, strong stabilizing measures are being implemented.

In *China*, GDP growth in 1992 is estimated at 12.8 per cent, a distinct improvement over the 5.2 per cent average growth rate attained during the previous three years. Industrial sector growth accelerated to an estimated 20.4 per cent in 1992 and soared by 25 per cent in the first half of 1993. For the first time since 1982, the growth of heavy industries substantially outweighed that of light industries as demand for investment goods surged. The main driving force is the private and foreign-owned sector which now accounts for more than 10 per cent of the total.

The Government, at long last convinced that the economy is overheating, has introduced a package of "semi-austerity" measures to cool it down. Credit will be restrained, property speculation dampened down, and investment caution urged. However, GNP growth in 1993 is forecasted at 12.5 per cent with inflation

averaging 11.5 per cent. Industry now makes up 47.8 per cent of national income. While the State-owned industries still accounted for more than half (55.2 per cent) of industrial production by value in the first half of 1993, they contributed only 24.5 per cent of the increase in output. The collective sector accounted for 54.1 per cent of increased output value, and the private and foreign-funded sector for 21.4 per cent. Strong consumer demand led to large production increases in some consumer durables as well as fabrics and garments. But there was also a big rise in the production of basic industrial inputs.

There is some evidence of the early signs of a slow-down in the steel market. Exceptionally strong domestic demand in China is continuing to divert output away from the export market. After a surge of 18.7 per cent in 1992, export growth slowed down to just 4.4 per cent in the first half of 1993. The import boom has continued, with first half growth up 23.2 per cent after a 26.4 per cent increase in 1992 (EIU, Country Report, 3rd quarter 1993).

To a large extent, FDI is responsible for the economic boom in China. In 1992, pledged and actual FDI soared to \$57.5 billion and \$11.2 billion, or 480 and 260 per cent, respectively, exceeding that in 1991. There is concern that much of the increased investment added to existing capacities in such industries as mechanical and electrical equipment, while investment decreased proportionately in areas that need expanding such as energy, raw materials and transport (*Asian Development Outlook*).

Despite the crop failure in 1991 and abrupt loss of massive amounts of aid from Moscow, the *Lao People's Democratic Republic* managed to realize a rise of production, a fall in inflation and stabilization of the exchange rate. Real GDP grew by an estimated 7.3 per cent in 1992, well above the rate of 4.3 per cent in 1991. Inflation dropped from 76 per cent in 1989 to 20 per cent in 1990, 13.5 per cent in 1991 and less than 10 per cent in 1992. After three years of rapid expansion, the rate of growth in the industrial sector fell to 7.5 per cent because of a decline in manufacturing growth and electricity production. Even so, manufacturing still managed to grow at a respectable 10 per cent. Private investment has become the main engine of growth. Private sector credit rose by 76 per cent in 1992. In the same year, a total of \$160 million in FDI was approved, almost the same as in

1991. By mid 1992, four years after the Government introduced its foreign investment code, a total of \$350 million had been actually invested. The garment sector has attracted the greatest interest. Privatization, however, is stagnating owing to the Government's failure to open the process to international competitive bidding.

Trade is now conducted almost exclusively with the convertible currency areas. Exports rose by over 20 per cent in 1992 with garments the leading sector. Imports rose by almost 17 per cent, reflecting continued growth in the imports of materials and supplies, much of which is aid-related, and of consumer goods.

At the start of 1992, the economic prospects of *Mongolia* had looked pretty poor, with a 12.5 per cent fall in national income and an 11.7 per cent decline in gross industrial production in 1991, compared with the year before. Its economy continued to contract in 1992. Real GDP fell by about 8 per cent. Industrial output fell by 14 per cent owing to serious shortages of petroleum and of spare parts for vehicles and machinery. The first half of 1993 witnessed improvement in some manufacturing sectors and foreign trade though the government continued to struggle with budget deficits. The private sector is now responsible for about 60 per cent of industrial output. In the first half of 1993 overall industrial output was reported to have been 19.3 per cent below that of the same period in 1992. In spite of industry's generally poor performance, there has been a modest rise in the production of some export goods and commodities such as copper concentrates, cashmere and leather jackets, but output of other products, including cement, building materials, processed meat and baby milk fell. No glassware, computers or colour televisions have been produced at all, and the electronics company, Monel, recently went into liquidation (EIU, *Country Reports*). However, during the past two years, some progress has been made in dismantling the central planning system, setting up market-oriented institutions, establishing a legal framework for private economic activity and initiating privatization. *Mongolia's* foreign trade remains dominated by the old State trade corporations, with the private sector accounting for only 5 per cent of total exports.

The year 1992 was a good one for *Viet Nam*. The economy made a surprisingly strong recovery after the collapse of Soviet aid with GDP rising 6 per cent in 1991 and more than 8 per cent in 1992. Rice

production soared, the currency rallied, inflation was curbed and the first foreign trade surplus in decades emerged. Industrial growth surged by an estimated 10.9 per cent in 1992. Gross output expanded rapidly in several centrally-managed heavy industry State enterprises, such as oil, steel, cement, electricity, coal and fertilizers, despite the tightening of bank credit. The private sector grew at an estimated 6 per cent as output of cooperatives declined. Inflation, which averaged more than 60 per cent in 1990 and 1991, had fallen to an annualized rate of 25 per cent by September 1992. In the first half of 1993, industrial production was up 10.2 per cent on the same period last year. Growth is still most marked in heavy industry. Steel output, which rose 24.1 per cent in 1992, expanded again in the first half of 1993 with output 9 per cent above the total 1992 level. Cement production grew by 19.7 per cent in 1992 which made it the third fastest growing industrial sector after crude oil and steel, and continued to grow in 1993. There are plans to develop and expand the car industry. However, many firms that produce textiles, garments electric fans and other consumer goods for the domestic market are on the brink of collapse.

Both private sector investment and FDI are prominent in the Ho Chi Minh area. The private sector accounted for 60 per cent of the city's total industrial output in 1992. Demand, from both the domestic and foreign markets, has been greatest in the light industrial sector, including for plastic, household utensils, leather articles, condiments, cosmetics, shoes and indoor decorations. However, the private sector is still complaining of contradictory regulations and unequal treatment particularly in the area of taxation (EIU, *Country Reports*).

FDI continues to be concentrated in the South. Almost 75 per cent of all FDI worth almost \$3 billion is in this region. Although privatization as such is not a priority, inefficient and insolvent State enterprises are in the process of being dissolved. However, the State sector will continue to play a leading role. Exports surged in 1992 by 25.6 per cent following a decline of 18 per cent in 1991, but are concentrated in rice and crude oil. Imports rose by 14.1 per cent, especially refined oil products, fertilizers and steel.

The decision by the United States in July 1993 to stop blocking multilateral aid for Viet Nam could prompt an infusion of up to US\$ 700 million next year from the IMF, World Bank and ADB.

F. Central Asia

The economies of Central Asia, including the Islamic Republic of Iran, Afghanistan, and the republics of CIS continue to struggle with economic development. As the Islamic Republic of Iran faces continued isolation and Afghanistan remains deadlocked in clan warfare, regional cooperation between these two countries and the Central Asian republics of CIS would be of mutual advantage. However, some CIS economies are also ravaged by war and have an antiquated industrial sector. Steps to establish a market economy are being taken but the process is slow.

The economy of the *Islamic Republic of Iran* grew 11.7 per cent in 1990/91 and 10.1 per cent in 1991/92 whereas growth is estimated to have slowed down to 6 per cent in 1992/93. Industrial productivity declined owing to the severe cut-back in the import of required inputs. The traditional handicraft industry has maintained remarkable resilience. Industries like handwoven rugs and carpets, metalware, ceramics, jewellery and other crafts all survive to make the traditional sector a major employer within industry as a whole. The petrochemicals sector has been the main element of the post-war industrialization programme, whereas iron and steel are also given priority by the Government. Steel output grew to 3.5 million tons in 1992 from 1.5 million tons four years earlier. Chemicals grew by 22 per cent in 1992, whereas the textiles, clothing and leather industry contracted by 3 per cent. Despite broad commitment to heavy industry by the Government, development outside petrochemicals, metals and construction materials sectors is slow and uncertain. Foreign investors have been invited to take part in industry schemes but the response has been, so far, modest (EIU, *Country profiles*). Industry and mining makes up only 15.8 per cent of GDP. The Government intends to liberalize the economy and financial sector and deepen privatization.

The economy of *Kazakhstan* is still deeply in recession. It is estimated that GDP contracted by 15 per cent in 1992 and 16.3 per cent in the first quarter of 1993 on the same period of 1992. Industrial production has continued to fall and was 11.3 per cent lower than in the first quarter of 1992. Light industry has reported falls in output of between 28 and 53 per cent. The most significant development for the immediate economic needs of the country was the economic and trade agreements with China, signed in early 1992. Chinese entrepreneurs are allowed to trade freely in Kazakhstan

and set up manufacturing industries. Kazakhstan's greatest attraction for the West has been the vast reserves of oil and gas along the Caspian Sea, which are estimated to be equal to Kuwait's reserves. A joint venture with Chevron was set up in 1992 (*Asia 1993 Yearbook*). Inflation is high with consumer goods price increases of 790 per cent in January/February 1993 on a year-on-year basis. Exports to non-CIS partners increased by 18.7 per cent in 1992, but this value may be overstated owing to an overvalued rouble exchange rate.

The economy in *Kyrgyzstan* contracted by 25 per cent in 1992 while inflation soared by 870 per cent. Kyrgyzstan has become the first Central Asian republic to leave the rouble zone. During the first quarter of 1993, GDP fell by 15 per cent on the same period of 1992, while the decline in industrial production seems to have accelerated. Output was 27 per cent lower than in the first quarter of 1992 while for the whole of 1992 there was a decline of 25 per cent. Although some steps in the direction of a market economy have been taken, privatization moves at a very slow pace. Industry now makes up 37.8 per cent of GDP. Principal exports are light industrial products and machinery and metal-working. There is still enormous potential in developing the rich mineral resources of Kyrgyzstan but FDI is hampered by lack of export outlets. Nevertheless, Kyrgyzstan remains essentially stable and is seeking the quickest way to establish a market economy (*Asia 1993 Yearbook*).

Uzbekistan, the world's third-largest producer of cotton, mainly for use in Russia's textile industry, had a crop output of 4.5 million tons in 1991. The Government is anxious to set up a modern textile industry. However, industry has suffered from a lack of deregulation and hesitation on the part of the Government to initiate effective legislation that would privatize industry. The mining and chemical industries have also suffered from the mass exodus of Russian technicians and managers. Many plants have closed down for lack of spare parts, shortage of raw materials or lack of fuel (*Asia 1993 Yearbook*). All links with Kyrgyzstan were cut following Kyrgyzstan's introduction of its own currency. Uzbekistan refuses to leave the rouble zone, knowing it would have difficulty surviving without Russia. Net material product growth was an estimated negative 20 per cent in 1992 while inflation soared to 700 per cent.

G. Pacific island economies

The average economic growth rate for Pacific island developing economies remained steady at 6.7 per cent in 1992 with Papua New Guinea recording the highest growth of 9 per cent. The average rate of inflation in these economies also decreased in 1992 to 5.1 from 7.1 per cent in 1991. Exports also surged, but given their high dependence on imports the current account deficits of the Pacific islands remained large. The region's trade deficits with Australia and New Zealand have prompted a re-examination of the SPARTECA agreement. The SPARTECA rules have posed problems for Fiji, which has had a rapidly developing manufacturing industry producing garments, as the 50 per cent local content requirement does not encourage the reduction of local costs through efficiency and other improvements.

Another promising economic prospect for the region is oil. Fiji, Tonga and Vanuatu have started to try to interest the major oil companies in exploration. However, by and large the region continues to depend on primary industries, particularly fishing and tourism. The Federated States of Micronesia, Kiribati, the Marshall Islands, Tuvalu, Palau, Solomon Islands and Papua New Guinea recently signed an agreement to control tuna fishing.

In *Fiji*, economic growth in 1992 is estimated at 3 per cent as compared with a decline of 0.1 per cent in 1991. Industrial sector growth at 3.4 per cent was below that recorded in 1991, mainly because of a decline in sugar output. Manufacturing, other than sugar, continued to grow strongly at 6 per cent following a rise of about 8 per cent in 1991. Much of this is attributable to the continued expansion of export-oriented manufacturing under the stimulus of the Tax-Free Factory Scheme introduced in 1987 (*Asian*

Development Outlook). However, social unrest has delayed foreign investment decisions. Furthermore, exports of garments declined with the existing SPARTECA framework of rules listed as the main reason.

In *Papua New Guinea*, real GDP expanded by 9 per cent in 1992, compared with 9.5 per cent in the previous year. Output in the mining and petroleum sector surged by around 30 per cent in 1992. Long overdue reforms were achieved: the old defensive investment machinery was replaced by a new Investment Promotion Authority; the currency was devalued by 10 per cent encouraging exports, a pioneer industry scheme offering a seven-year tax holiday for new products and services was introduced. The Papua New Guinea Holdings Corporation was established as a privatization vehicle for government assets. The Government has approved a list of new forestry guidelines aimed at restricting the export of tropical logs and is also drafting legislation aimed at restricting the amount of fishing in Papua New Guinean waters by foreign companies. Total exports expanded by 27.6 per cent in 1992, as compared with 14.5 per cent in 1991, mainly owing to the high growth rates of export of agricultural commodities such as coffee and palm oil.

The economy of *Solomon Islands* grew by 5 per cent in 1992 after a faltering 1.8 per cent in 1991. Industrial growth is estimated at under 2 per cent and resulted mainly from the processing of increased primary production. Copra production recovered strongly, by around 16 per cent, while fish catch and cocoa faced a decline. Log exports soared and the Government intends to reduce the annual rate of logging to sustainable levels.

References

- (1) Economic Intelligence Unit (EIU), *Country Reports*, 3rd quarter 1993 and *Country Profiles* 1993/94, all economies.
- (2) Far Eastern Economic Review, *Asia 1993 Yearbook*.
- (3) Asian Development Bank, *Asian Development Outlook (1993)*.
- (4) UNIDO, *Global Report 1992/93*.
- (5) *Far Eastern Economic Review (FEER)*; *Bangkok Post*; *International Herald Tribune*; selected issues.

II. PROMOTION AND DEVELOPMENT OF THE TEXTILE AND GARMENT INDUSTRY IN ASIA AND THE PACIFIC: PROSPECTS AND CHALLENGES

Introduction

The textile and garment industry has historically played a crucial role in the industrial development strategies of developed and many developing countries. It represented a traditional industry which is still a major source of employment and manufacturing value added in several developing economies including the newly industrializing economies (NIEs). Originally protected under import-substitution policies, these industries basically produced for the domestic market, but as export-oriented growth policies were adopted, they played an essential role in export growth, exporting mainly to the industrialized countries on the basis of low labour cost competitive advantage. It is also an industry which has undergone considerable technological change during the last decades. Despite the rise of protectionism and agreements like the Multi-Fibre Agreements, textiles and garments though declining have continued to play an important role in those economies which have now reached higher stages of economic development. The Newly Industrializing Economies (NIEs) in Asia, particularly Hong Kong, the Republic of Korea and Taiwan Province of China, were by far the largest textile-garment exporter during

the 1960s, on an average contributing more than 75 per cent of total Third World Exports over that period. There is little doubt that the NIEs' early industrialization efforts benefitted substantially from the dynamic export-oriented expansion of their clothing industry. Apart from the NIEs, China, and to a lesser extent India, have always belonged to the world's largest textile producing countries of varying materials but this is largely due to the large domestic protected market for which textile industries have continued to produce, dominating the industrial structure in these countries. Nevertheless, these countries have great export potential in both fabrics and yarns being the lowest-cost producers world-wide. Many developing countries are now upgrading their exports by extending the textile conversion, sequence through apparel manufacture, thus increasing the value added to the exports.

For example, tables 1 and 2 show the performance of the selected countries, areas and groups in export and import of textiles and related products. Table 3 presents the process of development of textile and garment industry.

Table 1. Changes in textile exports and imports in East Asian countries/areas: 1985-1990
(US\$ million)

Country		Cotton fabrics		Synthetic fabrics		Clothing	
		Export	Import	Export	Import	Export	Import
Japan	1985	666	279	2,283	116	377	625
	1990	873	495	2,345	340	203	3,584
NIEs ^a	1985	757	257	2,464	1,504	5,999	613
	1990	1,781	1,476	6,702	3,741	11,123	3,117
ASEAN	1985	249	304	490	619	942	156
	1990	557	829	1,309	1,500	3,826	393
China	1985	994	62	496	431	906	8
	1990	1,602	312	1,095	834	3,181	17

Source: Compiled from United Nations Commodity Trade Statistics, and printed in I. Yamaza, Trade Policy Issues in the Asian-Pacific Region, The Case of Textile and Clothing Industry, Asia-Pacific Economic Literature, Vol. 7, No. 1.

^a NIE here refers to Republic of Korea, Taiwan Province of China and Hong Kong.

Table 2. Exports of woven garments by East Asian countries/areas to major markets: 1985-1990 (US\$ million)

From/to		United States	European community	Japan
NIEs ^a	1985	3,345	1,049	351
	1990	5,153	2,912	1,399
ASEAN	1985	530	148	9
	1990	1,377	1,065	188
China	1985	334	123	193
	1990	544	423	686

Source — Compiled from United Nations Commodity Trade Statistics, and printed in I. Yamaza, Trade Policy Issues in the Asian-Pacific Region, The Case of Textile and Clothing Industry, Asia-Pacific Economic Literature, Vol. 7, No. 1.

^a NIE here refers to Republic of Korea, Taiwan Province of China and Hong Kong.

A. Textile and garment industry development: the case of the Republic of Korea

In the Republic of Korea, industrial policy was directed at import substitution of non-durable consumer goods, industrial raw materials and intermediate goods, during the first five-year economic development plan, 1962-1966. The risk of labour-intensive industries like textile and garments was largely due to the initiative of private entrepreneurs starting with little capital borrowed from informal markets rather than the government initiative. The government did provide heavy protection though for these "infant" industries in the form of an overvalued currency rate, high tariffs and quantitative restrictions. However, priority industries did not include textiles and garments, but rather basic industries like cement, chemical fertilizers, oil refining and industrial chemicals. During the first plan, these industries received 32 per cent of total government investment in the manufacturing sector. At that time, textile industries were already operating in the Republic of Korea and in 1957, synthetic fibre production was pioneered in addition to natural fibre producers.

During the second five-year plan, 1967-1971, the beginning of the export-oriented industrialization drive, priority industries like automobiles, electronics, iron and steel, machinery and shipbuilding, and petrochemicals, enjoyed strong government assistance through government controlled banks' credit allocation. In the Republic of Korea, garment manufacturing has played a minor role in manufacturing production and has never contributed more than about 5 per cent to MVA.

A strong base in the textile sector, although diminishing in its economic importance has been retained and developed in the field of synthetic fibres and high quality products using most modern technologies. Although less important in terms of value added, the garment industries has been a more important contributor to export earnings than the textile industry. However, the share of both textiles and garments in total manufacturing exports has been declining since the beginning of the 1970s. Thus, though textile and garment industries were not accorded priority industry status, they benefited from the general government industrial policy focused on developing an export-oriented industry. All export-oriented industries, including textiles and garments were promoted through tax exemptions, customs rebates, easy access to foreign exchange and credit at low interest rates, provided by Development Banks and later government controlled commercial banks, although priority industries benefited to a larger extent than others. Commercial banks levied an annual interest rate of 6 per cent on borrowing for export, but 12 per cent on loans for machinery, and the gap widened during the 1960s. In 1962, the interest rate differentiate on export loans was only 1.9 per cent below the rate on normal loans, but by 1963 it was 17 per cent lower.¹

¹ Michael McDermott, Stephen Young, "South Korea's Industry: New Directions in World Markets", Special Report No. 2005, Economic Intelligence Unit, July 1989.

Table 3. Characteristics of four development stages of the textile and garment industry

Parameters	Stage I	Stage II	Stage III	Stage IV
Use of endowments <i>competitiveness</i>	Abundant natural resources (cotton, silk, wool) and/or low cost labour.	Abundant natural resources (cotton, silk, wool) and/or low cost labour.	Human capital and technology.	High technological capabilities (invention, adaption, application) and highly skilled manpower. Key role support infrastructure.
Composition of MVA <i>industrial structure</i>	Light consumer industries mass production of low VA products benefiting from economies of scale Dominance of state-owned enterprises.	Diversification - Horizontal expansion: same products and factor inputs. - Vertical expansion: higher VA products.	Dominance of intermediate and capital goods branches consolidation/streamlining shedding labour intensive industries/processes.	Dominance of service sector including a large proportion of industry related services previously included under industry. Vertical integration/cooperation concentration on high VA products for the upper-end market.
Technological Capabilities <i>level of technology</i> <i>HRD/training</i> <i>position of women</i>	Semi-automatic labour intensive technology using abundant unskilled labour force. Apprenticeship and on-the-job training sufficient. Opportunity costs of manufacturing labour force are close to zero for men and women alike. Preference for women based upon the nature and tradition of tasks.	Mix of labour and capital intensive technology. Increasing importance of vocational qualifications and in-service training industry and increasing occupational polarization between male and female labour force, opportunity costs of labour in the light, low VA industries are higher for men than women. Preference for women based upon low cost advantage.	Increasing automation to compensate for rising labour costs demand for semi- and high-skilled production labour force; increasing demand for management and marketing expertise. Increasing occupational and wage disparity between women and men due to educational and training differences. Low cost of female labour loses its prime importance as other factors enter the cost structure. Women are leaving the industry for the service sector.	Highly automated use of the newest technology responding to changing market conditions rather than changes in factor costs. Highly educated/trained manpower emphasis on multiskilling, organized in-service training/retraining, and R and D lack of technical education marginalizes women in industry, more opportunities in the supportive services.
Government Policies <i>social economic</i> <i>women specific</i>	Import protection/infant industry argument. Employment creation policies labour legislation including selective protection measures for female labour force.	Export promotion incentives for foreign investment/infrastructure. Localization policies selective protection measures for female labour force.	Provision of enabling environment for local and foreign investors cooperation with the industry in training and education. Promotion of equal employment opportunities and wages equality between men and women, social services.	Cooperation with industry on training and technology development (science parks, projects). Promotion of women's social and economic status (provision of social services and non-discriminatory legislations).

Source: UNIDO, Changing Techno-Economic Environment in the Textile and Clothing Industry, PPD. 237, 15 February 1993.

Of all the incentives on offer, automatic access to relatively cheap credit is considered the most powerful force behind Republic of Korea's early export drive. Despite the country's enthusiasm for export promotion, even though the won was devalued by nearly 100 per cent in 1964, it remained overvalued against the United States dollar (virtually the only currency in which trading was conducted) throughout the period 1962-1971. Consequently, although essential imports were unnecessarily expensive, in terms of exports, the advantages of incentives appear to have outweighed the problems arising from the residual strength of the war.²

Export growth was also stimulated by institutional arrangements. Chaired by the President himself, the monthly meeting for export promotion was established in 1965. Furthermore, annual export targets were set by the then Ministry of Commerce and Industry, now the Ministry of Trade and Industry (MTI). These were classified by product, regional and country of destination, and the performance of individual companies was evaluated vis-a-vis their pre-set targets. Companies also received support from government funded bodies such as the newly founded Korea Trade Promotion Corporation (Kotra) and the Korea Export-Import Bank. According to the textile lobby in the Republic of Korea, government incentives to the textile industry were insufficient to guarantee its international competitiveness. The Temporary Law Governing Textile Industry Equipment in 1967,

² Ibid.

assisted the industry by improving production capacity through the replacement of old facilities by new ones. The confluence of changing comparative advantage, the non-discriminatory export incentive system, and sector-specific assistance accelerated the expansion of the textile industry. Moreover, the outward processing rush by foreign textile firms and the Government of the Republic of Korea active inducement policy have facilitated the inflow of advanced technology and capital. The creation of free trade zones and the provision of tax holidays, coupled with the Government's tight control of labour, attracted foreign investors to the textile sector.

As a result of this stimulating government policy and the free trade spirit internationally, the Republic of Korea's rapid industrial expansion in the 1960s was export based. Special care was also taken to ensure that import controls did not handicap direct and indirect exports. In 1962, all manufactured goods accounted for just 27 per cent of total exports. By 1970, textiles alone were responsible for 40.8 per cent of total exports, also benefiting from the worldwide boom in manmade fibres. During the early and mid-1970s, output of the textile and related industries (i.e. apparel and leather) continued to grow very fast (table 4) despite the end to export incentives with the Republic of Korea's membership in GATT in 1967 and rising labour costs. The Government's attention became focused on heavy and chemical industries from 1971, using the following criteria for selection of strategic industries:

- Forward and backward inter-industry linkage effects:

Table 4. Republic of Korea: Production indices for textiles, apparel and leather, 1968-1988
(1985 = 100)

Year	Index	Growth rate (per cent)	Year	Index	Growth rate (per cent)
1968	6.6	40.4	1979	70.0	5.1
1969	8.5	28.8	1980	75.3	7.6
1970	10.2	20.0	1981	87.1	15.7
1971	12.8	25.5	1982	88.3	1.4
1972	17.4	35.9	1983	94.4	6.9
1973	24.4	40.2	1984	99.8	5.7
1974	28.3	16.0	1985	100.0	0.2
1975	38.4	35.7	1986	117.2	17.2
1976	51.4	33.9	1987	131.0	11.8
1977	56.9	10.7	1988	134.2	2.4
1978	66.6	17.0			

Source: Economic Planning Board.

- Value added inducement effect, hence contribution to GDP growth;
- Foreign exchange earning or saving effect;
- Utilization of domestic natural resources;
- Availability of foreign capital for the particular industry chosen.

These industries, including steel, non-ferrous metals, shipbuilding, machinery, electronics and chemicals, received financial support and massive investment through the National Investment Fund, founded in 1974 and lenient fiscal duties. They operated under a new phase of import substitution. The degree of curtailment of export incentives was significant. In 1972, exporters received a subsidy of 29.4 per cent, but within three years this had dropped to 16.0 per cent. At the same time, interest rates on loans to exporters drew closer³ to those charged on normal borrowings. Exporters in the Republic of Korea thus entered the 1980s lacking the support levels which they had enjoyed during the first and second five-year plans. Preoccupation with heavy industry diverted resources from textiles and apparel. These changing conditions led the Government of the Republic of Korea to declare the textile complex and sunset industry.

By the end of the 1970s, however, government-sponsored heavy industrialization was revealed to be a costly mistake. The strategic sectors (e.g., heavy machinery, shipbuilding, automobile, petrochemical, and electronics) suffered from capacity underutilization because of over investment, duplication, and sagging exports. Ironically, the textile sector filled the gap left by these strategic sectors. Even in the late 1970s, the textile industry still maintained a strong comparative advantage. Firms in the Republic of Korea have also managed to adjust surprisingly well to increasing United States protectionism. With only a minimum investment (compared to capital intensive heavy industry), the textile lobby argued, the textile complex could generate lucrative export earnings. These factors altered the intention of Government of the Republic of Korea to actively phase out the textile sector by reducing support to the industry and allowing competition to operate more freely.⁴

³ Ibid.

⁴ Stephan Haggard, Chung-in Moon, ed., "Pacific Dynamics: The International Politics of Industrial Change", Pacific and World Studies series No. 2, CIS-Inha University, Westview Press, 1989.

The Government shifted from its previous policy position of neglect to one of active promotion. The Government's promotional policies were codified through the enactment of the Textile Industry Modernization Act in 1979. The law identifies four operation goals and strategies: (1) the structural reorganization of the textile complex through vertical integration; (2) the differentiation of the industry through product diversification and transition from high volume, low-to-medium priced products to high-value-added and fashion-conscious ones; (3) the modernization of production capacity by the inducement of advanced foreign technology, research and development investment, and improvement and replacement of old facilities; and (4) strengthening of production and marketing information.

