

# Asia-Pacific Trade Agreement: Implications of Exchange of Trade Preferences for Member and Prospective Member Countries

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## ABSTRACT

The Asia-Pacific Trade Agreement is a preferential trading arrangement that was earlier known as the Bangkok Agreement, which had been initiated under the auspices of ESCAP in July 1975. The Agreement has taken far too long to arrive at the current level of trade liberalization in the region. However, the enhanced opportunities the Agreement offered for deeper trade liberalization among the member countries is visible following the accession of China in 2001, the revitalization of the arrangement in 2005 to reflect recent global changes and the accelerated exchange of concessions concluded in the Third Round of negotiations in 2006.

The present study has clearly revealed that considerable opportunities exist for new countries to accede to the Agreement. The prospective member countries of the region would find that the large and growing markets of China, India and the Republic of Korea offer attractive opportunities to expand their share in the vast regional market.

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The study reveals that a large number of products offered concessions under the Third Round are being imported in significant amounts from the concession-offering countries even in the absence of actual implementation of the preferences. The high preferential margins being offered by China and the Republic of Korea would allow both existing as well as the prospective member States (should they choose to accede to the Agreement) to improve further their market penetration.

The study further highlights the favourable export-import complementarities that exist with respect to products/sectors between some of the prospective member States of ESCAP (particularly Indonesia, the Philippines, Thailand and Viet Nam) with the APTA contracting States.

Perhaps the most important potential of APTA lies in the very broad region-wide framework of ESCAP, which has 53 members and 9 associate members. In the context of Asian regionalism, it therefore constitutes a building block for region-wide integration.

While APTA has to some extent been revitalized in the context of global changes, its scope and objectives continue to be defined by traditional approaches to regional integration. It is time for the Participating States to move speedily to a free trade agreement with the scope of cooperation expanded to include services, investments and a variety of trade facilitation measures. A summary of measures implemented under regional integration arrangements globally and with particular reference to ASEAN has been brought out in this regard.

## **1. BACKGROUND**

The First Agreement on Trade Negotiations among Developing Member Countries of the Economic and Social Commission for Asia and the Pacific, known as the Bangkok Agreement, was signed in July 1975 under the auspices of ESCAP. The original signatories to the Agreement were Bangladesh, India, the Lao People's Democratic Republic, the Republic of Korea and Sri Lanka. The Lao People's Democratic Republic has not issued customs notification on the tariff concessions granted, and hence to this extent is not an effective participating member. However, some other members have extended their concessions to include that country.

China became a member of the Bangkok Agreement formally in 2001. Its accession has major implications for the Bangkok Agreement and for trade in the Asian and

Pacific region.<sup>1</sup> All developing member countries of ESCAP are eligible to accede to the Agreement.

The objective of the Bangkok Agreement,<sup>2</sup> as stipulated in article 2, “is to promote economic development through a continuous process of trade expansion among the developing member countries of ESCAP and to further international economic cooperation through the adoption of mutually beneficial trade liberalization measures consistent with their respective present and future development and trade needs, and taking into account the trading interest of third countries, particularly those of other developing countries”.

The Bangkok Agreement is essentially a preferential trading arrangement designed to liberalize and expand trade progressively in the ESCAP region through such measures as the relaxation of tariff and non-tariff barriers and trade-related economic cooperation.

The General Agreement on Tariffs and Trade (GATT) Council approved the Bangkok Agreement in March 1978.

The Participating States of the Bangkok Agreement, recognizing that the international trading system has evolved substantially since the Agreement came into force in the mid-1970s, have recently launched a process of revitalization within the Agreement, requesting ESCAP, its secretariat to oversee the process.

The revitalization process consists of a number of measures, including the following:

- *Amended text of the Agreement.* The text of the Bangkok Agreement has been amended to reflect changes that have taken place in the international trading system since the original text entered into force. The revised text has a preamble, 8 chapters consisting of 40 Articles and 2 annexes. Annex I refers to the National Lists of Concessions, and annex II provides the common Rules of Origin.
- *Ministerial Council.* Member countries have recently established the Ministerial Council under the Bangkok Agreement to provide overall policy direction for the further negotiating agenda of the Agreement. The existing Standing Committee, consisting of representatives of the countries participating in the Agreement, will continue to perform its existing functions of reviewing and implementing the Agreement.

<sup>1</sup> Papua New Guinea acceded to the Agreement in December 1993, though the Agreement has yet to be ratified by the Government. Pakistan notified its intention to accede to the Agreement in February 1998, and is in the process of accession.

<sup>2</sup> The present name of the Bangkok Agreement is the Asia-Pacific Trade Agreement, as noted later in this section.

- *Engagement of the business sector.* The Agreement is seeking modalities for government-private sector dialogue to promote greater awareness of the benefits of trade liberalization.
- *Expansion of membership.* The member States are seeking to promote the accession of new members so that the full potential of the Agreement on a broader regional basis can be attained. So far, three rounds of negotiations have been completed under the Agreement. The First Round was concluded in 1975, leading to the signing of the Agreement by the Participating States.

The first session of the Ministerial Council was held on 2 November 2005 and at that time the name of the Bangkok Agreement was changed to the Asia-Pacific Trade Agreement (APTA). The Ministerial Declaration announced the change in the text of the Agreement to take into account the global developments that had taken place in recent years. It mentioned the conclusion of Third Round concessions, which would be put in place with effect from 1 July 2006, upon completion of the internal procedures of all Participating States. The Declaration directed the Committee to make suitable recommendations, including the timing for the launching of the Fourth Round of negotiations for tariff liberalization, and suggest measures of cooperation for further enhancing the trade and investment flows consistent with the objective of deepening and widening the scope of the Agreement. The Declaration also expressed the hope of exploring the possibilities of APTA evolving into a common framework mechanism for all regional trade arrangements in the region.

The total number of products for which tariff preferences were extended after renegotiations was 93 items, of which the ad valorem duties of 80 products were reduced by an average of 23 per cent and the tariff of 9 products were bound. In the case of the 4 remaining products, specific duties were reduced, ranging from 10 to 67 per cent. In addition, special concessions were granted to the two least developed countries, for Bangladesh on 3 product items, and for the Lao People's Democratic Republic on 16 items.

The results of the number of products offered tariff concessions by the Participating States under the Second and Third Rounds of APTA with margin of preference is given in table 1. It will be observed that at the end of the Third Round, Participating States had exchanged concessions on a consolidated basis on 4,270 products (apart from 587 that were offered exclusively to least developed countries). The concessions offered for all countries nearly trebled, from 1,721 products in the Second Round to 3,596 in the Third, while those offered to least developed countries increased five times from 112 to 519, respectively. The average margin of preference in the Third Round was 30.2 per cent, while this was doubled (62 per cent) as special concessions to least developed countries. In the Third Round, the Republic of Korea offered concessions on the largest number of products, followed by China, but on a consolidated basis China offered concessions on the largest number of products, followed by the Republic of Korea. The margin of preference offered

**Table 1. Number of products offered tariff concession by Participating States under the Second and Third Rounds of the Bangkok Agreement with margin of preference**

<i>Concession offering states</i>	<i>Second Round</i>		<i>Third Round</i>		<i>After Third Round (consolidation)</i>	
	<i>No. of products</i>	<i>MOP (%)</i>	<i>No. of products</i>	<i>MOP (%)</i>	<i>No. of products<sup>a</sup></i>	<i>MOP (%)</i>
Bangladesh	129	13.96	86	13.5	210	14.1
China <sup>b</sup>	902 (18)	15.4 (55.1)	769 (138)	40.0 (80.9)	1 697 (161)	26.7 (77.9)
India	188 (33)	52.6 (32.2)	396 (24)	10.0 (50.0)	570 (48)	23.9 (39.7)
Republic of Korea	214 (29)	30.3 (38.2)	1 204 (291)	36.4 (66.3)	1 367 (306)	35.4 (64.6)
Sri Lanka	288 (32)	17.8 (14.0)	239 (48)	9.2 (10.7)	427 (72)	14.0 (12.0)
Total	1 721 (112)	21.6 (32.2)	3 596 (519)	30.2 (62.0)	4 270 (587)	26.8 (58.8)

*Source:* ESCAP secretariat.

*Notes:* The figures in parentheses relate to special concessions to least developed countries. China has already incorporated the Second Round concessions.

MOP: Margin of preference estimated as a simple average of all items.

<sup>a</sup> In accordance with the consolidated concession lists which are part and parcel of the official revised text of the Agreement signed and ratified by the Participating States.

<sup>b</sup> The number for China is the result of a consolidation of its accession schedules and Third Round concessions.

by China is the highest, followed by the Republic of Korea, for both general and special products.

## 2. SCOPE AND METHOD OF STUDY

After introducing the main landmarks in the evolution of APTA, the paper examines the implications of the offer of concessions under the Second and Third Rounds and also at the end of the Third Round (that is, the combined Second and Third Rounds) by five Participating States, Bangladesh, China, India, the Republic of Korea and Sri Lanka, on intra-APTA trade as well as its implications for 10 prospective ESCAP member countries of APTA, Bhutan, Cambodia, Indonesia, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Thailand and Viet Nam. With respect to intra-APTA trade, it is relevant to assess the impact of the Second Round, if any, since the products offered concessions under the Second Round have been liberalized for quite some time. An increasing share of imports in relation to world imports of negotiated products would indicate a positive impact of the trade preferences offered by the concession-offering country. With respect to products offered concessions under the Third Round, no impact assessment is possible since the concessions were only implemented as of September 2006. However, when viewed

from the point of view of their value and share in world imports, their existing import coverage reflects their potential impact to some extent.

With respect to prospective member countries (PMCs), first the aggregate imports of the Participating States from PMCs, and their share in world imports, are examined for the period 1990-2003 to assess the overall potential exports of the PMCs to the APTA Participating States. Next, the imports of products offered concessions by the APTA Participating States under the Second and Third Rounds, and at the end of the Third Round, from PMCs, compared with imports of the same products from the world for the period 1999-2003, are identified using the Personal Computer Trade Analysis System (PC-TAS) CD-ROM of the International Trade Centre UNCTAD/WTO, based on the 6-digit harmonized system (HS) Rev. 1 (1986) Comtrade data. Since the concessions offered by Bangladesh, India and Sri Lanka are also based on that HS classification, the two data sets are, by and large, comparable. However, the concessions offered by China and the Republic of Korea are more disaggregated at 8- and 10-digit HS levels of classification. The advantage of Comtrade data is that they are comparable by country and generally available over five years. However, data for Bangladesh and Pakistan are available only for 2003 and for Sri Lanka only for 1999, 2001 and 2002. The main limitation of these data is that those products having a traded value below \$50,000 are excluded in the event that the benchmark level remains below this cut-off level in all the recorded years.<sup>3</sup> Further, the data overstate trade flows, particularly for imports from the Republic of Korea and China, owing to a higher level of aggregation, but also understate to the extent that they exclude products below the cut-off value.

After identifying the possibilities of trade (exports) for PMCs in all traded products, the study estimates cosine measures of export-import complementarities between prospective members as exporters and the APTA Participating States as importers in all products at the 6-digit HS level of classification<sup>4</sup> using the United Nations Comtrade data. The value of this measure has been estimated not only for all globally traded products (exports of prospective members against imports of Agreement countries, respectively), but also for all products included under different 2-digit HS level of classification chapters, in both cases at the 6-digit HS level of classification.<sup>5</sup>

Further, by matching each country's global exports of products at the 6-digit HS level with each partner (prospective partner) country's global imports at the same level of aggregation, the set of products having potential for trade between the identified partner countries has been established. The objective of this exercise is to assess the trade complementarity that exists between the APTA Participating States with PMCs beyond

<sup>3</sup> This implies that products of any value are reported in case the cut-off value of the product is >\$50,000 in any one of the reporting years.

<sup>4</sup> See the technical appendix for an estimation of this measure.

<sup>5</sup> This has been done to identify products with trade potential in sectors with high export-import complementarity which could be quite compatible with overall low complementarity for all products.

those that are identified under the different rounds of negotiations, so that new products can be considered for inclusion in a proposed subsequent Fourth Round of negotiations.<sup>6</sup>

The study subsequently makes some comments on the modalities for expanding and broadening the scope of the Agreement so as to align it with the global trends. A summary of the study and the final conclusions drawn appear at the end of the study.

### 3. PREFERENTIAL TRADE OF INTRA-APTA MEMBER COUNTRIES

#### (a) Bangladesh

Table 2 shows that the most important markets for products exported under the Second Round, in order of importance, were China, India and the Republic of Korea. The share of Bangladesh in the world imports of those countries showed an increase in the case of China and the Republic of Korea, but a declining share in the case of India and Sri Lanka.

**Table 2. Imports of APTA member countries from Bangladesh and the world: products under National and Special Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

APTA members	Imports from	1999	2000	2001	2002	2003
China (14)	Bangladesh	2 122	642	1 558	11 295	8 066
	World	3 152 983	4 351 827	4 301 524	5 086 012	8 401 213
	Share (%)	0.07	0.01	0.04	0.22	0.10
India (9)	Bangladesh	7 437	5 757	4 316	4 181	5 477
	World	91 094	55 599	80 575	81 201	104 869
	Share (%)	8.16	10.35	5.36	5.15	5.22
Republic of Korea (5)	Bangladesh	968	774	877	1 061	1 291
	World	94 426	102 951	50 623	42 980	34 758
	Share (%)	1.03	0.75	1.73	2.47	3.71
Lao People's Democratic Republic	Bangladesh	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (1)	Bangladesh	2 458	n.a.	47	108	n.a.
	World	2 553	n.a.	100	301	n.a.
	Share (%)	96.28	n.a.	47.00	35.88	n.a.

