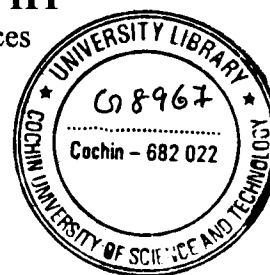


**A STUDY ON INDIA'S TRADE RELATIONSHIP  
WITH SAARC COUNTRIES  
WITH SPECIAL REFERENCE TO SAPTA**

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Thesis submitted to the  
**Cochin University of Science and Technology**  
for the award of the Degree of  
**DOCTOR OF PHILOSOPHY**  
Under the Faculty of Social Sciences



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## **CERTIFICATE**

This is to certify that the thesis entitled “ **A STUDY ON INDIA’S TRADE RELATIONSHIP WITH SAARC COUNTRIES WITH SPECIAL REFERENCE TO SAPTA**” submitted by Shri. *M. Venkatesh* for the award of the Degree of Doctor of Philosophy by the Cochin University of Science and Technology is a record of bonafide research carried out by him under my supervision and guidance. The thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title of recognition.

**Prof. (Dr.) P. Sudarsanan Pillai**  
**(Research guide)**

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### **List of Abbreviations**

<b>ADB</b>	Asian Development Bank
<b>ASEAN</b>	Association of South-East Asian Nations
<b>CEC</b>	Committee on Economic Cooperation
<b>CIS</b>	Commonwealth of Independent States
<b>ESCAP</b>	Economic and Social Commission of Asia and Pacific
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>FTA</b>	Free Trade Agreement
<b>GDP</b>	Gross Domestic Product
<b>GEP</b>	Group of Eminent Persons
<b>GNH</b>	Gross National Happiness
<b>GNP</b>	Gross National Product
<b>IGG</b>	Inter Governmental Group
<b>IMF</b>	International Monetary Fund
<b>IPA</b>	Integrated Program of Action
<b>IPR</b>	Intellectual Property Rights
<b>JVs</b>	Joint Ventures
<b>LAIA</b>	Latin American Integration Association
<b>LDCs</b>	Least Developed Countries
<b>MNEs/Cs</b>	Multi-National Enterprises/Companies
<b>NAFTA</b>	North American Free Trade Area

<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OPEC</b>	Organisation of Petroleum Exporting Countries
<b>PTA</b>	Preferential Trading Arrangements
<b>RBI</b>	Reserve Bank of India
<b>RCA</b>	Revealed Comparative Advantage
<b>REA/REI/C</b>	Regional Economic Association / Integration / Cooperation
<b>RECSA</b>	Regional Economic Cooperation in South Asia
<b>RTA</b>	Regional Trading Arrangements
<b>SAARC</b>	South Asian Association for Regional Cooperation
<b>SACU</b>	Southern African Customs Union
<b>SADC</b>	Southern African Development Community
<b>SAFTA</b>	SAARC Free Trading Agreement
<b>SAPTA</b>	SAARC Preferential Trading Agreement
<b>SCCI</b>	SAARC Chamber of Commerce and Industry
<b>SITC</b>	Standard International Trade Classification
<b>SMCs</b>	Small and Medium Countries
<b>TMS</b>	Trade, Manufacture and Services
<b>TRIPS</b>	Trade-Related aspects of Intellectual Property Rights
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>USA</b>	United States of America
<b>WTO</b>	World Trade Organisation



## **CHAPTER – I**

### **INTRODUCTION**

In today's world no nation exists in economic isolation. A nation's economy, its industries, service sectors, levels of income and employment and living standards are linked to the economies of its trading partners. The benefits of international trade accrue in the forms of lower domestic prices, development of more efficient methods and new products and a greater range of consumption choices. In an open trading system, a country will import those commodities that it produces relatively at a higher cost. Since resources are channeled from uses of low productivity to that of high productivity, gains from trade are attained permitting higher levels of consumption and investment.

Over the past 20 years, world trade has grown twice as fast as real GDP deepening economic integration and raising living standards<sup>1</sup>. The role of foreign trade in economic development is considerable and both are intimately connected. Trade can stimulate growth if exports are tending to increase faster than imports or be a brake on growth if imports are tending to increase faster than exports.