In order to achieve these goals, the Fund for Textile Industry Modernization was established in 1980. The government was to contribute 60 billion won during the period 1981-1986, half of the total fund. The allocation of the Fund was focused chiefly on improvement and modernization of production facilities and technology development including that of design and fashion. During 1981-1983, 12.7 billion won were allocated for low-interest (8 per cent for facilities modernization and 6 per cent for technology development), long-term (8 and 5 years respectively) loans. The government also invested an additional 12 billion won in the textile industry (especially small-scale firms) out of the Fund for the Promotion of Small and Medium Scale Enterprises. At the same time, a wide range of tax incentives extended: tariff exemption for imported raw materials, tax reduction for investments and depreciation, and special tax provision for small scale textiles and apparel firms.⁵

The 1980s witnessed a shift in government policy towards decentralization, deregulation and liberalization of the economy, and privatization. These policy changes ended government support for strategic industries effectively and instead spawned new initiatives to stimulate management in the private sector. For example, the Ministry of Technology and Industry (MTI) established some 20 Private Sector Consultative Committees for individual manufacturing industries. Such committees comprise representatives from the industry, financial institution, academia, research institutes, the media, and consumer organizations. The committees provide a forum for discussion leading to policy recommendations submitted to the government.

⁵ Ibid.

The private sector's view of industrial policy is represented by the Committee for Industrial Development and this committee's consent is required by the 1986 Industrial Development Law before the MTI can introduce certain regulatory or promotional measures with respect to a particular industry.

In the textile industry, by far the fastest growing sector and the largest by the mid-1970s was synthetics, output of which by 1980 was more than 20 times the 1968 level, compared with the trebling of production of cotton fabrics in the same period and the quintupling of wool (table 5). But because of the shift in government policy and changing external conditions, other industries' growth had outpaced textiles' and by 1981 accounted for less than 30 per cent of total exports, compared with 41 per cent in 1970 (table 6). From 1977 onwards the industry's rate of growth failed and by 1981, after a short-lived surge in 1980, decline had set in. In 1988, the textile industry finally lost its long held position as the Republic of Korea's single largest export sector. Although textile exports increased by 19.4 per cent to \$14.12 billion, electronic exports grew by 39.3 per cent to \$15.65 billion.

Nevertheless, textile and related industries have managed to remain important in the industrial sector

in the Republic of Korea both in terms of output and exports. In the absence of any further government support, textile companies have taken up their own initiatives. Apparel manufacturers have transferred production overseas to certain Asian countries to overcome the main problems of the appreciation of the won, rising labour costs and more expensive imported materials and to secure unused quota, and to the Caribbean to overcome United States protectionism. They have also begun to move up market and many have licensed prestigious foreign brand names. Industry and Government are united, however, in their efforts to reduce dependence on imported technology. Local designers are receiving financial and marketing assistance from the government through the Korean Federation of Textiles Industries.⁶

The textile industry also has technical weaknesses. Dyeing, for example, is a capital-intensive process with high wastage levels. The Government is providing funds for plant modernization and anti-waste equipment. The industry still exports more than 70 per cent of its output. The Government is encouraging the industry to be more profit oriented, but it

⁶ McDemott, *op.cit.*

Table 5. Output of principal products of the Republic of Korea's textile and apparel industry, 1968-1987

	Woolen yarn (tons)	Cotton fabrics ('000 m ²)	Pure silk fabrics ('000 m ²)	Synthetic fibre fabrics ('000 m ²)	Knitted underwear ('000 items)
1968	2,315	113,293	3,182	71,000	...
1969	1,847	191,820	4,704	96,479	...
1970	1,927	192,634	6,923	175,498	...
1971	1,402	233,782	8,134	222,914	...
1972	3,231	201,189	12,032	338,123	...
1973	3,145	264,400	15,538	519,576	...
1974	2,747	261,446	13,887	479,070	...
1975	3,299	254,779	14,789	726,959	...
1976	5,271	294,770	14,458	942,227	...
1977	9,889	287,740	11,290	963,144	...
1978	9,744	273,391	17,050	1,103,196	134,713
1979	11,559	317,160	13,846	1,233,803	165,271
1980	12,325	366,019	11,317	1,461,249	179,187
1981	13,643	353,654	18,649	1,801,872	168,848
1982	16,433	446,882	21,379	1,753,977	187,150
1983	20,708	442,263	19,619	1,801,645	219,440
1984	23,417	395,310	18,404	1,936,129	217,400
1985	25,736	470,129	19,651	2,101,099	208,377
1986	29,246	536,415	25,860	2,357,801	268,288
1987	33,582	539,134	31,044	2,624,355	340,200

Source: Economic Planning Board.

has also set a target of 10 per cent of the world market by the year 2000. Most major textile producers have belonged to groups pursuing a concentric diversification strategy. They are investing heavily in their non-textile businesses in order to boost the proportions of non-textile sales. At the same time, in order to accelerate diversification, they are entering licensing agreements with foreign partners. With the increasing rate of technology, textile producers have stepped up R and D efforts while also acquiring technology externally.

The textile industry in the Republic of Korea has

been a front runner in the country's export-oriented industrialization drive, benefiting from government incentives to export-oriented industries, though never being singled out as strategic industry. Most of its success was originally due to the international climate of free trade and textile boom in the absence of too many competitors and its own initiatives and entrepreneurial spirit. When decline set in, textile industries successfully shifted production abroad, diversified into other product lines, and stepped up R and D efforts and technology upgrading. Although the Government has provided substantial support to the industry, this has not been a decisive factor in their success.

Table 6. Major export items from Republic of Korea, 1970-1988
(Per cent of total exports)

Rank	1970		1975		1981		1985		1988 (Jan-Sep)	
	Item	Per cent	Item	Per cent	Item	Per cent	Item	Per cent	Item	Per cent
1	Textiles	40.8	Textiles	36.2	Textiles	29.5	Textiles	23.1	Electronics	25.3
2	Plywood	11.0	Electronics	8.9	Electronics	10.6	Ships, sea		Textiles	24.3
3	Wigs	10.8	Steel products	4.6	Steel products	10.5	structures	10.6	Footwear	6.7
4	Mining goods	5.9	Plywood	4.1	Ships, sea		Electronics	14.0	Steel products	6.4
5	Electronics	3.5	Footwear	3.8	structures	6.7	Steel products	8.5	Automobiles	5.3
					Footwear	5.0	Footwear	5.2		
Sub-total		72.0		57.6		62.3		61.4		68.0

Source: The IRP-Yong, "Korean Trade Reaches a Turning Point", *KCCI Quarterly Review*, January 1989.

B. Textile and garment industry development: the case of Taiwan Province of China

In Taiwan Province of China, the initial years after independence mainly left industrial development to private indigenous entrepreneurs. The Government adopted protectionist measures, however, to enable the first labour-intensive industries, dominated by textiles, garments and footwear, to arise free from competition. During the First Four Year Economic Development Plan in 1953, the textile industry was selected as strategic import substitution sector. It suppressed imports by adopting a multiple exchange rate and licensing measures. As these industries did very well, helped by a rationalization policy for agriculture, the possibilities of easy import substitution had already been exhausted by the early sixties. This was particularly so for textiles. In the late 1940s and early 1950s, import substitution was most notably successful in cotton textiles, which relied on imported raw cotton. By 1952 however, cotton textile production had reached the limit of the domestic market, and import substitution shifted to

other commodities, including synthetic yarn. Import substitution in those industries was achieved quickly because of relatively simple technology involved in the production process. Table 7 shows that textile and apparel industries witnessed the highest growth rates, apart from transport equipment, and has effectively continued to do so during the era of export-oriented growth.

To promote import substitution, Taiwan Province of China employed the usual policy package of tariffs, import controls and quotas, and multiple exchange rates. Between 1948 and 1955, the average nominal tariff rate for all imports more than doubled, rising from 20 to nearly 45 per cent. By prohibiting the importation of luxury goods and controlling the imports of other consumer goods, the government managed to conserve foreign exchange for capital and raw material imports.

**Table 7. Average annual growth rates of industrial production 1949-1973 (per cent)
(Taiwan Province of China)**

	1949-1973	1949-1954	1955-1962	1963-1973
Total	17.6	22.0	10.8	20.1
Food	11.9	28.5	7.3	6.2
Beverages	11.7	16.7	4.7	14.2
Tobacco	8.1	20.8	3.4	4.5
Textiles	26.0	54.9	9.2	22.4
Apparel	-	-	-	25.8
Wood and wood products	15.9	11.0	14.1	19.9
Paper and paper products	17.2	23.0	15.8	15.2
Printing	-	-	-	8.9
Leather products	15.8	24.4	12.7	13.4
Rubber products	20.7	28.3	10.3	24.1
Chemicals	21.2	16.1	16.8	27.3
Products of petroleum and coal	15.8	21.8	8.4	17.9
Nonmetallic mineral products	13.4	13.2	15.6	11.8
Basic metals	19.5	36.8	13.0	14.8
Metal products	20.6	31.9	12.6	20.1
Machinery except electrical	17.3	19.9	11.3	20.3
Electrical machinery and supplies	28.8	49.8	24.1	20.7
Transportation equipment	58.9	154.6	26.4	30.2
Miscellaneous	19.2	12.2	5.5	31.3

Sources: MOEA, *The Republic of China, Taiwan Province of China Industrial Production Statistics Monthly* July 1963, pp. 8-11, and July 1975, pp. 11-23.

In 1959, a Nineteen-Point Programme of Economic and Financial Reform was launched by the Government to relax some of the restrictions and regulations that hampered normal commercial undertakings. Various trade and foreign exchange controls were dismantled, a single exchange rate was adopted, FDI was promoted, and the planning machinery was reinforced in the Economic Planning Council that would later be known as the Council for Economic Planning and Development (CEPD). The CEPD drew up a series of four-year plans that were indicative for the private sector rather than to provide a basis for heavy government intervention. The era of export-led growth had begun.

A Board of Foreign Trade was established to promote exports and impede competing imports. Special incentives given to exporters included low-interest loans, rebates on customs duties, remission of various taxes, devaluation of the currency, and subsidies. The top export products appeared to be an extension of early import substitutes, like textiles, garments and footwear. Later, electronics were added. The Ministry of Finance and Bank of China were instrumental in accumulating and distributing funds. The National Science Council and a new Science and

Technology Advisory Group promoted more practical technology transfers as well as R and D.

Export cartels, including one in cotton and woolen textiles, were established and in 1966 the first export processing zone (EPZ) was opened. Companies settling down in EPZs were exempt from import duties to aim at export of all production.

By changing critical price relationships, the post-1958 reforms made it more profitable for domestic producers to export, especially in the cotton textile industry.⁷

Taiwan Province of China's outward-looking strategy managed to revive the floundering textile industry in the 1960s, whose growth accounted for nearly 25 per cent of the net increase in manufacturing value-added. By the late 1960s, textile was Taiwan Province of China's most important manufacturing industry, accounting for about 20 per cent of the value-added originating in manufacturing and almost 30 per cent Taiwan Province of China's total export. In 1969, 38.9

⁷ See e.g. Samuel P.S. Ho, "Economic Development of Taiwan 1860-1970", Yale University Press, 1978, p. 198.

per cent of total textile and apparel production was exported. In contrast to Japan and the Republic of Korea, Taiwan Province of China did not implement any sector specific industrial policy. Incentives were largely non-discretionary, including changes in macroeconomic and exchange rate policies. Nevertheless, they were of great importance to the textile industry.⁸

The Statue for the Encouragement of Investment (1961) entitled the textile industry to several financial and tax benefits extended to other industries. On the other hand, the enactment and timely amendment of the Statue for Investment by Foreign Nationals (1954) and the Statue for Technical Cooperation (1962) has helped attract foreign capital and technology essential to the expansion and modernization of the industry, including from overseas Chinese. The creation of export processing zones was especially helpful in facilitating in the inflow of textile-related foreign capital and technology, mostly Japanese. The expanding export markets and comparative advantage in labour costs made the textile industry a booming sector.

Starting in the late 1960s, however, the textile industry of Taiwan Province of China encountered the same constraints that faced the industry in the Republic of Korea: import restrictions, the emergence of ASEAN exporters, and rapid industrial reorganization into high-value-added technology intensive sectors such as electronics and resulting labour shortages that weakened Taiwan Province of China's comparative advantage in cheap labour. Despite these market changes, the government did not devise any sector specific industrial policy until the Ten Year Textile Industry Revitalization Plan in 1980. The Ten Year Plan is one of the Government of Taiwan Province of China several sector specific industrial policies. It demonstrated the wish of the Government to maintain the industry and reverse the trend of eroding comparative advantage through promotional policies aimed at boosting exports. Taiwan Province of China's textile industrial policy has not greatly deviated from that of the Republic of Korea. It focused on three elements: (1) structural reorganization through the promotion of vertical integration; (2) differentiation of products into high quality and high-value-added ones through technological innovation and R and D; (3) modernization of

product capacity by the improvement and renovation of equipment.

The implementation of the plan has not been smooth. The textile complex in Taiwan Province of China is relatively fragmented with the existence of small apparel and textile firms. This fragmentation is held responsible for the weakening of the industry's competitiveness. The plan's first target was to consolidate these small firms into larger, vertically integrated groups. Primarily due to resistance by small firms, however, this consolidation process has not been implemented as anticipated. In addition, a package of comprehensive financial, tax, investment, and administrative incentive embedded in the plan has not succeeded in upgrading the quality, developing new products, or improving equipment; as originally planned.⁹

Following the Republic of Korea's experience, government attention in the 1970s and 1980s moved to capital and technology-intensive industries. Tables 8 and 9 are indicative of the fact that electronics and computer industry output have surpassed textiles and apparel in importance in the 1980s. However, as in the Republic of Korea, Taiwan Province of China's textile industries have proved to be remarkably-resilient. The yarn and fibre industry is among the most competitive in Asia despite recent upward pressure on wage costs. The textiles industry has actually managed to sustain its performance through increasing value added rather than sales value.¹⁰ However, some less efficient producers were hurt by the impact of the strong NT dollar, and a few are investing in lower cost centres such as Thailand, Indonesia, the Philippines, and mainland China — a strategy impeded by the network of production quotas governing global textiles trade.

The major role of the government has continued to be as one of providing incentive to industry to improve production techniques and product diversification. In 1980, the Hsinchu Science Based Industrial Park opened, which houses two universities, research institutes and laboratories. Investors in the park also receive a five year tax holiday, import duty exemption and certain financial and foreign exchange freedom.

⁹ Ibid

¹⁰ Economic Intelligence Unit Country Profile 1992/93, Taiwan.

⁸ Haggard, *op cit*

Table 8. Relative share of expansion of food processing, textiles and footwear, and electrical machinery industries in manufacturing expansion 1954-1979 (Taiwan Province of China) (Per cent)

Industry	1954-1961	1961-1966	1966-1971	1971-1979
1. Food processing	25.4	14.6	8.9	3.8
2. Textiles and footwear	7.3	14.2	27.3	11.5
3. Electrical machinery	2.8	8.8	12.8	12.8
The three labour-absorbing industries (1+2+3)	35.5	37.6	49.0	28.1
4. All other sub-industries	64.5	62.4	51.0	71.9
Total manufacturing	100.0	100.0	100.0	100.0

Source: Directorate-General of Budget, Accounting and Statistics, Executive Yuan, *National Income of the Republic of China*, various years.

Table 9. Index of industrial production in Taiwan Province of China (1986 = 100)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
General	76.5	85.6	87.8	100.0	110.7	115.6	119.5	118.1	126.1
Manufacturing	75.4	84.7	86.9	100.0	111.2	115.4	119.0	116.7	125.3
Food index	87.1	91.6	99.8	100.0	104.6	105.8	103.5	108.6	111.8
Textiles	84.2	92.7	92.2	100.0	104.7	94.0	97.6	92.1	98.8
Plastic products	65.1	78.4	82.5	100.0	113.2	118.9	116.7	107.4	111.6
Machinery	76.0	81.4	83.8	100.0	117.8	134.0	135.4	139.5	149.4
Electrical machinery and appliances	62.1	81.6	78.1	100.0	123.7	136.3	141.8	140.2	154.0
Transport equipment	79.8	87.4	83.2	100.0	122.8	125.2	143.9	144.1	160.5
Basic metals	79.3	84.2	86.5	100.0	107.5	120.3	127.0	129.7	143.5

Sources: Council for Economic Planning and Development, *Taiwan Statistical Data Book, Industry of Free China*.

C. Textile and garment industry development: the case of Indonesia¹¹

During the colonial period, indigenous Indonesia textile producers were initially quite successful, although they were later swamped by the larger mechanized factories controlled by foreign capital, mainly Dutch and Chinese. Quotas on the import of Japanese cloth stimulated domestic textile production in the 1930s. Although the Dutch and Chinese took

over textile industries, a few indigenous operators managed to maintain a substantial base in the textile industry, forming producer and trade cooperatives.

After independence, the Government moved quickly into all spheres of economic activity. State corporations also moved into the textile industry with the argument that the private sector was unable to do so. State Industrial Corporations were financed through the state finance banks, in particular the Bank Industrial Negara (BIN). The Government also took control over trade. However, up to 1956, the intervention of the state in the economy was motivated by the idea that the State would provide the infrastructure for the

¹¹ This subsection highlights the special relationships between politics and industry that has influenced the growth of the Indonesian textile industry, and is largely a summary with focus on the textile industry of: Richard Robinson, "The Rise of Capital", Asian Studies Association of Australia, Allen and Unwin 1986.

development of a domestic capitalist class. In 1956, the Economic Urgency Programmes were abandoned, because the Government itself was unable to mobilize capital for many of the industrial projects proposed and because it was found to be impossible to attract indigenous partners with sufficient capital resources to participate. However, the Benteng programme, established in 1950 to allocate import licenses, and state control over the allocation of state credit, licences, monopolies, contracts and other concessions continued and was to become an object of struggle between state managers who wished to use them as tools in regularized economic strategies. State power was both patrimonial and mercantile in character. Especially the large enterprises, including large textile mills belonging to large trading groups benefited from these programmes and were even able to enter sole agency agreements with foreign manufacturers. This did not prevent the shifting of the bulk of these industries into the hands of the Chinese as a result of the increasing application of capital and technology. In the textile industry, imports of cloth and cotton were reserved for Benteng importers, but individual indigenous producers, with a few notable exceptions, lacked the capital to purchase licenses and make prepayments themselves. The decline of indigenous producers was also hastened by their inability to compete with fully manufactured textiles imported by Benteng importers or to compete for government orders with the more highly mechanized Chinese and European mills. Furthermore, inflation played havoc. Traders in the Japanese textile industry found they had to pay inflationary prices for supplies from abroad at the same time that they were harassed by sporadic price controls. Even at high prices, supplies became uncertain as the overvalued exchange rate caused exchange reserves to dwindle. However, instead of opening up, the state continued to strengthen its hold on the economy.

The period 1957-1965 was the era of the "Guided Economy" in which import substitution was the central policy and where the state was in charge of the coordination and regulation of all sectors of the Indonesian economy, state, private, and cooperative, to ensure the integration of investment and production into the wider social and political goals and needs of Indonesia. State leadership was provided both in the form of central planning and control over distribution, credit and production and by direct state investment. Foreign capital was subordinated through a combination of expropriation, preference for government-to-government loans and, where direct investment could not be avoided, joint ventures and production-sharing agreements. However, this policy failed. State

enterprises proved to be largely inefficient, and private business suffered from the general process of economic dislocation, collapse of infrastructure, inflation, shortages of inputs essential to production. The problems were particularly acute for the smaller commodity producers with limited capital resources. Most of the smaller indigenous textile producers, for example, did not have enough funds to purchase their quotas of raw cotton which had to be indented for in advance and they found bank credit hard to obtain. Consequently, they either processed the yarn on a commission basis for a middle man who financed the purchase of the raw material, or paid part of the quota to a money lender as interest, or sold the entire quota to the middlemen who financed its purchase. In this way, the greater part of the yarn allocations of small and medium producers was channeled to the larger and more efficient factories.

Smaller textile producers tended to exaggerate their production capacity in order to gain larger allocations, the majority of which they could sell in order to finance the purchase of enough cotton to keep production going. Many smaller producers gave production away completely and became sellers of allocations rather than manufacturers. By purchasing the excess allocations from the smaller producers, larger manufacturers, predominantly Chinese, established an increasingly dominant position in the industry in this period. However, despite their advantage in the black market, even the larger scale operators were forced to operate below capacity because of overall shortages of foreign exchange for imports of yarn and other raw materials. Investment in new machinery was minimal and most power looms in operation had been installed in the colonial period. Those indigenous capitalists who did manage to establish large textile manufacturing plants were drawn less from traditional textile producers but increasingly from the ranks of those businessmen who had built import firms around Benteng licences and who maintained association with political leaders, thereby guaranteeing privileged access to both import allocations and state-bank credit.

The years 1949-1965 had seen the failure of Indonesia to build its own nationalist capitalist economy through either a domestic capitalist class or state-owned capital. The New Order after 1965 started with a policy of *laissez-faire* and provided the conditions for the re-entry of foreign capital. However, import-substitution remained the core strategy, and as early as 1970 a reversal to economic nationalism occurred. The shift towards market economics was induced by IMF/IBRD/FGGI policy prescriptions and conditions for debt relief

arrangements. The import substitution programme adopted in the first five-year plan, Repelita I included the textile (1969-1974) industry and was aimed at the rehabilitation of industrial infrastructure in West Java. It involved preferential fiscal and monetary policies, including preferential effective foreign exchange rates, direct concessionary bank credits, tax holidays, cushions exemptions, protective tariff, subsidized infrastructure and administrative services and assistance. The most important pieces of legislation shaping the structure of capital ownership under the New Order have been the Foreign Capital Investment Law (PMA) and the Domestic Capital Investment Law (PMDN). As a result, foreign capital flowed into the textile sector, especially Japanese, and was invested in large integrated mills. By 1980, realized foreign investment in textiles totalled US\$513 million compared with approximately US\$89 million domestic investment. Private domestic investment constituted the largest sector in the mid 1970s. Several major domestic business groups with political patronage were operating on a large scale in the textile sector, often in joint ventures with foreign partners. The bulk of private domestic enterprise and employment was, however, in smaller ventures, including textiles and weaving. Given that the domestic market proved to be a finite one and that import substitution rapidly became saturated, the rapid gains by foreign investors were losses for the smaller indigenous firms. State protection of the import substitution sector and provision of infrastructure had to a considerable degree benefited foreign capital and not domestic enterprises. However, nothing was done to rectify this situation. As a result, strong calls were made for more protection of domestic enterprises and the curbing of foreign capital which ultimately led to the re-emergence of economic nationalism in the mid 1970s. State-led national capitalism became the norm once again, facilitated by the surge in oil revenues, and foreign investment was curtailed. State attention focused on priority industries in resource processing and in sectors like steel, paper and cement, but not textiles on a priority basis anymore. The Government remained committed to foreign investment, however, despite the increasingly stringent demands on international capital to ensure domestic equity participation and, more importantly, to submit to increased control by the Government of Indonesia over the areas in which it could invest. Foreign investors were forced out of protected import-substitution industries into sectors which required a level of capital or technology not available domestically. For policy makers in the period 1974/75 – 1981/82 the enormous sums made available to the State through oil company tax meant that the State could finance and directly invest in economic

development, and on a scale previously impossible, either through the creation of infrastructure, the provision of credit to national corporations and direct state investment in major resources, or through industrial projects.

The new policy focus had substantial consequences for the textile industry. Rapidly growing from 1967 with heavy protection from imports the textile industry had become saturated by the mid 1970s and, as well, offered few backward linkages. When production exceeded domestic demand, many textile factories were closed down. Levels of imported inputs for the industry in 1974 was 99 per cent of cotton, 100 per cent for synthetic fibres, 50 per cent for yarns, 95 per cent for textile dyes, 99 per cent for machinery and 95 per cent for spare parts. In that year, a ban was placed on new investments in low quality textile manufacturing and investment in the outer island was restricted. Investments in fully integrated mills were given priority.

Foreign investment has dominated the higher technology projects with higher value-added, while domestic investment has tended to be located in the more labour-intensive and smaller-scale enterprises. This division, which was quite clear in the industrial census of 1974, has continued into the 1980s in certain key areas of import substitution manufacture. For example, in textiles PMA realized investment to 1980 failed US\$837 million compared to US\$297 million under PMDN, giving a clear supremacy to foreign capital in large-scale integrated spinning mills.

Around the beginning of the 1980s more attention was paid to SMIs. Special credit schemes were designed but remained small. Banks were forced to lend to SMIs and to a lesser extent to big indigenous business. Potential patronage continued to ensure funds for many indigenous enterprises. Some state commercial banks were also forced to become shareholders and become involved in the management of many declining companies in fields including textiles and accumulated bad debts as a result. Some companies were alleged to involve banks in control and ownership deliberately, as a form of guarantee against bankruptcy. With the decline in oil revenue in the early 1980s, the Government has attempted to increase non-oil export earnings, especially in the manufacturing sector. For that purpose, export-oriented industries were offered tax and other incentives to investments which would increase foreign exchange earnings. The textile and clothing industry has turned into export industry but it does not rank among the leading export items and its contribution to manufacturing value added is rela-

tively small as table 10 shows. Table 10, based on input-output data, shows a decline in the importance of the textile industry in the first half of the 1970s, when the industry was still largely import substitution based, whereas the industrial survey shows an increase.

This is probably a consequence of the fact that in the textile industry small-scale enterprises account for a substantial proportion of the sector's output. In this segment of the textile sector output may have been stagnant or declining, as growth in the modern sector

Table 10. Distribution of manufacturing value added at factor cost by 25 sub-sectors, 1971, 1975, 1980 and 1983 (values in Rp. million) (Indonesia)

ISIC	Sector	1971		1975		1980		1983	
		Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent
Basic agro-processing									
311/2	Food products	172,374	76.6	374,091	79.0	909,900	66.8		n.a.
314	Tobacco	13,344	5.9	28,255	6.0	33,910	2.5		n.a.
331	Wood products	24,963	11.1	41,310	8.7	26,340	19.3		n.a.
355	Rubber products	14,427	6.4	29,628	6.3	154,104	11.3		n.a.
Total basic agro-processing		225,108	100.0	473,284	100.0	1,361,254	100.0		n.a.
Manufacturing									
311/2	Food products	102,388	24.4	401,590	20.0	1,204,695	22.8	1,182,580	19.4
313	Beverages	5,397	1.3	14,960	1.1	36,302	0.7	85,159	1.4
314	Tobacco	15,665	3.7	66,942	5.0	259,494	4.9	599,088	9.3
321	Textiles	45,373	10.8	104,758	7.8	326,625	6.2	433,138	7.1
322	Clothing	24,484	5.8	52,595	3.9	137,546	2.6	138,852	2.3
323	Leather	2,152	0.5	10,578	0.8	21,268	0.4	19,112	0.3
324	Footwear	8,428	2.0	25,440	1.9	77,674	1.5	106,342	1.8
331	Wood products	4,696	1.1	30,944	2.3	245,798	4.7	388,612	6.4
332	Furniture	4,669	1.1	10,050	0.8	78,520	1.5	85,971	1.4
341	Paper	3,786	0.9	12,270	0.9	26,975	0.5	29,372	0.5
342	Printing, publishing	17,188	4.1	44,496	3.3	93,251	1.8	83,620	1.4
351	Industrial chemicals	1,667	0.4	32,729	2.4	514,001	9.7	528,941	8.7
352	Other chemical products	20,536	4.9	40,406	3.0	255,391	4.8	286,974	4.7
353	Petroleum products	57,901	13.8	90,356	6.8	455,900	8.6	67,980	6.1
354	Other oil products	430	0.1	2,913	0.2	1,072	-	-	-
355	Rubber products	3,150	0.7	15,829	1.2	45,074	0.8	91,264	1.5
356	Plastic products	1,657	0.4	7,336	0.5	63,288	1.2	71,145	1.2
361	Ceramics, pottery	415	0.1	1,906	0.1	3,914	-	7,114	0.2
362	Glass	1,213	0.3	3,286	0.2	18,203	0.3	45,768	0.8
363	Cement	3,999	1.0	18,701	1.4	112,547	2.1	137,084	2.3
364/9	Building materials	16,020	3.8	44,795	3.4	74,820	1.4	122,932	2.0
371	Iron and steel	1,205	0.3	4,148	0.3	139,941	2.6	163,963	2.7
372	Non-ferrous metals	5,889	1.4	16,170	1.2	69,118	1.3	136,973	2.3
381	Metal products	18,715	4.5	50,631	3.8	145,563	2.8	174,668	2.9
382	Non-electrical machinery	530	0.1	24,695	1.8	240,045	4.6	163,411	2.7
383	Electrical machinery	7,128	1.7	17,368	1.3	145,603	2.8	148,074	2.4
384	Transport equipment ^a	40,232	9.6	176,385	13.2	426,900	8.1	424,078	7.0
385/90	Other manufacturing	5,446	1.3	14,765	1.1	54,852	1.0	61,019	1.0
Total manufacturing		420,355	100.0	1,337,042	100.0	5,274,380	100.0	6,083,343	100.0

Source: BPS, *Tabel Input-output Indonesia, 1971, 1975 and 1980*.