Source: Estimated from the PC-TAS database, 2005.

Note: Figures in parentheses indicate the number of products imported in 2003.

<sup>6</sup> This paper has been adapted for publication in the *Asia-Pacific Trade and Investment Review* and does not include the comprehensive annex tables, which are too large to be included in the text of this paper but were attached at the end of the original paper; they contained hyperlinks from which the details of identified products could be examined (only through the electronic version of the paper).

Table 3 shows that China, the Republic of Korea and India were the most important markets for Bangladesh for products under the Third Round. The share of Bangladesh in the world trade of member countries is quite marginal and shows a mildly declining trend.

**Table 3. Imports of APTA member countries from Bangladesh and the world: products under National and Special Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China (12)	Bangladesh	3 658	7 629	1 508	1 246	4 480
	World	717 773	1 126 061	1 193 831	1 295 655	1 897 681
	Share (%)	0.51	0.68	0.13	0.10	0.24
India (5)	Bangladesh	290	224	42	129	489
	World	93 977	115 877	124 141	176 169	164 154
	Share (%)	0.31	0.19	0.03	0.07	0.30
Republic of Korea (18)	Bangladesh	1 909	1 124	2 242	1 485	2 422
	World	731 420	954 315	1 182 140	1 535 710	1 716 593
	Share (%)	0.26	0.12	0.19	0.10	0.14
Lao People's Democratic Republic	Bangladesh	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (1)	Bangladesh	83	n.a.	–	–	n.a.
	World	15 422	n.a.	11 755	11 878	n.a.
	Share (%)	0.54	---	0.00	0.00	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

When products under both rounds are combined, China, India and the Republic of Korea remain the most important markets for Bangladesh in order of importance, as can be seen in table 4.

### **(b) China**

The Republic of Korea was the largest market of China for products under the Second Round, followed by India, Sri Lanka and Bangladesh, as can be seen in table 5. The share of China in all member country world imports shows a rising trend.

For products offered concessions under the Third Round, the Republic of Korea was the largest market of China, followed by India, Sri Lanka and Bangladesh, as can be seen in table 6. The share of China in the world exports of all these countries shows a rising trend.



**Table 4. Imports of APTA member countries from Bangladesh and the world: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China (26)	Bangladesh	5 780	8 271	3 066	12 541	12 546
	World	3 870 756	5 477 888	5 495 355	6 381 667	10 298 894
	Share (%)	0.15	0.15	0.06	0.20	0.12
India (14)	Bangladesh	7 727	5 981	4 358	4 310	5 966
	World	185 071	171 476	204 716	257 370	269 023
	Share (%)	4.18	3.49	2.13	1.67	2.22
Republic of Korea (23)	Bangladesh	2 877	1 898	3 119	2 546	3 713
	World	825 846	1 057 266	1 232 763	1 578 690	1 751 351
	Share (%)	0.35	0.18	0.25	0.16	0.21
Lao People's Democratic Republic	Bangladesh	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (2)	Bangladesh	2 541	n.a.	–	108	n.a.
	World	17 975	n.a.	11 855	12 179	n.a.
	Share (%)	14.14	---	0.00	0.00	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 5. Imports of APTA member countries from China and the world: products under National Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (14)	China	n.a.	n.a.	n.a.	n.a.	2 091
	World	n.a.	n.a.	n.a.	n.a.	12 491
	Share (%)	---	---	---	---	16.74
India (34)	China	22 734	19 739	21 558	23 962	45 329
	World	211 547	157 985	144 826	174 478	260 229
	Share (%)	10.75	12.49	14.89	13.73	17.42
Republic of Korea (92)	China	128 607	170 287	189 401	298 037	379 535
	World	1 288 909	1 439 936	1 236 853	1 461 357	1 542 841
	Share (%)	9.98	11.83	15.31	20.39	24.60
Lao People's Democratic Republic	China	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (23)	China	2 057	n.a.	2 363	3 289	n.a.
	World	37 369	n.a.	37 675	38 094	n.a.
	Share (%)	5.50	---	6.27	8.63	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 6. Imports of APTA member countries from China and the world: products under National Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (25)	China	n.a.	n.a.	n.a.	n.a.	11 164
	World	n.a.	n.a.	n.a.	n.a.	109 443
	Share (%)	---	---	---	---	10.20
India (288)	China	148 322	208 037	308 814	367 261	401 244
	World	7 591 412	7 122 308	6 935 846	8 912 906	10 739 138
	Share (%)	1.95	2.92	4.45	4.12	3.74
Republic of Korea (388)	China	2 997 909	4 164 297	4 587 921	5 519 656	6 866 877
	World	34 284 851	51 401 691	44 209 617	44 123 732	51 836 500
	Share (%)	8.74	8.10	10.38	12.51	13.25
Lao People's Democratic Republic	China	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (79)	China	14 653	n.a.	20 332	29 408	n.a.
	World	279 506	n.a.	279 434	256 565	n.a.
	Share (%)	5.24	---	7.28	11.46	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

At the end of the Third Round, the Republic of Korea remained the largest market of China, followed by India, Sri Lanka and Bangladesh, as can be seen in table 7.

### (c) *India*

China was the largest market of India for products offered concessions under the Second Round, as can be seen in table 8. If the year 2001 is excluded (when the world imports of China of such products marked an unusual decline), the share of India in the world imports of China shows a slightly increasing trend. The share of India in the world imports of Sri Lanka has also been increasing.

For products offered concessions under the Third Round, China was the largest market of India, followed by the Republic of Korea and Sri Lanka, as can be seen in table 9. The shares of China and Sri Lanka show a rising trend.

At the end of the Third Round, China and the Republic of Korea remained the largest markets for products offered concessions, as can be seen in table 10. Further, the share of India in the imports of China and Sri Lanka shows an increasing trend.

**Table 7. Imports of APTA member countries from China and the world: products under National Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (n.a.)	China	n.a.	n.a.	n.a.	n.a.	13 255
	World	n.a.	n.a.	n.a.	n.a.	121 934
	Share (%)	---	---	---	---	10.87
India (322)	China	171 056	227 776	330 372	391 223	446 573
	World	7 802 959	7 280 293	7 080 672	9 087 384	10 999 367
	Share (%)	2.19	3.13	4.67	4.31	4.06
Republic of Korea (480)	China	3 126 516	4 334 584	4 777 322	5 817 693	7 246 412
	World	35 573 760	52 841 627	45 446 470	45 585 089	53 379 341
	Share (%)	8.79	8.20	10.51	12.76	13.58
Lao People's Democratic Republic	China	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (527)	China	16 710	n.a.	22 695	32 697	n.a.
	World	316 875	n.a.	317 109	294 659	n.a.
	Share (%)	5.27	---	7.16	11.10	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 8. Imports of APTA member countries from India and the world: products under National Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (12)	India	n.a.	n.a.	n.a.	n.a.	6 850
	World	n.a.	n.a.	n.a.	n.a.	19 126
	Share (%)	---	---	---	---	35.82
China (101)	India	41 609	92 906	194 170	300 060	393 221
	World	14 114 477	17 660 865	1 826 853	20 561 324	26 707 330
	Share (%)	0.29	0.53	10.63	1.46	1.47
Republic of Korea (43)	India	21 820	21 088	16 161	16 773	18 182
	World	697 793	746 144	710 371	825 138	885 025
	Share (%)	3.13	2.83	2.28	2.03	2.05
Lao People's Democratic Republic	India	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (33)	India	10 168	n.a.	9 136	16 872	n.a.
	World	80 714	n.a.	91 078	86 690	n.a.
	Share (%)	12.60	---	10.03	19.46	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 9. Imports of APTA member countries from India and the world: products under National Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (23)	India	n.a.	n.a.	n.a.	n.a.	14 199
	World	n.a.	n.a.	n.a.	n.a.	118 174
	Share (%)	---	---	---	---	12.02
China (226)	India	275 092	449 127	461 554	550 850	769 281
	World	33 880 492	43 229 825	49 166 248	58 678 230	74 898 839
	Share (%)	0.81	1.04	0.94	0.94	1.03
Republic of Korea (130)	India	122 238	158 096	115 692	141 581	176 672
	World	28 410 558	43 105 077	36 861 950	35 627 007	41 525 636
	Share (%)	0.43	0.37	0.31	0.40	0.43
Lao People's Democratic Republic	India	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (112)	India	45 796	n.a.	40 762	59 232	n.a.
	World	362 030	n.a.	364 995	350 565	n.a.
	Share (%)	12.65	---	11.17	16.90	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 10. Imports of APTA member countries from India and the world: products under National Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (35)	India	n.a.	n.a.	n.a.	n.a.	21 049
	World	n.a.	n.a.	n.a.	n.a.	137 300
	Share (%)	---	---	---	---	15.33
China (327)	India	316 701	542 033	655 724	850 910	1 162 502
	World	47 994 969	60 890 690	50 993 101	79 239 554	101 606 169
	Share (%)	0.66	0.89	1.29	1.07	1.14
Republic of Korea (173)	India	144 058	179 184	131 853	158 354	194 854
	World	29 108 351	43 851 221	37 572 321	36 452 145	42 410 661
	Share (%)	0.49	0.41	0.35	0.43	0.46
Lao People's Democratic Republic	India	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (145)	India	55 964	n.a.	49 898	76 104	n.a.
	World	442 744	n.a.	456 073	437 255	n.a.
	Share (%)	12.64	---	10.94	17.40	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**(d) Republic of Korea**

Table 11 reveals that China was by far the largest market for the export of the Republic of Korea of products offered concessions under the Second Round, followed by India and Sri Lanka. While the share of the Republic of Korea in the world imports of China remained stable at a little over 16 per cent, this share shows an increase in relation to those of India.

**Table 11. Imports of APTA member countries from the Republic of Korea and the world: products under National Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (2)	Republic of Korea	n.a.	n.a.	n.a.	n.a.	148
	World	n.a.	n.a.	n.a.	n.a.	350
	Share (%)	---	---	---	---	42.29
China (298)	Republic of Korea	2 992 386	3 973 951	4 106 719	4 565 721	6 363 817
	World	18 376 056	23 469 905	24 934 647	28 966 867	37 616 338
	Share (%)	16.28	16.93	16.47	15.76	16.92
India (16)	Republic of Korea	6 790	4 994	7 504	4 570	14 370
	World	155 609	111 020	104 628	123 780	183 160
	Share (%)	4.36	4.50	7.17	3.69	7.85
Lao People's Democratic Republic	Republic of Korea	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (15)	Republic of Korea	2 891	n.a.	2 831	2 243	n.a.
	World	24 345	n.a.	24 938	25 233	n.a.
	Share (%)	11.88	---	11.35	8.89	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

With regard to products offered concessions under the Third Round, China remained the most important market for the Republic of Korea, followed by India, as can be seen in table 12. The shares of the Republic of Korea and India in the world imports of China also show an increase. At the end of the Third Round, China remained the most important market for the Republic of Korea, followed by India, as can be seen in table 13.

**(e) Lao People's Democratic Republic**

China was the only country importing one product offered concessions in the Second Round from the Lao People's Democratic Republic as can be seen in table 14. Its share in the world exports of China increased significantly, from a negligible value in 2000 to 5.07 per cent in 2003.

**Table 12. Imports of APTA member countries from the Republic of Korea and the world: products under National Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (18)	Republic of Korea	n.a.	n.a.	n.a.	n.a.	18 637
	World	n.a.	n.a.	n.a.	n.a.	112 152
	Share (%)	---	---	---	---	16.62
China (474)	Republic of Korea	4 183 635	5 658 146	6 221 862	10 702 131	16 612 740
	World	46 081 190	57 261 545	64 074 399	83 784 852	116 096 893
	Share (%)	9.08	9.88	9.71	12.77	14.31
India (174)	Republic of Korea	95 981	79 842	83 901	137 639	733 323
	World	6 891 820	6 408 543	6 246 016	7 968 899	9 214 571
	Share (%)	1.39	1.25	1.34	1.73	7.96
Lao People's Democratic Republic	Republic of Korea	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (89)	Republic of Korea	61 611	n.a.	56 862	40 286	n.a.
	World	349 885	n.a.	358 467	331 300	n.a.
	Share (%)	17.60	---	15.86	12.16	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 13. Imports of APTA member countries from the Republic of Korea and the world: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (20)	Republic of Korea	n.a.	n.a.	n.a.	n.a.	18 785
	World	n.a.	n.a.	n.a.	n.a.	112 502
	Share (%)	---	---	---	---	16.70
China (772)	Republic of Korea	7 176 021	9 632 097	10 328 581	15 267 852	22 976 557
	World	64 457 246	80 731 450	89 009 046	112 751 719	153 713 231
	Share (%)	11.13	11.93	11.60	13.54	14.95
India (190)	Republic of Korea	102 771	84 836	91 405	142 209	747 693
	World	7 047 429	6 519 563	6 350 644	8 092 679	9 397 731
	Share (%)	1.46	1.30	1.44	1.76	7.96
Lao People's Democratic Republic	Republic of Korea	n.a.	n.a.	n.a.	n.a.	n.a.
Sri Lanka (104)	Republic of Korea	64 502	n.a.	59 693	42 529	n.a.
	World	374 230	n.a.	383 405	356 533	n.a.
	Share (%)	17.24	---	15.57	11.93	---

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 14. Imports of APTA member countries from the Lao People's Democratic Republic and the world: products under National and Special Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China (1)	Lao People's Democratic Republic	–	68	224	1 428	2 205
	World	85 529	265 610	224 721	285 871	43 526
	Share (%)	0	0.03	0.10	0.50	5.07

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

In table 15, it can be seen that again China was the only importer of one product offered concessions in the Third Round. Its share in the world imports declined during the reference period.