The dramatic growth of cross-border investment and international trade over the past two decades combined with explosive growth in global communications and technology. The FDI<sup>4</sup> flow, which was \$160 billion in 1991 soared to \$1.1 trillion in 2000. And the volume of international trade also expanded dramatically

to 16 fold over the past 50 years, are an evident for well being of the nations through open trading system. However, it is generally accepted that the gains to a nation from free international trade may more than outweigh the losses to particular domestic firms and workers. Although free trade is often strongly advocated, many countries believe that the expansion in trade is best accomplished through the establishment of Regional Economic Association (REA) / Integration (REI). However, the emerging WTO regime has in no way undermined the process of regionalism. It has wide ranging implications for the global economy.

The South Asian Association for Regional Co-operation (SAARC) comprises the seven countries of South Asia. i.e., Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. SAARC is a manifestation of the determination of the people of South Asia to work together towards finding solutions to their common problems in a spirit of friendship, trust and understanding and to create an order based on mutual respect, equity and shared benefits. The primary objective of the Association is the acceleration of the process of economic and social development in member states, through collective action in agreed areas of co-operation

South Asian nations<sup>11</sup> have not only a shared culture and a common history, but also, a common destiny in the 21<sup>st</sup> century. South Asia constitutes 3% of world area, but houses 22% of the world's population. South Asia also makes an

integrated condominium of common rivers, mountain system, ocean and a conjoint ecological system.

The region suffers from massive balance of payments burden, mass unemployment, high population growth rate, large concentration of poverty, low rate of economic growth, constant food shortage, worsening terms of trade, largely illiterate, considerable malnourished, and also the least gender sensitive region of the globe.

The combined GDP<sup>4</sup> of South Asia US \$ 609 trillion is only 1.8% of the world GDP. Unsurprisingly therefore, per capita incomes are low. In 2000 the average per capita income stood at \$ 490 and therefore poverty is a serious problem confronting the south Asian economies.

The South Asian economies differ rather significantly in size. For example<sup>3</sup>, India accounts for more than three-fourth of the region's GDP while Sri Lanka and Nepal contribute only 2.7% and 0.9% to the regional GDP respectively. Pakistan and Bangladesh comprise medium sized economies in the region and account for 11.7 and 8 percent respectively of the regional GDP. There are also sharp variations in per capita incomes across the countries, Sri Lanka's per capita income (US\$ 860) is over three times that of Nepal (US\$ 241). Whereas Bangladesh, India, and Pakistan's per capita income is US\$ 373, 459, and 516 respectively.

The Imports<sup>4</sup> of South Asia increased from \$37.7 billion in 1990 to \$78.1 billion in 2000, indicating an annual growth rate of 9.8 percent, but the Exports increased at a more rapid rate of 12.06 percent, from \$27.3 billion in 1990 to \$65.2 billion in 2000. India's bilateral trade with the SAARC countries accounts for a small share in her trade. India's Imports from SAARC countries increased marginally from 0.54% of the total Imports in 1991 to 0.73% in 2000. Whereas, the Exports rose to 4.43% in 2000 compared to 1.78% in 1991 (More than doubled).

Due to the growing protectionist tendencies in the international market and the increasing competition among suppliers, particularly in the developing world, the need to evolve feasible strategies for regional economic co-operation in South Asia is becoming more and more apparent. This is evidenced by the recent tempo of activities in this regard in the South Asian region. Increased regional economic co-operation would help reduce the economic dependence of the South Asian countries on the developed countries in the future. Given the possibility that trade with the rest of the world does not offer very happy prospects in the future, intra regional trade could facilitate growth and development of the South Asian countries on the basis of the regional self-reliance. Such regional economic co-operation is considered feasible because intra regional, historical, cultural, geographical and developmental commonalities are much stronger than intra regional differences in political and economic structures and perspectives. Besides, the sub continental economy of the South Asian region offers potentially

vast and undeveloped markets, and is blessed with huge endowments of material and human resources. Against this background, the present study attempts to review the trade structure and technological flows among SAARC countries and to indicate a few areas for future co-operation. Also undertakes a detailed analysis of the pattern of “revealed Comparative” advantage and the extent of trade complementarity in South Asia, with a view to ascertaining whether or not the SAPTA (Saarc Preferential Trading Agreement) and the existing trade structures of individual countries can support the regional economic co-operation initiatives.