Ministry of Industry, *Penyusunan Tabel Input-output Indonesia Updated 1983*, Jakarta, 1985.

Ministry of Industry and BPS, Provisional input-output table 1980, for data selected agro-processing industries not available in the final 1980 input-output table

^a In the original 1971 and 1975 input-output data the transport equipment sector also included a substantial repair sub-sector. In 1980 the bulk of repair activities had been allocated to the services sector. For this reason repair activities have also been excluded from the 1971 and 1975 data.

replaced, at least to some extent, activities carried out in the small-scale sector.¹² Indonesia has not switched to a full-fledged export-oriented growth strategy like its ASEAN partners and the NIEs although exports have played an increasing role in the 1980s. However, despite attempts at export diversification, the bulk of exports still consists of oil and gas. Nevertheless, textile and garment exports from Indonesia are highly competitive with similar exports from NIEs and other ASEAN countries. They benefit from NIEs foreign investment in the country, making use of cheap labour

¹² Huib Poot, Anie Kuyven Hoven, Jaap Jansen, "Industrialization and Trade in Indonesia", Gadjah Mada University Press, 1991.

D. Textile and garment industry development: the case of Malaysia

Initially, the Malaysian manufacturing sector played a rather insignificant role in the economy, dominated by the sectors like food, timber and rubber. The textile sector was of no importance and was not designated priority industry under the Pioneer Industries Ordinance of 1958 aimed at import substitution. Incentives offered under the ordinance on the basis of tax holidays as a function of capital investment gave little encouragement to the establishment of small industries, the vast majority of which utilized processing techniques based on domestic raw materials. Foreign investment soared, however, responding enthusiastically to Malaysia's industrialization drive, but was not forthcoming in the textile sector, but rather in sectors like petroleum and chemicals (United States), iron and steel, car assembly and electrical appliances (Japan). The major bulk of domestic industrial activities that evolved over the period 1957-1970 originated from the local Chinese, producing for the domestic market in sectors like food, wood-based plastics and general engineering, and sugar refining. The larger establishments were foreign-owned.

It was not until the export-oriented industrialization drive in 1970s that the textile sector emerged as a strong, export-oriented industry. Textile's contribution to manufacturing value added did not materialize until the 1970s. The 1968 Investment Incentives Act and 1971 Free Trade Zone Act boosted the number of export-oriented industries. Although textiles were not a major export-item in 1970, they already accounted for 8.5 per cent of the total manufactured goods export, growing steadily at an annual

costs, and the bulk of textile and garments exports is directed to these countries and the Middle East, rather than Europe and the United States where they face heavy restrictions.

Much emphasis is put on quality improvement and better production techniques. The Government's priority is on higher value industries, which as a result, figure more prominently than the textile sector, which is now mainly in the private sector.

Thus, the textile and garment industry in Indonesia is moving effectively towards export promotion. This sector is being diversified, using the locally available materials and abundant labour.

rate of 25.4 per cent. By 1986, textiles exports contributed 11.0 per cent to the export of major manufactured goods, making it the second most important item after electronics.¹³

Export promotion was the central theme of the New Economic Policy Labour-intensive adopted in 1970, which aimed at increasing the bumiputra share in ownership and control of economic activity through maximum growth, regional dispersal and promotion of employment. The main policy instruments were a system of industrial incentives (pioneer status, investment tax credit, labour utilization relief), industrial estates and export processing zones, and participation in industrial ventures by government-aided bumiputra institutions. In the early 1980s, government attention shifted toward the promotion of heavy industries, spurred by the international recession which heavily affected the export sector. The textile sector contracted by 4.8 per cent and 4.6 per cent in 1982 and 1983 respectively, an average contraction of 2.6 per cent over 1981-1983 compared to an average annual growth of value added of 11.9 per cent over 1976-1980 (table 11).¹⁴ Rising labour costs contributed to the decline of the sector.

Export of textile goods to industrialized countries was also limited by export quotas imposed under the

¹³ Fong Chan Onn, "The Malaysian Economic Challenge in the 1990s: Transformation of Growth", Longman Singapore Publication, 1989.

¹⁴ UNIDO, Industrial Development Review Series: "Malaysia", IS 545, 31/7/1985.

Table 11. Malaysia: Average annual growth of value added by branch of manufacturing, 1971-1983 (Per cent)

Manufacturing sub-sector	Average annual growth rate		
	1971-1980	1976-1980	1981-1983
Processed food	4.5	6.9	-0.3
Other foods	n.a.	6.3	4.8
Oils and fats	26.0	15.4	9.1
Beverages and tobacco	6.9	9.5	-3.3
Textiles and clothing	13.3	11.9	-2.6
Sawmills and furniture	8.7	8.6	0.4
Paper and printing	7.6	16.4	6.2
Industrial chemicals	2.0	10.8	-11.6
Chemical products	6.5	9.9	2.9
Petroleum products	3.5	10.4	18.6
Rubber products	5.5	4.4	-3.3
Cement	7.0	10.1	10.7
Other non-metallic products	4.7	15.4	-4.4
Basic metal products	10.3	9.5	3.2
Fabricated metal products	7.2	11.7	3.8
Electrical machinery	10.8	11.0	10.7
Transport equipment	8.6	15.6	4.9
Other manufactures	36.4	13.3	-2.4
Total	11.6	11.3	4.4

Sources: *Fourth Malaysia Plan 1981-1985; Mid-Term Review of the Fourth Malaysia Plan 1981-1985.*

Multi-Fibre Agreement (MFA). The national quotas were negotiated by the country, and assigned by the Ministry of Trade and Industry to various textile firms. In the mid 1980s, about 40 establishments were allocated quotas for exports. Detailed analysis of the export performance of some of these firms in 1988 indicated quota limitation was the major constraint preventing better export performance of these firms. This suggests that continued expansion of Malaysian textiles will depend crucially on Malaysia's ability to expand its quota and the MFA.¹⁵

A major strategy pursued to accelerate export-oriented industrialization in Malaysia is the establishment of FTZs. Starting in 1972, there were already 8 FTZs established by the end of 1983. Firms located in the FTZs have to export at least 80 per cent of their production, the production meant for export are exempted from payment of custom duties on the needed imports or duties on exports. The majority of the 88 plants operating in the FTZs in 1983 were in the electronics and electrical components (47) while another 10 were involved in textile manufacturing. This means that FDI played an important role in the textile

exports, at least in the late 1970s and early 1980s. It is interesting to note that Malaysia has been successful in areas such as textiles, where it has no resource comparative advantage (most raw materials like cotton, acrylic fibre, woollen yarn and fabric of fine count, rayon wool and even rubberized waterproof fabric for apparel making are imported) and highly unsuccessful in the further processing and manufacture of products based on commodities of which it is the world's major exporter.¹⁶

The Industrial Master Plan (IMP), adopted in 1986 has singled out the textile sector as an industry that requires special attention. The IMP advocated, *inter alia*, incentives for import-substitution and elimination of discrimination against exports. Although the emphasis of the IMP was on promotion of heavy industries, the textile and apparel industry was pushed to grow through modernization and rationalization, while the apparel segment is expected to take minimum advantage of its export potential by expanding production facilities if necessary.¹⁷

¹⁶ *Ibid*

¹⁷ UNIDO, Industrial Development Review Series, "Malaysia, Sustaining the Industrial Investment Momentum", Basil Blackwell, 1991.

¹⁵ Fong Chan Onn, *op.cit.*

The Malaysian textile industry can be broadly divided in two subsectors, namely textiles and weaving apparel. In the textile subsector, activities are confined mainly to polymerization (production of man-made fibre), spinning (natural and man-made fibre yarn), texturing of man-made fibre yarn, weaving and knitting a wide range of fabrics. In the knitting subsector, activities are concentrated on various types of garments and include a wide range of textile products such as carpets, rugs, ropes twine, towels, narrow fabrics, socks, laces and also textile goods such as bed linen, table linen and headwear.

The textile industry comprises a relatively small number of companies engaged in spinning, weaving and fabric processing, a significant number of companies are involved in apparel manufacturing. There were about 160 textile and apparel manufacturers who are member of the Malaysian Textile Manufacturers Association. More than half of them produced woven apparel, knitted fabrics and knitwear, as well as undergarments, of which the majority is for the export market.

Since the declining years of 1981-1983, there has been a gradual and steady increase in output over the years in the textile subsector. Whereas the cotton fabric segment grew modestly at 6 per cent during 1983-1988, the apparel segment recorded spectacular production

increases in volume terms during the period (table 12). The relatively high pace of expansion in the apparel subsector has been attributed partly to the new technologies used in the garment industries, particularly in the larger plants. A few of the medium-size plants have begun to use smaller computer-aided marker drawing machines. Among the two segments of the textile industry, the apparel subsector is more export-oriented. The ratio of exports to output was around 65 per cent in the early 1980s. The corresponding ratio for textiles was only around 25 per cent. Countries which are signatory to the MA represent the main destination for Malaysian apparel exports, with the United States and the European Community constituting the main markets. On the other hand, yarn and fabrics exports are destined mainly for non-MFA countries. Given increasing difficulties in the export sector, domestic demand will play a larger role in the textile industry. Domestic consumption of apparel is projected to grow at an average annual rate of 7-8 per cent during 1991-1995. Domestic consumption of textiles is mainly a derived demand originating primarily in the apparel subsector. While around 70 per cent of the output of apparel will be targeted for the export markets by 1995, domestic demand is expected to constitute a major source of growth for the clothing industry.¹⁸ Despite stiff competition from other textile-

¹⁸ Ibid.

Table 12. Textile and garment production in Peninsular Malaysia, 1983-1988

Product category	Units	1983	1984	1985	1986	1987	1988	Percentage change 1983-1988
A. Yarn and textile								
1. Synthetic fibre and blended yarn	'000 tons	48.49	50.11	46.71	48.36	53.48	53.71	11
2. Cotton and blended yarn	'000 tons	23.55	24.93	25.17	28.54	32.47	34.44	46
3. Cotton fabric	Million metres	193.95	178.08	180.75	189.59	201.15	206.79	6
4. Knitted fabric	Million metres	11.34	14.26	15.81	..	..	..	..
B. Apparel								
1. Trousers - men's and boys'	Million pieces	8.29	10.41	9.17	9.11	12.50	11.47	38
2. Shirts - men's and boy's	Million pieces	19.02	24.24	21.38	22.74	25.61	29.58	56
3. Blouses - women's and girls'	Million pieces	7.88	11.04	13.98	15.50	15.76	16.37	122
4. Dresses - women's and girls'	Million pieces	2.97	2.55	2.58	3.13	3.65	3.82	29

Source: Department of Statistics, *Monthly Statistical Bulletin, Peninsular Malaysia*, various issues.

producing countries and increasing neo-protectionism in developed countries, exports of textiles, clothing and footwear expanded further by 18.5 per cent in 1988. Contributory factors to the substantial gains in export earnings were the ability of local manufacturers to increase exports of non-quota items particularly to the European Community countries, better utilization of quota allocations, and increased exports of higher value apparel to the United States. Nevertheless, having utilized more than 80 per cent of the allocated quota of exports to the United States as stipulated under the MFA, Malaysian textile and apparel exports are seeking diversification into new destinations, especially to

non-quota countries and areas such as Japan, Australia, Hong Kong and the Middle East.¹⁹

Nevertheless, Malaysia's share in world exports of textiles and clothing is less than 1 per cent. Its comparative advantage lies in the wearing apparel segment of the textile industry. The quality of apparel is largely dependent on the design and other skills rather than technology embedded in machines.²⁰

¹⁹ Ibid.

²⁰ Ibid.

E. Textile and garment industry development: the case of Thailand

Like most of other ASEAN economies and NIEs, the textile sector benefited from general industrial policies. Government policy in the 1950s was characterized by a policy of non-intervention, but not to the extent as in the case of Hong Kong. The Government played for instance an important role in the promotion of private investment through the Board of Investment which was set up in 1959. The BOI used a combination of various investment promotion schemes, tariff policies, tax regimes, and trade and price controls to direct the pattern of industrial investment. The Ministries of Industry, Finance and Commerce, and the Bank of Thailand formulated policies aimed at different industries, and even at individual firms. Thus, a consistent set of policy objectives was not discernible, which led to confusion and uncertainty, with no effect on the growth of the economy.²¹

In the 1960s and early 1970s, the Government adopted the policy of import-substitution as laid out in the first five-year national economic development plans drawn by the National Economic and Social Development Board (NESDB). Import tariffs, which were generally low at the beginning of the period, were significantly raised in 1964, and again in 1970, initially only for revenue purposes, but later also for the protection of domestic industries. Industries were given incentives in accordance to importance. Vital industries were guaranteed against nationalization and competition from state enterprises. They received a number of tax concessions during the first five years

of production, including exemption or reduction from tariff and business taxes on imported machinery, equipment, raw materials and intermediate inputs needed directly for production, exemption from income tax, and loans on favourable terms. Although the textile industry benefited from these incentives, it did not figure as prominently as industries like food processing, machine tools, leather, petroleum, beverages, iron and steel, paper and rubber products. By 1971, there was still a considerable bias to production for the domestic market and against exports, with incentives being the strongest for production of final products based on imported intermediate and capital goods.

With the saturation of the domestic market, the textile sector really took off with the adoption of an export-promotion policy. Incentives provided to export-oriented industries included full exemption from import tariffs on machinery and raw materials and business taxes, refund of all taxes incurred in the production process, a rediscount facility at subsidized interest rates from the Bank of Thailand, and technical assistance from the Export Service Centre of the Ministry of Commerce. These promotion policies contributed, along with a devaluation of the baht, to the phenomenal growth of manufacturing exports between 1970 and 1976 at an annual compound rate of about 30 per cent. The textile sector became a leading export item (table 13). However, like in other East-Asian economies, it appears that market opportunities rather than policy measures have provided the main impetus to this rapid growth. Partly because the incentives provided by the BOI chiefly took the form of protection of domestic sales for exporting firms, promoted firms were on balance no more export-

²¹ P. Ungphakorn, etc., "Finance, Trade and Economic Development in Thailand", Sompong Press, 1975.

Table 13. Thailand: Principal exports of manufactures, 1970-1984
(Million baht)

	1970	1977	1980	1982	1983	1984 ^a
1. Textile	23	2,170	3,616	4,799	14,351	19,149
2. Garments	18	1,693	4,894	8,005	6,214	6,131
3. Precious stones	197	1,210	3,773	5,251	6,214	6,131
4. Integrated circuits	-	1,145	6,156	5,930	5,829	7,352
Total manufactured exports	808	21,955	43,065	63,205	61,358	76,107
Total exports	14,270	71,198	133,197	159,728	146,472	175,270
1-4 as percentage of total manufactured exports	22.0	28.3	42.8	37.9	43.0	48.0
Manufacture as percentage of total exports	5.7	30.8	32.3	39.6	41.9	43.4

Sources: World Bank, Thailand: *Managing Public Resources for Structural Adjustment*, August 1983; Bank of Thailand *Monthly Bulletin*, January 1985.

^a Estimate.

oriented than the manufacturing sector as a whole.²² In the second half of the 1970s, the textile sector was boldly hit by the world recession, and export growth was mainly due to integrated circuits and precious stones, rather than textiles and garments. It is interesting to note that most textile exports were directed towards developing country markets rather than the OECD economies. Among the latter, the European Community was important as a market for Thai clothing exports. The initial boom in textile exports was also due to the advantage for Thai as a late-comer in the exemption from quota restrictions on the major textile and clothing exporters, such as Hong Kong and Taiwan Province of China. By 1980, the industry received considerably less government attention in favour of relatively capital-intensive industrial projects producing for the domestic market under a second import-substitution policy, from oil refining and vehicle assembly to chemicals, metal products and machinery.

While it has been official policy to welcome FDI, and tax holdings and other incentives have been available to foreign investors, the administrative procedures for approval of applications have been complex and often discouraging, though deregulation measures have been implemented in the 1980s. As a result, the inflow of FDI in the 1970s has been small, relative to other ASEAN countries. Even in 1981, it contributed only 3 per cent of gross domestic investment. Domestic savings has been the main source of finance for private sector growth in the Thai economy.²³

²² World Bank, "Thailand: Country Memorandum, Building on the Recent Success - A Policy Framework", Vol. I Main Report, No. 7445-TH, 21/2/1989.

²³ UNIDO, Industrial Development Series: "Thailand", IS.548, 7/8/1985.

The Government has been helpful to boost export-oriented industries though its actions have not been decisive in their growth. Various policy instruments were implemented in the 1970s: the Investment Promotion Act of 1977 authorized the Government to provide measures such as guarantee, special permission, favourable income tax and import taxes on raw materials and machinery as well as temporary import surcharge on competitive products. The BOI provides special investment promotion schemes to high priority industries, such as export industries, industries in rural areas or in Investment Promotion Zones. The import tariff was found to be biased towards domestically produced finished consumer goods in the 1970s. Several changes had been made since the implementation of the Fifth Plan which intended to correct the tariff structure towards more uniform nominal tariff rates and lower average effective tariff rates. However, though the protection levels for certain subsectors, including textiles and garments, have been altered, the overall protection structure remains similar to that in 1980. Table 14 shows that finished products such as textile goods have high effective protection rates compared to machinery and heavy intermediates such as chemical products. In this sense, the tariff structure continues to discriminate against the development of domestic industries in these latter sectors.²⁴

Exemptions from duties and taxes on imported inputs for export-oriented industries are granted by the Customs Department. Exports are supported financially by the rediscounting facilities of the BOT and the Export Development Fund. An export credit guarantee has been under consideration for a long time.

²⁴ World Bank No. 7445-TH, op.cit.

**Table 14. Average effective rates of protection in Thailand
(Per cent)**

Sector	After April 1985 changes			January 1988		
	VADP	VAWP	UNWGTED	VADP	VAWP	UNWGTED
Agriculture	19.4	13.2	28.0 (29.4)	19.4	13.1	28.0 (29.4)
Other primary products	12.6	10.7	10.5 (12.4)	13.1	11.3	10.9 (12.1)
Agro-processing	84.0	32.8	135.2 (264.4)	84.1	32.9	135.4 (264.4)
Other manufacturing	61.4	51.9	66.3 (69.6)	60.7	51.2	63.6 (67.3)
of which:						
Textile products	78.3	59.9	118.4	78.3	59.9	118.4
Leather products	113.6	114.8	152.7	100.1	100.5	119.3
Wood products	54.6	49.6	62.0	51.4	46.1	60.3
Paper and pulp	50.2	49.2	53.5	50.8	49.2	54.0
Chemical products	10.0	9.2	44.5	10.4	9.5	45.2
Rubber products	19.3	-6.2	42.0	19.3	-6.2	42.0
Other non-metal products	79.6	68.7	108.5	79.4	68.7	108.3
Metal products	79.6	64.6	70.9	79.6	64.6	70.9
Machinery	36.8	34.9	29.3	37.1	35.2	29.4
Consumer goods and motor vehicles	73.5	70.0	45.6	72.6	68.7	40.0
Overall average	46.6	30.0 (132.0)	65.6	46.4	29.7 (131.4)	64.6

Source: World Bank staff estimates.

Notes: (1) Effective rates of protection represent the potential incentive effects of the protective structure and were calculated according to the Corden method using input coefficients from the 1980 input-output table. See Annex 3 for the nominal rates that were used.

- (2) Numbers in parentheses represent standard deviations.
 (3) VADP - using 1980 value-added in domestic prices as weights.
 (4) VAWP - using 1980 value-added in world prices as weights.
 (5) UNWGTED - simple numerical averages.

Furthermore, enterprises providing for export could benefit from a reduction in the cost of electricity at a rate of 31.3 per cent (as of 1985). Enterprises operating in the Export Processing Zones are exempt from import-export duties and business taxes. An Export Service Centre, under the Ministry of Commerce, assists Thai exporters in solving their marketing problems and provides information to foreign buyers. Most government incentives and promotion policies are aimed at large-scale investments, with relative neglect of the small-scale sector. In the textile and clothing industry, some large-scale investments were promoted in the mid 1980s in up-stream operations consisting of plants for the production of synthetic fibres and spinning mills, once the structural problems and the

problems associated with over-capacity due to the decline in world demand were solved.²⁵

As far as SMIs are concerned, the Department of Industrial Promotion in the Ministry of Industry provides assistance for the technical needs of cottage industries and small-scale industries. It also conducts training courses for managerial personnel through the Management Development and Productivity Division. The Textile Industry Division in DIP, serves to strengthen the country's textile industry by providing technical services. Attempts to assist SMI have been stepped up in the late 1980s through the Small

²⁵ UNIDO, IS 548, op cit

Industries Finance Office (SIFO), the BOT's Small-Scale Industries Refinancing Scheme, and the Small Industries Credit Guarantee Fund (SICGF). Also the Industrial Finance Corporation of Thailand (IFCT), a private development finance institution under the auspices of the Ministry of Finance assists SMI. The SMI sector is important in the textile industry, accounting in 1984 for 91.2 per cent of all enterprises in the sector. Many large enterprises are foreign-owned. FDI has surged since 1987, especially from Japan and the NIEs due to the rising yen and soaring labour costs in these countries, with the textile sector being a major recipient. However, since 1990 FDI has cooled due to infrastructural constraints and skill shortages. Although FDI has had a far-reaching impact on the Thai manufacturing sector, issues concerning R and D, crowding-out effects on local producers, and regional imbalance in industrial development will need to be addressed. The BOI endeavours to address these issues.

Exports of textiles, spearheaded by garment exports, emerged as Thailand's leading foreign exchange earner in the second half of the 1980s. In terms of value added, the textile sector grew by 4.19 per cent during 1980-1985 and by 12.93 per cent over 1985-1988 (table 15). The textile and wearing apparel sector accounted for 17.6 per cent of gross output in manufacturing in 1988, the biggest share after food products. The rising price of oil, which accounts for around 26 per cent of bleaching, printing and dyeing costs, was the principal cause of a severe, albeit temporary, crisis suffered by the textile and clothing industry in 1990. The fall in energy costs in 1991 led to a proportionate decline in production costs. Despite a rise in the minimum wage, Thailand's textile and clothing exports seem to have been firmly established with the ranks of Hong Kong, the Republic of Korea and Taiwan Province of China. Although fierce competition from low cost producers is posing problems to Thai manufacturers, the determinants of competi-

Table 15. Growth of value added by sub-sector of manufacturing, in Thailand 1980-1988
(Percentage at constant 1972 prices)

ISIC	Manufacturing sub-sector	1980-1985	1985-1988	1980-1988
311	Food	8.77	7.40	8.26
312	Other food	5.00	5.88	5.33
313	Beverages	6.34	5.43	6.00
314	Tobacco	-0.94	4.22	0.99
321	Textiles	4.19	12.93	7.47
322	Wearing apparel	6.96	13.36	9.36
323	Leather products	14.77	29.21	20.18
324	Footwear	5.20	7.42	6.03
331	Wood and cork	-2.31	9.28	2.04
332	Furniture and fixtures	3.89	10.14	6.23
341	Paper and paper products	3.15	11.80	6.39
342	Printing, publishing and allied industry	7.22	0.31	4.63
351	Chemical products	8.29	13.38	10.20
352	Other chemical products	6.76	9.43	7.76
353	Petroleum refineries	3.20	6.92	4.60
354	Products of petroleum and coal	--	--	--
355	Rubber products	2.03	14.35	6.65
356	Plastic products	3.26	17.24	8.50
361	Manufacture of pottery	9.71	11.40	10.35
362	Glass and glass products	8.31	5.19	7.14
369	Non-metallic products	6.31	10.69	7.96
371	Iron and steel	4.05	4.90	4.37
372	Non-ferrous metals	3.98	-0.76	2.20
381	Fabricated products	4.50	11.27	7.04
382	Machinery	6.61	10.68	8.14
383	Electrical machinery	5.00	14.88	8.71
384	Transport equipment	-9.08	20.81	2.13
385	Professional and scientific equipment	7.05	14.53	9.85
390	Other industrial products	10.90	24.62	16.05
	Manufacturing value added	4.74	11.20	7.16

Source: Thailand Development Research Institute.

tiveness in the world market are increasingly being related to the technological and market factors. Thailand has made significant strides in market diversification of its exports, but export markets are characterized by fiercer competition. The textile industry in Thailand is becoming increasingly capital-intensive. However, the technology gap with NIEs and OECD economies is quite large. Furthermore, the raw material base for the Thai textile and garment industry is weak. Around 90 per cent of the total demand for cotton is met by imports. With additional spindles being installed every year to meet rising demand for textile and cloth, the demand for cotton is on the increase. The area under cultivation has been declining steadily due to the increasing demand for land for cultivation of other crops and lack of price incentives for cotton cultivation. The situation is exacerbated by the relatively high cost of cotton cultivation, particularly the rising cost of pesticides. In the late 1980s, the area under the intensive promotional programme by the Ministry of Agriculture totalled 400,000 rai, with the financial and marketing assistance of the private sector, particularly those operating cotton mills. Efforts are under way to educate farmers about efficient cultivation methods, harvesting and plant care, with a view to enhancing productivity.²⁶

Local production of Thai silk, which has earned a high reputation in the world market for its texture and quality, is inadequate to cope with the industrial demand, meeting only 30 per cent of domestic requirements. Thailand's man-made fibre production comprises polyester, nylon and rayon. All raw materials for producing synthetic fibres are being imported. The government is providing incentives to the domestic petrochemical industry under an import-substitution programme which will also provide inputs to the textile industry.

In the spinning sector, most of the machines are of the 1960s vintage. In replacing old machines, many firms chose to import used equipment from the NIEs.

²⁶ UNIDO, Industrial Development Series: "Thailand, Coping with the Strains of Success", Blackwell, 1992.

Modernization is stagnant partly due to the fact that the majority of Thai textiles are targeted for the domestic market, where quality requirements are not as stringent as in the export markets. However, the surge in profit from the exports of garment has provided a strong incentive for clothing firms to modernize production facilities.²⁷

Linkages between the large, modern textile firms and the small traditional ones in the textile sector are weak. The large firms have ties within their own group and they also have easy access to modern technology and facilities while the small firms have only limited access to technology, capital and marketing information. The backward linkages between the clothing sector and the local textile mid stream sectors of spinning, weaving, dyeing and finishing industries are rather weak due to a rapid rise in the use of imported materials.²⁸

The expansion of the Thai textile industry is likely to be in the production of higher quality products, bleaching, dying, cloth printing and in the production of new fabrics. In the production of ready-to-wear garments, emphasis will be placed on fashion design catering to the medium and high quality market although current prospects for the Thai garment industry depend largely on medium and basic apparel items. Due to fierce competition the rate of expansion of the clothing industry is expected to decline.

The Seventh Plan (1992-1996) has for the first time identified six strategic industrial sectors in which Thailand could gain a competitive advantage. The textile and garment sector is one of them. The Government will implement an array of support measures for these industries in the form of fiscal incentives, short-term protection and the removal of barriers to essential imports.²⁹

²⁷ Ibid

²⁸ Ibid

²⁹ Ibid

Conclusions and Recommendations

The economies of the Asian and Pacific region have demonstrated a dynamic change with substantive structural transformation in the industrial sector. While the degree and extent of such changes have varied among economies, but the trend is obvious with movement towards higher productivity and growth. In

this process of change, the textile and garment sector has played a significant role. Japan which played a leading role in textile and garment production and trade during fifties and sixties, began phasing out of this sector around mid-seventies. The Republic of Korea, Taiwan Province of China and Hong Kong emerged

as leading producers and increased their share in global trading of textile and garments. However, due to increasing labour costs, exchange rate changes and trade policies shift in industrialized countries, the Republic of Korea, Taiwan Province of China and Hong Kong began losing their comparative advantage in this sector, whereas China, ASEAN and other developing countries emerged as leading producers and exporters. In this process of shifting comparative advantages, how other developing countries can benefit and penetrate global market for textile and garment, is of crucial concern. These economies need to review their policies, strategies and institutional support aimed at promoting the textile and garment sector.