**Table 15. Imports of APTA member countries from the Lao People's Democratic Republic and the world: products under National and Special Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China (1)	Lao People's Democratic Republic	632	586	584	360	534
	World	8 541	8 210	9 565	17 101	17 648
	Share (%)	7.40	7.14	6.11	2.11	3.03

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

At the end of the Third Round, there was an increase in the share of the imports of China in the case of products offered concessions under the Second and Third Rounds, as can be seen in table 16.

#### **(f) Sri Lanka**

For products offered concessions under the Second Round, India was the most important market for Sri Lanka, followed by China and the Republic of Korea, as can be seen in table 17. The share of Sri Lanka in the world imports of other member countries shows a decline.

**Table 16. Imports of APTA member countries from the Lao People's Democratic Republic and the world: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China (2)	Lao People's Democratic Republic	632	654	808	1 788	2 739
	World	94 070	273 820	234 286	302 972	61 174
	Share (%)	0.67	0.24	0.34	0.59	4.48

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 17. Imports of APTA member countries from Sri Lanka and the world: products under National Lists of Concessions – Second Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (3)	Sri Lanka	n.a.	n.a.	n.a.	n.a.	1 381
	World	n.a.	n.a.	n.a.	n.a.	8 666
	Share (%)	---	---	---	---	15.94
China (12)	Sri Lanka	910	1 846	2 583	4 099	4 555
	World	113 045	1 536 643	1 517 773	1 758 429	2 240 797
	Share (%)	0.80	0.12	0.17	0.23	0.20
India (12)	Sri Lanka	4 874	4 278	23 010	17 473	11 142
	World	29 928	24 594	76 615	61 832	100 013
	Share (%)	16.29	17.39	30.03	28.26	11.13
Republic of Korea (111)	Sri Lanka	1 313	1 041	1 337	1 863	1 914
	World	93 051	106 903	110 594	144 591	171 261
	Share (%)	1.41	0.97	1.21	1.29	1.12
Lao People's Democratic Republic	Sri Lanka	n.a.	n.a.	n.a.	n.a.	n.a.

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

With regard to products offered concessions under the Third Round, China was the largest market for Sri Lanka in 2003, followed by the Republic of Korea and India, as can be seen in table 18.

At the end of the Third Round, China became the largest market of Sri Lanka in 2003, followed by India and the Republic of Korea, as can be seen in table 19.



**Table 18. Imports of APTA member countries from Sri Lanka and the world: products under National Lists of Concessions – Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (1)	Sri Lanka	n.a.	n.a.	n.a.	n.a.	1 023
	World	n.a.	n.a.	n.a.	n.a.	2 023
	Share (%)					50.57
China (23)	Sri Lanka	4 414	5 885	2 099	5 774	9 456
	World	2 706 285	3 637 623	3 631 525	4 501 055	520 142
	Share (%)	0.16	0.16	0.06	0.13	1.82
India (33)	Sri Lanka	794	879	3 552	3 732	1 244
	World	615 645	636 817	587 855	946 165	1 888 535
	Share (%)	0.13	0.14	0.60	0.39	0.07
Republic of Korea (32)	Sri Lanka	6 109	6 497	4 405	3 852	2 951
	World	1 665 112	2 085 172	1 796 988	1 963 701	2 132 187
	Share (%)	0.37	0.31	0.25	0.20	0.14
Lao People's Democratic Republic	Sri Lanka	n.a.	n.a.	n.a.	n.a.	n.a.

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**Table 19. Imports of APTA member countries from Sri Lanka and the world: products under National Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh (4)	Sri Lanka	n.a.	n.a.	n.a.	n.a.	2 404
	World	n.a.	n.a.	n.a.	n.a.	10 689
	Share (%)	---	---	---	---	22.49
China (35)	Sri Lanka	5 324	7 731	4 682	9 873	14 011
	World	2 819 330	5 174 266	5 149 298	6 259 484	2 760 939
	Share (%)	0.19	0.15	0.09	0.16	0.51
India (45)	Sri Lanka	5 668	5 157	26 562	21 205	12 386
	World	645 573	661 411	664 470	1 007 997	1 898 548
	Share (%)	0.88	0.78	4.00	2.10	0.65
Republic of Korea (143)	Sri Lanka	7 422	7 538	5 742	5 715	4 865
	World	1 758 163	2 192 075	1 907 582	2 108 292	2 303 448
	Share (%)	0.42	0.34	0.30	0.27	0.21
Lao People's Democratic Republic	Sri Lanka	n.a.	n.a.	n.a.	n.a.	n.a.

*Source:* Estimated from the PC-TAS database, 2005.

*Note:* Figures in parentheses indicate the number of products imported in 2003.

**(g) Regional analysis**

Table 20 presents the regional and world imports of APTA Participating States during the Second Round. Except for Bangladesh (for which time series data are not available), it is of interest to note that the import shares of all the APTA Participating States showed an increasing trend between 1999 and 2003. The share of APTA-6 member countries increased from 8.43 to 9.27 per cent over that period.

**Table 20. Regional and world imports of APTA member countries:  
Second Round concessions (1999-2003)**  
(Thousands of United States dollars)

<i>Second Round</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	31	0	0	0	0	10 470
World		0	0	0	0	40 633
Share (%)		0.00	0.00	0.00	0.00	25.77
China	425	3 037 027	4 069 345	4 305 030	4 881 175	6 769 659
World		35 756 561	47 019 240	32 580 797	56 372 632	74 965 678
Share (%)		8.49	8.65	13.21	8.66	9.03
India	71	41 835	34 768	56 388	50 186	76 318
World		488 178	349 198	406 644	441 291	648 271
Share (%)		8.57	9.96	13.87	11.37	11.77
Republic of Korea	251	152 708	193 190	207 776	317 734	400 922
World		2 174 179	2 395 934	2 108 441	2 474 066	2 633 885
Share (%)		7.02	8.06	9.85	12.84	15.22
Sri Lanka	72	17 574	0	14 377	22 512	0
World		144 981	0	153 791	150 318	0
Share (%)		12.12	0.00	9.35	14.98	0.00
Total APTA-6	850	3 249 144	4 297 303	4 583 571	5 271 607	7 257 369
World		38 563 899	49 764 372	35 249 673	59 438 307	78 288 467
Share (%)		8.43	8.64	13.00	8.87	9.27

Source: Estimated from the PC-TAS database, 2005.

Table 21 presents the import value coverage of products offered concessions in the Third Round. Again it is seen that there is an increase in the share of imports for products conceded concessions in this Round in relation to world imports of conceded products. This indicates that the nature of the products offered concessions was buoyant in terms of exports to concession-offering countries (since the liberalization of these products is pending as customs notifications have yet to be issued).

**Table 21. Regional and world imports of APTA member countries:  
Third Round concessions (1999-2003)**  
(Thousands of United States dollars)

<i>Third Round</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	67	0	0	0	0	45 023
World		0	0	0	0	341 792
Share (%)		0.00	0.00	0.00	0.00	13.17
China	735	4 466 799	6 120 787	6 687 023	11 260 001	17 395 957
World		83 385 740	105 255 054	118 066 003	148 259 792	193 413 555
Share (%)		5.36	5.82	5.66	7.59	8.99
India	500	245 387	288 982	396 309	508 761	1 136 300
World		15 192 854	14 283 545	13 893 858	18 004 139	22 006 398
Share (%)		1.62	2.02	2.85	2.83	5.16
Republic of Korea	568	3 128 165	4 330 014	4 710 260	5 666 574	7 048 922
World		65 091 941	97 546 255	84 050 695	83 250 150	97 210 916
Share (%)		4.81	4.44	5.60	6.81	7.25
Sri Lanka	281	122 143	0	117 956	128 926	0
World		1 006 843	0	1 014 651	950 308	0
Share (%)		12.13	0.00	11.63	13.57	0.00
Total APTA-6	2 151	7 962 494	10 739 783	11 911 548	17 564 262	25 626 202
World		164 677 378	217 084 854	217 025 207	250 464 389	312 972 661
Share (%)		4.84	4.95	5.49	7.01	8.19

Source: Estimated from the PC-TAS database, 2005.

When the products offered concessions under the Second and Third Rounds are combined, the trends in import shares show an increasing share, as expected, this can be seen in table 22.

Table 23 shows the distribution by section of the value of products conceded concessions at the end of the Third Round that were imported by APTA as a whole from each APTA Participating State, as a percentage of total imports from the world in the conceded products. This will give an idea of the relative importance of the products exported by the Participating States to the APTA region. It will be observed that, except for Bangladesh, the shares for all the sections combined (I-XXI) increased for all Participating States. APTA imports from China show that the import shares relative to the world imports of similar products improved for most of the sections, with the exception of animal and animal products. APTA imports from India showed increasing shares for vegetable products, footwear, pearls and base metals, but declining shares for most of the other sections. APTA imports from the Republic of Korea showed increasing shares for wood pulp products, machinery and mechanical appliances, and instruments. APTA imports from Sri Lanka showed increasing shares for animal or vegetable fats, wood pulp products and articles of stone, plaster, cement and asbestos.

**Table 22. Regional and world imports of APTA member countries:  
end of Third Round concessions (1999-2003)**  
(Thousands of United States dollars)

<i>End of Third Round</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	59	0	0	0	0	55 493
World		0	0	0	0	382 425
Share (%)		0.00	0.00	0.00	0.00	14.51
China	1 160	7 503 826	10 190 132	10 992 053	16 141 176	24 165 616
World		119 142 301	152 274 294	150 646 800	204 632 424	268 379 233
Share (%)		6.30	6.69	7.30	7.89	9.00
India	571	287 222	323 750	452 697	558 947	1 212 618
World		15 681 032	14 632 743	14 300 502	18 445 430	22 654 669
Share (%)		1.83	2.21	3.17	3.03	5.35
Republic of Korea	819	3 280 873	4 523 204	4 918 036	5 984 308	7 449 844
World		67 266 120	99 942 189	86 159 136	85 724 216	99 844 801
Share (%)		4.88	4.53	5.71	6.98	7.46
Sri Lanka	251	139 717	0	132 286	151 330	0
World		1 151 824	0	1 168 442	1 100 626	0
Share (%)		12.13	0.00	11.32	13.75	0.00
Total APTA-6	2 860	11 211 638	15 037 086	16 495 072	22 835 761	32 883 571
World		203 241 277	266 849 226	252 274 880	309 902 696	391 261 128
Share (%)		5.52	5.64	6.54	7.37	8.40

Source: Estimated from the PC-TAS database, 2005.

**Table 23. Distribution by section of products conceded concessions at the end of the Third Round for the region and the world: 1999 and 2003**  
(Percentage of world imports)

Sections	Product description	Chapter	Bangladesh		China		India		Republic of Korea		Sri Lanka	
			1999	2003	1999	2003	1999	2003	1999	2003	1999	2003
I	Animal and animal products	01-05	1.54	0.70	53.63	46.80	0.81	1.83	2.80	2.33	0.00	0.00
II	Vegetable products	06-14	0.00	0.60	2.39	6.45	5.31	17.68	5.43	3.04	46.50	25.52
III	Animal or vegetable fats	15	--	--	--	--	0.00	2.72	--	--	0.00	12.38
IV	Prepared foodstuffs	16-24	4.53	2.59	--	--	9.87	0.82	2.56	1.43	0.16	0.03
V	Mineral products	25-27	--	--	0.99	1.45	0.33	0.52	17.98	23.77	--	9.23
VI	Chemical products	28-38	0.49	0.08	14.63	17.11	1.48	2.30	17.39	17.46	0.64	1.27
VII	Plastic and rubber	39-40	0.01	0.00	5.04	11.58	0.13	1.33	18.12	15.94	0.23	0.41
VIII	Hides and skins	41-43	0.17	0.36	32.99	47.43	0.38	0.82	2.62	2.60	0.55	0.17
IX	Wood and wood products	44-46	96.28	35.88	29.25	32.14	0.70	0.78	0.43	0.00	0.00	0.57
X	Wood pulp products	47-49	--	--	1.33	2.23	26.15	7.14	10.99	28.52	1.25	4.51
XI	Textiles and textile articles	50-63	0.95	0.66	30.85	51.42	2.62	2.06	20.27	15.44	0.42	0.25
XII	Footwear, headgear	64-67	0.23	0.76	69.40	71.40	5.12	11.42	31.48	31.90	15.51	0.00
XIII	Article of stone, plaster, cement, asbestos	68-70	--	--	8.39	19.91	0.88	0.45	18.65	15.28	1.47	32.84
XIV	Pearls, precious or semi-precious stones, metal	71	--	--	0.58	0.94	23.39	29.78	0.47	0.43	0.36	0.17
XV	Base metals and articles thereof	72-83	0.00	0.00	12.03	18.78	0.85	2.35	15.07	14.59	0.14	0.11
XVI	Machinery and mechanical appliances	84-85	0.00	0.00	10.26	20.08	0.09	0.17	5.43	11.55	0.10	0.11
XVII	Transportation equipment	86-89	--	--	0.30	0.64	4.11	0.43	3.70	6.67	0.00	0.01
XVIII	Instruments-measuring, musical	90-92	0.28	0.42	18.21	20.43	0.11	0.28	3.79	26.25	0.00	0.06
XIX	Arms and ammunition	93	--	--	--	--	--	--	--	--	--	--
XX	Miscellaneous	94-96	--	--	18.14	31.83	0.88	0.55	19.87	15.90	0.63	2.23
XXI	Works of art	97-99	--	--	--	--	--	--	--	--	--	--
	<b>All commodities</b>	<b>01-99</b>	<b>0.39</b>	<b>0.18</b>	<b>7.58</b>	<b>11.94</b>	<b>0.67</b>	<b>1.00</b>	<b>10.30</b>	<b>14.29</b>	<b>0.30</b>	<b>0.38</b>

Source: Estimated from the PC-TAS database, 2005.