#### **1.1 STATEMENT OF THE PROBLEM :**

The International economic environment and the global political balance have undergone revolutionary changes since the beginning of 1980s. The Introduction of this development has consequently led to a continuous erosion of multilateral frame work of trading system: increasing internationalization of production, application of various protective unfair trade policies and comparative disparity on the distribution of benefits from the existing trading system. Further, the formation of regional grouping of organizations has become a trend in the world economies since the post world war-II, not only to strengthen gradual economic integration for overcoming barriers of global trade policies but also to exploit the potential of complementarities for a better allocation of available resources to mutual comparative advantage.

The trend towards excessive regionalisation of world markets vis-à-vis the formation of different regional blocks have created a common threat to the prospects of a multilateral trading system and opening door for bilateralism, despite the efforts of WTO to evolve a multilateral free trading system under the frame work of new round of trade negotiations.

Since the late 1950s more than forty economic co-operation and association arrangements have been formed among developing countries<sup>5</sup>. Their experience has shown that most of them disintegrate prematurely in an atmosphere of hostility and recrimination or otherwise they became inactive and continue to exist but only on paper. It is possible to assess the success of regional economic co-operation among developing countries only in the longer term i.e., after the development of a productive sector capable of responding to increases in inter regional demand. Further, REA (Regional Economic Association) is necessary among developing countries in order to increase the group's bargaining power in its economic and sometimes political external relations.

SAARC was founded by the Dhaka declaration of 1985 as a regional grouping of seven South Asian developing countries viz., Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Srilanka. After successful establishment of SAARC as an association for political affairs, all the seven countries literally agreed to form a regional block for economic activities. That dream came to realize ultimately when SAPTA was founded on 11<sup>th</sup> day of April 1993.

The main aim of the present study is to analyse India's foreign trade with SAARC countries individually and with the Region (which is consortium of less developing countries) as a whole under SAPTA agreement and to investigate the changes before and after the formation of SAPTA. This study on the changes in India's foreign trade from 1991-92 to 1999-2000 is expected to be useful in evolving suitable policy prescriptions that would lead to improving the trade with SAARC countries and there by improving the country's balance of payments position.

## **1.2 SIGNIFICANCE OF THE STUDY :**

Foreign Trade assumes significance because they form the core component of the process of country's growth and employment generation. Therefore it becomes a matter of paramount importance to study the various options for improving the Foreign Trade relationship with various countries and developing countries in particular. Our experience with European Union market for Indian exports and various rigidities in terms of newer trade barriers makes us to think of the possibilities of improving and diversifying trade to the countries closer to us. An enquiry into the achievements of SAPTA, its problems and prospects is extremely significant in this context.

### **1.3 OBJECTIVES OF THE STUDY :**

Following are the specific Objectives of the present study:

1. To analyze the trends in India's aggregate exports and imports for the period 1991-92 to 1999-2000.
2. To analyze the SAARC intra regional trade before and after implementation of SAPTA
3. To facilitate in identifying the appropriate Policy instruments and strategies for achieving the objectives of regional economic co-operation.
4. To study the possibilities for promotion of Intra-regional trade through Preferential trading arrangements, Joint ventures, Technology Transfer and Investments.
5. To outline the scope for Co-operation in areas like Regional projects, Physical infrastructure and Regional Tourism.
6. To make recommendations to improve and consolidate India's trade with SAARC countries.

### **1.4 HYPOTHESIS :**

- (1) SAPTA has not led to improvement of India's Trade with SAARC countries
- (2) There is no Trade Complementarity that exists between SAARC countries



## **1.5 METHODOLOGY :**

The methodology followed in this study is a broad analytical framework encompassing the various facets of regional economic co-operation. This framework is considered useful for two important reasons. The first is that it provides a rational basis for establishing regional economic co-operation. This helps in removing the apprehensions about the prospects of regional economic co-operation. Specific commodities/products and industries have been identified for the expansion of intra-regional and intra-industry trade and for the establishment of joint ventures in the member countries. The second reason is that this framework also facilitates in identifying the appropriate policy instruments and strategies for achieving the objectives of regional economic co-operation. The study has also outlined the supporting institutional mechanisms in areas related to trade and investment. Such mechanisms often play a crucial role in strengthening the efforts of regional economic co-operation.