- (1) Although the Government played an important role in industrial development in NIEs and ASEAN-economies, the success of particular industries, including the textile and garment industry is largely due to initially favourable external conditions and private sector initiatives. To the extent that textile and garment industries received priority attention and assistance this was usually part of the general industrial policies of first import-substitution and later export promotion. It also follows that the major role the Government can play in the development of any particular industry is to create favourable conditions for private entrepreneurship and eliminate obstacles to private sector growth. It should be noted that Hong Kong, a leading textile and garment exporter in the world, industrialized on the basis of private sector initiatives with the virtual absence of any government interference or industrial policy.
- (2) Although import substitution policies provided protection to the textile and garment sector and allowed it to grow on the basis of domestic demand in bigger developing countries, such policy at times led to inefficiencies in capital allocation, inflation and balance of payment deficits. It was export promotion that really caused the growth of the textile and garment sector, profiting from cheap labour and buoyant external conditions. With the relative decline of cheap labour as an element determining international competitiveness and rising global protection and with an increasing number of competitors, developing countries need to provide special incentives. This may even entail import and export subsidies at the beginning. Furthermore, the developing countries should strive to promote export-oriented textile industry based on FDI, as cheap

factor costs in such economies will continue to provide a competitive basis for at least some years to come. As technological aspects will be increasingly decisive in the long run, FDI will be helpful as several developing countries lack the capacity to close the technology gap with more developed economies on their own. It is therefore important that these countries endeavour to establish the necessary conditions for FDI to the maximum extent possible. The reliance on FDI in this respect is a necessary condition as domestic industries have limited possibility to compete on an international level.

- (3) As SMIs bear the bulk of textile and garment production and employment, developing countries specially the least developed ones should pay particular attention to them and promote linkages with the larger enterprises. This includes stimulating SMI textile export potential, in particular to markets in the region rather than the OECD economies where protection levels are expected to continue to form a major barrier.
- (4) An important lesson of NIEs to other developing countries is that the development of the textile industry, and for the matter of any industry, should be seen within the framework of general economic and social development. In particular, Government should continuously strive to upgrade education levels and provide the framework for human resource development. This involves basic and higher education but also vocational training. At the same time, much emphasis needs to be put in the transfer of appropriate technology for textile industry as cheap labour costs will eventually be phased out as a determinant of international competitiveness. Governments need to establish conditions and an institutional framework to ensure proper absorption and distribution of technology in their economies, with particular attention to SMI, and create the basis for indigenous technology adaptation and development. Thus, skill development should be of urgent concern due to the gestation period of investment in human resources. The emerging trend points towards a shift from the mass production of standard products, using narrowly skilled workers, high volume technology towards more specialized products using a broadly skilled workforce and universal, multipurpose machines.
- (5) Apart from technological considerations, Governments in LDCs can be helpful to determine their country's competitive advantage in

- certain subsectors in the textile and garment industry, like Thailand for instance has in the production of silk, and identify specific market and consumer segments which are targets for these particular products. Companies are often in no position to undertake these marketing efforts on their own, especially the SMI. Such developments not only require overall improved skills and know-how, but marketing and managerial talent need to be promoted and encouraged.
- (6) Attempts should be made to develop import-substitution industries in those sub-sectors that provide intermediates to the textile and garment industry, which are expensive to import, e.g. cotton and certain chemicals. This statement further illustrates that development of textile and garment industries cannot be seen in isolation.
- (7) Thus, the developing countries of the region specially the least developed ones need to adopt new strategies focusing the textile and garment industry on high quality and innovative products, production, flexibility, market knowledge and distribution services. Even the traditional low income markets for mass products have become more quality- and variety-conscious, given the large choice of suppliers.
- (8) Developing countries which are striving hard to promote textile and garment industries have no option to move into the adoption of new technologies if they want to penetrate more in the export market. Initially, it will involve extensive costs but will be paid in due course of time. Thus, as pointed by the UNIDO study, "it is important for the future development of the textile-garment sector in the developing countries of the Asian region to assess possibilities for incremental technological improvements as well as to review their marketing strategy. The scope for selective improvements is larger in the garment than in the textile industry due to the higher degree of interdependence of technology changes in the textile production. It could also be argued that in the clothing industry the adoption of organizational changes could yield higher and faster return on investment than automation of production. Since low price is still a determining factor on domestic and regional markets in Asia, their development would guarantee demand for low-wage producers for some time still".³⁰

³⁰ UNIDO; Changing Techno-Economic Environment in the Textile and Clothing Industry, PPD. 237 (SPEC), 15 February 1993.

III. PARTICIPATION OF WOMEN IN MANUFACTURING IN THE ESCAP REGION

Introduction

In the Asian and Pacific region women are a vital resource in the rural and urban economies and constitute an essential part of the industrial labour force. In fact, in many of these countries over the past few decades women have made increasing inroads into the formal manufacturing sector. However, within the ESCAP region, considerable variations exist in the rates of female participation in manufacturing, and the patterns governing women's integration into the industrial labour force. The different patterns of female participation are influenced on the one hand by conditions of economic and industrial development which determine the demand for the female work force; on the other hand, sociocultural, demographic and educational factors determine the availability of women for participation in the formal manufacturing sector.

The Asian and Pacific region encompasses countries spanning a wide range of development levels, including some of the most rapidly growing economies in the world. It is also diverse in terms of women's role in the economy. Many of the examples cited of rapid increases in female participation in manufacturing relate to the NIEs of South-East Asia. In these countries women's pronounced integration into the industrial labour force was triggered among other things by the rapid growth of the manufacturing sector, based mainly on an export-led industrialization strategy. At the same time it was favoured by improvements in female access to secondary and tertiary education and a certain alleviation of sociocultural barriers to female employment in the modern sector.

A. Overview

1. Female participation in the economy

In the majority of the Asian and Pacific economies, substantial increases in female economic activity rates have occurred over the last couple of decades. At the same time, however, some countries have witnessed a decrease in women's activity rates. Such tendencies may partly be attributed to problems in the measurement of women's economic participation particularly in the traditional and informal sectors of the economy. Nevertheless it is not unusual that female participation in the economy declines during the initial stages of development and then increases during the later stages.

In traditional economies, high rates of female economic activity are a result of their important role in subsistence agriculture, and in micro-scale production activities. This is the case particularly in rural areas, where women are involved in various traditional processing activities. Often women's productive activities are closely linked to their role in subsistence agriculture and work in the household, making it difficult to differentiate between production for the market and production for self-consumption. Women are tradi-

tionally strongly involved in food-processing activities, but also in spinning, handloom weaving, basket or mat weaving, beer production etc. depending on local traditions and structures.

These traditional production activities have been most affected by competition from modern sector products and imports, and several typically female micro-scale occupations have not been able to withstand this competition and have therefore been subject to displacement.

In Thailand, for example, a type of rural industry which tends to be dominated by women is home food-processing enterprises such as the preparation of pickled fruits and vegetables, dried and salted fish, squid or other marine products. All such food-processing is traditionally Thai. There is less female involvement in the production of foods of foreign origin such as noodles and pastries.

With increasing urbanization, women have also become a major labour force in the informal sector of the cities, where they are involved in a multitude of trading and processing activities. Petty trade and street kitchens, as well as garment production, food-

processing and crafts manufacture constitute major domains of women's involvement. The important role of women in these informal sector production activities is, however, generally not registered and therefore mostly not accounted for by statistics.

In most ESCAP countries, female economic participation rates have increased over the last decades even though a decrease has taken place in some countries (part III, table 1). Where increases in female activity rates have occurred, these have mostly taken place in the modern sector (non-agricultural) of the economy. Within the modern sector, manufacturing, the service sector (particularly clerical jobs and community services such as nursing and teaching) and commercial activities have absorbed the largest share of women employed.

In several countries, employment of women in manufacturing has made the largest contribution to the fast rise in female participation in the modern sector. In a number of countries women constitute nearly half of the labour force in the manufacturing sector (part III, table 3). This is the case particular in the ASEAN (Association of South-East Asian Nations) economies in South-East Asia.

It must be noted that some of the above rates are substantially higher than in most of the industrialized countries. For example, in the United States of America (1989) women had a share in manufacturing employment of 33 per cent and in the Federal Republic of Germany (1988) 40.7 per cent.

Increasing female participation in the modern manufacturing sector labour force has been concentrated in a certain range of manufacturing branches, overwhelmingly those included under light industries. The garment-making industry is a predominant employer of women, worldwide and in developing countries, especially at the operator and lower management levels. This sector is therefore often regarded as the classical "female" sector. Nevertheless, there exist strong regional differences: in India, Bangladesh and Pakistan, for example, women have found only limited access to this industry.

In the food-processing industry, female involvement has been high in some areas such as in fruits and vegetable processing, packaging and canning. Also in the electrical and electronics sector, women have high participation rates in assembly operations while the more skilled operations in this sector are generally in the hands of men.

Female share in non-agricultural activities (Percentage)

High

Philippines	45.5	(1990)
Thailand	45.1	(1988)
Singapore	42.0	(1989)
Indonesia	40.8	(1989)

Low

Pakistan	6.6	(1990)
India	12.5	(1989)
Solomon Islands	15.7	(1986)
Brunei Darussalam	19.5	(1986)

(I.L.O., *Yearbook of Labour Statistics*, 1991, table 4).

Female share in manufacturing (Percentage)

High

Indonesia	46.2	(1989)
Malaysia	46.0	(1987)
Philippines	45.7	(1990)
Sri Lanka	45.2	(1986)
Thailand	45.2	(1988)

Low

India	9.1	(1989)
Pakistan	12.1	(1990)

(I.L.O., *Yearbook of Labour Statistics*, 1991, table 3B).

Light industry branches like textiles and electronics have often been strongly involved in a relocation process of production facilities from developed to developing countries which has taken place mainly in the 1970s and 1980s. The factories which have been built up in developing countries rely generally on inputs imported from the industrialized world (i.e. not procured from the local market) which are assembled and subsequently re-exported. In the context of this relocation process, considerable amounts of foreign investment have flowed into these countries. It has been observed that women generally had an over-proportionate share in foreign-owned export processing/assembly factories.

In the Republic of Korea's Special Economic Processing Zones, for example, 73 per cent of the labour force is female and in Indonesia's Batam Island Zone the female share is as high as 90 per cent (Lewenhak, 1988).

Rapid female integration into the manufacturing sector has been characterized by a considerable degree of occupational segregation with women concentrating at the lower skill levels of the occupational hierarchy. Women predominate in unskilled production jobs with less security of tenure and lower wages, while men concentrate in jobs with greater stability, higher wages and better career prospects and in higher ranking white collar jobs.

Occupational segregation, defined as certain jobs being filled exclusively or largely by a single sex, has long been a characteristic of the Asian labour markets and still continues. It shows two characteristics: "horizontal segregation" which confines women to a narrow range of so-called female occupations, and "vertical segregation" which restricts them at the bottom of the occupational ladder with low skill, responsibility and pay.

The clothing industry in Thailand, for example, has generated at least half a million jobs for Thai women but the majority is concentrated in the lower rung as sewing and general production workers, with less than 1 per cent of the total at the managerial and administrative level.

The concentration of women is mostly apparent in production occupations at the shop floor, to a large extent in unskilled assembly operations. In some cases, they are employed only in low level auxiliary work, such as sweepers. This is the case particularly in countries or sectors where women's participation is generally very low. In general women are under-represented in white-collar jobs; they occupy only a very minor share of positions in the higher ranking of the administrative structure in the public as well as in the private sector.

Women very frequently receive lower wages than men. This is not only a result of their concentration at lower skill levels. Even when women and men do exactly the same work, it is no exception that women are paid at lower wage rates than men. In several countries, this is permitted by law, which sometimes even stipulates different minimum wages for men and women. Where equal payment exists in principle, this is not always complied with.

In countries with equal pay legislation employing women under unstable contracts, as temporary or seasonal workers or as apprentices, is a "legal" way for paying women lower salaries. Women also tend to

Female-male wage ratios in manufacturing (Percentage)

Japan	41.3	(1990)
Republic of Korea	50.1	(1990)
Singapore	57.4	(1990)
Sri Lanka	65.6	(1989)
Hong Kong	69.3	(1990)
New Zealand	74.9	(1990)

(I.L.O., *Yearbook of Labour Statistics*, 1991, table 17A).

be fired more easily than men and to have less access to promotion.

The available figures indicate that in several countries female workers in manufacturing receive lower wages than their male counterparts. The wage differential is observed to decline with a rise of the level of education. The low wages of women are often attributed to their younger age and inexperience compared with men, the transience of their work commitment, and their lack of skills.

2. The demand side

In the majority of cases, overall economic growth has had an enhancing effect on women's economic participation at least in the modern sector of the economy. Economic growth has generally led to an expansion of the economy which tends to employ women in more significant number; due to the existing demand for female labour force the social climate has also partly become more open to women's participation in the economy.

Particularly the growth of the manufacturing sector has partly been accompanied by soaring rates of female participation in the manufacturing sector labour force especially in the NIEs, while in other countries women have remained very much underrepresented in manufacturing. However the rates and patterns of female manufacturing participation have strongly varied between countries and sectors. More important than the rate of industrial growth are the patterns which have characterized the development of the manufacturing sector.

At the same time, micro-scale activities in the traditional sector of the economy have increasingly been displaced, affecting particularly rural women and their traditional income sources. This development was not matched by the creation of corresponding numbers

of employment opportunities — or women have not found access to existing modern sector jobs. At the same time, economic crisis, formal sector unemployment, low wages etc. have forced increasing numbers of women into the informal sector of the cities.

The growth of the modern sector in general and of the manufacturing sector in particular are important factors for female participation in the economy and industry. Particularly relevant for the rates and conditions of female integration into the manufacturing sector are the patterns which characterize the industrialization process and which determine the industrial structure. The role that women play in the industrialization process of a country depends on the kinds of industries (labour-intensive, capital-intensive) and/or the stage (early, advanced) that characterize the process.

Industries which are characterized by a high absorption of female labour are typically assembly-oriented, require a large amount of unskilled labour, and comprise occupations which do not demand a high level of physical strength. This includes mainly wearing apparel, electronics, and fruit and vegetable processing. At the same time, where light assembly-oriented jobs exist in other sectors (e.g. assembly of automobile parts), the employment of women is often considerable. Female employment is mostly based on a high demand for cheap labour; also the jobs offered by light industries are usually in areas associated with the traditional functions of women (e.g. clothing, food processing, etc.) and where women have a high level of manual dexterity.

The female share is considerably lower in heavy and capital-intensive industries which involve generally less, and at the same time more skill-intensive jobs. The lower levels of female employment is mostly related to the fact that in these industries overall less employment is created, that these industries are less sensitive to wages, and that the technical expertise and/or physical strength which may be required is generally related to the "male nature".

Light industries usually dominate the industrial structure of most countries at an early stage of industrialization. Food processing and textile industries are often the first sectors to come up; many countries have started their industrialization and export production process the "textile way" — taking advantage of their cheap labour force. More capital-intensive heavy industries are only built up during later stages of the industrialization process. The proportion of female

employment in manufacturing grows during the "first stage" of industrialization (characterized by labour-intensive industries). Thus, the shift in development policy can bring about a restructuring of the labour process within this sector that negatively affects the pattern of female employment.

There are other technological development patterns which appear to have a predominantly negative impact on female participation in the manufacturing labour force. One of the major developments of the 1980s is the fast progress of flexible automation technologies. Flexible production technologies have significantly lowered the barriers to automation, and made it possible to mechanize also parts of the production process which previously were resistant to automation, such as the production process of small lot sizes, of goods subject to frequent model and fashion changes.

Even in garment production, where the softness of the material in addition to fast fashion changes still presents obstacles to automation, the development of flexible production technologies is progressing. Microelectronics have made it possible to "flexibly" produce quite different, changing and even customized items with one machine. The result of these trends has been that the demand for cheap unskilled labour force to carry out labour-intensive assembly operations (overwhelmingly women) has gone down quite drastically. This has in particular affected the employment of this type of labour force in developing countries, and has led to a trend of relocation "back north" in a number of sectors. At the same time, though, other sectors and/or different reasons have become more dominant in the international relocation process (e.g. software development, the allocation of quotas for garment exports to the United States and Europe, etc.).

High rates of female employment in the manufacturing sector have also been strongly correlated with the establishment of assembly operations for export, generally on the basis of foreign investment or international subcontracting arrangements. In Indonesia in 1982, for example, 90 per cent of workers in export processing zones were women, in Sri Lanka (1987) 82 per cent, in Taiwan Province of China (1983) 80 per cent and in the Republic of Korea (1982) 77 per cent (I.L.O., *Yearbook of Labour Statistics, 1989/1990*).

On the above basis, main factors related to manufacturing development which have influenced female employment include the sectors which are leading the industrialization process, the scale and type of tech-

nology applied, and on this basis, the type of occupations involved and the kind of labour force required. Light, labour-intensive industries as they predominate during early stages of industrialization, tend to employ high shares of women, whereas women are usually underrepresented in heavy, capital-intensive industries.

Economic growth and the size and development patterns of the manufacturing sector can, however, give only part of the reasons for women's specific role and pattern of integration in industry, mainly those related to the demand of the manufacturing sector for a specific type of labour force. The supply of this specific type of labour force, i.e. the availability and the quality of the female labour force as well as the specific patterns of their integration are, however, dependent on another set of factors related to social, cultural, demographic and educational characteristics.

3. The supply side

(1) Sociocultural environment and demographic patterns

Sociocultural factors which influence female participation in economic activities are mainly related to religious and traditional norms as well as to customary patterns of division of labour which assign a certain place and position in society and the economy to women. In spite of the fast progress of social and cultural change in most developing countries, women's role and position has often not substantially changed.

In most societies it is assumed that women's role should be within the household, while men's role is outside the home. Typical for Muslim and Hindu cultures is the principle of "seclusion" which strictly limits women's role to the confines of the home and does not permit their interaction with unrelated males. In modern societies there is still a strong belief that men are the main, often sole providers for their families' economic "well-being", while women are seen as economic dependents.

The result of the above-mentioned norms is on the one hand that women are still strongly involved in all kinds of production and processing activities, as long as they are home-based. On the other hand, an economic role for women outside the house is often not acceptable — except in the case of absolute economic necessity; it may for example shed a bad light on a man when his wife has to work.

Economically active women face many kinds of discrimination and disadvantages: Female entrepre-

neurs are not accepted as business partners; they frequently have difficulties finding access to credit, training, other support services, or industry associations; receive lower wages with the justification that they are only supplementary income earners.

A main underlying factor is the consideration of childbearing and home-making as the main and life-long occupation for women, a view which influences both women's perceptions of themselves and their attitudes towards work and training/education and that of the society as a whole. Consequently, women's work is regarded as temporary, to fill the time until marriage, and only short term education and training is considered worthy, providing lower skills. The weakness in these assumptions arises from overlooking the fact that women are a heterogeneous group, and many women's circumstances do not fit the above picture. A rising number of them are main breadwinners (female headed households) due to changing economic and social circumstances.

The perception of women as supplementary income earners influences government policy, employment practices and employee behaviour: government employment programmes, for example, tend to target men exclusively as assumed breadwinners. Sociocultural norms, in particular the practice of "seclusion", does not permit employers to hire women (in addition to men) except when separate facilities exist for work, dining or even in a commuter's bus. Cultural norms may also limit the tasks which employers feel they can assign to women — women may for example not be requested to go on assignments outside the office or to travel alone.

Generally, traditions which break employment into women's and men's jobs are more deeply rooted in older industries. Women's opportunities of advancement thus would likely be better in the electronics industry than in the metal-industry, in modern branches of printing than in the long-established printing crafts using hot metal composition. Long-standing male domains in employment are the most difficult for women to enter. Thus, although there are a number of skilled and unskilled jobs in industry which could offer opportunities for women's entry into industrial work, in practice this is very difficult. The common explanation given by employers is that women are not interested in industrial jobs, and do not apply anyway, do not like to work on shifts, will not be accepted by male workers, or that these have been male jobs all along.

The more strongly sociocultural norms restrict women to the confines of the home, the more difficult is it for them to integrate into modern sector employment outside the home, and to be employed at a level equal with men.

In a situation where sociocultural norms make women exclusively responsible for the household and the family, demographic and life-cycle patterns strongly influence women's possibilities to participate in the modern sector labour force. Economic participation rates are considerably higher for young unmarried women, as women often only participate in paid employment until their marriage or until the birth of their first child. The earlier women tend to marry and to have children, and the more children they have, the lower are generally their economic participation rates. On the other hand, a higher level of female education and labour force participation also lead to declines in fertility rates as well as to an increase in the average age at marriage.

Demographic patterns (i.e. marital patterns and fertility rates) are strongly (negatively) correlated with female participation in the modern sector labour force. It must, however, be taken into account that only child-bearing, but not child rearing, can necessarily be considered as a biological function of women. The impact of demographic factors on female labour force participation is therefore also dependent on sociocultural norms and the existence of biases against female employment.

(2) *Human resources development*

An aspect which is generally considered as one of the main reasons for lower rates and unequal patterns of female modern sector participation is their lower educational level. Formal education is a precondition for modern sector employment. More advanced education is required for entry into most formal sector employment in manufacturing, trade, administration, and other services, and into positions of political power. Nearly all modern sector jobs require at least basic literacy; secondary education is generally necessary for a white-collar job.

In most countries women have lower rates of school enrolment and achievement. In many cases, their literacy rates are significantly behind those of men. It is estimated, for example, that more than 100 million women in the Asian and Pacific region are still illiterate. At higher development stages, it is secondary and tertiary levels that women's enrolment and achievement rates are much lower than men's.

**Female illiteracy rate (percentage) in Asia
Estimates 1990**

High		Low	
Nepal	86.8	Republic of Korea	6.5
Afghanistan	86.1	Thailand	10.1
Pakistan	78.9	Philippines	10.5
Bangladesh	78.0	Viet Nam	16.4
Cambodia	77.6	Sri Lanka	16.5

Source: UNESCO 1991.

Also when girls/women find access to education or training, differences in comparison to men exist with regard to the areas and trades they are trained in. Women-specific training courses often concentrate on domains which are closely related to their traditional role and home responsibilities, such as domestic sciences, hygiene etc. Even when women are trained in technical skills, this typically focuses on weaving, sewing etc. and often no attention is given to any business or marketing training which would permit women to make a living on basis of the technical skills acquired. At higher levels, girls tend to concentrate in the humanities, while men enrol in technical and business-related courses.

In most countries the curricula within the educational system often differs for boys and girls. The system continues to produce teachers and instructors for girls' training who are trained in subjects with weak labour demand and who, therefore, have no other option but to teach what they know. The education system, deeply rooted in its traditions in many countries, fails to prepare large number of girls and women for modern life. Without reform of the existing educational and training system (both within the formal school system and outside), the curricula, teacher and instructor training, selecting and testing procedures, and particularly the educational and vocational guidance systems, and training of teaching and guidance staff, little change can be expected in the long run.

The cost of training is also rising, particularly because of rapidly changing and higher technology, and the necessity for recurrent training and guidance. The high cost of much needed training, and the chronic shortage of resources to meet this need, requires rationalization of training systems through better utilization of existing resources. Many of the programmes, mainly or exclusively attended by women, will not be able to stand scrutiny as they may not be in priority areas of

skill demand, with low investment value in economic terms. There is an urgent need to seek measures to modernize female lines of training in areas of manpower demand.

The educational patterns are closely related with sociocultural norms and traditional perceptions of women's role. When women are generally not involved in employment nor in other modern sector economic activities, parents see no need for and no benefit in formally educating girls. In addition, girls have to help their mothers in the house, take care of younger siblings, etc. Chastity and the risk of premature pregnancy are other reasons for parents' hesitation to send girls to school.

In addition, research has also shown that even higher educational levels of women do not automatically lead to an increase in women's participation and to a decline in occupational segregation. A number of studies show that in many cases only a small part of occupational segregation and difference in earnings between men and women can be attributed to a lower educational level of women. Equality of education may be a necessary condition, but it also does not appear to be a sufficient condition for equality of pay.

The emerging trends in industrial development will bring changes in inter- and intra-sectoral employment, occupational structures and skill requirements. The experience of the industrialized countries shows

that it is most likely low cost labour intensive branches which will be first affected. Introduction of new technologies, production and management structures in, for example, textiles and clothing as well as in electronics branch where women constitute 80-90 per cent of the production labour force, will require new skills. Women, who lack education and vocational training, will face tremendous difficulties in meeting the challenges of the technological changes. Due to the same reason, the scope for their sectoral and occupational mobility is limited.

Appropriate strategies for female human capital formation within the context of industrial restructuring and development will assume critical importance in determining the productivity of the economies in the Asian and Pacific region.

The interplay between the supply and the demand side determining the female integration into the industrial sector is a reflection of the form and speed of the socio-economic changes taking place in a given country. In spite of country differences, however, it is possible to assert certain common characteristics of the female labour force associated with a certain stage of economic development. This has been demonstrated in the ESCAP study on Women's Economic Participation in Asia and the Pacific, Bangkok 1987 and further developed in UNIDO's recent work on a typology of women's participation in the manufacturing sector in developing countries.

B. Country groups

1. Developed Economies:

Australia, Japan, New Zealand

In general, labour force participation rates for both males and females are high in the industrialized countries of the ESCAP region (table 1) reflecting the advanced level of economic development as well as changing social conditions, particularly changing attitudes towards married women's economic participation. In the developed economies, a large share of the female labour force consists of employees in the modern sector. Nevertheless the share of unpaid female family workers continues to be disproportionately high (table 4).

In the developed economies production jobs for women are most common in heavily-industrialized Japan, whereas clerical jobs predominate female employment in Australia and New Zealand. This

reflects the changing composition of employment as economies develop and, especially, industrialize, from the primary/agricultural to the secondary/industrial and then tertiary/service sector as the major source of output and employment.

The data on literary and educational achievement clearly indicates the advanced level of the developed economies in terms of human capital formation. Illiteracy is non-existent and the share of female enrolment at all levels is next to parity (tables 8 and 9).

Data for female participation in the manufacturing sector slowly declined during the 1970s although female participation in the non-agricultural sector increased. This trend is due to the general decrease of the manufacturing share of the total employment. Increased female participation in the modern economy has been attributed to the expansion of the tertiary

sector where many women are employed in clerical and service jobs

Australia/New Zealand: The trend of increasing female employment, especially the employment of married women, that can be observed in other industrialized economies holds true for the labour market in Australia and New Zealand. It is related to changing social and economic conditions, particularly changes in attitudes towards married women's economic participation, improvements in female education and changing structure of the job market. Nevertheless occupational segregation and gender gaps in earnings are still persistent and characterize the structure of the labour force in both Australia and New Zealand.

A high proportion of the work force in community and personal services and the business and financial sector are women, while workers in construction and transport industries are mostly men. In both Australia and New Zealand, one third of the female labour force is in clerical occupations and nearly half of the male labour force is in trade and production occupations (ESCAP 1987).

Women's lower levels of education in the past have restricted them to particular occupations that do not require educational skills. However, current enrolment figures for Australia show that girls remain in school as long as, if not longer than, boys; a smaller proportion of girls, however, go on to tertiary study. Years of schooling can no longer be considered a factor contributing to occupational segregation. The relevant factor appears to be the type of school curriculum offered and chosen by girls and boys

Occupational sex segregation is perceived to be an issue in Australia and New Zealand because women tend to concentrate in jobs that are less well paid than those held by men. Women therefore do not have parity with men in terms of job status and wages.

Japan: Japan's remarkable growth of female labour force participation during the past three decades can be attributed largely to the pronounced increase in the participation of married women as paid employees in the labour market. In opposition to such rapidly-increased importance in the paid labour force, female status measured in terms of their earnings relative to men's earnings improved only at a considerably slower rate (ESCAP 1987)

Based on the Equal Employment Opportunity Law and medium-term basic policies, the Ministry of

Labour is undertaking specific measures to improve the working environment for women workers. Special attention is given to the support of part-time workers and homeworkers — the majority of which are female workers who work for supplementing their family income. The increase in the number of part-time and homeworkers seems to reflect the needs of both the demand and the supply sides of the labour force, and is expected to increase further in the future.