Note: -- indicates data not available.

## 4. PROSPECTIVE MEMBER COUNTRIES OF APTA

### (a) Country report: Bhutan

#### (i) APTA as market

Since the 1990s, the imports of Bangladesh from Bhutan have varied between \$3 million and \$8 million as can be seen in table 24. India provides the largest market for Bhutanese goods. The imports of India from Bhutan increased from \$1 million in 1991 to \$47 million in 2003.

**Table 24. Imports of APTA member countries from Bhutan**  
(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	7	4	4	3	8	4	5	4	5	4	5	5	3	4
China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	0	1	1	3	3	16	17	19	8	15	20	22	24	47
Republic of Korea	0	0	1	6	1	0	0	0	0	0	0	0	0	0
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Percentage share</b>														
Bangladesh	0.20	0.11	0.11	0.06	0.18	0.06	0.07	0.06	0.07	0.05	0.05	0.06	0.04	0.04
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
India	0.00	0.00	0.01	0.01	0.01	0.05	0.05	0.05	0.02	0.03	0.04	0.04	0.04	0.07
Republic of Korea	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sri Lanka	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: International Monetary Fund, *Direction of Trade Statistics* CD-ROM, April 2005.

#### (ii) Exports of products offered concessions

For products offered concessions at the end of the Third Round, Bhutan would benefit mainly from the imports from India, as can be seen in table 25. However, since Bhutan already has duty-free entry to the Indian market under a bilateral agreement, these benefits are believed to be limited.

**Table 25. Imports of APTA member countries from Bhutan: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
India	Bhutan	7	7 238	7 747	9 260	11 627	11 293
	World		50 094	48 590	46 566	62 070	80 004
	Share (%)		14.45	15.94	19.89	18.73	14.12

Source: Calculated from the PC-TAS database, 2005.

Note: No match between the exports of Bhutan and the imports of Bangladesh, China, the Republic of Korea and Sri Lanka.

(iii) *Trade complementarities between the exports of Bhutan and APTA imports*

Table 26 presents the trade complementarity of Bhutan<sup>7</sup> as a supplier to APTA member countries. It will be seen that it has good export-import complementarity only with Sri Lanka. However, for selected 2-digit HS classification products, Bhutan has high complementarity with APTA members in the products listed below. The figures in parentheses show the measure of complementarity.

**Table 26. Trade complementarities between the exports of Bhutan and APTA imports, 1999**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	n.a.
China	0.035
India	0.016
Republic of Korea	0.096
Sri Lanka (2002)	0.650

Source: Estimated from the PC-TAS database, 2005.

China: Furniture, bedding, cushions, lamps and lighting fit (0.998); coffee, tea, mate and spices (0.964); preparations of vegetables, fruits, nuts etc. (0.878); edible fruits and nuts, peel of citrus/melons (0.850); and plastics and articles thereof (0.771).

India: Preparations of vegetables, fruits, nuts etc. (0.999); coffee, tea, mate and spices (0.832); plastics and articles thereof (0.639); beverages, spirits and vinegar (0.265); and edible vegetables (0.146).

<sup>7</sup> Henceforth, “trade complementarity” refers to the index of cosine measure. For the concept and definition, see the technical appendix.

Republic of Korea: Preparations of vegetables, fruits, nuts etc. (0.995); milling industry products (0.991); iron and steel (0.985); furniture, bedding, cushions, lamps and lighting fit (0.960); and edible vegetables (0.906).

Sri Lanka: Salt, sulphur, earth and stone, lime and cement (0.996); made-up textile articles not elsewhere specified, needlecraft sets (0.815); edible fruits and nuts, peel of citrus/melons (0.740); plastics and articles thereof (0.613); and furniture, bedding, cushions, lamps and lighting fit (0.526).

(iv) *Market by product for Bhutan in APTA*

Table 27 shows the total value of matched products at the 6-digit HS classification level with Bhutan as supplier and APTA members as market.

**Table 27. Bhutan as supplier and APTA as market, 1999**

<i>Markets</i>	<i>No. of matched products</i>	<i>Bhutan as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	n.a.	n.a.	n.a.
China	55	114 896	2 001 750
India	36	37 642	1 207 007
Republic of Korea	58	67 977	3 607 350
Sri Lanka	41	51 268	118 962

*Source:* Calculated from the PC-TAS database, 2005.

**(b) Country report: Cambodia**

(i) *APTA as market*

It can be observed in table 28 that China was the largest destination of Cambodia for the exports of all APTA member countries. The imports of China from Cambodia increased from a negligible value in 1990 to \$26 million in 2003. The Republic of Korea was the second largest destination of Cambodia of all APTA members, with total imports amounting to \$4.2 million in 2003.

(ii) *Exports of products offered concessions*

For products offered concessions in both rounds, China would remain by far the largest market, as illustrated in table 29. However, the import value of China has been declining. Imports to the Republic of Korea were modest for the period 1999-2001.



**Table 28. Imports of APTA member countries from Cambodia**  
(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	0	0	0	0	0	0	0	0	0	1	1	0	0	0
China	0	0	0	1	1	6	7	45	48	56	52	35	25	26
India	0	0	3	2	0	29	0	1	2	1	1	0	0	0
Republic of Korea	0	0	0	0	0	0	0	1	1	5	2	7	3	4
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Percentage share</b>														
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.02	0.01	0.01	0.01
India	0.00	0.00	0.01	0.01	0.00	0.08	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Republic of Korea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Sri Lanka	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

**Table 29. Imports of APTA member countries from Cambodia: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	1999	2000	2001	2002	2003
China	Cambodia	9	51 505	42 284	47 198	2 630	3 214
	World		647 918	439 221	929 784	1 095 752	1 312 309
	Share (%)		7.95	9.63	5.08	0.24	0.24
Republic of Korea	Cambodia	10	823	795	645	---	---
	World		2 030 221	3 933 100	2 668 136	2 319 478	2 391 848
	Share (%)		0.04	0.02	0.02	---	---

Source: Calculated from the PC-TAS database, 2005.

(iii) *Trade complementarities between the exports of Cambodia and APTA imports*

Table 30 reveals that Cambodia has good trade complementarity with Sri Lanka and Bangladesh and moderately good complementarity with India and the Republic of Korea. Some of the products in which Cambodia has good export-import complementarity are shown at the 2-digit HS code level below.

**Table 30. Trade complementarities between the exports of Cambodia and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.548
China	0.176
India	0.393
Republic of Korea	0.257
Sri Lanka (2002)	0.655

*Source:* Estimated from the PC-TAS database, 2005.

Bangladesh: Silk, including yarns and woven fabrics thereof (0.998); ships, boats and floating structures (0.998); made-up textile articles not elsewhere specified, needlecraft sets, (0.988); zinc and articles thereof (0.987); and sugars and sugar confectionery (0.986).

China: Residues from food industries, animal feed (0.999); headgear and other articles (0.999); manufacture of straw, esparto, or other plaiting material (0.998); pearls, stones, precious metals, imitation jewelry (0.997); and mineral fuels, oils, waxes and bituminous substances (0.996).

India: Mineral fuels, oils, waxes and bituminous substances (9.998); residues from food industries, animal feed (9.987); clocks and watches and parts thereof (0.977); albuminoidal substances, starches, glues, enzymes (0.975); and made-up textile articles not elsewhere specified, needlecraft sets, (0.966).

Republic of Korea: Mineral fuels, oils, waxes and bituminous substances (0.999) milling industry products (0.999); live animals (0.989); miscellaneous edible preparations (0.977); and animal or vegetable fats, oils and waxes (0.959).

Sri Lanka: Pearls, stones, precious metals, imitation jewelry (0.999); zinc and articles thereof (0.999); pharmaceutical products (0.983); animal or vegetable fats, oils and waxes (0.969); and cereals (0.969).

*(iv) Market for Cambodia in APTA, by product*

Table 31 reveals that a large number of products of export interest to Cambodia match the import needs of APTA member countries. The trade potential in value terms is presented in the table.

**Table 31. Cambodia as supplier and APTA as market, 2003**

<i>Markets</i>	<i>No. of matched products</i>	<i>Cambodia as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	1 160	1 646 971	4 488 736
China	1 560	2 010 346	241 008 622
India	1 965	1 996 034	21 327 407
Republic of Korea	1 540	1 967 748	82 728 924
Sri Lanka (2002)	1 160	1 234 142	4 105 939

Source: Calculated from the PC-TAS database, 2005.

### (c) Country report: Indonesia

#### (i) APTA as market

In 2003, China and the Republic of Korea provided the largest market for Indonesian exports to APTA member countries, as can be seen in table 32. India provided the third largest market. It can also be seen that imports of Indonesian products to most APTA countries have increased rapidly since the 1990s.

**Table 32. Imports of APTA member countries from Indonesia**

(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	54	25	53	58	58	71	84	154	185	159	193	180	172	209
China	849	1 403	1 554	1 446	1 589	2 053	2 289	2 674	2 462	3 051	4 125	3 888	4 501	5 748
India	173	67	73	88	283	384	578	698	805	926	922	1 159	1 432	1 917
Republic of Korea	1 601	2 052	2 292	2 588	2 843	3 325	4 013	4 099	3 070	3 986	5 287	4 474	4 723	5 212
Sri Lanka	39	41	66	86	85	97	109	133	182	172	172	143	147	163
<b>Percentage share</b>														
Bangladesh	1.48	0.74	1.43	1.45	1.27	1.09	1.21	2.24	2.51	1.90	2.15	1.99	2.19	2.16
China	1.58	2.20	1.90	1.40	1.37	1.55	1.65	1.88	1.75	1.84	1.83	1.60	1.52	1.39
India	0.72	0.34	0.32	0.41	1.11	1.11	1.60	1.71	1.91	1.93	1.83	1.95	2.13	2.75
Republic of Korea	2.15	2.51	2.76	2.99	2.78	2.46	2.67	2.83	3.29	3.33	3.29	3.17	3.11	2.91
Sri Lanka	1.49	1.34	1.91	2.15	2.01	2.16	2.30	2.52	2.91	2.75	2.57	2.49	2.45	2.45

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

(ii) *Exports of products offered concessions*

At the end of the Third Round, the Republic of Korea was the largest market for Indonesian exports, followed by China and India, as can be seen in table 33.

**Table 33. Imports of APTA member countries from Indonesia: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	Indonesia	3	---	---	---	---	3 839
	World		---	---	---	---	53 782
	Share (%)		---	---	---	---	7.14
China	Indonesia	290	449 109	674 624	735 081	862 805	954 888
	World		46 450 143	59 510 079	64 841 541	78 591 195	105 824 547
	Share (%)		0.97	1.13	1.13	1.10	0.90
India	Indonesia	120	60 092	44 828	56 794	277 953	104 696
	World		6 680 104	6 081 637	6 044 826	7 774 525	9 203 713
	Share (%)		0.90	0.74	0.94	3.58	1.14
Republic of Korea	Indonesia	198	948 469	1 347 365	1 386 399	1 379 007	1 372 768
	World		30 538 908	46 345 602	39 654 362	38 932 199	45 596 122
	Share (%)		3.11	2.91	3.50	3.54	3.01
Sri Lanka	Indonesia	41	10 468	---	14 208	12 390	---
	World		267 262	---	292 706	257 030	---
	Share (%)		3.92	---	4.85	4.82	---

*Source:* Calculated from the PC-TAS database, 2005.

(iii) *Trade complementarities between the exports of Indonesia and APTA imports*

The export-import complementarity of Indonesia with Sri Lanka, the Republic of Korea and India is good, and moderately good with China, as can be seen in table 34.

The 2-digit HS level classification of products includes the exports of Indonesia at the 6-digit HS level that relate well with imports from APTA members. The 2-digit HS level-aggregated products that have good complementarity with APTA members are listed below.

Bangladesh: Railway or tramway locomotives, rolling stock (0.997); products of animal origin (0.951); copper and articles thereof (0.941); preparations of vegetables, fruits, nuts etc. (0.927); and aircraft, spacecraft, and parts thereof (0.920).

**Table 34. Trade complementarities between the exports of Indonesia and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.088
China	0.364
India	0.610
Republic of Korea	0.638
Sri Lanka (2002)	0.665

*Source:* Estimated from the PC-TAS database, 2005.

China: Meat and edible meat offal (0.995); vegetable plaiting materials (0.957); aircraft, spacecraft, and parts thereof (0.951); explosives, matches, pyrotechnic products (0.948); and coffee, tea, mate and spices (0.880).

India: Ores slag and ash (0.996); tin and articles thereof (0.993); tobacco and manufacture of tobacco substitutes (0.990); inorganic chemicals, organic/inorganic compounds of precious metals (0.981); and cereals (0.958).