Furthermore, The issues concerning regional trade liberalization are many, and to understand the ground realities, there is a need for having varieties of databases and adoption of number of suitable approaches. In this study we have attempted to examine intra-regional trade over a period of time. In the context of existing intra-regional trade, attempt has been made to examine coverage and effectiveness of each round of SAPTA on individual member countries.

### **1.5 (A) Sources of Data and Tools of Analysis :**

For the purpose of the study, both Primary and Secondary data were used. Primary data are collected through interviews and discussions with the traders/agents to get their views on improving the trade relationship with SAARC countries. For examining Intra-regional trade among SAARC member countries, we have used data provided by Direction of Trade Statistics, IMF, World Bank, ADB, RBI, plan documents of Government of India, Study reports of the various Universities, Directorate of Industries etc., To trace the bilateral and intra-regional trade behavior, we have used time series data for the period 1990-2000. For data on Tariff and non-tariff barriers and Concessions, the information provided by the SAARC Secretariat is used. It may be noted that different rounds of SAPTA were signed and implemented at different points of time. We used “before and after” approach to examine the effectiveness of each round of SAPTA on India from the specific supplying partner country.

In Balassa’s RCA index<sup>8</sup>, it is argued that if a country exports a relatively substantial part of its domestic production and if this performance index is better than the internationally practiced norms, the product is considered to be competitive. We have used the same logic to identify the potential product for each country. Similar to Balassa’s argument, it may be argued that a country has competitiveness in those products, which are exported substantially as compared to other products in the export basket of the country.

Various Journals, Books, Working Papers etc., also form the sources of Secondary data.

#### **1.5 (B) Sampling Design :**

The Primary data were collected using multiple methods such as Questionnaire, Interviews and Discussions. Discussions method was largely used. A list of registered companies and traders who are actively dealing with Saarc countries was obtained from the offices of the Joint Director General of Foreign Trade, Kochi, Bangalore and New Delhi. This list had 32 organisations from Kochi, 116 organisations from Bangalore, and 200 from Delhi. To restrict the sample size to 100 and to give equal representation to all the three regions, all the 32 organisations of Kochi and 34 Organisations each from Bangalore and Delhi region were randomly selected. Questionnaires were sent to all the 100 organizations. However 9 Organisations from Kochi, 2 from Bangalore, and 5 from Delhi did not respond. After receiving the completed questionnaires, the researcher personally interviewed officers of the organisations for further clarifications. Repeated visits were required in some of the cases.

Interviews and discussions were also held with Experts/Academicians/Research Scholars etc., to get a deep insight into the problems, prospects and policy formulations etc., in the SAARC region.

The Data collected were edited, processed and analysed using appropriate statistical tools.

On the basis of analysis, conclusions are drawn and recommendations are made.

#### **1.6 SCHEME OF THE STUDY :**

The scheme of the thesis is as follows :

The first Chapter contains the Introduction, Objectives of the study and Methodology of the study. In chapter II Review of literature is outlined. In Chapter III Origin and Development of Regional Economic Integration has been discussed. Chapter IV contains two sections viz., (a) analysis of Revealed Comparative advantage (b) Trade Complimentarity. An overview of Analysis of Intra-regional Trade of SAARC countries is presented in chapter V. Regional Co-operation in Other Areas viz., Possible opportunities/promotion of trade through Investments, Joint ventures and Technology Transfers, Physical infrastructure, Regional Projects, Regional Tourism and Energy Co-operation etc., is discussed in Chapter VI. Summary, Recommendations and Conclusions have been detailed in Chapter VII.

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## **CHAPTER - II**

### **REVIEW OF LITERATURE**

The existing literature on the subject provides mixed responses on the implications of different rounds of SAPTA on regional trade. It is noted that a limited number of studies have been conducted on the subject and few of them are selected and reviewed in three parts. The first part is of general nature and consists of all those studies, which examine the association between trade and development/economic growth. It also deals with the studies those connected with the estimation of export and import functions in particular. In the second and third part, some of the studies, which are connected with the intra-SAARC trade and studies related to SAPTA are reviewed respectively.