From a long-range perspective, the female percentage working in the tertiary industries is increasing, whereas their share in the manufacturing industry declines, thus reflecting changes in the industrial structure in Japan.

2. Newly Industrializing Economies: Hong Kong, Republic of Korea, Singapore

The newly industrializing economies are characterized by overall very high female participation indicators, particularly in the modern sector of the economy. In Hong Kong and Singapore, where almost no agricultural sector exists, it reaches close to 100 per cent (table 2). Also female participation in manufacturing is very pronounced: more than 40 per cent of the total manufacturing labour force of these countries are women (table 3). In this group also the participation of women in manufacturing as a share of total female Economically Active Population (EAP) is relatively high.

The newly industrializing economies are characterized by a highly developed economic and industrial structure. As concerns the structure of the manufacturing sector, particularly Singapore and the Republic of Korea are characterized by a low importance of light industries, and the predominance of heavy and advanced industries.

Regarding the sociocultural and educational status of women a striking result is the pronounced inequality in the status of women and men expressed in the ratio of the share of female illiterates to the share of male illiterates, (table 6), even though it has gone down considerably for the population now 15 to 24. To some extent, this can be explained as a reflection of the overall lower male illiteracy rate compared to other countries.

Very pronounced is also the comparatively very high age of marriage for women in these countries (table 6). Together with the low fertility rates (Hong Kong 1.4, the Republic of Korea 1.6, Singapore 1.9)

this indicates a high availability of female labour force, i.e. demographic data which are favourable to female labour force participation (table 7). Among the young women, the educational status is high. As indicated by the available data, this seems to be a result of the more recent past which has been considerable improvements in the educational status of women for the younger generation (table 8).

Hong Kong and Singapore are also characterized by a relatively high representation of women among administrative and managerial staff, indicating a comparatively low level of occupational segregation between men and women.

Hong Kong: The industrialization process that began in Hong Kong in the 1950s was initiated by export-oriented manufacturing industries based on low wage labour, including the labour of young females. Cheap and qualified labour readily employed in the newly booming manufacturing groups was the major advantage over advanced economies. Growth in the female labour force and the decline in occupational sex segregation have been remarkable.

The female labour force in the modern sector is expected to grow further, albeit not as quickly as in the past given that the economy is also expanding. Changes on the female labour supply side are also expected, which will effect the selective nature of the demand for female labour in the labour market. As the age structure changes in the way that the proportion of young women under 25 decreases, the currently strong preference for young, unmarried women in clerical and production jobs will necessarily change. It is also expected that the supply of skilled and semi-skilled female labour will increase with the wide provision of secondary education and with job training programmes for women.

The garment industry is the major employer of women in Hong Kong. The industry currently faces acute labour shortages and rising wage pressures. In order to survive the competition from Thailand, Malaysia, Indonesia and other Asian low-wage countries, Hong Kong has moved up market with increased deployment of quality control and design management. There have been concentrated efforts to set up educational programmes to encourage both management capacity and local design talent. The five higher education institutions in Hong Kong all offer programmes aimed at preparing new recruits for employment in the local textiles and clothing industries. The available statistics show that women have substantial

entry into some of the courses, particularly in the Technical Institute. In the Institute of Textiles and Clothing, the enrolment of women for the Higher and Professional Diplomas in Fashion and Clothing Technology is impressively large. So is the level of participation of women students in the courses for Graphic Design. In contrast, women have fared less well numerically in Engineering and Computer Studies: skills most needed for careers in managerial and technical positions in the modern garment sector (Mitter, 1992).

Republic of Korea: The vast majority of female workers are employed in occupations which require only simple skills. According to the Korean Women's Development Institute (1989) the employment rate of highly-educated women has dropped between 1975 and 1986, showing that it has become increasingly difficult for those women to find jobs.

On the other hand it is expected that the demand for professional and technically skilled labour in the field of technical science will greatly increase due to the advancement to the information society. The advantage of cheap labour producing mass products of low quality for export is giving way to more specialized and high quality products dependent upon technology intensive production and the availability of skilled human resources. The rising demand for good quality and sophisticated technology requiring higher skills is already putting pressure on the private and public sector in the Republic of Korea to re-orient the direction of manpower planning in order to remain competitive.

The female labour force is expected to grow by far during the 90's due to the rise in the productive age level and the increase of women's participation in economic activities but at present there seems to be a gap between the future requirements and the available industrial work force. The situation of women in the manufacturing sector is especially weak due to lack of adequate education and training.

Since the mid-eighties women workers have been reported to be leaving textiles and garments in large numbers for the electronic plants, which provide better working conditions in terms of lighting and sanitary facilities. In spite of the better working environment, however, the turnover among female production workers in this sector has also been high. The lack of career structure and promotion is primarily responsible for the discontent among women workers.

Singapore: Women in Singapore have made impressive progress since the promulgation of the Women's Charter in 1961. Economically, their rising status can be measured by their rapidly increasing labour force participation and growing visibility in the professions. Factors which have contributed to the changing labour force participation of Singapore women are (1) the rapid expansion of educational facilities and the policy and practice of equal access to every level of education, (2) the sharp reduction in fertility together with the availability of alternative child care facilities and (3) the rapid economic development and industrialization which has created a sustained growth in demand for female labour.

Singapore has encouraged employers to provide training and retraining with a variety of incentives and a Skill Development Fund, which intended to finance the retraining of workers expected to be affected by economic restructuring. Since 1987, the Fund is also focusing on the training of low-skilled workers and this shift has benefited women, since they form the majority of unskilled and semi-skilled workers in the textiles and electronics industries.

3. ASEAN Economies: Indonesia, Malaysia, Philippines, Thailand

The ASEAN economies are equally characterized by a strong participation of women in the economy which is, however, less concentrated in the modern sector (table 2). With regard to female participation in the manufacturing sector these countries are at a level equal with the second group with the majority working in the textile, electronics and food-processing sectors (table 3). This may be an indication for the smaller size of the manufacturing sector of the ASEAN countries and the fact that while women constitute around 45 per cent of the manufacturing labour force, they are still more strongly involved in other economic sectors.

Also in the ASEAN countries, there is a quite pronounced inequality in the literacy level between men and women, even though it is somewhat lower than in the second group (table 6). Very notable are the significant improvements in female education which have taken place in the last years. Thus, the literacy level is significantly higher for the group 15-24 than for the overall female population over 15 (table 8). The fertility rate is still significantly higher in these countries than in the second group (Indonesia 3.3, Malaysia, 3.8, Philippines 4.1, Thailand 2.4).

Indonesia: Data indicates, that women in Indonesia have taken advantage of the sectoral shift towards increasing importance of the industrial sector. Female employment in this sector increased from 12.6 per cent (1980) to 14.9 per cent in 1990. However, their engagement in manufacturing (1990: 13.8 per cent) is mainly of informal status (self-employed, small-scale and household industry) and specific training programmes in the areas of managerial and marketing skills are much needed. Furthermore, education and training of females in the field of science and technology in order to prepare them for a wider range of job opportunities in the industrial growth sectors should be promoted.

Malaysia: Malaysia has achieved rapid economic development in the last two decades. The growth of GNP has been accompanied by substantial structural changes in production and employment. The major structural shift is from the primary to the secondary sector, and in particular, the rapid growth of manufacturing activities.

The female labour force participation rate in Malaysia increased from 37.2 per cent in 1970 to 46.7 per cent in 1990. Over the last two decades women's employment status improved significantly in line with the expansion of employment and structural changes in the economy. The proportion of women as unpaid family worker in the traditional and informal sectors dropped from 39.7 per cent in 1970 to 21.6 per cent in 1990, due to their employment in the modern sector, particularly the estate, industrial and service sectors. Consequently, the proportion of women classified as employees rose substantially, from 38.9 per cent to 62.9 per cent over the same period (Sixth Malaysia Plan, 1991).

Delayed age of marriage (1987: 23.5) and reduction of fertility (1990: 3.8) have reduced the burden of home-making and child care responsibilities and encouraged women to seek paid employment. Increasing access of females to education, first at primary level but increasingly at secondary and tertiary levels, led to improvements of their skills and employability. The rate of growth in manufacturing employment has been much faster for females than for males. Industries employing the largest number of females are electronics, garments, textiles, food manufacturing, wood and rubber products (ESCAP 1987).

In terms of occupational structure, women are employed mainly in low-skilled, labour-intensive jobs

in the agricultural sector and in low-paid, semi-skilled, assembly type production operations in the industrial sector.

While women have achieved educational parity, they still lag behind in training and employment experience. Employers, male colleagues and women workers themselves are still conditioned by past social morals and prejudices regarding the role and status of women in society and in the labour market.

Philippines: One of the more positive signs of development in women's education is their entry into non-traditional areas like metal work, carpentry and shoe-makers in both the formal and non-formal sectors. Although the progress is gradual, it indicates women's and government's efforts to overcome attitudinal barriers to women's search for new roles and better opportunities. In the Philippines the range of training and education opportunities in which women can engage in has been successfully expanded to the traditionally-masculine professions.

However, from a large scale perspective the increase in female employment over the last decade has not broadened their occupational choices or improved women's "utilisation" patterns nor led to salary raises or improved work conditions. In 1988 more women than men were unemployed and the possibility of mismatch between educational qualifications and skills requirement of jobs available remains to be high. Alternative employment schemes such as entrepreneurship for women have not been systematically introduced in education and training although women have an inclination towards wholesale and retail trade areas, proven as a trend by employment data from the formal and informal sector (Zafra, 1989).

Especially the Philippine women workers in the garment and textile industries face serious problems. Their low education levels and lack of marketable skills make them vulnerable and insecure. More education and training programmes targeted at women industrial workers should be considered in order to give them additional marketable skills, making laid-off and retrenched women less dependent on the unpredictable demand for garment or textile workers (ESCAP, 1987).

Thailand: Latest figures from the World Bank (1991) show, that the total enrolment ratio for secondary education in Thailand stands at 30 per cent and lags substantially behind that in other Asian countries. It falls below what might be expected in a country at Thailand's per capita income level and

made the expansion of secondary education a priority of the Government. It can be assumed that the female enrolment ratio is substantially lower than the overall ratio thus requiring special measures to be taken by the Government.

According to a study on the textile industry (Bangpropha, 1987) women constitute 80-95 per cent of workers in the textile, electronic, and food processing industries. The textile and clothing industry has generated at least half a million jobs for Thai women but the majority are concentrated in the lower rung as sewing and general production workers, with less than 1 per cent of the total at the managerial and administrative level (UNIDO, 1991). More women should be encouraged to move up to the management level or to become entrepreneurs themselves. Both financial and technical support are needed to enhance women's supportive role in the future development of the textile and clothing industry.

4. South Asian Economies: Bangladesh, India, Nepal, Pakistan, Sri Lanka

While India and in particular Nepal show a relatively high overall economic activity rate of women (in Bangladesh it is very low probably due to under-estimation), women's role in the modern and in particular in the manufacturing sector is very low in these countries. Particularly Nepal shows clearly the typical picture of women's participation in a least developed country, i.e. high overall female economic activity, but a low share in the modern sector. At the same time, it must be assumed that there is a low recording of overall economic activity in Bangladesh which in turn leads to relatively high shares in the modern as well as in the manufacturing sector.

Most characteristic for this group of countries is probably (and not surprisingly) the side of socio-cultural, demographic and educational factors. All countries are characterized by high levels of fertility, high illiteracy among women, and relatively low levels of school enrolment and achievement (table 8). Notable is, that at face value the level of inequality is lower in these countries than in most of the other ones. This is, however, rather an artificial result which reflects the weakness of this indicator. With male illiteracy estimated at 62.4 per cent (1990) in Nepal, it is obvious that female illiteracy, even though it was estimated as high as 86.8 per cent (1990), can not any more be double as high as occurs in the case of the Newly Industrialized Economies.

Bangladesh: Educational attainment of Bangladeshi females is among the lowest in the world, as much because of the limited concept of women's role in the society and the economy as of the extreme poverty of the country. According to the World Bank (1990) only one in three school-age girls is in school, only 2 per cent of women age 20-24 are in universities, and only three out of a thousand women are in professional jobs.

For Bangladesh to be able to take advantage of its female human capital, it is important to expand enrolment of females in primary education as the very basic starting point to acquire literacy and numeracy. In addition it is critical to enhance opportunities in vocational and technical education to provide women with skills required for wage and self-employment.

Male and female labour markets are markedly segregated. For the large part, females in rural areas are hired for jobs within the homestead like paddy husking and processing or separating jute fibre. Only recently employment outside the homestead has been increasing in importance. Female participation in certain types of non-traditional jobs is expanding. These new employment trends are demonstrated through different kinds of field agricultural activities (transplanting, weeding, harvesting), engagement in export-oriented industries such as garments and fish-processing and activities in the construction industry.

However, education is the key to providing women with the capability to develop skills for mastering shifts in technology and concepts of management that are critical in the workplace. Skill training is increasingly necessary for Bangladeshi women in view of the growth of population, limited capacity of agriculture to absorb expanding labour force, and diversification of the technological base of the economy.

India: India is one of the few countries in Asia where women's share of employment in the secondary and tertiary sectors has fallen during the past several decades. Growth in female agricultural employment has outpaced female job creation in the rest of the economy. Among the reasons are the obsolescence of many non-agricultural occupations dominated by women and the movement of men into new mechanized jobs that have replaced these jobs. Women's lack of education and training as well as stereotypes about their ability to master mechanical and technical skills have been major barriers to upward mobility (Bennett, 1992).

In India, the level of female literacy and accordingly the level of female participation in the formal

sector is relatively low. The majority of women are engaged in the vast rural and urban unorganized sector. According to the National Commission on Self Employed Women 94 per cent of the female labour force operate within the informal sector. The formal sector in India absorbs less than 15 per cent of the total labour force and the female share is estimated to be 12 per cent.

The private sector employs a negligible share of women who are generally localised in unskilled or secretarial jobs. A new type of women workers can be found in the export oriented multinational industries. This minority is trained to do sophisticated jobs but remuneration is inadequate and job security unassured.

While there has been a rapid increase in the efforts made by the Indian government and NGOs towards industrial development through systematic entrepreneurship developing programmes during the past twenty years, issues and questions relating to the promotion of women entrepreneurs, engaged in micro- and small-scale enterprises, are being raised much more recently. Indian women have proven their great potential as successful entrepreneurs. Some of the Indian entrepreneurs today lead the biggest shipping companies, trading and export houses, brewing plants, plastic factories and electronics establishment. Garment and handicrafts exports are primarily in the hands of women entrepreneurs. However, such achievement by about 200,000 women entrepreneurs in India or 6.2 per cent of total SSI entrepreneurs (1986/87) touches just the fringe of a vast future potential (Shah 1992).

Yet, significant allocations towards women entrepreneurs development were rarely made. Action in favour of women has very often been more welfare oriented than development oriented and only recently constructive steps are taken to prepare women for self-employment and entrepreneurship.

In India women comprise less than 25 per cent of the total enrolment of vocational and technical training institutions. Of the 190,000 apprentices, women total only about 4,000. Lack of access to relevant industrial training for women is a major contributing factor to this imbalance, although there is a strong demand for skilled female workers in industry, especially in electronics, telecommunications, computer science and software development, drafting, and chemical analysis in testing laboratories (Shah, 1992).

Nepal: Overall participation rates of women in the Nepalese economy are high, reflecting the rural character of economic activities. In the manufacturing sector, female employment is predominantly found in the textile and food industries. But, as pointed out in a UNIDO study (1988), the great majority of women only do unskilled work and those working at higher professional levels are often involved in work that does not require industrial skills (secretaries, etc.). Both, female participation in manufacturing and in education, however, have shown faster growth rates than those for men in recent years.

In the informal sector, women play a much more conspicuous role. In informal activities such as food processing and textiles production, women not only dominate the labour force, but they are far more often involved in entrepreneurial and managerial activities as well. The division between "typical" male and female activities is less strict in some of the industries and the geographical spread of cottage-industry employment is much wider. Among the more developed cottage industries, exporters, such as the carpet manufacturers, employ a high percentage of women.

Strengthening the role of women in industry in Nepal will in general depend on their more intensive participation in technical education and training. Linking these to actual productive activities would enable more women to enter the manufacturing sector. The coordination of industry-related programmes and projects designed for women with overall industrial sector policies is much needed in order to increase their efficiency.

Pakistan: In Pakistan, despite high economic growth over the past decade, the educational status of women is among the lowest in the world with female literacy rate of only 20 per cent (UNESCO 1991). Supply and demand factors work together to inhibit female education, but lack of facilities and resources seem to be more pressing constraints.

The existing vocational training centres for women are not geared to labour-market needs, and most institutes teach only traditional skills such as sewing and embroidery. According to a survey of vocational institutes in Lahore, most of the skill training did not lead necessarily to income-generation, nor did it prepare women for growing job opportunities in such areas as electronics, garment-making, and secretarial and clerical staff in government offices. It is pointed out that training in business entrepreneurship would also

benefit women, by making them more aware of the various means of making their businesses more profitable.

In the rural economy craft production is a culturally sanctioned enterprise practised by many women. Handicraft production in particular is done more or less along the lines of the putting-out system: agents supply the raw materials to the producers, virtually all are women, who remain in their homes.

The informal sector is the primary employer of poor urban working women. Micro-level studies indicate that home-based workers (pieceworkers and micro-entrepreneurs) constitute 53 per cent of all employed women in the urban sector and 77 to 83 per cent of employed women in the informal sector. Urban women workers outside the home constitute between 17 and 23 per cent of the female labour force according to World Bank estimates (1989). Female wage workers are mainly found in manufacturing, construction and services. The group of self-employed women consists mainly of vendors.

In the formal sector women are concentrated within a few industries and occupational groups. According to the 1985/86 Labour Force Survey, the highest percentage of the female urban work force in the formal sector is in the community, personal and social service sector (44 per cent), followed by manufacturing (37 per cent) and agriculture (13 per cent). Within the industrial sector, the highest percentage of employed women consists of spinners, weavers, knitters, dyers and related workers (32 per cent). The next highest percentage is of labourers (21 per cent); tailors/dressmakers, upholsters and related workers (17 per cent); bricklayers, carpenters and other construction workers (11 per cent); transport equipment operators (4 per cent); potters and related workers (3 per cent). Therefore "manufacturing" and "professions and services" emerge as the largest employers of women in the urban formal sector.

Barriers to entry in formal sector employment are much greater for women than men. Women's lower education and skill levels limit them; also, conditions in the workplace may not be conducive to women working because segregation norms may not be maintained. There is a widespread practice among employers of hiring women on a temporary basis, which deprives them of work-related benefits (maternity leave, creches, working hours, etc.), as well as the opportunity to raise their productivity through on-the-job experience.

Sri Lanka: The liberalization of the economy, the reliance on the strategy of export-led growth and the promotion of private enterprise in industry has had a strong impact on industrial employment patterns of women in Sri Lanka. The most visible consequence of this has been the development of a manufactured export sector whose labour force is predominantly female (1987: 81.6 per cent of labour force in EPZ Colombo). Women in EPZs are usually employed in semi-skilled, low technology and gender specific jobs with low wages and stressful working conditions. More than two thirds of the total female manufacturing labour force are employed in textile and clothing industries alone (UNIDO 1991). Women are engaged to a lesser extent in food manufacturing, rubber products and industrial chemicals.

The female literacy rate in Sri Lanka for 1990 is estimated to be as high as 83.5 per cent (UNESCO 1991) and leading within the group of South Asian Countries. General education opportunities have expanded over the last five decades without gender disparities and statistics reveal almost equal percentage of admissions in primary, secondary and tertiary education.

In a historical context of wide acceptance of the economic value of academic education, vocational education in Sri Lanka has been relegated to a secondary status that is not in consonance with the priority given to industrialization in recent years. So, as academic education grew, the lack of trained technical workforce became more pronounced. Although this imbalance has been largely corrected today the situation of women has not changed in proportion.

In the last decade the enrolment of women in vocational institutions and programmes has increased but they are still confined to "feminine" areas of employment. The gender role assumptions of policy makers and employers and women themselves have created a gender gap in technical and vocational education that has implications for employment in industry. Women are disadvantaged in access to technical and vocational training programmes that are prerequisites to upward mobility in industry. Over 80 per cent are enrolled in courses related to the textile and garment subsectors in the manufacturing industry. Furthermore, women are underrepresented in technology courses in universities and other institutes of tertiary education (Jayaweera 1991).

5. Economies in transition: China, Lao People's Democratic Republic, Mongolia, Viet Nam

As Governments of the former centrally-planned economies are introducing market reforms the relative importance of the state enterprises is declining steadily and extensive rationalization to improve the efficiency of these industries is taking place. At the same time, resource-based industries and light manufactures are expected to see substantial growth with closer integration into the world economy.

Statistics reveal substantial equality in female economic participation in the economies in transition. Involvement in the modern and manufacturing sector is relatively high, comparable to the newly industrialized economies.

Notable is the quite pronounced inequality in the literacy level between men and women especially at the age group 15-24, although the educational level (primary and secondary) is more balanced.

China: In China, after 1949, a large number of women joined the labour force. The number of women workers increased from 7.5 per cent of the total labour force in 1949 to 37 per cent of the labour force in 1988 (UNIDO, 1991). In 1987, 36.1 per cent of the female labour force were engaged in agriculture/forestry, 40.9 per cent in industry and 43.3 per cent in commerce and trade.

In recent years, with the emergence of township enterprises, many women have entered the non-agricultural workforce. The growth of rural industries offers substantial employment opportunities for women, and contributes to absorb surplus and underemployed female labour due to state-owned factories closing down. In 1988, 35 million rural women worked in these township enterprises, accounting for 41 per cent of the total number of workers in these enterprises and 22 per cent of the female workforce in rural areas (UNIDO, 1991).

Differences in the educational levels between male and female in urban and rural areas varies greatly depending on the geographic situations and the economic and sociocultural levels of development of the population.

According to UNESCO estimates for 1990, there were 223 million illiterates in China, of which 69 per cent were women. Taking into account the population above 15 years, the percentage of illiterates is estimated at 26.7 per cent for the population as a whole, with males accounting for 15.9 per cent and females 38.2 per cent. Especially the high number of female drop-outs at the primary level contributes to the number of female illiterates and probably reflects the still persisting traditional perception of Chinese women as being secluded, segregated from the affairs of men and confined to the domestic area.

In 1985 girls formed 41.6 per cent of those accepted at agricultural vocational schools. In technical and general secondary schools the percentages were 38.3 and 39.3 per cent respectively. In addition, various types of technical workshops are organized in factories, enterprises and institutes for on-the-job training. The All China Women's Federation suggests that one-third of female workers in urban areas have received literacy and technical training. Another 90 million women in rural areas have mastered one or two practical production skills as a result of such training.

The All China Women's Federation has a well-established network of rural centres that can be an effective channel for promoting management and business skills for female entrepreneurs. In Beijing, it has an institute providing higher-level training for women in personnel management. At the provincial level the ACWF runs women cadre schools in each province.

The economic and social status of women in general could be improved through selective support in literacy and skill training courses for female students as well as factory workers. However, for being competitive also the women entrepreneurs need training. As a consequence of the economic reform policy a dynamic diversified economy emerged, consisting of many types of entrepreneurial activities and sectors most appropriate for female involvement yet have to be identified.

Lao People's Democratic Republic: Since the economy is based on agriculture and 80 per cent of the population are living in rural areas, female economic activity in the Lao People's Democratic Republic is concentrated in the agricultural sector. Important activities like rice plantation and livestock breeding are mainly carried out by women.

With the introduction of market mechanisms the number of enterprises and factories in the industrial

sector is growing fast and eventually comprises 950 light industrial manufactures and about 550 handicraft workshops. Women are mainly engaged in textile and garments, pharmaceuticals, water purification factories and to a lesser extent in agro-industries and building materials.

In order to promote female participation and professional mobility in the industrial sector and to improve the living and working conditions of women in the Lao People's Democratic Republic, the Government built up the "Lao Women's Union", which plays an important role in protecting women's rights. Furthermore, the National Assembly in 1990 adopted the first constitution, which emphasizes equal rights between men and women and the women and children protection rights. The labour law clarifies principles and conditions for female workers e.g. maternity leave.

In spite of the achievements for female workers in the industrial sector various problems need to be further examined in order to improve working and living conditions for women. The main problems are: lack of qualification because of low educational level, low salary and lack of access to information.

Mongolia: According to the 1992 statistical data the population of Mongolia has reached 2.2 millions, of which 44 per cent are considered as economically active. 85 per cent of the economically active population are engaged, 49.1 per cent of which are women. Female sectoral engagement is highest in light and food industries with 85 per cent of women being directly involved in key processes of manufacturing.

As a result of the ongoing structural change from a centrally planned to a market economy many women find themselves unemployed for reasons of redundancy and their number grows rapidly. Thus, it is essential to provide female workers with opportunities to further participate in the labour market or to become self-employed and to train them in new sectors, management and technologies. In the future highly qualified workers will be needed for the extension of production, manufacturing of high quality goods and introduction of advanced technology. At present women are encouraged to set up small- and medium-size enterprises and to start self-employed activities. 213 women are owners of private enterprises and cooperatives, which accounts for 8 per cent of the total number of private entrepreneurs.

Viet Nam: During the centrally planned period of the Vietnamese economy women were highly active

in the economy, making up 55.7 per cent of the labour force in 1983. In the agricultural and industrial sectors, women accounted for 60 per cent and 47 per cent of those employed, respectively. Slightly more than half of the professional and technical workers are women. The lowest female representation rates were found in energy (28 per cent), construction (34.5 per cent) and engineering industries (39 per cent). The Government, at that time, reported an upward trend in the employment of women in the small-scale, craft and service sectors (ESCAP, 1987).

In recent years Viet Nam integrated its economy into the world market and opened up to foreign investment. Industries such as electronics, biotechnologies and informatics have been developed and heavy-industries and manufacturing are gaining their position in the national production. In keeping path with the development of industries the contingent of skilled workers, male and female, has also increased and data from 1990 indicates that the female percentage among workers in the industrial sector is 40 to 50 per cent. In subsectors like textiles and food-processing the female share is estimated to be as high as 70 to 80 per cent.

6. Pacific Island economies: Fiji, Guam, Papua New Guinea, Solomon Islands

The Pacific island economies although having all small economies span a range of different development levels and are a mixed group in terms of female participation in the economy. Compared to the other regional groups female participation is at an intermediate level being relatively high in the informal and traditional agricultural sector and relatively low in the modern sector of the economy, mainly concentrated

in services and very low in manufacturing. The Government is usually the major employer of persons with educational qualifications, and government jobs dominate the wage market on many islands.

Regarding demographic factors favouring or constraining women's labour force participation, the fertility rate is at a medium level, i.e. approximately in the same range as the newly industrialized economies, but significantly higher than for the developed economies.

Educational indicators for women are favourable in this group with low illiteracy rates and relatively high share of secondary level enrolment of women (except Papua New Guinea). Also with regard to equality in illiteracy rate, the picture is relatively balanced for these countries.

Nevertheless, formal education in terms of quality is not in a healthy state in the Pacific overall since many graduates are not achieving standards common in other developing and developed countries. Especially the education of girls and women urgently requires policy attention since girls represent less than their share of population in most Pacific education systems, and their representation falls markedly from primary to secondary and tertiary levels (Hughes 1985). Highly educated women remain a very small proportion of the Pacific island female population and the majority of South Pacific women have only basic literacy skills acquired in primary school, which are inadequate for participation in the modern economy. In higher education, women are mainly enrolled in courses such as home economics, secretarial and agriculture (especially in Papua New Guinea and the Solomon Islands) but are poorly represented in science, accounting, engineering and law (Tongamoa 1988).