Republic of Korea: Tin and articles thereof (0.999); fertilizers (0.997); manufactures of straw, esparto, or other plaiting material (0.993); pearls, stones, precious metals, imitation jewelry (0.989); and ores slag and ash (0.988).

*(iv) Market for Indonesia in APTA, by product*

The number of matched products, and their value, are presented in table 35, which also shows the enormous trade potential of Indonesian exports to APTA markets.

**Table 35. Indonesia as supplier and APTA as market, 2003**

<i>Market</i>	<i>No. of matched products</i>	<i>Indonesia as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	2 102	42 277 346	5 926 593
China	3 714	58 018 682	371 608 858
India	3 394	54 699 769	62 268 992
Republic of Korea	3 725	57 039 069	158 023 866
Sri Lanka (2002)	41	51 268	118 962

*Source:* Calculated from the PC-TAS database, 2005.

**(d) Country report: Mongolia***(i) APTA as market*

It may be observed in table 36 that China is the largest market for Mongolia of all APTA member countries. The imports of China increased from \$11 million in 1990 to \$285 million in 2003. The next important market is the Republic of Korea, whose imports increased from a negligible value in 1990 to \$4 million in 2003.

**Table 36. Imports of APTA member countries from Mongolia***(Value in millions of United States dollars and percentage share of world imports)*

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
China	11	20	48	69	76	101	126	188	181	194	229	240	223	285
India	2	0	0	0	0	0	0	0	0	0	0	0	0	1
Republic of Korea	0	0	2	4	5	10	2	2	5	5	2	2	6	4
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Percentage share</b>														
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
China	0.02	0.03	0.06	0.07	0.07	0.08	0.09	0.13	0.13	0.12	0.10	0.10	0.08	0.07
India	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Republic of Korea	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Sri Lanka	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

*(ii) Exports of products offered concessions*

At the end of the Third Round, both China and the Republic of Korea could provide a market for the conceded products. However, the import values are quite modest, as can be seen in table 37.

*(iii) Trade complementarities between the exports of Mongolia and APTA imports*

Mongolia has good export-import complementarity with China and the Republic of Korea, as can be seen in table 38. The products that have good complementarity are presented below.

**Table 37. Imports of APTA member countries from Mongolia: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China	Mongolia	32	2 963	5 479	9 641	10 184	9 727
	World		1 264 355	2 005 646	1 969 953	2 033 934	2 048 317
	Share (%)		0.23	0.27	0.49	0.50	0.47
Republic of Korea	Mongolia	4	22	148	10	33	1 478
	World		242 924	259 997	253 163	321 144	354 856
	Share (%)		0.01	0.06	0.00	0.01	0.42

Source: Calculated from the PC-TAS database, 2005.

**Table 38. Trade complementarities between the exports of Mongolia and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.184
China	0.863
India	0.111
Republic of Korea	0.689
Sri Lanka (2002)	0.029

Source: Estimated from the PC-TAS database, 2005.

Bangladesh: Beverages, spirits and vinegar (0.976); raw hides and skins and leather (0.860); salt, sulphur, earth and stone, lime and cement (0.824); vehicles other than railway or tramway rolling (0.724); and mineral fuels, oils, waxes and bituminous substances (0.554).

China: Beverages, spirits and vinegar (0.999); furniture, bedding, cushions, lamps and lighting fit (0.999); ores slag and ash (0.998); aluminum and articles thereof (0.981); and products of animal origin (0.955).

India: Ores slag and ash (0.997); aluminum and articles thereof (0.996); fur skins and artificial fur, manufactures (0.950); fish and crustaceans (0.927); and beverages, spirits and vinegar (0.920).

Republic of Korea: Aluminum and articles thereof (0.999); plastics and articles thereof (0.997); furniture, bedding, cushions, lamps and lighting fit (0.994); fur skins and artificial fur, manufactures (0.991); and copper and articles thereof (0.951).

Sri Lanka: Wool and fine or coarse animal hair, including yarns and wool (0.992); iron and steel (0.977); meat and edible meat offal (0.852); wood and articles of wood, wood charcoal (0.818); and fish and crustaceans (0.725).

(iv) *Market for Mongolia in APTA, by product*

It will be observed that quite a number of the products exported by Mongolia are being imported by APTA member countries, as can be seen in table 39. The trade potential appears to be appreciable.

**Table 39. Mongolia as supplier and APTA as market, 2003**

<i>Market</i>	<i>No. of matched products</i>	<i>Mongolia as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	97	94 133	770 394
China	215	461 751	55 450 583
India	170	568 926	30 805 775
Republic of Korea	215	594 270	43 567 635
Sri Lanka (2001)	123	115 309	807 914

*Source:* Calculated from the PC-TAS database, 2005.

**(e) Country report: Myanmar**

(i) *APTA as market*

India offers the largest market to Myanmar of all APTA member countries, as may be seen in table 40. Its imports increased from \$90 million in 1990 to \$391 million in 2003. China offers the next largest market for Myanmar. Chinese imports from Myanmar increased from \$95 million in 1990 to \$169 million in 2003. During the same period, imports of Bangladesh increased from a negligible value to \$33 million while imports to the Republic of Korea increased from \$4 million to \$29 million. Imports from Sri Lanka amounted to only \$2 million in 2003.

(ii) *Exports of products offered concessions*

At the end of the Third Round, China, the Republic of Korea and India remained the main markets for products offered concessions, as can be seen in table 41.



**Table 40. Imports of APTA member countries from Myanmar**  
(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	0	0	1	7	8	5	4	3	12	14	22	20	24	33
China	95	106	131	165	143	150	137	73	62	101	123	134	137	170
India	90	51	104	117	120	160	148	212	186	172	179	197	214	391
Republic of Korea	4	5	6	14	11	13	18	17	13	16	23	51	56	29
Sri Lanka	6	0	3	7	1	1	12	6	1	1	1	1	1	2
<b>Percentage share</b>														
Bangladesh	0.01	0.00	0.02	0.16	0.16	0.07	0.05	0.04	0.17	0.16	0.24	0.22	0.30	0.34
China	0.18	0.17	0.16	0.16	0.12	0.11	0.10	0.05	0.04	0.06	0.05	0.06	0.05	0.04
India	0.38	0.26	0.45	0.55	0.47	0.47	0.41	0.52	0.44	0.36	0.36	0.33	0.32	0.56
Republic of Korea	0.00	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.02
Sri Lanka	0.24	0.00	0.09	0.17	0.02	0.02	0.25	0.11	0.02	0.01	0.02	0.02	0.02	0.03

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

**Table 41. Imports of APTA member countries from Myanmar: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	1999	2000	2001	2002	2003
China	Myanmar	36	22 456	26 695	22 411	10 235	21 953
	World		2 188 576	3 900 068	3 865 253	4 751 373	5 657 019
	Share (%)		1.03	0.68	0.58	0.22	0.39
India	Myanmar	19	2 170	2 050	1 847	1 210	1 871
	World		153 197	106 036	431 410	129 907	203 589
	Share (%)		1.42	1.93	0.43	0.93	0.92
Republic of Korea	Myanmar	21	3 903	4 142	32 621	30 684	2 641
	World		15 877 075	26 529 712	22 710 427	20 880 484	25 248 589
	Share (%)		0.02	0.02	0.14	0.15	0.01

Source: Calculated from the PC-TAS database, 2005.

*(iii) Trade complementarities between the exports of Myanmar and APTA imports*

Myanmar has good export-import complementarity with China and the Republic of Korea, as can be seen in table 42. The products having high complementarity are listed below.

**Table 42. Trade complementarities between the exports of Myanmar and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.526
China	0.202
India	0.499
Republic of Korea	0.264
Sri Lanka (2002)	0.814

*Source:* Estimated from the PC-TAS database, 2005.

Bangladesh: Beverages, spirits and vinegar (0.976); raw hides and skins and leather (0.860); salt, sulphur, earth and stone, lime and cement (0.824); vehicles other than railway or tramway rolling stock (0.724); and mineral fuels, oils, waxes and bituminous substances (0.554).

China: Beverages, spirits and vinegar (0.999), furniture, bedding, cushions, lamps and lighting fit (0.999); ores slag and ash (0.998); aluminum and articles thereof (0.981); and products of animal origin (0.955).

India: Ores slag and ash (0.997); aluminum and articles thereof (0.996); fur skins and artificial fur, manufactures (0.950); fish and crustaceans (0.927); and beverages, spirits and vinegar (0.920).

Republic of Korea: Aluminum and articles thereof (0.999); plastics and articles thereof (0.997); furniture, bedding, cushions, lamps and lighting fit (0.994); fur skins and artificial fur, manufactures (0.991); and copper and articles thereof (0.951).

Sri Lanka: Wool and fine or coarse animal hair, including yarns and wool (0.992); iron and steel (0.977); meat and edible meat offal (0.852); wood and articles of wood, wood charcoal (0.818); and fish and crustaceans (0.725).

*(iv) Market for Myanmar in APTA, by product*

The total number of the export products of Myanmar that match the import needs of APTA members, and the trade value underlying this, are presented in table 43.

**Table 43. Myanmar as supplier and APTA as market, 2003**

<i>Markets</i>	<i>No. of matched products</i>	<i>Myanmar as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	1 565	2 235 512	5 467 057
China	2 212	2 678 044	284 778 469
India	2 133	2 592 452	31 005 583
Republic of Korea	2 201	2 651 498	111 460 699
Sri Lanka (2002)	1 811	1 981 431	5 012 624

*Source:* Calculated from the PC-TAS database, 2005.

### (f) Country report: Nepal

#### (i) APTA as market

India provides the largest market for Nepalese products of all APTA member countries, as can be seen in table 44. It will be seen that the imports of India rose from \$15 million in 1990 to \$274 million in 2003. The next important market is offered by China, whose imports amounted to \$5 million in 2003. During this period, the imports of Bangladesh also increased, from \$2 million to \$5 million. Imports into the Republic of Korea from Nepal amounted to only \$1 million in 2003.

**Table 44. Imports of APTA member countries from Nepal**

*(Value in millions of United States dollars and percentage share of world imports)*

<i>APTA members</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
<b>Value in millions of United States dollars</b>														
Bangladesh	2	0	0	0	1	4	6	11	14	9	4	4	5	5
China	5	1	1	2	2	0	3	10	5	8	7	5	5	5
India	15	19	23	19	14	27	49	87	132	178	238	262	285	274
Republic of Korea	1	1	1	1	0	0	1	0	0	0	4	1	1	1
Sri Lanka	0	0	24	0	1	1	0	5	1	0	0	0	0	0
<b>Percentage share</b>														
Bangladesh	0.04	0.00	0.01	0.01	0.01	0.06	0.09	0.16	0.19	0.11	0.04	0.05	0.07	0.05
China	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
India	0.06	0.10	0.10	0.09	0.05	0.08	0.14	0.21	0.31	0.37	0.47	0.44	0.42	0.39
Republic of Korea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sri Lanka	0.00	0.00	0.68	0.00	0.02	0.02	0.00	0.09	0.02	0.00	0.00	0.00	0.00	0.00

*Source:* IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

*(ii) Exports of products offered concessions*

At the end of the Third Round, India remained the main market for products offered concessions under both rounds, as can be seen in table 45. Nepal needs to negotiate new product concessions from APTA members to ensure its meaningful participation in the Agreement.

**Table 45. Imports of APTA member countries from Nepal: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China	Nepal	9	657	800	8 531	168	297
	World		1 484 181	1 824 564	2 010 328	2 356 145	2 491 267
	Share (%)		0.04	0.04	0.42	0.01	0.01
India	Nepal	30	38 592	49 195	47 148	35 745	15 351
	World		190 823	185 269	209 959	218 070	277 741
	Share (%)		20.22	26.55	22.46	16.39	5.53
Republic of Korea	Nepal	1	---	---	---	---	---
	World		---	---	---	---	---
	Share (%)		---	---	---	---	---

*Source:* Calculated from the PC-TAS database, 2005.

*(iii) Trade complementarities between the exports of Nepal and APTA imports*

Table 46 reveals that Nepal has good export-import complementarity with both China and India. The specific products in which Nepal has high trade complementarity are listed below.

**Table 46. Trade complementarities between the exports of Nepal and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	n.a.
China	0.576
India	0.694
Republic of Korea	0.064
Sri Lanka (2002)	0.059

*Source:* Estimated from the PC-TAS database, 2005.

China: Photographic or cinematographic goods (0.999); miscellaneous chemical products (0.997); pharmaceutical products (0.996); dairy, eggs, honey, and edible products (0.993); and wood and articles of wood, wood charcoal (0.940).

India: Miscellaneous chemical products (0.999); pharmaceutical products (0.961); headgear and other parts (0.952); wood and articles of wood, wood charcoal (0.952); and oils and resinoids, perfumery, cosmetic or toilet products (0.950).

Republic of Korea: Miscellaneous chemical products (0.998); soaps, waxes, scouring products, candles, modelling (0.970); photographic or cinematographic goods (0.960); dairy, eggs, honey, and edible products (0.957); and wood and articles of wood, wood charcoal (0.931).

Sri Lanka: Articles of leather, saddlery and harness, travel goods (0.999); cereals (0.998); animal or vegetable fats, oils and waxes (0.995); articles of iron or steel (0.991); and miscellaneous chemical products (0.991).

*(iv) Market for Nepal in APTA, by product*

Table 47 shows the number of export products that match APTA member's imports. Nepal needs to negotiate trade exchanges in products other than those with India.

**Table 47. Nepal as supplier and APTA as market, 2000**

<i>Market</i>	<i>No. of matched products</i>	<i>Nepal as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	n.a.	n.a.	n.a.
China	183	536 583	4 579 565
India	149	511 132	60 598
Republic of Korea	192	547 328	2 853 978
Sri Lanka (2000)	211	476 164	564 437

*Source:* Calculated from the PC-TAS database, 2005.

**(g) Country report: Pakistan**

*(i) APTA as market*

The imports of China from Pakistan increased from \$85 million in 1990 to \$575 million in 2003. The next important market for Pakistan is the Republic of Korea, whose imports increased from \$172 million in 1990 to \$231 million in 2003. The imports

of India from Pakistan have fluctuated, they were valued at \$54 million in 2003. In that year, Bangladesh and Sri Lanka imported \$95 and \$71 million respectively from Pakistan. China is the largest market of all APTA members for products from Pakistan, as can be seen in table 48.

**Table 48. Imports of APTA member countries from Pakistan**  
(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	70	57	88	90	110	138	90	69	73	85	93	86	60	95
China	85	89	92	96	162	223	342	379	390	390	456	582	557	575
India	45	58	146	47	47	37	39	42	172	105	65	73	54	54
Republic of Korea	172	292	210	179	239	280	283	222	150	211	263	320	267	231
Sri Lanka	51	74	67	55	61	52	69	38	91	95	72	74	66	71
<b>Percentage share</b>														
Bangladesh	1.92	1.68	2.36	2.25	2.40	2.12	1.30	1.00	1.00	1.02	1.04	0.95	0.76	0.99
China	0.16	0.14	0.11	0.09	0.14	0.17	0.25	0.27	0.28	0.24	0.20	0.24	0.19	0.14
India	0.19	0.30	0.63	0.22	0.19	0.11	0.11	0.10	0.41	0.22	0.13	0.12	0.08	0.08
Republic of Korea	0.23	0.36	0.25	0.21	0.23	0.21	0.19	0.15	0.16	0.18	0.16	0.23	0.18	0.13
Sri Lanka	1.93	2.41	1.93	1.38	1.44	1.16	1.46	0.72	1.45	1.51	1.08	1.29	1.09	1.06

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

(ii) *Exports of products offered concessions*

If Pakistan were to join APTA, its main market for products offered concessions under the two rounds would be China, followed by the Republic of Korea and Bangladesh, as can be seen in table 49.

(iii) *Trade complementarities between the exports of Pakistan and APTA imports*

Table 50 indicates that Pakistan has poor export-import complementarity with all APTA member countries except Bangladesh, with which it has moderate complementarity. However, those products in which it has high complementarity with APTA members are presented below.

Bangladesh: Cereals (0.999); animal or vegetable fats, oils and waxes (0.999); lac, gums, resins etc. (0.995); mineral fuels, oils, waxes and bituminous substances (0.991); and glass and glassware (0.964).

**Table 49. Imports of APTA member countries from Pakistan: products under National Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	Pakistan	32	---	---	---	---	49 961
	World		---	---	---	---	5 865 096
	Share (%)		---	---	---	---	0.85
China	Pakistan	53	271 541	366 452	431 324	408 277	401 081
	World		5 617 280	6 781 162	6 662 629	9 866 496	10 422 350
	Share (%)		4.83	5.40	6.47	4.14	3.85
India	Pakistan	5	---	---	---	---	---
	World		---	---	---	---	---
	Share (%)		---	---	---	---	---
Republic of Korea	Pakistan	33	28 133	---	30 878	28 097	---
	World		139 694	---	1 277 071	1 536 882	---
	Share (%)		20.14	---	2.42	1.83	---
Sri Lanka	Pakistan	9	---	---	---	---	---
	World		---	---	---	---	---
	Share (%)		---	---	---	---	---

Source: Calculated from the PC-TAS database, 2005.

**Table 50. Trade complementarities between the exports of Pakistan and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.309
China	0.060
India	0.030
Republic of Korea	0.055
Sri Lanka (2002)	n.a.

Source: Estimated from the PC-TAS database, 2005.

China: Ores slag and ash (0.999); musical instruments, parts and accessories (0.999); products of animal origin (0.990); organic chemicals (0.985); and tobacco and manufacture of tobacco substitutes (0.958).

India: Musical instruments, parts and accessories (0.995); pharmaceutical products (0.958); live trees and other plants (0.951); lac, gums, resins etc. (0.943); and impregnated, coated, covered, or laminated textile (0.941).

Republic of Korea: Musical instruments, parts and accessories (0.999); arms and ammunition, parts and accessories (0.991); manufacture of straw, esparto, or other plaiting materials (0.983); animal or vegetable fats, oils and waxes (0.981); and pharmaceutical products (0.978).

Sri Lanka: Musical instruments, parts and accessories (0.999); arms and ammunition, parts and accessories (0.991); manufacture of straw, esparto, or other plaiting materials (0.983); animal or vegetable fats, oils and waxes (0.981); and pharmaceutical products (0.978).

(iv) *Market for Pakistan in APTA, by product*

The number of export products that match the imports of APTA members is presented in table 51 below. The underlying global trade is also indicated.

**Table 51. Pakistan as supplier and APTA as market, 2003**

<i>Market</i>	<i>No. of matched products</i>	<i>Pakistan as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	778	7 148 550	3 816 884
China	1 265	12 076 310	133 749 436
India	1 267	12 074 041	71 574 783
Republic of Korea	1 117	11 345 726	34 866 738
Sri Lanka (2002)	n.a.	n.a.	n.a.

*Source:* Calculated from the PC-TAS database, 2005.

**(h) Country report: the Philippines**

(i) *APTA as market*

It will be observed in table 52 that in recent years China has become the largest market for exports from the Philippines, followed by the Republic of Korea and India. The import shares of China and the Republic of Korea have also risen.

(ii) *Exports of products offered concessions*

Table 53 shows that at the end of the Third Round, China, the Republic of Korea and India were the main markets for the Philippines, in descending order of importance.



**Table 52. Imports of APTA member countries from the Philippines**  
(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value in millions of United States dollars</b>														
Bangladesh	1	5	5	1	5	5	0	7	4	6	15	8	6	10
China	62	128	114	167	164	209	328	244	344	575	663	793	1 356	2 145
India	2	17	9	226	13	20	179	34	38	42	64	71	89	102
Republic of Korea	230	228	176	220	291	442	371	436	509	1 032	1 173	1 044	1 339	1 314
Sri Lanka	3	3	2	4	7	9	0	9	12	12	8	7	8	9
<b>Percentage share</b>														
Bangladesh	0.01	0.05	0.05	0.01	0.04	0.03	0.00	0.03	0.01	0.02	0.04	0.02	0.02	0.03
China	0.75	1.45	1.16	1.48	1.22	1.20	1.60	0.97	1.17	1.62	1.74	2.47	3.85	5.92
India	0.03	0.19	0.09	2.00	0.10	0.12	0.87	0.13	0.13	0.12	0.17	0.22	0.25	0.28
Republic of Korea	2.80	2.58	1.79	1.96	2.17	2.55	1.81	1.73	1.72	2.91	3.07	3.25	3.80	3.63
Sri Lanka	0.04	0.03	0.02	0.03	0.05	0.05	0.00	0.04	0.04	0.03	0.02	0.02	0.02	0.02

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

**Table 53. Imports of APTA member countries from the Philippines: products under National List of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	1999	2000	2001	2002	2003
Bangladesh	Philippines	147		--	--	--	959
	World	--		--	--	--	7 827
	Share (%)	--		--	--	--	--
China	Philippines	154	175 786	324 184	360 709	405 566	626 670
	World	--	42 407 853	54 253 998	59 358 512	73 450 096	102 771 513
	Share (%)	--	0.41	0.60	0.61	0.55	0.61
India	Philippines	47	3 330	4 441	5 119	4 965	6 373
	World	--	937 704	924 714	787 460	979 859	994 263
	Share (%)	--	0.36	0.48	0.65	0.51	0.64
Republic of Korea	Philippines	101	280 594	382 479	178 562	194 957	108 384
	World	--	26 983 638	42 357 842	36 019 098	34 647 046	40 784 965
	Share (%)	--	1.04	0.90	0.50	0.56	0.27
Sri Lanka	Philippines	1	n.a.	--	--	52	n.a.
	World	--	1 417	--	1 294	1 945	n.a.
	Share (%)	--	0	--	0	2.67	n.a.

Source: Calculated from the PC-TAS database, 2005.

(iii) *Trade complementarities between the exports of the Philippines and APTA imports*

The export-import complementarity of the Philippines with APTA member countries is shown in table 54. Even though the overall index of the complementarity does not appear to be very favourable, some products under the 2-digit HS code level show good complementarity. The list of such products is given below.

**Table 54. Trade complementarities between the exports of the Philippines and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.156
China	0.146
India	0.026
Republic of Korea	0.044
Sri Lanka (2002)	0.083

*Source:* Estimated from the PC-TAS database, 2005.

Bangladesh: Silk, including yarns and woven fabrics thereof (0.999); ships, boats, and floating structures (0.999); lac, gums, resins etc. (0.999); mineral fuels, oils, waxes and bituminous substances (0.997); and wool and fine or coarse animal hair, including yarns and woven fabrics thereof (0.997).

China: Ships, boats, and floating structures (0.999); miscellaneous edible preparations (0.983) sugars and sugar confectionery (0.970); pharmaceutical products (0.954); and animal or vegetable fats, oils and waxes (0.953).

India: Tobacco and manufacture of tobacco substitutes (0.989); paper and paperboard, articles of paper pulp (0.980); sugars and sugar confectionery (0.961); cereals (0.939); and headgear and other parts (0.9386).

Republic of Korea: Ships, boats, and floating structures (0.999); miscellaneous edible preparations (0.989); headgear and other parts (0.981); copper and articles thereof (0.972); and sugars and sugar confectionery (0.970).

Sri Lanka: Fur skins and artificial fur, manufactures (0.994); vegetable textile fibres not elsewhere specified, yarns and woven fabrics thereof (0.991); residues from food industries, animal feed (0.984); products of animal origin (0.980); and milling industry products (0.958).

*(iv) Market for the Philippines in APTA, by product*

The Philippines has a large number of exportable products that match the imports of APTA countries. The trade values are quite high, as can be seen in table 55.

**Table 55. Philippines as supplier and APTA as market, 2003**

<i>Market</i>	<i>No. of matched products</i>	<i>Philippines as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	1 162	14 566 260	1 837 889
China	1 949	32 857 112	296 907 674
India	1 777	31 853 466	47 276 141
Republic of Korea	1 977	32 594 192	126 652 694
Sri Lanka (2002)	1 552	1 979 991	3 589 515

*Source:* Calculated from the PC-TAS database, 2005.

**(i) Country report: Thailand***(i) APTA as market*

It can be observed from table 56 that China is by far the largest market of all APTA member countries for Thailand.

**Table 56. Imports of APTA member countries from Thailand**

*(Value in millions of United States dollars and percentage share of world imports)*

<i>APTA members</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
<b>Value in millions of United States dollars</b>														
Bangladesh	36	19	32	43	59	76	67	86	124	141	188	180	163	177
China	386	422	424	601	864	1 611	1 890	2 005	2 423	2 780	4 019	4 713	5 599	8 827
India	62	49	67	54	146	146	176	224	263	314	335	530	454	552
Republic of Korea	464	562	638	539	620	936	1 219	1 280	809	1 068	1 631	1 589	1 703	1 898
Sri Lanka	85	99	98	109	123	114	129	153	146	136	169	147	146	146
<b>Percentage share</b>														
Bangladesh	0.98	0.56	0.85	1.07	1.29	1.17	0.96	1.25	1.69	1.69	2.09	1.99	2.08	1.83
China	0.72	0.66	0.52	0.58	0.75	1.22	1.36	1.41	1.73	1.68	1.79	1.93	1.89	2.14
India	0.26	0.25	0.29	0.25	0.57	0.42	0.49	0.55	0.62	0.66	0.67	0.89	0.68	0.79
Republic of Korea	0.62	0.69	0.77	0.62	0.61	0.69	0.81	0.89	0.87	0.89	1.02	1.13	1.12	1.06
Sri Lanka	3.23	3.24	2.83	2.73	2.91	2.54	2.72	2.90	2.33	2.18	2.52	2.57	2.42	2.19

*Source:* IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

The imports of China from Thailand increased from \$386 million in 1990 to \$8,827 million in 2003, as can be seen in table 56. The next important market for Thailand is the Republic of Korea, whose imports from Thailand increased from \$464 million in 1990 to \$1,898 million in 2003. The imports of India also increased, from \$62 million in 1990 to \$552 million in 2003. During the same period, the imports of Bangladesh from Thailand increased from \$36 million to \$177 million, while those of Sri Lanka from Thailand rose from \$85 million to \$146 million.

(ii) *Exports of products offered concessions*

At the end of the Third Round, China, the Republic of Korea, India and Sri Lanka remained the most important markets for Thailand, as can be seen in table 57.