Table 1. Economically active population aged 15 years and over

Country/Area	Economically active women (000s)		Estimated economic activity rate (per cent)				Average annual growth 1970-1990 (per cent)		Women as per cent of total EAP 1990
			Female		Male		f	m	
	1970	1990	1970	1990	1970	1990			1990
Asia and Pacific									
Asia									
Afghanistan	245	502	6	8	90	86	3.7	2.1	9
Bangladesh	941	2,206	5	7	91	87	4.4	2.5	7
Bhutan	147	197	48	43	91	89	1.5	2.1	31
Cambodia	1,163	1,409	59	52	86	86	1.0	1.5	38
China	162,390	283,433	67	70	90	87	2.8	2.4	43
Democratic People's Republic of Korea	2,614	4,787	65	64	85	81	3.1	2.9	46
Hong Kong	552	1,037	45	48	85	84	3.2	3.4	33
India	60,008	76,570	38	29	87	84	1.2	2.3	25
Indonesia	12,825	21,628	36	37	88	83	2.6	2.3	31
Iran (Islamic Republic of)	947	2,589	12	17	85	80	5.2	3.2	18
Japan	20,752	23,557	51	46	84	79	0.6	0.9	38
Lao People's Democratic Republic	693	955	80	71	91	88	1.6	2.0	44
Malaysia	1,092	2,463	37	44	83	82	4.2	3.1	35
Mongolia	258	468	73	72	91	87	3.0	2.9	46
Myanmar	4,319	6,375	54	48	87	85	2.0	2.4	36
Nepal	1,589	2,253	47	43	91	87	1.8	2.2	32
Pakistan	1,583	3,983	9	13	88	86	4.7	2.9	12
Philippines	4,250	6,843	42	36	84	81	2.4	2.8	31
Republic of Korea	3,590	6,303	38	40	81	78	2.9	2.6	34
Singapore	185	417	30	40	82	83	4.1	2.5	32
Sri Lanka	1,054	1,691	31	29	83	80	2.4	1.9	27
Thailand	7,601	12,754	75	68	87	85	2.6	3.1	45
Viet Nam	9,006	15,040	71	70	88	86	2.6	2.8	47
Pacific									
Australia	1,666	3,037	37	46	82	77	3.0	1.5	38
Fiji	17	52	12	22	87	86	5.7	2.2	20
Guam	7	15	33	50	83	76	4.2	-0.8	41
New Zealand	323	548	33	40	81	77	2.7	1.4	35
Papua New Guinea	463	663	69	58	90	87	1.8	2.4	38

Source: United Nations Social Statistics and Indicators, Series K No. 8; The World's Women 1970-1990, Trends and Statistics, New York, 1991.

Table 2. Female participation in the modern sector of the economy

Country/Area	Year	Female non-agricultural paid employment		Female employees in total female EAP	Male-female employees ratio in total EAP
		As percentage of total female employment	As percentage of total non-agricultural employment		
Bangladesh	1985/86	...	...	68.9	4.9
Brunei Darussalam	1986	98.3	19.5	-	-
China	1990	...	37.7	-	-
Hong Kong	1990	99.2	36.3	-	-
India*	1989	86.5	12.5	-	-
Indonesia	1989	44.6	40.8	20.8	2.1
Japan	1990	91.5	40.0	70.7	1.6
Republic of Korea	1990	79.5	39.6	55.6	1.6
Malaysia	1987	69.1	35.3	59.6	1.9
Pakistan	1990	27.7	6.6	-	-
Philippines	1990	68.6	45.5	41.2	1.7
Singapore	1989	99.9	42.0	89.5	1.3
Sri Lanka	1986	39.2	27.4	42.6	2.1
Thailand	1988	32.4	45.1	23.6	1.3
Australia	1990	95.9	42.0	81.0	1.3
New Zealand	1990	90.8	52.2	-	-
Solomon Islands	1986	69.7	15.7	-	-

* Public Sector.

Source: ILO, *Statistical Yearbook*, 1991, tables 2A/3A/4.**Table 3. Female participation in the manufacturing sector**

Country/Area	Year	Female manufacturing EAP		Female employment in manufacturing	
		As percentage of total manufacturing EAP	As percentage of total female EAP	As percentage of total manufacturing employment	As percentage of total female employment
Bangladesh	1985/86	35.5	33.1	-	-
China	1989	-	-	39.3	38.4
Hong Kong	1990	41.8	31.4	41.8	31.8
India	1989	-	-	9.1	16.0
Indonesia	1989	46.4	11.3	46.2	10.0
Japan	1990	39.5	22.9	39.5	23.4
Republic of Korea	1990	42.2	27.4	42.2	27.9
Malaysia	1987	46.0	20.2	46.0	20.2
Pakistan	1990	-	-	12.1	13.2
Philippines	1990	45.7	11.0	45.7	12.2
Singapore	1989/90	45.8	33.0	44.4	32.8
Sri Lanka	1986	-	-	45.2	26.5
Thailand	1988	-	-	45.2	8.1
Australia	1990	26.5	9.7	26.4	9.8
New Zealand	1990	-	-	30.6	12.0

Source: ILO, *Statistical Yearbook*, 1991, table 2A/3B.

Table 4. Female participation in the informal production sector

Country/Area	Year	Female percentage			
		Total EAP		Manufacturing EAP	
		Employers and own-account workers	Unpaid family labour	Employers and own-account workers	Unpaid family labour
Bangladesh	1985/86	4.6	6.2	—	—
Indonesia	1989	27.3	65.9	53.3	73.5
Japan	1990	30.8	82.0	54.2	80.7
Republic of Korea	1990	27.0	87.0	18.3	87.5
Malaysia	1987	24.4	63.3	64.8	73.1
Philippines	1990	29.5	52.5	60.7	67.2
Singapore	1989	18.0	79.5	21.4	85.9
Sri Lanka	1990	22.5	61.8	—	—
Thailand	1988	26.8	63.6	36.4	70.8
Australia	1990	31.8	58.7	30.7	78.5

Source: ILO, *Statistical Yearbook*, 1991, table 2A.

Table 5. Occupational segregation

Country/Area	Year	Female EAP in occupational category		Female share in total EAP
		Administrative and managerial workers	Professional, technical and related workers	
Bangladesh	1985/86	1.3	11.2	10.4
Hong Kong	1990	15.8	41.8	36.3
Indonesia*	1980	10.3	36.5	33.0
Japan	1990	7.9	42.0	40.6
Republic of Korea	1990	4.1	42.4	40.4
Malaysia	1987	9.9	45.3	35.3
Philippines	1990	27.6	63.2	37.0
Singapore	1989	24.5	39.3	39.2
Sri Lanka	1981	9.7	48.3	27.4
Thailand	1980	11.1	49.5	48.0
Australia	1990	41.3	23.7	41.4
Fiji	1986	1.4	39.6	21.2
New Zealand	1981	8.0	43.9	34.2

Source: *ESCAP, *Status of Women in Asia and the Pacific Region*, 1989, table 6. ILO, *Statistical Yearbook*, 1991, table 2B/2C.

Table 5a. Occupational segregation in manufacturing

Country/Area	Year	Female manufacturing EAP in occupational category			Female manufacturing EAP in total manufacturing EAP
		Professional, technical and related workers	Administrative and managerial workers	Production and related workers	
Bangladesh	1985-86	0.0	0.7	38.6	35.5
Japan	1990	9.8	6.6	41.7	39.5
Republic of Korea	1990	21.5	2.5	45.3	42.2
Malaysia	1987	20.6	5.6	47.3	46.0
Singapore	1989	20.5	13.7	49.6	45.6
Thailand	1990	35.6	19.0	47.9	46.6
Australia	1990	9.8	19.4	29.8	26.5
Fiji	1986	11.9	8.6	24.9	24.4

Source: ILO, *Statistical Yearbook*, 1991, table 2C.

Table 6. Women's sociocultural role and status

Country/Area	Female-male illiterates ratio		Female illiterates as percentage of total female population	Females entered second level as percentage of all students entered second level
	Age 15 and over	Age 15-24		
	Estimates 1990		Latest year available	
Afghanistan	1.5	1.6	86.1	13.4
Bangladesh	1.4	1.3	78.0	21.0
Brunei Darussalam	2.3 (1981)	0.9	31.0	38.1
China	2.4	3.1	40.6	29.9
Cambodia	1.4	-	77.6	-
Hong Kong	3.6 (1971)	1.7	35.9	41.7
India	1.7	1.7	66.3	23.2
Indonesia	2.0	1.7	32.0	35.7
Iran (Islamic Republic of)	1.5	2.2	59.4	-
Japan	-	-	-	55.0
Republic of Korea	7.2	1.7	6.5	45.9
Malaysia	2.1	1.6	29.6	40.0
Myanmar	2.5	1.6	27.7	32.3
Nepal	1.3	1.5	86.8	-
Pakistan	1.4	1.3	85.2	18.7
Philippines	1.0	0.8	10.5	44.1
Singapore	2.0 (1980)	1.0	26.0	44.9
Sri Lanka	2.5	1.2	16.5	44.7
Thailand	2.5	1.5	10.1	29.7
Viet Nam	2.0	1.5	16.4	36.3
Australia	-	-	-	61.6
Fiji	1.9 (1980)	1.6	19.1	45.0
Guam	0.9 (1980)	0.8	3.5	47.3
New Zealand	-	-	-	55.8
Papua New Guinea	1.7	-	62.2	22.4

Source: UNESCO, *Statistical Yearbook*, 1991, table 1.3, 1.4.

Table 7. Demographic factors/availability of female labour force

Country/Area	Single women age 20-24	Total fertility rate	Average age at first marriage
	As percentage of all women age 20-24		
Afghanistan	9.3	6.8	17.8
Bangladesh	3.2	5.0	16.7
Brunei Darussalam	52.1	3.4	25.0
Bhutan	-	5.5	-
Myanmar	35.8	3.8	-
Cambodia	-	4.6	21.3
China	-	2.3	22.4
Hong Kong	68.4	1.4	26.6
India	-	3.9	18.7
Indonesia	22.1	3.7	21.1
Iran (Islamic Republic of)	21.3	5.1	19.7
Japan	77.6	1.7	25.8
Republic of Korea	66.0	1.6	24.7
Lao People's Democratic Republic	-	6.6	-
Malaysia	-	3.7	23.5
Mongolia	-	4.8	-
Nepal	-	5.6	17.9
Pakistan	24.4	5.4	19.8
Philippines	45.3	4.0	22.4
Singapore	73.7	1.8	26.2
Sri Lanka	55.2	2.6	24.4
Thailand	-	2.4	22.7
Viet Nam	-	3.8	-
Australia	39.9	1.9	23.9
Fiji	36.1	2.9	-
Guam	40.0	3.0	-
New Zealand	49.2	2.2	22.8
Papua New Guinea	-	5.0	-

Source: United Nations Demographic Yearbook, 1982;
Population Data Sheet, 1991, ESCAP;
United Nations Demographic Yearbook, 1987, Annex table 3A.

Table 8. Women's access to basic education

Country/Area	Female illiterates		Ratio of female enrolment	Female enrolment	
	Age 15 and over	Age 15-24	1st and 2nd level	1st level	2nd level
	As percentage of total female population at the corresponding age group		To total female population at the corresponding age group	As percentage of total enrolment	
	Estimates 1990		Latest year available		
Afghanistan	86.1	88.9	13	33	33
Bangladesh	78.0	72.9	35	44	32
Bhutan	75.4	-	13	37	29
Cambodia	77.6	-	-	-	-
China	38.2	19.0	76	46	41
Hong Kong	35.9 (1971)	5.0	88	48	51
India	66.3	59.7	54	41	35
Indonesia	32.0	18.4	80	48	45
Iran (Islamic Republic of)	56.7	58.3	72	46	41
Japan	-	-	99	49	50
Republic of Korea	6.5	1.2	97	49	47
Lao People's Democratic Republic	-	-	60	44	42
Malaysia	29.6	16.0	78	49	50
Mongolia	-	-	98	50	52
Myanmar	27.7	18.6	59	48	47
Nepal	86.8	84.9	39	32	27*
Pakistan	78.9	75.3	20	34	28
Philippines	10.5	7.6	96	49	50*
Singapore	26.0 (1980)	3.8	87	47	50
Sri Lanka	16.5	9.8	89	49	51
Thailand	10.1	3.8	65	48	46
Viet Nam	16.4	6.0	67	48	47
Australia	-	-	94	49	50
Fiji	19.1 (1985)	9.0	90	49	50
Guam	3.5 (1980)	4.1	-	48	48*
New Zealand	-	-	96	49	49
Papua New Guinea	62.2	-	40	44	37

* Total second level

Source: UNESCO, *Statistical Yearbook*, 1991, table 1.3, 3.2, 3.4, 3.7.

Table 9. Women's access to vocational/technical training

Country/Area	Year	Female enrolment at 2nd level (vocational) As percentage of total 2nd level enrolment (vocational)	Female enrolment at 3rd level		
			Natural sciences	Engineering	Commercial and business administration
			As percentage of total 3rd level enrolment in each field		
Afghanistan	1975	11	-	-	-
Bangladesh	1988/89	5	16.4	3.8	11.7
Bhutan	1984	5	-	-	-
Brunei Darussalam	1989	28	-	-	-
China	1989	44	-	-	-
Hong Kong	1984/87	32	21.5	2.4	53.0
India	1985	30	32.4	8.7	21.7
Indonesia	1984/88	42	38.9	16.4	40.1
Iran (Islamic Republic of)	1988/89	20	34.8	4.2	26.5
Japan	1989	47	16.4	4.4	-
Republic of Korea	1989/90	53	29.4	3.0	17.2
Lao People's Democratic Republic	1987	31	-	-	-
Malaysia	1988/89	25	44.1	13.1	49.1
Mongolia	1986/87	47	71.1	42.9	-
Nepal	1980	-	12.2	2.3	11.9
Pakistan	1987/89	25	22.7	3.1	10.0
Philippines	1980	-	64.4	15.8	59.9
Singapore	1980/87	23	64.0	16.7	66.4
Sri Lanka	1976/88	33	41.7	14.0	34.5
Thailand	1975	45	-	-	-
Viet Nam	1976/80	35	20.3	16.0	25.1
Australia	1989	-	37.8	8.9	39.1
Fiji	1986	51	-	-	-
Guam	1983	45	-	-	-
New Zealand	1989	70	38.1	8.6	44.3
Papua New Guinea	1987/89	24	13.8	4.1	21.9

Source: UNESCO, *Statistical Yearbooks*, 1990 and 1991, table 3.7, 3.12.

Bibliography

- Australian National University, 1985: Women in Development in the South Pacific, Canberra
- Bangpropha, Wannee 1987: Thai Women Workers in Textile Industry: Their Situation and Struggle. Master's Thesis. Institute of Social Studies. The Hague
- Bennett, Lynn 1992: Women, Poverty, and Productivity in India. EDI Seminar Paper Number 43. World Bank. Washington, D.C.
- ESCAP, 1987: Women's Economic Participation in the Asia and Pacific. Bangkok
- ESCAP, 1987: Achievements of the United Nations Decade for Women in Asia and the Pacific. Bangkok
- ESCAP, 1987: Young Women Workers in Manufacturing: A Case Study of Rapidly Industrializing Economies of the ESCAP Region. Bangkok
- ESCAP, 1989: Status of Women in the Asia and Pacific Region. Bangkok
- ESCAP, 1991: Industrial Restructuring in Asia and Pacific. Bangkok
- ILO. Yearbook of Labour Statistics, Various Editions. Geneva
- Jayawera, Swarna 1991: Women, Skill Development and Employment. Colombo
- Korean Women's Development Institute, 1989: Women's Studies Forum. Seoul
- Lewenhak, Sherla, 1988: The Revaluation of Women's Work. New York
- Mitter, Swasti, 1992: New Skills Requirements and Appropriate Programmes for the Enhancement of Participation of the Female Labour Force in Industry in selected Economies of the Asia-Pacific Region, Paper presented at the ESCAP Regional Workshop on Diversified Skill Development for Women in Industry at Chiang Mai/Thailand, 23-27 March, 1992
- Shah, Hina, 1992: Social Dimensions of Integrating Women in Industrial Development, Paper presented at the ESCAP Regional Workshop on Diversified Skill Development for Women in Industry at Chiang Mai/Thailand, 23-27 March, 1992
- Tongamo, Taiamoni, 1988: Pacific Women: Roles and Status of Women in Pacific Societies. Suva
- UNDP: Human Development Report 1992. New York
- UNESCO: Statistical Yearbook, 1991. Paris
- UNIDO, 1988: The Current and Perspective Contribution of Women to Nepal's Industrial Development. Vienna
- UNIDO, 1989: Women in Industrial Development in Developing Countries: Trends and Perspectives (UNIDO-document PPD 137, 25 October 1989). Vienna
- UNIDO, 1991: Participation of Women in the Manufacturing Sector: Patterns and Influential Factors (UNIDO-document, September 1991). Vienna
- UNIDO, 1991: Women in China: Report of Mission to China 19-28 April 1991. Vienna (not published)
- United Nations, 1984: Demographic Yearbook 1982. New York
- United Nations, 1991: The World's Women 1970-1990, Trends and Statistics (Social Statistics and Indicators, Series K, No. 8). New York
- The World Bank, 1989: Women in Pakistan: An Economic and Social Strategy. Washington, D.C.
- The World Bank, 1990: Bangladesh: Strategies for Enhancing the Role of Women in Economic Development. Washington, D.C.
- Zafra, Agrafina: 'Whither Women's Productivity?' in APSIDEP, 1989: Writings in Vocational and Technical Training: The Reflection of a Decade. Islamabad

**NEWS:
SELECTED ESCAP ACTIVITIES**

IV. FORTY-NINTH SESSION OF THE COMMISSION

The forty-ninth session of the Commission was held at the United Nations Conference Centre, Bangkok, from 21 to 29 April 1993.

The session was attended by representatives of 51 members and associate members of ESCAP. Several United Nations bodies and specialized agencies, intergovernmental organizations and non-governmental organizations were also represented.

The Commission at that session adopted two relevant resolutions for enhancing regional cooperation, namely, resolution 49/1 of 29 April 1993 on the implementation of the action programme for regional economic cooperation in trade and investment, and resolution 49/3 on the Tehran Declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific. Excerpts from those resolutions, including reference to relevant documents, as well as selected quotes in the industrial sector from the report of the Commission are provided below:

1. Resolution 49/1. Implementation of the action programme for regional economic cooperation in trade and investment

The theme topic of the forty-ninth session was "Expansion of investment and intraregional trade as a vehicle for enhancing regional economic cooperation and development in Asia and the Pacific".

The ESCAP secretariat prepared a detailed study on the theme topic, which was published as part two of the *Economic and Social Survey of Asia and the Pacific 1992* (ST/ESCAP/1243/Part II, United Nations Publication Sales No. E.93.II.F.6). The study:

- (a) Examined recent overall trends in trade and investment in the Asian and Pacific region and reviewed the formal agreements for economic cooperation in the region;
- (b) Assessed the nexus between trade and investment in the region as well as its actual and potential contribution to a process of industrial restructuring that could result in a virtuous circle of growth;
- (c) Described in some detail why this synergy was not realized in some contexts;

- (d) Examined a range of issues, including endogenous factors such as the macroeconomic environment, foreign exchange and investment regulations, infrastructural inadequacies, and some exogenous concerns that have constrained the operation of the nexus between trade and investment;
- (e) Analysed the special problems prevailing in the Pacific islands, in the least developed countries in general and in the economies in transition in the region;
- (f) Formulated an approach to regional cooperation and development and the specific direction that cooperation initiatives must take in the context of Asia and the Pacific.

The Commission also deliberated on the programme of action for regional economic cooperation in trade and investment, which was earlier endorsed by the Committee for Regional Economic Cooperation, at its second session held in April 1993 (see next article in this publication).

By resolution 49/1, the Commission:

- Noted the sustained growth and expansion of trade in the ESCAP region as a whole, but also recognized the potential for the further expansion of trade for the benefits of all the developing economies in the region, especially the least developed, landlocked and Pacific island economies as well as the disadvantaged economies in transition,
- Took into account the need for the establishment of a strong regional economy in Asia and the Pacific, with growing interlinkages in trade and investment among ESCAP members and associate members in order to enable the region to retain its resilience into the next century, which will require policies that foster closer economic ties based on expanding interdependence within the region,
- Recognized that notwithstanding such cooperative endeavours within the region,

the successful conclusion of the Uruguay Round of multilateral trade negotiations and an open world trading system must still underpin the regionwide pursuit of outward-oriented development strategies.

- Emphasized the relevance of the recommendations emerging from the deliberations on the theme topic of the forty-ninth session of the Commission, "Expansion of investment and intraregional trade as a vehicle for enhancing regional economic cooperation and development in Asia and the Pacific", as a step towards achieving a more balanced and sustained development of the region.
- Focused on the action programme for regional economic cooperation in trade and investment as endorsed by the Committee for Regional Economic Cooperation at its second session and further endorsed by the Commission at the present session.
- Realized the importance of effective utilization of all available resources, as well as of avoiding duplication of effort for the creation of a better environment for the promotion of regional economic cooperation and development.
- Acknowledged the funding support of the United Nations Development Programme under its fifth intercountry programme for the efficient implementation of the action programme.

1. Called upon the Executive Secretary to accord priority, subject to the availability of financial resources, to the activities of the secretariat in the implementation of the action programme for regional economic cooperation in trade and investment, particularly in the following areas:

- (a) Review and analysis of regional trade patterns;
- (b) Strengthening of the Regional Trade Information Network;
- (c) Networking of trade-related research institutions;
- (d) Enhancement of national capabilities in quality control;
- (e) Sectoral foreign direct investment inflows and analysis of foreign direct investment policies;

- (f) Establishment of a regional investment information and promotion service;
- (g) Development of export-oriented small and medium enterprises;
- (h) Environmental issues related to trade and investment;
- (i) Assistance in specific sectors to disadvantaged economies in transition;
- (j) Integration of the central Asian economies into the region;
- (k) Inter-subregional cooperation in trade and investment;

2. Called upon all members and associate members to support and participate actively in the implementation of the action programme;

3. Invited the Asian Development Bank, the International Monetary Fund, the World Bank and interested United Nations agencies and organizations, as well as bilateral donor countries and the members and associate members of the Commission, to collaborate actively with the secretariat in its efforts to implement the action programme;

4. Requested the Executive Secretary to report annually on the progress in the implementation of the action programme, beginning with the fiftieth session of the Commission.

2. Resolution 49/3. Tehran Declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific

The Commission adopted resolution 49/3, after considering a report on the Meeting of Ministers of Industry and Technology, held at Tehran in June 1992, which also included the Tehran Declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific, and the Regional Strategy and Action Plan for Industrial and Technological Development. By that resolution, the Commission:

- Recognized the urgent need to spread the development momentum to all countries of the region, especially the least developed, land-locked and island developing countries and the disadvantaged economies in transition.

- Realized that the growing integration of the world economy has led to a situation where in factors exogenous to national economies are increasingly important, and that enhanced regional and global cooperation is called for,
- Also realized that the overall dynamic performance of the region can be further strengthened through increased regional and subregional cooperation and by the integration into the world economy of the region's least developed and island developing economies and disadvantaged economies in transition through increased trade, investment and national capacity-building,
- Welcomed the greater emphasis on the adoption of policies and measures in promoting the role of the private sector in industrial development and technological progress,

1. Took note of the recommendations of the Meeting of Ministers of Industry and Technology, held at Tehran on 28 and 29 June 1992, and the Tehran Declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific, adopted by the Meeting of Ministers;

2. Endorsed the Regional Strategy and Action Plan for Industrial and Technological Development, also adopted by the Meeting of Ministers;

3. Called for the early implementation of the recommendations of the Meeting of Ministers of Industry and Technology, the Tehran Declaration, and the Regional Strategy and Action Plan;

4. Welcomed the offer of the government of the Islamic Republic of Iran, to upgrade the existing national centre, namely the Institute for Research in Planning and Development, Tehran, to provide regional and subregional facilities, and in that context, requested the Executive Secretary to examine the legal, financial and other implications and modalities and report to the Commission at its fiftieth session;

5. Invited all United Nations bodies and specialized agencies concerned, as well as regional and subregional intergovernmental and non-governmental organizations, multilateral funding agencies, bilateral aid agencies and donor Governments, to provide technical and financial support for the implementation of the Tehran Declaration and the Regional Strategy and Action Plan;

6. Called upon the Executive Secretary to mobilize resources for the implementation of the recommendations of the Meeting of Ministers of Industry and Technology, the Tehran Declaration, and the Regional Strategy and Action Plan, and to report on the progress in implementing those recommendations to the Commission at its fifty-first and subsequent sessions;

7. Requested the Executive Secretary to convene in 1996 a regional conference of senior officials, representatives of concerned United Nations bodies and agencies and other relevant organizations, and the private sector in order to review and assess the progress achieved in the implementation of the recommendations of the Meeting of Ministers of Industry and Technology, the Tehran Declaration, and the Regional Strategy and Action Plan and to report thereon to the Commission at its fifty-third session, to be held in 1997.

3. Selected quotes in the industrial sector from the report of the Commission

- "The Commission emphasized that well-balanced and stable growth of the world economy was essential for sustained development of the industrial sector at the national level. Furthermore, improvement of infrastructure, appropriate development of human resources, provision of support services and adequate supply of energy were critical elements for strengthening national capacity and consolidating the industrial development base. All those elements therefore required urgent attention.
- "The Commission pointed out that strengthening the private sector and enhancing its role were essential for promoting competitiveness in manufacturing at both domestic and international levels. While expressing satisfaction at various reform measures, including liberalization, decentralization, deregulation and restructuring, the Commission emphasized that an open trading system and multilateralism were essential for promoting greater competitiveness and the integration of industrial activities ... However, despite the tangible achievements of some countries in the region, most of the countries in the region were confronted with problems in building and using technological capa-

bilities, in attracting foreign direct investment and in promoting transfer of technology, particularly with regard to access to information on new and emerging technologies and commercialization of the results of research and development. Those countries also had acute shortages of skilled technicians, as well as of scientific and technological personnel. The Commission therefore urged the countries of the region to strengthen efforts to implement effectively the various economic, industrial and technological reform measures already adopted.

- "The Commission felt that cooperation among the private sectors of various countries was essential to the overall improvement of manufacturing competitiveness and industrial efficiency.
- "The Commission felt that there were tremendous opportunities for promoting intra-regional and interregional flows of investment in the Asian and Pacific region. The Commission directed the secretariat to accord higher priority to such activities.
- "The Commission emphasized that industrial financing was a critical concern of the developing countries of the region. It urged the secretariat to undertake activities to explore innovative means of industrial financing, including the development of an appropriate capital market.
- "The Commission noted with concern the constraints faced by the least developed and island developing economies and the economies in transition with regard to industrial and technological development ... the Commission strongly felt that those groups needed particular assistance in the following areas: developing human resources and creating appropriate capabilities and a climate conducive to promoting foreign direct investment and the accompanying technology transfer, the assessment and adoption of new and emerging technologies; research and development of standardization and quality control; the development of telecommunications; and the upgrading of the technology of export-oriented small and medium enterprises so as to increase their competitiveness.
- "The Commission urged the secretariat to

mobilize all possible resources to assist the Asian republics, especially in the areas of market-oriented reforms, industrial restructuring and rehabilitation, skills promotion and investment opportunities. Exchange visits of officials and private entrepreneurs from those republics to the newly industrializing economies, the Association of South-East Asian Nations (ASEAN) and the developed countries would be desirable and fruitful.

- "The Commission emphasized that activities to develop industrial and technical skills needed to be strengthened at the national, subregional and regional levels through regional cooperation. It called for greater participation of the private sector in the development of science and technology and technical and managerial skills. Because shorter product life-cycles threatened the competitiveness of existing products, flexible training programmes to develop the skills required for the adoption of new and emerging technologies were essential.
- "The Commission strongly emphasized that the development and promotion of small and medium industries was essential and required urgent attention. It held the view that small and medium enterprises were important agents for industrial and technological development in national economies, and should be supported financially with concessionary loans in areas of technological upgrading. Those industries required special assistance through the provision of technological information and technology transfer.
- "The Commission pointed out that industrial decentralization and the dispersal of industries to the rural areas were essential for balanced industrial development at the national level. Appropriate activities should therefore be initiated at the regional level to assist countries in achieving meaningful industrial dispersal and rural industrialization.

Source: Report of the Economic and Social Commission for Asia and the Pacific on its forty-ninth session, (Official Records of the Economic and Social Council, 1993, Supplement No. 16 (E/1993/36-E/ESCAP/927)), pp. 35-37, 40-43, 48-50, and 79-82.