**Table 57. Imports of APTA member countries from Thailand: products under National Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
Bangladesh	Thailand	5	---	---	---	---	2 666
	World		---	---	---	---	48 337
	Share (%)		---	---	---	---	5.52
China	Thailand	479	1 042 259	1 693 975	1 659 304	2 032 139	2 649 947
	World		55 840 246	24 570 414	76 041 344	94 252 872	97 832 987
	Share (%)		1.87	6.89	2.18	2.16	2.06
India	Thailand	135	19 420	21 609	33 747	34 713	47 270
	World		7 074 527	6 429 887	6 237 985	7 947 126	9 313 891
	Share (%)		0.27	0.34	0.54	0.44	0.51
Republic of Korea	Thailand	212	191 123	350 257	333 218	381 851	366 810
	World		29 371 189	45 022 197	38 423 939	37 798 924	44 244 103
	Share (%)		0.65	0.78	0.87	1.01	0.83
Sri Lanka	Thailand	60	21 546	---	---	28 128	---
	World		292 811	---	---	299 122	---
	Share (%)		7.36	---	---	9.40	---

Source: Calculated from the PC-TAS database, 2005.

(iii) *Trade complementarities between the exports of Thailand and APTA imports*

Table 58 reveals that Thailand has good export-import complementarity with China and moderate trade complementarity with the Republic of Korea. A list of the products in which Thailand has good trade complementarity with APTA members is given below.

**Table 58. Trade complementarities between the exports of Thailand and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.221
China	0.558
India	0.157
Republic of Korea	0.325
Sri Lanka (2002)	0.182

*Source:* Estimated from the PC-TAS database, 2005.

Bangladesh: Tobacco and manufacture of tobacco substitutes (0.997); railway or tramway locomotives, rolling stock (0.996); products of animal origin (0.995); headgear and other parts (0.987); and cereals (0.986).

China: Tobacco and manufacture of tobacco substitutes (0.994); cereals (0.991); miscellaneous edible preparations (0.985); meat and edible meat offal (0.985); and live animals (0.980).

India: Arms and ammunition, parts and accessories (0.997); tin and articles thereof (0.994); impregnated, coated, covered, or laminated textile (0.969); headgear and other parts (0.945); and lead and articles thereof (0.926).

Republic of Korea: Tin and articles thereof (0.993); miscellaneous edible preparations (0.988); pulp of wood, waste and scrap of paper (0.981); headgear and other parts (0.975); and vegetable plaiting materials (0.943).

Sri Lanka: Ores slag and ash (0.996); live animals (0.994); vegetable plaiting materials (0.967); salt, sulphur, earth and stone, lime and cement (0.949); and pharmaceutical products (0.945).

*(iv) Market for Thailand in APTA, by product*

Table 59 reveals that Thailand has quite a number of export products that match the imports of APTA members. The trade values are also significant.

**Table 59. Thailand as supplier and APTA as market, 2003**

<i>Markets</i>	<i>No. of matched products</i>	<i>Thailand as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	2 063	55 610 692	6 083 887
China	3 561	77 634 989	379 044 582
India	3 281	72 734 042	68 611 940
Republic of Korea	3 585	77 999 869	153 831 690
Sri Lanka (2001)	2 715	53 846 883	4 989 824

Source: Calculated from the PC-TAS database, 2005.

### (j) Country report: Viet Nam

#### (i) APTA as market

China is the largest market among APTA member countries for Vietnamese exports, as can be seen in table 60. The imports of China from Viet Nam increased from \$1 million in 1990 to \$1,456 million in 2003. Imports into the Republic of Korea also increased from a negligible value in 1990 to \$511 million in 2003. The imports of India were valued at \$36 million in 2003.

**Table 60. Imports of APTA member countries from Viet Nam**

(Value in millions of United States dollars and percentage share of world imports)

<i>APTA members</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
<b>Value in millions of United States dollars</b>														
Bangladesh	0	0	1	1	5	1	1	6	2	7	11	3	3	2
China	1	11	73	123	191	332	308	357	217	354	929	1 010	1 115	1 456
India	59	38	59	44	50	15	1	7	9	11	12	50	57	36
Republic of Korea	0	41	58	91	114	193	232	226	184	264	322	386	470	511
Sri Lanka	12	0	36	0	3	0	19	3	7	7	9	8	5	8
<b>Percentage share</b>														
Bangladesh	0.00	0.00	0.02	0.02	0.10	0.02	0.01	0.09	0.02	0.08	0.12	0.03	0.04	0.03
China	0.00	0.02	0.09	0.12	0.17	0.25	0.22	0.25	0.15	0.21	0.41	0.41	0.38	0.35
India	0.25	0.20	0.25	0.21	0.20	0.04	0.00	0.02	0.02	0.02	0.02	0.08	0.09	0.05
Republic of Korea	0.00	0.05	0.07	0.11	0.11	0.14	0.15	0.16	0.20	0.22	0.20	0.27	0.31	0.29
Sri Lanka	0.45	0.00	1.02	0.00	0.07	0.00	0.40	0.06	0.12	0.10	0.14	0.14	0.09	0.12

Source: IMF, *Direction of Trade Statistics* CD-ROM, April 2005.

(ii) *Market for Viet Nam in APTA, by product*

At the end of the Third Round, the most important markets for Viet Nam remained China, the Republic of Korea and India, as can be seen in table 61.

**Table 61. Imports of APTA member countries from Viet Nam: products under National and Special Lists of Concessions – end of the Third Round (1999-2003)**  
(Thousands of United States dollars)

<i>APTA members</i>	<i>Imports from</i>	<i>No. of products</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>
China	Viet Nam	182	42 670	70 116	90 110	141 734	211 089
	World		16 852 835	30 605 699	31 326 598	36 554 227	46 148 896
	Share (%)		0.25	0.23	0.29	0.39	0.46
India	Viet Nam	14	2 184	1 348	1 227	2 050	2 288
	World		164 931	168 497	230 863	254 486	362 188
	Share (%)		1.32	0.80	0.53	0.81	0.63
Republic of Korea	Viet Nam	144	82 713	92 394	101 747	111 805	135 629
	World		23 276 507	37 378 240	31 450 610	29 922 092	34 936 148
	Share (%)		0.36	0.25	0.32	0.37	0.39
Sri Lanka	Viet Nam	6	1 078	---	---	---	---
	World		56 872	---	52 614	57 190	---
	Share (%)		1.90	---	---	---	---

Source: Calculated from the PC-TAS database, 2005.

(iii) *Trade complementarities between the exports of Viet Nam and APTA imports*

Table 62 shows that Viet Nam has good export-import complementarity with Bangladesh and Sri Lanka. The products in question are listed below.

**Table 62. Trade complementarities between the exports of Viet Nam and APTA imports, 2003**

<i>APTA members</i>	<i>Cosine index value</i>
Bangladesh	0.568
China	0.267
India	0.105
Republic of Korea	0.225
Sri Lanka (2002)	0.642

Source: Estimated from the PC-TAS database, 2005.

Bangladesh: Zinc and articles thereof (0.995); salt, sulphur, earth and stone, lime and cement (0.994); mineral fuels, oils, waxes and bituminous substances (0.987); lead and articles thereof (0.980); and nickel and articles thereof (0.979).

China: Umbrellas, sun umbrellas, walking-sticks, whips (0.994); nickel and articles thereof (0.993); preparations of cereals, flour, starch or milk (0.986); silk, including yarns and woven fabrics thereof (0.985); and knitted or crocheted fabrics (0.982).

India: Tin and articles thereof (0.990); nickel and articles thereof (0.988); fur skins and artificial fur, manufactures (0.975); miscellaneous edible preparations (0.942); arms and ammunition, parts and accessories (0.934); and explosives, matches, pyrotechnic products (0.917).

Republic of Korea: Live trees and other plants (0.994); nickel and articles thereof (0.993); tin and articles thereof (0.993); miscellaneous edible preparations (0.976); and pulp of wood, waste and scrap of paper (0.972).

Sri Lanka: Explosives, matches, pyrotechnic products (0.987); oils and resinoids, perfumery, cosmetic or toilet (0.978); pharmaceutical products (0.976); residues from food industries, animal feed (0.935); and lead and articles thereof (0.932).

(iv) *Market for Viet Nam in APTA, by product*

It can be observed in table 63 that quite a number of exports of Viet Nam match with the imported products of APTA members. The value of trade in these products is also considerable.

**Table 63. Viet Nam as supplier and APTA as market, 2003**

<i>Markets</i>	<i>No. of matched products</i>	<i>Viet Nam as supplier (thousands of United States dollars)</i>	<i>APTA members as market (thousands of United States dollars)</i>
Bangladesh	2 224	17 876 084	6 564 348
China	3 707	20 677 348	399 368 625
India	3 505	20 560 983	73 457 112
Republic of Korea	3 683	20 680 382	163 343 006
Sri Lanka (2002)	2 797	14 802 429	5 831 265

*Source:* Calculated from the PC-TAS database, 2005.



## 5. DEEPENING AND BROADENING THE SCOPE

As noted earlier, APTA has recently been subject to several revitalization measures under which major institutional changes have been made to provide it with greater legitimacy and relevance.

As a preferential trading arrangement based on a product-by-product positive list<sup>8</sup> approach, APTA reflects the mildest form of regional integration. This is an anomalous situation at a time when most regional trading arrangements the world over are moving to free trade agreements or areas on the basis of a negative list approach and even higher forms of regional integration. Further, considerable multilateral trade liberalization is in process within the context of the Doha Development Agenda under the World Trade Organization (WTO). This is definitely going to erode preferential margins (at present quite slim under APTA) in all regional trading arrangements. Thus, to be relevant, APTA must transform itself into a free trade area within a relatively shorter transition period than is the case of other competing regional arrangements.

It must be noted that the benefit to prospective member countries from accession would be only incidental to the concessions exchanged among present APTA members based on their request and offer lists. PMCs need to do a similar exercise targeting their own export capabilities. This study provides an illustrative list of such products in which their export capabilities could be matched with the import needs of APTA members; thus would become relevant if a Fourth Round of negotiations was undertaken.

It must be recognized further that most APTA members as well as PMCs have competing, multiple membership in other regional and bilateral trading arrangements, possibly offering them more favourable market access than APTA.<sup>9</sup> Thus, unless the Agreement is able to offer better opportunities in terms of market access, interest in it may be limited.

Article 6 of the Agreement refers to the obligation of Participating States to make information on non-tariff measures existing on conceded products available to one another on a transparent basis. In practice, however, the National List of Concessions only

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<sup>8</sup> Under a positive list approach, negotiations take place on a product-by-product basis, whereas under the negative list approach all products are liberalized with exceptions.

<sup>9</sup> To illustrate, India, Bangladesh, Sri Lanka and Pakistan are members of the South Asian Free Trade Area (SAFTA) while the former three countries are also members of the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC). Further, India has bilateral free trade agreements with Bhutan, Nepal and Sri Lanka in South Asia and with ASEAN, Thailand and Singapore in South-East Asia. Similarly, China has FTAs with ASEAN, and is negotiating one with India. The Republic of Korea has bilateral agreements with Japan; Hong Kong, China; and Chile. Pakistan is a member of the Economic Cooperation Organization and has a bilateral free trade agreement with Sri Lanka. Among PMCs, Bhutan is a member of BIMSTEC, while the Philippines has a bilateral free trade agreement with Japan and Thailand with Australia, to name only a few.

mentions the tariff measures, while no mention is made of the non-tariff measures existing on such products. This is a serious limitation of the negotiations and unless tariff measures are considered in tandem with non-tariff ones, the real magnitude of removal of trade restrictions remains ambiguous.

Further, in keeping with the current trends in all regional trading arrangements, APTA must quickly transcend its limited scope and engage in new areas such as investment and services and related facilitation measures.

Table 64 presents a comparative synoptic picture of different types of agreements on services, investment and intellectual property under various regional trading arrangements. Most North-South agreements, notably the bilateral FTAs of the United States of America and the European Union, have been important drivers. Most regional trading arrangements provide national as well as most-favoured-nation treatment (including fair and equitable treatment) to agreements on services and investment.<sup>10</sup> Furthermore, in the case of most South-South agreements, a requirement of establishment to provide services, a positive list approach to pre-establishment limitation for services and investment and WTO compatible performance requirements have been included. However, most of these arrangements do not incorporate provisions concerning the trade-related aspects of intellectual property rights (TRIPS). Given the diverse nature of the membership of ESCAP, consisting of least developed countries, developing and developed countries, the common features of South-South agreements would be more appropriate than those contained in North-South or North-North agreements.

In the context of widening the scope of APTA, particular reference could be made to the ASEAN model. Under the ASEAN Framework Agreement on Services, one of its objectives is to liberalize trade in services by expanding the depth and scope of liberalization beyond those undertaken by Member States under the General Agreement on Trade in Services (GATS) with the aim of realizing an FTA in services (article Ic). Under the Agreement, two or more Member States may proceed first if other Member States are not yet ready to implement these arrangements (article II.1). It adopts a positive list approach by providing for negotiations on measures affecting trade in specific service sectors (article IV.1). The Agreement provides for mutual recognition of “the education or experience obtained, requirements met, or licences or certifications granted in another Member State, for the purpose of licensing or certification of service suppliers. Such recognition may be based upon an agreement or arrangement with the Member State concerned or may be accorded autonomously” (article V.1).<sup>11</sup>

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<sup>10</sup> The exceptions to national and most-favoured-nation treatment in the case of services are European Union (EU)-South Africa, Southern African Development Community (SADC) and Japan-Singapore. In the case of investment agreements, the exceptions are EU-South Africa, EU-Mexico, the Caribbean Community and Common Market (CARICOM) and SADC.

<sup>11</sup> For details, see the ASEAN Framework Agreement on Services, in <[www.aseansec.org/6628.htm](http://www.aseansec.org/6628.htm)>.