V. COMMITTEE FOR REGIONAL ECONOMIC COOPERATION

The thematic Committee on Regional Economic Cooperation was established by the Commission through its resolution 48/2 of 23 April 1992 on restructuring the conference structure of the Commission.

The Committee is composed of all members and associate members of the Commission and meets once a year. It has a high-level steering group drawn from regional members and associate members on a voluntary basis. The Committee, under the overall supervision of the Commission, performs the following functions:

1. Serves as a mobilizer of ideas, a forum for policy-oriented discussion, and a catalyst for action to promote regional economic cooperation.
2. Reviews periodically:
 - (a) The impact on the economics of the Asian and Pacific region of global economic interdependence in such areas as trade, financial and investment flows, technological progress and industrial growth;
 - (b) The future economic outlook of the region and the structural adjustment needed to strengthen the economics of the region.
3. Initiates policy-oriented studies on regional economic cooperation which, after review by the Committee or its Steering Group, should be disseminated widely in the region.
4. Identifies potential areas for regional economic cooperation, recommends appropriate policy options and assists the regional members and associate members of the Commission in implementing measures to achieve such cooperation by encouraging, facilitating and sponsoring consultations through the establishment of working groups, including expert and technical groups and other appropriate arrangements.
5. Develops a close relationship with relevant subregional organizations, promotes the interchange of information on their activities and studies on issues relating to regional economic cooperation, and encourages linkages among them.
6. Devises ways and means of establishing dialogue with development agencies and financial institutions, private sector organizations, non-govern-

mental organizations, and donor countries, within and outside the region, in its initiatives and activities to promote regional economic cooperation.

The first session of the Committee for Regional Economic Cooperation was held at Bangkok on 19, 22 October and 2 November 1992. It was attended by representatives of 26 ESCAP members and associate members and a number of United Nations bodies and agencies. That session was essentially an organizational meeting at which the participants discussed the scope and focus of the programme of work of the ESCAP secretariat in regional economic cooperation, as well as arrangements for the convening of the first meeting of the Steering Group.

The Committee envisaged its role within the perspective of the growing interdependence among the Asian and Pacific economies. The region's diversity, increasing complementarities and dynamism ascribed mainly to its generally outward-oriented policies provided the appropriate framework and stimulus to regional economic cooperation. The Committee recommended that the work programme of ESCAP for regional economic cooperation should focus on areas in which the secretariat, as a regional multidisciplinary organization, had a comparative advantage, and that its activities should be action-oriented and time-bound.

The Steering Group of the Committee held two meetings: first meeting at New Delhi from 24 to 29 November 1992 and the second at Bangkok on 15 and 16 April 1993.

At its first meeting, the Steering Group reviewed the international economic environment and its likely impact on the region's economies. It also considered the secretariat proposal on an action programme for regional economic cooperation in trade and investment. During the discussions, the Steering Group made incisive and meaningful comments on the issues raised in the action programme and decided that, in the light of its observations, a revised draft action programme should be given final consideration at its second meeting. Accordingly, the Steering Group, at its second meeting, considered the revised draft and finalized it for submission to the Committee.

The Steering Group also decided to consider the

issues of investment-related technology transfer and technological capability building and regional cooperation in infrastructure development at its third meeting.

The second session of the Committee for Regional Economic Cooperation was held at Bangkok on 19 and 20 April 1993. It was attended by 29 ESCAP members and associate members as well as concerned United Nations bodies and agencies and intergovernmental organizations. The Committee at that session considered and endorsed the revised action programme for regional economic cooperation in trade and investment, as approved by the Steering Group.

The Commission, at its forty-ninth session, endorsed the action programme and adopted resolution 49/1 on its implementation (see article I in this publication).

The action programme for regional economic cooperation in trade and investment provides pragmatic and timely approach to the strengthening of growth in the region through an outward-oriented development strategy. The specific components of the action programme include the following:

- A. Growth of intraregional trade:** 1. Review and analysis of regional trade patterns; 2. Regional trade expansion infrastructure; 3. Network of trade-related research institutions; 4. ISO 9000 series; 5. Regional commodity problems.
- B. Role of foreign investment and the private sector:** 1. Study of sectoral FDI inflows and analysis of FDI policies; 2. Regional investment information and promotion service.
- C. Development of small and medium enterprise:** 1. Study on the regional experience of export-oriented small and medium enterprises; 2. Promoting enterprise-to-enterprise cooperation for small and medium enterprises.
- D. Emerging trade and investment-related concerns:** Trade, investment and environmental issues.
- E. Economies in transition:** 1. Regional cooperation to overcome macroeconomic problems; 2. Study of requirements for the integration of the newly independent Asian republics into the region; 3. Assistance to economies in transition in specific-sectors.
- F. Inter-subregional cooperation:** Study on current status of interaction.

Sources: ESCAP, Report of the Committee for Regional Economic Cooperation on its first session, Bangkok, 19, 22 October and 2 November 1992 (E/ESCAP/REC/Rep).

_____, Report of the Steering Group of the Committee for Regional Economic Cooperation on its first meeting, New Delhi, 24-27 November 1992 (E/ESCAP/REC(2)/1).

ESCAP, Report of the Steering Group of the Committee for Regional Economic Cooperation, Second Session, Bangkok, 15, 16 and 19 April 1993 (E/ESCAP/REC(2)/...).

_____, Report of the Committee for Regional Economic Cooperation, Second Session, Bangkok, 19 and 20 April 1993 (E/ESCAP/898).

VI. REGIONAL FORUM FOR SUSTAINABLE INDUSTRIAL DEVELOPMENT AND RESTRUCTURING IN ASIA AND THE PACIFIC

The Commission, at its forty-seventh session, which was held at Seoul in April 1991, deliberated on the theme topic "Industrial restructuring in Asia and the Pacific, in particular with a view to strengthening regional cooperation. In so doing, the Commission considered the theme study and a draft plan of action prepared by the secretariat. The Commission concluded its deliberations with the adoption of resolution 47/2 of 10 April 1991 on the Seoul Plan of Action for Promoting Industrial Restructuring in Asia and the Pacific.

By resolution 47/2, the Commission:

- Took into account General Assembly resolution 45/199 of 21 December 1990 on the International Development Strategy for the Fourth United Nations Development Decade, especially the sections on science and technology and industrial policies and measures, which emphasized:
 - (a) That the reactivation of development in the decade of the 1990s on a sustained base would be closely related to the ability of the developing countries to participate in the rapid advances in science and technology that have characterized the global economy in recent year and will continue in the future;
 - (b) That industrial progress in developing countries can also be significantly enhanced through cooperation among such countries at the global, regional and subregional levels;
 - (c) That the integration of markets of developing countries, the setting up of joint ventures and programmes for training and upgrading skills must be among the objectives of policies and measures to promote industrialization during the 1990s.
- Recognized the critical and important contribution of the industrial sector to the overall

process of restructuring for economic progress.

- Also recognized that the developing economies of the region are on the threshold of a new era of economic, industrial and technological change.
 1. Welcomed the plan of action for promoting industrial restructuring in Asia and the Pacific as a comprehensive and constructive basis for further discussion.
 2. Decided that the plan of action shall be called the Seoul Plan of Action for Promoting Industrial Restructuring in Asia and the Pacific;
 3. Invited all members and associate members to intensify their efforts to strengthen regional cooperation for accelerating the pace of industrial and technological development and to initiate cooperative measures for this purpose;
 4. Requested developed countries, developing countries in a position to do so, relevant United Nations agencies and bodies, and other international agencies to render active support to the developing members and associate members of the Commission for accelerating their industrial and technological development, taking into account the needs of least developed, land-locked and island developing countries.
 5. Requested the Executive Secretary, *inter alia*, to organize a meeting of senior officials of members and associate members of the Commission to deliberate further on the plan of action with a view to examining its content, priorities and modalities for promoting industrial restructuring in the ESCAP region.

In accordance with the above directive, a Meeting of Senior Officials on the Seoul Plan of Action was convened in November 1991. That meeting examined

the Plan and established priorities and modalities for promoting industrial restructuring in the ESCAP region.

The secretariat incorporated the various revisions in the Seoul Plan of Action as suggested by the Meeting of Senior Officials and presented it to the Commission at its forty-eighth session, which was held at Beijing in April 1992.

The Seoul Plan of Action views industrial restructuring as a complex and dynamic process, involving shifts in the structure of production, ownership, size, and market orientation of industrial enterprises. The Seoul Plan of Action recognizes that the structural changes occurring in the manufacturing sector of the economies of the region are largely guided by factor prices, exchange rates, interest rates and credit policies, trade policies and technological capabilities.

The underlying considerations and principles embodied in the Seoul Plan of Action have been formulated in keeping with the dynamic performance of the region as a whole, as well as the perceptible tendencies towards greater integration and interdependence among the economies of the region. These tendencies have brought new opportunities as well as challenges for fostering regional cooperation to facilitate industrial restructuring. The Seoul Plan of Action is designed to utilize these opportunities, particularly those that have arisen in the areas of intraregional trade, foreign direct investment, new products technologies, relocation of industrial activities in line with changing comparative advantage, geographical sourcing of parts and equipment, region-wide subcontracting arrangements, and harmonization of industrial policies and programmes.

The Seoul Plan of Action is predicated on the basic principle that the formulation and implementation of the national strategies, policies, plans and programmes for industrial restructuring are the sovereign right and responsibility of each member and associate member of the Commission.

After extensive deliberations, the Commission adopted the Seoul Plan of Action for Promoting Industrial Restructuring in Asia and the Pacific, and noted that the secretariat should determine the specifics of the regional cooperation measures recommended therein, and assume the coordinating role. It also stressed the need to work closely with relevant international organizations and United Nations agencies and bodies, especially the United Nations Industrial

Development Organization (UNIDO), in implementing the regional cooperation measures.

With a view to strengthening regional cooperation, the Commission endorsed the proposal as contained in the Seoul Plan of Action that a regional forum for sustainable industrial development and restructuring, could be constituted on an experimental basis to deal with key issues of regional concern in industrial development and restructuring.

The Commission also decided that the forum could be convened the participation of high-level government officials, representatives of the private sector and professional experts, to discuss critical issues relating to, and work out the mechanisms for industrial restructuring.

First Meeting of the Regional Forum for Sustainable Industrial Development and Restructuring in Asia and the Pacific

ESCAP convened the first meeting of the Regional Forum for Sustainable Industrial Development and Restructuring in Asia and the Pacific at Kuala Lumpur, from 6 to 10 December 1993. The Government of Malaysia provided host facilities and the Governments of Japan and the Republic of Korea provided funding support for the Forum.

The Forum was attended by fifty-one experts from 16 countries as follows: Azerbaijan, Bangladesh, People's Republic of China, Indonesia, Islamic Republic of Iran, Republic of Korea, Malaysia, Nepal, Pakistan, Papua New Guinea, Philippines, Thailand, Turkmenistan, United States of America, Uzbekistan and Viet Nam.

International Labour Organization (ILO), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO), and World Assembly of Small and Medium Enterprises (WASME) were also represented.

The Forum considered the following issues:

- (a) Industrial restructuring through promotion of integration among economies prospects for enterprise-to-enterprise cooperation,
- (b) Promoting private sector development for industrial and technological development; rebalancing the public and private sector role

for support services, financing and privatization.

- (c) Problems and issues for transfer of new and emerging technologies: need for cooperative arrangements and institutional development;
- (d) Skills development for adapting new and emerging technologies;
- (e) Institution-building for meeting long-term needs of industrial development and restructuring.

The meeting concluded its five-day deliberations by unanimously adopting a set of 34 recommendations and proposals for action at regional and national levels, with special focus on (a) private sector development and promotion of enterprise-to-enterprise cooperation, and (b) technology transfer and skills development (see ST/ESCAP/1373).

At the regional level, the meeting recommended

that ESCAP secretariat should service the Regional Forum for the next three years through mobilization of extrabudgetary resources and strengthening of secretariat's resources in the field of industrial and technological development. Eventually, based on the needs and priorities of member countries, further review could be undertaken by the Forum meeting in 1997 for its longer-term arrangements.

At the national level, the meeting recommended that National Forums for Promoting Sustainable Industrial Development and Restructuring should be established, in each participating country, if not already done so, to bring together government officials, private sector representatives and professional experts to discuss critical issues and recommend practical measures for accelerating the pace of industrial development and restructuring.

The meeting also adopted the terms of reference of the Regional Forum, which are presented in the accompanied box.

TERMS OF REFERENCE OF REGIONAL FORUM FOR SUSTAINABLE INDUSTRIAL DEVELOPMENT AND RESTRUCTURING IN ASIA AND THE PACIFIC

- (a) To design activities for the implementation of the Seoul Plan of Action for Promoting Industrial Restructuring, and Regional Strategy and Action Plan for Industrial and Technological Development adopted by the Meeting of Ministers of Industry and Technology held at Tehran in June 1992, with special reference to the long-term needs of industrial development and restructuring;
- (b) To assist regional member countries in strengthening national institutional facilities for cooperating industrial development and restructuring and to maintain continuing liaison with such bodies;
- (c) To collect information on industrial development and restructuring and disseminate to the countries of the region;
- (d) To organize, upon specific requests of national institutions, industrial development and restructuring support teams to assist countries with special reference to the least developed countries and transitionally disadvantaged economies in the region;
- (e) To develop specialized training courses and organize workshops, seminars and meetings on location in countries that request such assistance in the implementation of the constituent elements of the Seoul Plan of Action;
- (f) To promote transfer and adaptation of technology aimed at facilitating industrial restructuring;
- (g) To establish a network of National Forum for Industrial Development and Restructuring, Chambers of Commerce and Industries in fostering greater understanding among countries and private sector entities. Also to enlist the cooperation of non-governmental organizations involved in the areas of industrial and technological development and restructuring;
- (h) To undertake programmes and projects in facilitating region-wide relocation of industries – both vertical and horizontal – and promote geographical sourcing of parts and components in line with changing division of labour and international competitiveness;
- (i) To act as a facilitator in dissemination information and provide guidelines in implementing the recommendations of organizations like GATT to promote greater flow of trade of manufactures and industries investments in the region;
- (j) To undertake, on request from countries of the region; enterprise/industry specific restructuring studies and evaluations and provide practical guidance in carrying out industrial restructuring successfully;
- (k) To arrange for the development of experts to countries at their request; and, for which purpose the Forum may make arrangements to obtain such experts as are required through bilateral sources;
- (l) To organize technical advisory committees, whenever it may be considered necessary to deal with any specialized activity in the implementation of the Plan;
- (m) To develop and implement activities in promoting of industrial and technological skills; and
- (n) To undertake any other activities, in consultation with the Executive Secretary of ESCAP, that may deemed to be relevant towards the furtherance of industrial development and restructuring.

VII. LIST OF ESCAP PROJECT PROPOSALS IN INDUSTRY AND TECHNOLOGY FOR IMPLEMENTATION IN 1994

Industry

1. Promotion of Foreign Direct Investment in the Asian Republics of the Commonwealth of Independent States and other Transitionally Disadvantaged Economies through Benchmark Studies and Study Tour
2. Promoting participation of women from low-income household in manufacturing activities through NGO support
3. Promotion of agro-based and agro-allied industries with special focus on industrial decentralization through rural industrialization
4. Seminar-cum-Study Tour for Promoting Vocational and Technical Skills for Industry. Lessons of NIEs Especially of the Republic of Korea to Least Developed Countries and Other Disadvantaged
5. Regional Seminar on Prospects and Problems of Privatization in ESCAP Countries
6. Assistance in the Development of Institutional Capability in the Central Asian Republics to Promote Foreign Direct Investment
7. Assistance in Industrial Projects Preparation and Management in Transitional Disadvantaged Economies of the Region
8. Regional Seminar on Enhancing Supply Flows of Finance Capital to Industrial Enterprises and Improving Financial Intermediation in Asian and Pacific Developing Economies
9. Promoting Complementarities through Geographical Sourcing of Industrial Products as Part of the Implementation of the Seoul Plan of Action and the Regional Strategy and Action Plan for Industrial and Technological Development
10. Regional Cooperation on the Adoption of ISO 9000 series
11. Consultancy Services Development and Utilization in Asia and the Pacific
12. Symposium on Enhancing the Role of the Private Sector for Promotion of International Competitiveness in Manufacturing
13. Regional Cooperation for Development of Selected Export-Oriented Small and Medium Enterprises
14. Assistance in Industrial Projects Preparation and Management in Selected Least Developed Countries of the Region

Technology

15. Support to Consultancy Development Programme in Asia and the Pacific
16. Workshop on the Promotion and Application of Tribological Technological Techniques in Industries
17. Training Course on Monitoring System of Automobile Maintenance Quality and Automobile Testing Technology
18. National policies and strategies for creating an appropriate technological climate conducive to regional cooperation in technology transfer, development and absorption
19. Enhancement of Regional Technology Flow to Least Developed and Market Oriented Transitional Economies
20. Seminar on strategy and management of human resources development for information technology transfer
21. Seminar on Technology Management for Strengthening Endogenous Technological Capabilities of Selected Countries
22. Accelerating Technology Transfer for Sustainable Development
23. Upgrading of technologies appropriate for rural women entrepreneurs engaged in fruit and vegetable processing
24. Application and Commercialization of Agricultural Technologies by Resource Poor Farmers
25. Training Workshops on Technology Transfer and Management for Selected Transitional Disadvantaged Countries
26. Workshop-cum-Study Tour for Central Asian Republics on Science and Technology Policies and Management During Transition to Market Economic
27. Fostering Collaborative Research and Training among Regional Biotechnology Institutions

VIII. ESCAP PUBLICATIONS ON INDUSTRY AND TECHNOLOGY, 1991-1993

- Industrial Restructuring in Asia and the Pacific, in Particular with a View to Strengthening Regional Cooperation, 1991 (*ST/ESCAP/960*)
- Promoting International Competitiveness and Efficient Resource Utilization: Bangladesh, 1991 (*ST/ESCAP/1059*)
- Promoting International Competitiveness and Efficient Resource Utilization: China, 1991 (*ST/ESCAP/1047*)
- Promoting International Competitiveness and Efficient Resource Utilization: India, 1991 (*ST/ESCAP/968*)
- Promoting International Competitiveness and Efficient Resource Utilization: Malaysia, 1991 (*ST/ESCAP/955*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing in Pakistan: A Country Study, 1991 (*ST/ESCAP/970*)
- Promoting International Competitiveness and Efficient Resource Utilization: The Philippines, 1991 (*ST/ESCAP/940*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing: Case of the Republic of Korea, 1991 (*ST/ESCAP/956*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing: Singapore Country Study, 1991 (*ST/ESCAP/1047*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing: Sri Lanka, 1991 (*ST/ESCAP/1136*)
- Regional Study on Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing in Asia and the Pacific, 1991 (*ST/ESCAP/1062*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing in Least Developed Countries, 1991 (*ST/ESCAP/1094*)
- Promoting International Competitiveness and Efficient Resource Utilization in South Asia, 1991 (*ST/ESCAP/1058*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing in Asia and the Pacific – Proceedings of the Regional Seminar, 17-21 December 1991, Beijing (*ST/ESCAP/1237*)
- Proceedings of the Meeting of Ministers of Industry and Technology, 23-29 June 1992, Tehran (*ST/ESCAP/1209*)
- Seoul Plan of Action for Promoting Industrial Restructuring in Asia and the Pacific, 1992 (*ST/ESCAP/1182*)
- Directory of Marketable Technology of the ESCAP Region, second edition, 1991 (*ST/ESCAP/1086*)
- Technical Economic and Social Aspects of Powder Metallurgy and its Application in Developing Asian Countries (*ST/ESCAP/866*)
- Report on the Technological Rehabilitation of Small-scale Foundries in the ESCAP Region, 1990 (*ST/ESCAP/939*)
- Report of the Workshop-cum-Study, Tour on Perspectives and Policy Issues of Biotechnology, 23-29 September 1990, Seoul (*ST/ESCAP/941*)
- Report of the TCDC Workshop on Strengthening and Development of Engineering Design and Consultancy Services for the Promotion of TCDC/ECDC, 3-7 September 1990, New Delhi (*ST/ESCAP/965*)
- Proceedings and Selected Papers of the Seminar on Development and Popularization of Appropriate Industrial Technology for Food Storage and Processing in the Pacific Island Countries, 23-27 April 1990, Port Vila (*ST/ESCAP/925*)
- Proceedings of the Regional Meeting of Directors/Heads of Consulting Firms on the Provision of Technology Management and Other Services, 23-27 September 1991, New Delhi (*ST/ESCAP/1060*)
- Legal Aspects of Transfer of New and Emerging Technologies (Biotechnology) 1991 (*ST/ESCAP/1111*)
- Strategies for the Technological Transformation of Selected Asian and Pacific Economies through Regional Cooperation (Report of the Consultative

- Expert Group Meeting on the Application and Extension of the Technology Atlas, 27-30 January 1992, Bangkok) (*ST/ESCAP/1149*)
- Small Industry Bulletin for Asia and the Pacific, No. 25, 1991 (*ST/ESCAP/SER.M/43*)
- Small Industry Bulletin for Asia and Pacific, Nos. 26/27, 1992 (*ST/ESCAP/SER.M/44*)
- Energy Conservation in the Commercial and Domestic Sub-sectors (*ST/ESCAP/1148*)
- Training Manual on Solar Photovoltaic Project Development (*ST/ESCAP/1221*)
- Patent Laws, Regulations and Organizational Structure (Report on the Expert Group Meeting on Patent Laws, Regulations and Organizational Structure, Yousung (Taejon), Republic of Korea, 25-27 November 1992 (*ST/ESCAP/1255*))
- Tehran Declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific: Regional Strategy and Action Plan for Industrial and Technological Development (*ST/ESCAP/1172*)
- Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing: Case Studies of China, Viet Nam, Lao People's Democratic Republic of Mongolia (*ST/ESCAP/1239*)
- Proceedings of the Regional Seminar on Promoting International Competitiveness and Efficient Resource Utilization in Manufacturing in Asia and the Pacific, 17-21 December 1991, Beijing (*ST/ESCAP/1237*)
- New Technologies and Industrial Transformation in Asian-Pacific Developing Economies (*ST/ESCAP/1238*)
- Promoting Diversified Skill Development for Women in Industry, Volume 1 and Volume 2 (*ST/ESCAP/1161*)
- Prospects of Economic and Technical Cooperation in Standardization, Quality Control and Testing Facilities: The role of National Standards System in Industrial Development (*ST/ESCAP/1281*)
- Industrial Development News for Asia and the Pacific, Nos. 20 and 21, 1993 (*ST/ESCAP/1245*)

To obtain these publications, write to:

Chief
 Industry and Technology Division
 Economic and Social Commission for Asia and the Pacific (ESCAP)
 United Nations Building
 Rajadamnern Avenue
 Bangkok 10200, Thailand

IX. CALENDAR OF ESCAP MEETINGS ON INDUSTRY AND TECHNOLOGY, 1992-1993

Date and Venue	Meeting
27-30 January 1992 Bangkok	Consultative Expert Group Meeting on the Application and Extension of the Technology Atlas
23-27 March 1992 Chiang Mai, Thailand	Regional Workshop on Promoting Diversified Skill Development for Women in Industry
23-25 June 1992 Tehran	Meeting of Ministers of Industry and Technology – Preparatory Meeting of Senior Officials
26 June 1992 Tehran	Private Sector Symposium
28-29 June 1992 Tehran	Meeting of Ministers of Industry and Technology
14-18 September 1992 Taejon Republic of Korea	Workshop on the Identification and Formulation of Inter-country Projects in the field of biotechnology
14-26 September 1992 Bangkok	ESCAP/UNIDO Training Workshop on Industrial Project Preparation and Management for Least Developed and Island Developing Countries of the ESCAP Region
23-27 September 1992 New Delhi	Regional Meeting of Directors/Heads of National Consulting Firms in the Promotion of Technology Management and Other Services
23-27 November 1992 Bangkok	ESCAP/UNIDO Regional Workshop on Agro-industries in Least Developed Countries of the ESCAP Region
25-27 November 1992 Taejon, Republic of Korea	Expert Group Meeting on Patent Laws, Regulations and Organizational Structure in Asian and Pacific Countries.
1-3 December 1992 Beijing	Seminar on Dyestuff Manufacturing Technology for Commercialization
8-15 December 1992 Bangkok	Training Workshop on Industrial Project Preparation and Management for Private Sector Representatives from Selected Least Developed, Island Developing and Transitionally Disadvantaged Economies of the Asian and Pacific Region
14-18 December 1992 Bangkok	Regional Training Workshop on the Application and Extension of the Technology Atlas
23-25 January 1993 Dhaka	National Seminar on Private Sector Growth, Technology Choice and Investment in Industrial Development of Bangladesh

Date and Venue	Meeting
26-30 January 1993 Dhaka	ESCAP/GOB Regional Seminar on Investment Promotion and Enhancement of the Role of the Private Sector in Asia and the Pacific
15-16 April 1993 Bangkok	Steering Group of the Committee for Regional Economic Cooperation, second meeting
19-20 April 1993 Bangkok	Committee for Regional Economic Cooperation, second session
25-27 August 1993 Beijing	Seminar on Dyestuff Manufacturing Technology for Commercialization
6-9 September 1993 Bangkok	Steering Group of the Committee for Regional Economic Cooperation, third meeting
7-10 September 1993 Lahore and Karachi	Regional Seminar on Privatization
27 September – 1 October 1993 Beijing	Workshop-cum-study Tour on Science and Technology for Plant-growth Regulators
26-28 October 1993 Bangkok	Expert Group Consultation on Strategies for Technology-led Industrial Development and Restructuring in Asia and the Pacific
12-14 November 1993 New Delhi	Expert Group Meeting-cum-symposium on Privatization as a Vehicle for Improvement of the Efficiency of Public Sector Enterprises
17-19 November 1993 New Delhi	International Training Programme on Consultancy for Export of Manufactured Goods
18-19 November 1993 New Delhi	Asian and Pacific Centre for Transfer of Technology, eighth session, Governing Board
22-26 November 1993 Bangkok	Consultative EGM on Technological Upgrading of Agro-based Industries: Development and Popularization of Appropriate Industrial Technology for Food Processing in Least Developed and Land-locked Developing Countries
5-7 December 1993 Islamabad	National Seminar of Application and Extension of Technology Atlas
6-8 December 1993 Jakarta	Regional Network for Agricultural Machinery, Technical Advisory Committee, seventeenth session
6-10 December 1993 Kuala Lumpur	Regional Forum for Sustainable Industrial Development and Restructuring in Asia and the Pacific
6-12 December 1993 Jakarta	AGRIMACH'93 Agricultural Machinery Exhibition and Symposium
9-11 December 1993 Jakarta	Regional Network for Agricultural Machinery, Governing Board, fifteenth session
13-15 December 1993 Bangkok	Expert Group Meeting on Resource Valuation in Subnational Planning

SELECTED DATA

**Table 1. Growth rate of gross domestic product
(Percentage per annum)**

Country or area	Base year	Average 1971-1980	Average 1981-1990	1987	1988	1989	1990	1991	1992	1993	1994
Newly industrializing economies		9.0	8.8	12.4	9.6	6.3	6.9	7.3	5.3	6.2	6.7
Hong Kong	1980	9.3	7.2	14.5	8.3	2.8	3.2	4.2	5.0	6.1	5.3
Republic of Korea	1985	9.0	9.9	12.0	11.5	6.2	9.2	8.4	4.5	6.0	7.0
Singapore	1985	7.9	6.3	9.4	11.1	9.2	8.3	6.7	5.8	5.8	6.0
Taiwan Province of China	1986	9.3	8.5	12.3	7.3	7.6	4.9	7.2	6.6	6.8	7.0
China and Mongolia		7.9	10.1	10.9	11.3	4.4	3.9	7.5	12.8	11.0	10.0
China	1978	7.9	10.1	10.9	11.3	4.4	3.9	7.5	12.8	11.0	10.0
Mongolia	1986	7.1	5.4	4.5	5.1	4.2	-2.5	-16.2	-7.6	...	...
South-East Asia		7.4	6.1	6.2	8.4	8.8	7.7	6.3	5.8	6.5	7.1
Cambodia	1989	...	...	...	9.8	3.5	1.2	7.6	7.0	...	...
Indonesia	1983	7.7	5.5	4.9	5.8	7.5	7.1	6.6	5.9	6.3	6.7
Lao People's Democratic Republic	1990	...	...	-1.1	-1.8	11.5	5.9	4.3	7.3	...	...
Malaysia	1978	7.8	5.2	5.4	8.9	9.2	9.7	8.7	8.0	8.0	7.8
Philippines	1985	6.0	1.0	4.8	6.3	6.1	2.7	-0.7	0.0	2.8	4.5
Thailand	1972	7.9	7.8	9.5	13.2	12.0	10.0	8.2	7.5	7.8	8.5
Viet Nam	1989	...	6.1	4.0	5.2	8.0	5.1	6.0	8.3	7.5	8.2
South Asia		4.0	5.7	4.5	9.9	5.3	5.2	2.1	4.7	5.3	6.0
Bangladesh	1985	5.8	4.1	4.2	2.9	2.5	6.6	3.4	4.0	5.0	5.0
Bhutan	1980	...	7.4	17.8	1.0	4.7	4.9	4.5	5.0	...	...
India	1980	3.7	5.8	4.3	10.9	5.6	5.2	1.2	4.2	5.4	6.0
Myanmar	1985	4.7	-0.1	-4.0	-11.4	3.7	2.7	1.3	1.2	...	...
Nepal	1975	3.2	4.9	3.9	7.3	4.2	6.1	5.5	3.1	2.8	5.9
Pakistan	1981	5.2	6.2	6.5	7.6	5.0	4.5	5.5	7.8	5.0	7.0
Sri Lanka	1982	4.3	3.9	1.5	2.7	2.3	6.2	4.8	4.6	5.7	5.4
Pacific islands		...	1.2	0.3	2.4	2.2	-0.4	6.3	6.7	...	...
Fiji	1977	4.3	1.5	-6.4	1.0	11.8	4.9	-0.1	3.0	...	...
Papua New Guinea	1983	...	1.0	2.8	2.9	-1.4	-3.0	9.5	9.0	...	...
Samoa	1984	...	1.2	1.0	-0.2	1.3	-4.5	-1.5	-5.0	...	...
Solomon Islands	1984	...	3.4	0.3	7.9	6.2	4.2	1.8	5.0	...	...
Tonga	1985	...	0.8	1.4	-4.1	1.6	-2.0	5.3	1.9	...	...
Vanuatu	1983	...	1.6	0.4	0.6	4.5	5.2	3.4	0.0	...	...
Average for DMCs		6.8	7.9	8.6	10.0	5.9	5.9	6.1	7.0	7.2	7.4

Source: Asian Development Bank, *Asian Development Outlook 1993*.