**Table 64. Services, investment and intellectual property rights in regional trading arrangements**

Agreements	Services				Investment						Intellectual property
	National and MFN/ treatment market access <sup>a</sup>	Rule of origin (non-restrictive) <sup>b</sup>	Pre-establishment and limitation market access exceptions	Right to provide services without establishment <sup>d</sup>	Ratchet mechanism <sup>e</sup>	National treatment/ MF post establishment	Ownership limitation	Pre-establishment limitation <sup>f</sup>	Ban on performance requirement	Inter-State dispute settlement	
	1	2	3	4	5	6	7	8	9	10	
<b>United States (US):</b>											
US-Jordan	Yes	Yes	Negative List	No	No	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	Yes <sup>h</sup>
US-Chile	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
US-Singapore	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
US-Australia	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
US-CAFTA	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
US-Morocco	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
NAFTA	Yes	Yes	Negative List	Yes	Yes	Yes	Negative List	Negative List	TRIMS <sup>+</sup>	Yes	TRIPS <sup>+</sup>
<b>EU:</b>											
EU-South Africa	No	No	No	No	No	No	No	No	No	No <sup>g</sup>	Yes <sup>i</sup>
EU-Mexico	Yes	Yes	Standstill <sup>e</sup>	No	No	No	No	No	No	No <sup>g</sup>	Yes <sup>i</sup>
EU-Chile	Yes	Yes	Positive List	No	No	Yes	No	Positive List	No	No <sup>g</sup>	Yes <sup>i</sup>
<b>South-South</b>											
MERCOSUR	Yes	Yes	Positive List	No	No	Yes	No	Negative List	TRIMS <sup>+</sup>	Yes	No <sup>j</sup>
Andean Community	No	Yes	Positive List	No	No	--	No	Positive List	TRIMS <sup>+</sup>	No	No <sup>k</sup>
CARICOM	Not specified	Yes	Negative List	No	No	No	Yes	Positive List	No	Yes	No
ASEAN	Yes	Yes	Positive List	No	No	Yes	Yes	Positive List	No	No	No <sup>l</sup>
SADC	No	No	--	--	--	No	No	None	No	No	TRIPS
COMESA	Yes	No	Positive List	--	--	No	No	Positive List	No	No	No <sup>m</sup>

Table 64. (continued)

Agreements	Services				Investment						
	National and MFN/ treatment market access <sup>a</sup>	Rule of origin (non-restrictive) <sup>b</sup>	Pre-establishment and market access exceptions	Right to provide services without establishment <sup>d</sup>	Ratchet mechanism <sup>e</sup>	National treatment/ MF post establishment	Ownership limitation	Pre-establishment limitation <sup>f</sup>	Ban on performance requirement	Inter-State dispute settlement	Intellectual property
	1	2	3	4	5	6	7	8	9	10	11
<b>Others:</b>											
Japan-Singapore	No	Yes	Positive List	No	No	--	--	--	--	Yes	Yes
Canada-Chile	Yes	Yes	Negative List	Yes	Yes	--	--	--	--	Yes	--
Chile-Mexico	Yes	Yes	Negative List	Yes	Yes	--	--	--	--	No	--

Source: World Bank, *Global Economic Prospects* (Washington, D.C., 2005), table 5.1, p. 99 and pp. 121-123.

Notes:

<sup>a</sup> Includes fair and equitable treatment.

<sup>b</sup> Denial benefits only to juridical person that do not conduct "substantial business" in one of the member countries.

<sup>c</sup> Provides for future negotiation of commitments similar to GATS.

<sup>d</sup> Right of non-establishment, that is, no establishment required to supply a service.

<sup>e</sup> Autonomous liberalization is automatically incorporated into the agreement.

<sup>f</sup> Limits on equity shareholdings for companies in sectors other than those excluded from pre-establishment limitations.

<sup>g</sup> The Common Market of Eastern and Southern Africa (COMESA) does grant fair and equitable treatment to members, but not to non-members.

<sup>h</sup> The intellectual property provisions are considered TRIPS Plus. However, the chapter coverage is less specific and comprehensive than other subsequent United States free trade agreements.

<sup>i</sup> Requires only adherence to international conventions.

<sup>j</sup> The South American Common Market (MERCOSUR) agreement does not include intellectual property, but provides for inter-parliamentary committees to begin work on harmonization of intellectual property laws.

<sup>k</sup> The Andean Community regulates all patents.

<sup>l</sup> ASEAN has a framework agreement.

<sup>m</sup> Act 128(e) calls for the adoption of new patent laws.

<sup>n</sup> EU bilateral investment treaties provide for investor-State dispute resolution.

CAFTA = Central Americans Free Trade Agreement.

CARICOM = Caribbean Community and Common Market.

SADC = Southern African Development Community.

The ASEAN Member States signed an Agreement for the Promotion and Protection of Investments in 1987. This Agreement provides for fair and equitable treatment and treatment no less favourable than that granted to investors of the most favoured nation. It permits two or more Contracting Parties to negotiate to accord national treatment within the framework of the Agreement (article IV). The Agreement provides that investments of nationals or companies of any Contracting Party shall not be subject to expropriation, nationalization or any other measure equivalent thereto, except for public use or public purpose in a non-discriminatory manner and upon payment of adequate compensation (article VI). It provides for the repatriation of the capital, net profits, dividends, royalties, ... accruing from any investments of the nationals or companies of the other Contracting Parties (article VII).<sup>12</sup>

## 6. SUMMARY AND CONCLUDING OBSERVATIONS

On the whole, intra-APTA trade in products offered preferential concessions under the Second Round appears to have been buoyant for most of the Participating States during the reference period of the present study. In the case of Bangladesh, both value and value shares from other APTA members have been showing an upward trend, except with Sri Lanka. The imports of China, in terms of both value and value shares have also been showing an upward trend. The same can be said of the imports of India from other APTA member countries (except Bangladesh). The import value and value share of the Republic of Korea with India has also risen and remains stable with China. From the limited data, however, it is difficult to ascertain positively whether the improved buoyancy in trade has been due to tariff preferences offered under APTA or those offered under other regional trading arrangements, or again due to other unspecified general factors related to improving trade complementarities.

For Bangladesh, the most important markets for products under the Second Round were those of China, India and the Republic of Korea, while under the Third Round, China, the Republic of Korea and India were its most important markets. For China, the most important markets were the Republic of Korea, India and Sri Lanka for products under both the Second and Third Rounds. For India, the most important markets for conceded products under the two rounds were China, the Republic of Korea and Sri Lanka. For the Republic of Korea, the most important markets under both the Second and Third Rounds were China, India and Sri Lanka. For Sri Lanka, the most important markets for products under both the Second and Third Rounds were India, China and the Republic of Korea.

Countries matching good export-import complementarities include Bhutan with Sri Lanka; Cambodia with Bangladesh and Sri Lanka; Indonesia with all APTA members,

<sup>12</sup> For details, see Agreement among the Governments of Brunei Darussalam, the Republic of Indonesia, Malaysia, the Republic of the Philippines, the Republic of Singapore, and the Kingdom of Thailand for the Promotion and Protection of Investments in <[www.aseansec.org/6464.htm](http://www.aseansec.org/6464.htm)>.

except China; Mongolia with China and the Republic of Korea; Thailand with China; and Viet Nam with China and the Republic of Korea. Countries having moderate export-import complementarities include Pakistan with Bangladesh; Thailand with the Republic of Korea; and Viet Nam with China and the Republic of Korea.

Bhutan has good export-import complementarity with Sri Lanka; Cambodia with Bangladesh and Sri Lanka; Indonesia with all APTA member countries, except China; Mongolia with China and the Republic of Korea; Thailand with China; and Viet Nam with China and the Republic of Korea. Pakistan has moderate export-import complementarity with Bangladesh; Thailand with the Republic of Korea; and Viet Nam with China and the Republic of Korea.

Even for countries with overall low export-import complementarity, there are groups of products contained under each chapter that have good complementarity.

Thailand and Indonesia have the largest number of export products matching world import products of APTA member countries, followed by Cambodia, the Philippines and Pakistan. Bhutan and Nepal have a smaller number of matched products. Generally, the largest number of matched products is with China, followed by the Republic of Korea and India. The largest markets for these matched products are also generally in these three countries.

The countries most likely to benefit from accession to APTA are those which meet the following conditions:

- (a) The existing market in APTA countries is good and growing;
- (b) There are good market opportunities for products offered concessions under the Second and Third Rounds;
- (c) The existing share of prospective member countries in the total and preferential imports of APTA members is low;
- (d) Export-import complementarity and trade potential are favourable;
- (e) The depth of preferential margins is high and not neutralized by non-tariff barriers.

Taking note of the above considerations, the most favourable conditions for PMCs, in order of importance, may be classified as below

- Most favourable: Thailand, Indonesia, the Philippines and Viet Nam
- Moderately favourable: Pakistan, Myanmar and Mongolia
- Least favourable: Cambodia, Bhutan and Nepal

The study points out that even in the PMCs for which conditions are less favourable, particular sectors of high export-import complementarity with APTA members can be identified.

APTA has taken far too long to arrive at the present level of liberalization. However, with its revitalization and the accession of China to the Agreement, there are enhanced opportunities for deeper trade liberalization. The study has clearly revealed that considerable opportunities exist for new countries to accede to the Agreement. The PMCs of the Agreement may find that the large markets of China, the Republic of Korea and India offer opportunities to expand their regional market. The product-by-product analysis of products offered concessions under the Third Round of the Agreement shows that nearly all PMCs stand to gain substantially from accession to the Agreement. It has been observed that a large number of products offered concessions under the Third Round are being imported in large values to the concession-offering countries, even without the actual implementation of the preferences. The high preferential margins being offered by China and the Republic of Korea would allow these countries to increase their market shares in APTA member countries even further. At a later stage, ESCAP, being a wide regional grouping, could act as a bridge between other regional groupings such as ASEAN, the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) and the South Asian Association for Regional Cooperations (SARRC). The study further demonstrates the favourable export-import complementarities that exist in the PMCs which are also ESCAP member States in identified products with markets in APTA member countries. Their accession to APTA would enable them to target their export opportunities in a more focused manner to the markets of the original Participating States.

While APTA has to some extent been revitalized in the context of global changes, which is reflected in its amended Agreement, its scope and objectives continue to be defined by traditional approaches to regional integration that emphasize primarily the lowering of customs tariffs. Even this limited area has not been adequately addressed by not factoring in the incidence of non-tariff barriers, and the very slow and protracted nature of negotiations based on the positive list approach. It is time for the member States to move speedily to an FTA instead of moving to yet another round of negotiations under a positive list approach. While doing so, APTA needs to widen its scope and objectives along the lines of South-South regional trading arrangements. This study emphasizes the relevance of the ASEAN experience in this regard.

Perhaps the most important potential of APTA lies in the very broad region-wide framework of ESCAP, which consists of 53 members and 9 associate members. In the context of Asian regionalism it could therefore constitute a building block for region-wide integration.

The present study has been limited to countries that have shown interest in joining the Agreement and whose benefits, should they join the Agreement, would be incidental and not directed. It is recommended that a similar study be undertaken analysing the potential benefits for all members of ESCAP from potential APTA member countries, in particular those countries which are currently engaged in various other existing regional trade arrangements. A database highlighting best practices could also be set up to facilitate such analysis and to achieve truly region-wide trade integration.



## TECHNICAL APPENDIX

### Cosine measure of complementarity

The degree of complementarity and competitiveness in the production and trade structure of member countries of a regional group has been discussed widely in the literature on international trade, particularly in the context of the formation of the customs union. It is generally believed that a customs union creates a more beneficial impact among complementary economies than competitive ones. This hypothesis is based on the assumption that the complementary economies have a different production structure while the competitive economies have a similar production structure.

One measure or index designed to estimate complementarity of trade between pairs of countries is known as the “*Cosine measure*” of trade complementarity developed by Linnemann.<sup>13</sup> The index is estimated on the basis of the cosine of the angle between the vector of exports of one country with the imports of another country or vice versa in an  $n$ -dimensional commodity space. In other words, it gives an idea of the extent to which the export structure of one country matches the import structure of another, and vice versa. The formula of the index is as follows:

#### Export-Import Similarity (EIS):

$$\sum_k X_{ik} * M_{jk} / \sqrt{(X_{ik}^2 * M_{jk}^2)}$$

or

#### Import-Export Similarity (IES):

$$\sum_k M_{ik} * X_{jk} / \sqrt{(M_{ik}^2 * X_{jk}^2)}$$

where  $X_{ik}$  = exports of  $i$ th country in commodity class  $k$  to the world and  $M_{jk}$  = imports of  $j$ th country in commodity class  $k$  from the world.

The value of the measure lies between 0 and 1. In the absence of any complementarity and in the presence of perfect complementarity, the measure takes the extreme value of zero and one. The movement from 0 to 1 is an indication of the increasing trade complementarity between the two countries. The cosine measure could also be considered as an indicator of the extent of competitiveness between the two countries. A lower value of the cosine measure would indicate that the two countries have potential competitiveness rather than potential complementarity.

<sup>13</sup> H. Linnemann, *An Econometric Study of International Trade Flows* (Amsterdam, North Holland Publishing), 1996.

Generally, for the purpose of classification, the following may be considered:

- (a) *Low Potential* (LP) as under the range of more than 0.001 but less than 0.250;
- (b) *Moderate Potential* (MP) as under the range of more than 0.250 but less than 0.550;
- (c) *High Potential* (HP) as under the range between 0.550 and 1.000.