**Table 2. Growth rate of value added in industry
(Percentage per annum)**

Country or area	Average 1971- 1980	Average 1981- 1990	1987	1988	1989	1990	1991	1992	1993	1994
Newly industrializing economies										
Hong Kong	...	...	...	...	...	...	...	...	...	...
Republic of Korea	15.0	12.6	16.8	12.3	6.0	11.8	8.9	3.6	6.4	7.2
Singapore	8.1	5.2	10.5	13.2	8.3	9.1	7.7	7.5	6.4	7.3
Taiwan Province of China	11.6	8.2	12.3	4.8	4.5	1.3	6.6	4.5	5.7	6.0
China and Mongolia										
China	9.1	11.7	13.7	14.5	3.8	3.2	12.6	20.4	15.0	13.0
Mongolia	10.2	5.8	5.2	5.1	11.1	-4.7	13.2	-14.2	...	...
South-East Asia										
Cambodia	...	...	...	15.0	1.7	-2.1	8.9	15.6	...	...
Indonesia	11.3	5.9	5.2	5.9	7.2	9.7	9.9	7.5	8.7	8.4
Lao People's Democratic Republic	...	...	-16.0	-2.4	35.0	16.2	19.9	7.5	...	...
Malaysia	9.6	7.4	6.7	12.7	12.4	13.2	11.2	10.0	10.6	11.0
Philippines	8.2	-0.8	5.4	7.6	8.2	2.6	-3.1	-0.5	2.9	6.0
Thailand	12.1	9.9	12.8	17.4	16.2	16.1	11.5	8.6	10.8	11.8
Viet Nam	...	5.4	10.1	2.3	-2.8	2.8	8.8	10.9	11.5	12.4
South Asia										
Bangladesh	11.9	5.6	8.1	5.3	4.8	6.4	4.3	7.0	7.1	7.2
Bhutan	...	12.2	71.9	-4.8	5.4	0.0	7.2	9.1	...	...
India	4.6	6.6	6.6	9.8	7.2	7.0	-0.3	4.0	6.5	8.0
Myanmar	5.8	-0.2	-5.2	-16.8	15.4	4.2	1.5	3.0	...	...
Nepal	...	...	...	...	...	...	...	...	...	...
Pakistan	6.3	7.6	8.6	9.8	4.7	6.4	6.8	7.3	7.0	8.0
Sri Lanka	4.3	4.9	6.3	4.2	3.5	7.7	3.9	6.0	7.0	6.5
Pacific islands										
Fiji	3.5	-2.0	-14.2	-6.6	11.9	6.2	5.7	3.4	...	...
Papua New Guinea	...	-1.4	-1.7	5.5	-14.1	-2.5	30.0	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	2.6	-1.7	14.0	6.2	1.0	0.5	...	...	...
Tonga	...	-2.9	-13.5	0.3	4.3	-4.5	-14.2	-3.9	...	...
Vanuatu	...	13.0	25.1	14.9	10.3	8.1	...	...	...	...

Source: Asian Development Bank, *Asian Development Outlook 1993*, p. 261.

**Table 3. Sectoral share of gross domestic product
(Percentage)**

	Agriculture			Industry			Services		
	1970	1980	1992	1970	1980	1992	1970	1980	1992
Newly industrializing economies									
Hong Kong	...	0.9	0.2	...	32.0	23.5	...	67.2	76.3
Republic of Korea	29.8	14.2	7.0	23.8	37.8	46.2	46.4	48.1	46.8
Singapore	2.2	1.1	0.3	36.4	38.8	37.5	61.4	60.0	62.2
Taiwan Province of China	...	7.9	3.7	...	46.0	42.6	...	46.1	53.7
China and Mongolia									
China	42.2	25.6	16.7	44.6	51.7	58.4	13.2	22.7	24.9
Mongolia	33.1	17.4	22.4	26.3	33.3	41.2	40.6	49.3	36.4
South-East Asia									
Cambodia	....	....	49.4	....	....	16.3	....	....	34.4
Indonesia	35.0	24.4	17.9	28.0	41.3	42.9	37.0	34.3	39.3
Lao People's Democratic Republic	....	....	59.8	....	....	17.2	....	....	23.0
Malaysia	....	22.9	16.1	....	35.8	43.9	....	41.3	40.0
Philippines	28.2	23.5	22.6	33.7	40.5	35.0	38.1	36.0	42.5
Thailand	30.2	20.6	13.1	25.7	30.7	37.4	44.1	48.7	49.5
Viet Nam	....	42.7	38.2	....	26.3	24.6	....	31.0	37.2
South Asia									
Bangladesh	....	49.4	36.9	....	14.8	17.7	....	35.8	45.5
Bhutan	....	56.7	43.8	....	12.2	24.8	....	31.1	31.4
India	44.5	39.6	32.5	23.9	24.4	27.3	31.6	36.0	40.2
Myanmar	49.5	47.9	48.1	12.0	12.3	13.2	38.5	39.8	38.7
Nepal	....	61.8	54.3	....	11.9	18.0	....	26.3	27.8
Pakistan	40.1	30.6	25.7	19.6	25.6	26.0	40.3	43.8	48.3
Sri Lanka	30.7	26.6	21.8	27.1	27.2	28.6	42.2	46.2	49.6
Pacific islands									
Fiji	30.2	22.5	21.1	23.1	21.7	17.2	46.7	55.8	61.6
Papua New Guinea	....	....	....	....	....	....	....	....	....
Samoa	....	....	....	....	....	....	....	....	....
Solomon Islands	....	52.5	....	....	10.0	....	....	37.4	....
Tonga	....	47.6	37.7	....	11.0	9.9	....	41.4	52.5
Vanuatu	....	....	....	....	....	....	....	....	....

Source: Asian Development Bank, *Asian Development Outlook 1993*, p. 263.

Table 4. Structure of manufacturing

	Distribution of manufacturing value added (percentage: current prices)											
	Value added in manufacturing (Millions of US dollars)		Food, beverages and tobacco		Textiles, clothing		Machinery and transport equipment		Chemicals		Others	
	1970	1990	1970	1990	1970	1990	1970	1990	1970	1990	1970	1990
Newly industrializing economies												
Hong Kong	1,013	11,403	4	7	41	38	16	20	2	2	36	33
Republic of Korea	1,880	70,497	26	11	17	13	11	32	11	9	36	35
Singapore	379	10,351	12	4	5	3	28	53	4	10	51	29
East Asia												
China	27,555	132,142	..	15	..	15	..	24	..	13	..	34
South-East Asia												
Indonesia	994	21,722	65	24	14	14	2	10	6	10	13	42
Lao People's Democratic Republic	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	500	..	26	13	3	6	8	31	9	11	54	39
Philippines	1,665	11,160	39	36	8	10	8	8	13	12	32	34
Thailand	1,130	20,926	43	29	13	25	9	12	6	3	29	31
South Asia												
Bangladesh	387	1,959	30	24	47	35	3	5	11	17	10	18
Bhutan	..	27	..	..	..	..	..	..	..	..	..	..
India	7,928	48,930	13	12	21	12	20	26	14	17	32	33
Iran (Islamic Republic of)	1,501	8,819	30	..	20	..	18	..	6	..	26	..
Nepal	32	152	..	35	..	25	..	2	..	8	..	30
Pakistan	1,462	6,184	24	29	38	19	6	7	9	15	23	30
Sri Lanka	369	1,077	26	51	19	23	10	4	11	3	33	20
Pacific islands												
Papua New Guinea	35	320	23	..	1	..	35	..	4	..	37	..
Developed economies												
Australia	9,551	44,589	16	18	9	7	24	19	7	8	43	48
Japan	73,342	849,308	8	9	8	5	34	39	11	10	40	37
New Zealand	1,811	7,572	24	26	13	9	15	14	4	6	43	46

Source: World Bank, *World Development Report 1993* (Oxford University Press), pp. 248-249.

**Table 5. Growth rate of merchandise imports
(Percentage per annum)**

	1991 imports (fob in millions of US dollars)	1987	1988	1989	1990	1991	1992	1993	1994
Newly industrializing economies	297,926	35.0	32.6	12.9	13.8	16.5	11.7	13.0	12.9
Hong Kong	100,636	37.0	31.8	13.4	14.3	21.5	23.0	20.5	18.0
Republic of Korea	76,561	29.9	24.9	17.9	14.6	17.6	0.9	6.3	7.5
Singapore	60,948	27.8	34.9	13.3	22.1	9.2	4.0	8.6	9.2
Taiwan Province of China	59,781	45.8	40.8	6.9	4.5	15.2	14.5	11.0	12.0
China and Mongolia	50,677	4.0	26.0	5.4	-14.5	16.8	25.5	24.2	23.0
China	50,176	4.3	27.4	5.3	-13.3	18.5	26.0	25.0	23.0
Mongolia	501	-0.7	-2.9	7.5	-46.5	-51.0	-20.2	...	...
South-East Asia	107,653	20.6	27.5	25.7	27.5	15.4	10.3	11.9	13.9
Cambodia	285	...	...	4.0	-7.1	74.4	26.5	...	...
Indonesia	24,626	5.0	10.4	17.9	31.5	14.8	10.0	10.5	11.0
Lao People's Democratic Republic	228	...	...	29.7	-4.3	13.1	16.5	...	...
Malaysia	34,049	15.7	28.4	35.6	29.9	26.3	6.0	10.0	12.0
Philippines	12,051	33.6	21.1	27.7	17.2	-1.3	14.6	13.3	13.0
Thailand	34,218	42.8	48.6	27.4	29.9	15.8	12.8	15.0	17.0
Viet Nam	2,196	13.9	12.3	-6.9	7.3	-20.2	14.1	24.7	28.0
South Asia	38,367	9.2	13.3	8.8	13.5	-6.6	7.1	8.0	10.9
Bangladesh	3,089	6.3	11.8	20.7	-1.2	-5.2	5.0	11.1	11.9
Bhutan	76	-8.8	41.0	-16.0	-20.2	-9.9	7.8	...	...
India	22,470	12.6	13.8	10.8	15.9	-12.9	6.1	9.9	10.3
Myanmar	893	-15.6	2.9	1.9	57.4	3.3	1.2	...	...
Nepal	757	17.4	29.8	-14.1	16.7	13.5	8.6	9.3	4.8
Pakistan	8,599	4.7	13.5	3.8	9.9	6.2	7.5	10.7	12.0
Sri Lanka	2,483	5.8	8.1	1.9	13.2	6.8	18.8	16.0	13.1
Pacific islands	2,250	12.7	22.6	2.6	-4.0	11.1	10.6	...	...
Fiji	553	-10.7	20.2	25.3	29.7	-13.9	7.4	...	...
Papua New Guinea	1,398	21.6	22.6	-3.1	-17.8	26.8	11.9	...	...
Samoa	83	30.2	22.8	0.0	6.8	12.9	30.0	...	...
Solomon Islands	92	2.8	51.5	-7.2	-20.9	18.8	-2.9	...	...
Tonga	51	8.7	25.5	9.0	5.0	0.2	6.3	...	...
Vanuatu	74	22.0	1.4	0.0	37.5	-7.0	6.8	...	...

Source: Asian Development Bank, *Asian Development Outlook 1993*, p. 270.

**Table 6. Growth rate of merchandise exports
(Percentage per annum)**

	1991 exports (fob in millions of US dollars)	1987	1988	1989	1990	1991	1992	1993	1994
Newly industrializing economies	300,492	34.7	26.0	10.2	7.8	14.4	11.8	12.5	12.0
Hong Kong	98,557	36.8	30.3	15.8	12.3	20.0	21.2	20.0	16.5
Republic of Korea	69,581	36.4	29.0	3.0	2.8	10.2	8.1	8.6	9.7
Singapore	56,819	28.7	38.3	13.8	17.2	12.1	6.0	8.6	9.0
Taiwan Province of China	75,535	34.8	13.2	9.2	1.4	13.0	7.1	8.1	9.0
China and Mongolia	59,266	34.2	17.8	5.1	18.1	14.1	16.4	15.4	15.0
China	58,919	34.9	18.2	5.3	19.2	14.4	16.5	16.0	15.0
Mongolia	347	10.3	-0.4	-2.5	-44.1	-22.1	2.7	...	...
South-East Asia	102,704	25.4	21.1	20.2	15.3	15.1	13.8	14.5	15.4
Cambodia	253	...	...	76.8	8.3	194.4	13.7	...	...
Indonesia	29,430	19.5	13.4	17.8	16.7	9.8	13.5	13.0	13.0
Lao People's Democratic Republic	97	...	...	9.5	24.3	22.7	37.3	...	...
Malaysia	33,882	31.1	17.4	18.3	17.1	17.3	11.0	14.0	15.0
Philippines	8,840	18.1	23.7	10.6	4.7	8.0	9.8	11.5	11.2
Thailand	28,232	31.7	36.1	25.7	15.0	23.8	17.8	18.4	18.7
Viet Nam	1,971	8.2	21.6	87.4	23.5	-18.0	25.6	22.2	22.0
South Asia	29,112	17.1	13.2	14.7	13.9	4.8	6.8	10.0	16.1
Bangladesh	1,689	22.4	19.9	1.1	28.2	1.0	14.3	11.8	11.1
Bhutan	66	62.2	36.2	-2.0	0.9	-11.2	9.7	...	...
India	18,224	16.0	13.7	19.5	12.2	0.6	2.1	12.2	17.3
Myanmar	498	-19.3	13.8	32.5	15.6	6.9	26.5	...	...
Nepal	275	13.7	19.5	-19.4	39.5	26.0	27.6	17.5	15.0
Pakistan	6,352	23.4	11.9	8.9	12.2	18.1	13.8	13.0	15.0
Sri Lanka	2,009	15.3	6.0	1.9	23.1	8.4	13.9	14.0	13.5
Pacific islands	1,923	20.4	18.0	-5.7	-3.4	8.9	22.6	...	...
Fiji	435	23.6	13.8	15.6	17.7	-7.5	9.2	...	...
Papua New Guinea	1,365	20.7	18.6	-10.6	-9.6	14.5	27.6	...	...
Samoa	8	12.0	28.2	-14.4	-31.2	-13.4	164.9	...	...
Solomon Islands	83	-1.0	29.6	-8.8	-5.7	18.5	13.7	...	...
Tonga	18	19.9	-8.8	52.8	21.3	50.4	-27.4	...	...
Vanuatu	15	55.7	12.4	-11.0	0.3	8.0	-2.0	...	...

Source: Asian Development Bank, *Asian Development Outlook 1993*, p. 268.

Table 7. Structure of merchandise exports

	Percentage share of merchandise exports									
	Fuels, minerals and metals		Other primary commodities		Machinery and transport equipment		Other manufactures		Textiles and clothing	
	1970	1991	1970	1991	1970	1991	1970	1991	1970	1991
Newly industrializing economies										
Hong Kong	1	2	3	3	12	24	84	72	44	40
Republic of Korea	7	3	17	4	7	38	69	55	36	21
Singapore	25	18	45	8	11	48	20	26	5	5
East Asia										
China	11	9	19	15	15	19	55	57	29	28
South-East Asia										
Indonesia	44	43	54	16	0	2	1	39	0	14
Lao People's Democratic Republic	..	..	..	..	..	..	..	..	..	..
Malaysia	30	17	63	22	2	38	6	23	1	6
Philippines	23	9	70	20	0	14	8	57	1	9
Thailand	15	2	77	32	0	22	8	45	1	17
South Asia										
Bangladesh	1	1	35	29	1	0	64	70	49	62
Bhutan	..	..	..	..	..	..	..	..	..	..
India	13	8	35	19	5	7	47	66	25	25
Iran (Islamic Republic of)	90	90	6	7	0	0	4	4	3	3
Nepal	0	0	65	11	0	..	35	88	25	76
Pakistan	2	1	41	26	0	0	57	72	47	60
Sri Lanka	1	1	98	34	0	2	1	62	0	43
Pacific islands										
Papua New Guinea	42	62	55	35	0	2	3	1	0	0
Developed economies										
Australia	28	35	53	28	6	7	13	29	1	1
Japan	2	1	5	1	41	66	53	31	11	2
New Zealand	1	8	88	65	2	5	9	22	1	2

Source: World Bank, *World Development Report 1993* (Oxford University Press), pp. 268-269.

Table 8. Structure of merchandise imports

	Percentage share of merchandise imports									
	Food		Fuels		Other primary commodities		Machinery and transport equipment		Other manufactures	
	1970	1991	1970	1991	1970	1991	1970	1991	1970	1991
Newly industrializing economies										
Hong Kong	19	6	3	2	10	5	16	27	52	60
Republic of Korea	17	6	7	16	21	13	30	34	25	31
Singapore	15	6	13	14	13	4	23	44	35	32
East Asia										
China	7	6	1	3	10	9	39	41	43	41
South-East Asia										
Indonesia	11	5	2	9	4	9	35	45	47	32
Lao People's Democratic Republic	..	..	..	..	..	..	..	..	..	..
Malaysia	20	6	12	4	9	5	28	55	31	30
Philippines	11	7	12	15	9	7	35	26	33	46
Thailand	4	5	9	9	8	8	36	39	43	38
South Asia										
Bangladesh	23	26	13	13	11	6	22	17	32	38
Bhutan	..	..	..	..	..	..	..	..	..	..
India	21	5	8	23	19	12	23	18	29	42
Iran (Islamic Republic of)	7	13	0	0	8	5	41	44	45	38
Nepal	5	9	11	12	0	14	25	24	60	41
Pakistan	21	17	6	18	7	8	31	28	35	29
Sri Lanka	47	17	3	11	4	4	18	19	29	49
Pacific islands										
Papua New Guinea	23	17	10	9	2	2	30	38	36	34
Developed economies										
Australia	5	5	5	6	7	3	41	42	42	45
Japan	17	15	21	23	37	15	11	16	14	30
New Zealand	6	8	7	8	11	4	34	37	43	44

Source: World Bank, *World Development Report 1993* (Oxford University Press), pp. 266-267.

Table 9. Growth of merchandise trade

	Merchandise trade (Millions of US dollars)		Average annual growth rate (Percentage)				Terms of trade (1987-1991)	
	Exports	Imports	Exports		Imports		1985	1991
	1991	1991	1970- 1980	1980- 1991	1970- 1980	1980- 1991		
Newly industrializing economies								
Hong Kong	29,738	100,255	9.7	4.4	7.8	11.3	97	101
Republic of Korea	71,672	81,251	23.5	12.2	11.6	11.1	103	108
Singapore	58,871	65,982	4.2	8.9	5.0	7.2	99	101
East Asia								
China	72,875	63,791	8.7	11.5	11.3	9.5	109	111
South-East Asia								
Indonesia	28,997	25,869	7.2	4.5	13.0	2.6	134	101
Lao People's Democratic Republic	97	228	..	..	..	..	..	..
Malaysia	34,300	35,183	4.8	10.9	3.7	7.2	117	93
Philippines	8,754	12,145	6.0	3.3	3.3	3.0	93	91
Thailand	28,324	37,408	10.3	14.4	5.0	11.1	91	91
South Asia								
Bangladesh	1,718	3,470	3.8	7.2	-2.4	4.3	122	105
Bhutan	..	..	..	..	..	..	..	..
India	17,664	20,418	4.3	7.4	3.0	4.2	96	100
Iran (Islamic Republic of)	15,916	21,688	-6.8	14.7	10.3	7.9	160	88
Nepal	238	740	10.9	8.1	8.8	4.9	98	85
Pakistan	6,528	8,439	0.7	9.9	4.2	2.6	90	80
Sri Lanka	2,629	3,861	2.0	6.3	4.5	2.1	103	87
Pacific islands								
Papua New Guinea	1,361	1,614	10.6	6.8	1.8	1.6	111	80
Developed economies								
Australia	37,724	39,460	3.8	4.6	1.8	5.0	111	107
Japan	314,395	234,103	9.0	3.9	0.4	5.6	71	99
New Zealand	9,269	8,494	3.4	3.6	-0.3	3.2	88	94

Source: World Bank, *World Development Report 1993* (Oxford University Press), pp. 264-265.

Table 10. Destination of exports from the ESCAP region, 1988, 1991 and 1992^a
(Percentage)

To \ From	ESCAP region			Developed economies of the region			Developing economies of the region			Middle East			Africa			Latin America			Eastern Europe ^b			United States of America			European Community			Japan		
	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992	1988	1991	1992
Developing economies of the ESCAP region	46.7	49.9	48.1	17.4	15.8	14.3	29.3	34.1	33.8	3.3	2.6	2.8	2.0	1.6	1.7	1.2	1.8	1.7	2.6	2.1	2.0	21.5	18.1	18.3	15.3	16.5	...	15.5	14.0	12.5
East Asia	46.4	51.4	49.6	15.4	12.9	11.6	31.0	38.4	38.0	3.2	2.2	2.3	2.1	1.7	2.0	1.5	2.2	2.1	1.7	1.3	0.9	23.7	19.5	19.7	13.3	14.1	...	13.8	11.6	10.3
China	64.2	71.6	60.4	17.7	15.1	13.8	46.4	56.5	46.6	3.9	1.8	1.3	3.4	1.1	0.9	0.5	0.8	0.6	5.9	2.9	2.2	7.1	8.6	14.0	10.0	9.5	...	16.9	14.3	12.8
Hong Kong	44.7	43.7	45.6	7.8	7.0	6.8	36.9	36.8	38.8	1.8	1.6	1.7	1.7	1.7	2.5	1.2	2.3	2.5	0.2	0.5	0.4	24.8	22.7	22.1	15.7	17.4	...	5.8	5.4	5.2
Republic of Korea	34.2	41.2	42.6	21.4	19.2	16.8	12.8	22.0	25.8	4.2	3.3	4.3	1.3	2.4	2.5	2.5	3.4	3.3	0.0	0.7	0.0	35.4	26.4	22.8	13.4	14.2	...	19.8	17.5	15.3
South-East Asia	52.4	53.2	51.9	21.0	20.0	18.3	31.4	33.2	33.6	2.8	3.0	3.3	1.6	1.3	1.4	0.9	1.2	1.1	0.7	0.9	1.2	21.3	19.0	18.8	14.5	15.4	...	18.4	17.7	16.1
Indonesia	65.1	65.0	61.0	43.4	39.2	36.1	21.6	25.8	24.9	2.2	3.4	3.6	0.9	0.8	0.8	0.2	0.6	0.4	0.6	0.4	0.5	16.2	12.0	12.1	11.1	12.8	...	41.7	36.9	33.4
Malaysia	58.6	60.9	57.7	19.6	17.8	15.7	39.0	43.1	42.0	2.3	2.1	2.5	0.6	0.5	0.4	0.8	1.1	1.3	1.1	0.5	0.2	17.4	16.9	17.4	14.4	14.8	...	16.6	15.9	13.8
Philippines	38.7	37.5	38.3	21.8	21.3	22.5	16.9	16.2	15.8	1.3	1.7	1.6	0.2	0.2	0.2	0.7	1.1	0.7	0.3	0.3	0.2	35.7	35.7	36.1	17.7	18.6	...	20.1	20.0	21.3
Singapore	49.2	50.7	48.5	11.7	11.5	7.6	37.5	39.2	40.9	2.5	2.8	3.4	2.0	2.0	2.5	1.5	1.6	1.7	0.7	1.1	2.0	23.8	19.7	18.9	13.0	14.0	...	8.6	8.7	5.2
Thailand	42.6	41.4	45.2	18.0	20.1	19.7	24.5	21.2	25.6	5.5	4.4	4.6	3.3	2.0	1.6	0.6	1.0	0.7	0.7	2.0	2.4	20.1	21.8	21.6	20.8	20.8	...	16.0	18.3	17.9
South Asia	25.7	27.5	26.4	11.8	9.7	9.3	13.9	17.8	17.1	8.1	6.0	5.8	2.5	2.3	2.0	0.4	0.6	0.5	11.7	11.3	9.9	18.4	16.0	16.8	26.7	27.4	...	10.2	8.5	8.2
Bangladesh	21.4	17.7	15.0	8.6	4.5	3.3	12.9	13.2	11.7	4.3	3.2	2.7	3.8	1.8	1.9	1.2	1.1	1.6	6.7	3.5	1.4	26.0	26.6	35.8	28.5	40.1	...	5.7	3.2	2.2
India	23.7	28.0	24.8	12.3	10.7	9.9	11.4	17.3	14.9	6.9	4.9	4.0	1.9	1.8	1.6	0.3	0.4	0.3	16.6	15.5	13.9	19.3	15.3	15.6	25.5	24.9	...	10.9	9.6	8.9
Nepal	34.8	12.4	...	1.0	0.8	...	33.8	11.6	...	0.1	0.0	...	0.0	0.0	...	0.0	0.1	...	0.5	0.1	...	23.7	23.6	...	36.7	55.4	...	0.9	0.6	...
Pakistan	33.0	31.5	36.2	13.3	9.4	9.8	19.7	22.1	26.4	10.3	9.5	11.7	4.3	4.2	3.7	0.2	0.7	0.5	3.4	3.0	1.6	11.2	11.4	11.9	30.2	29.4	...	11.4	8.0	8.4
Sri Lanka	23.2	20.9	19.3	7.3	6.9	7.1	16.0	13.9	12.3	15.9	7.9	6.1	1.4	1.3	0.8	1.8	1.6	0.8	0.7	3.4	4.3	25.1	27.1	30.3	23.4	30.7	...	5.7	5.5	5.6

Source: International Monetary Fund, *Direction of Trade Statistics Yearbook, 1992* (Washington, DC, 1992).

^a Data for 1992 are only for the first six months of the year. Exports are expressed as a percentage of total exports to the world.

^b Including the former Union of Soviet Socialist Republics.

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