#### **2.1 General Studies :**

Ransi Sahney and William DipPietro<sup>1</sup> pointed out that in recent years investigation of the relationship between export expansion and economic growth has received considerable attention in the literature. The findings strongly support the argument that export expansion leads to higher economic growth thereby suggesting the overall superiority of an export led growth strategy for development to one of import substitution. The theoretical argument maintained in the study is that export expansion results in both more efficient use of resources and adoption of latest technology. Hence the authors state that several empirical

studies assessing the importance of exports for economic growth in developing countries have used exports as a factor of production by estimating production function based growth equation. DiePietro and Sahney conclude from their findings that export expansion contributes to overall economic growth and that the importance of exports changes with the level of development.

Kaorussi investigated the relationship in a sample of 73 countries. Using data for the period 1960-78, he found that export expansion is associated with better economic performance for both groups low as well as middle-income countries. He also tried to determine through examining the commodity composition of exports, how the relationship between the growth of exports and economic growth is affected by the extent of development.

Sukumar Nandi and Basudeb Biswas<sup>2</sup> have done empirical work to investigate the relationship between exports and economic growth in India. Their econometric results show that in Indian context, causality runs one way i.e., export growth causes growth of national income and hence they conclude that it leads to support the hypothesis that exports can help economic growth of a country. However, they do point out that this is contrary to the view in the literature that export growth cannot be helpful in the context of countries like India. Nandi and Biswas do admit that the study done is based on Indian data only and that a more broad based study covering a number of countries may shed more light in this direction. Empirical investigations reveal that the developing

countries' import demand of various goods has been sensitive to relative price differences on the one hand, between imports and domestically produced goods and on the other, between imports from developing and from developed countries. These results support the view that growing trade among developing countries, in particular, their imports from each other has not been due merely to income growth but relative price differences between developed and developing country suppliers have played a major role.

Prabirjit Sarkar<sup>3</sup> examines the patterns of trade movements of inter-regional terms of trade between the developing and developed market economies for the period 1950-80. He comes to the conclusion that the post-second world war period saw a tremendous growth in world trade in merchandise. During the three decades (1950-80), world exports and imports (of visible) rose at an abnormal growth rate of about 11 percent. Over the three decades the rates of growth accelerated from 6.4 percent during 1950-60 to above 9 percent during 1960-70 and further to above 10 percent in the last decade, 1970-80.

V.L.Rao<sup>4</sup> states that foreign investments into India as a result of the trade policy changes announced since July 1991, is encouraged to increase at a faster rate. Foreign investors urged India to allow foreign firms to hold 100 percent stake in subsidiaries, cut tariffs and improve infrastructure. He states that trade reforms and other economic reforms are a good thing for any country. However, their usefulness depends on a credible and stable macro economic framework and



the institutional and other mechanisms to implement and sustain the reforms. Emphasis should shift from debates on market vs. State, liberalization vs. non-liberalization and privatization vs. Nationalization to (a) identifying the optimal form and sequencing of economic liberalization and (b) effective Government business partnership.

Sen and Das<sup>5</sup> points out that trade policy in India has been subject to significant shift since the beginning of the 1990's. Their observations are that, the policy of import liberalization implemented since early nineties seems to have inflated the import bill by causing expansion in the volume of imports both in absolute terms and as proportion to GDP when both imports and GDP are measured in current prices. The export link to imports seems to have lost its purpose especially with the premium based incentives to exporters open to sharp fluctuation and down trends. The export linked import licensing has contributed to an increase in the value of licenses issued.

M.S.Rao<sup>6</sup> has well reviewed recently some of the studies in which either import or export or both functions are estimated by Ordinary Least Squares (OLS) method and thereby computed income and income and price elasticity. Here a brief review of recent studies is presented. Murthy and Sastry estimated export function for India by using export price, world real income, domestic industrial activity and time as explanatory variables. The function is estimated for India's aggregate exports as well as for individual export items. For the period 1950-62,

Da Costa estimated a linear export function in which industrial activity abroad was taken as one of the explanatory variables in addition export prices and world income. He estimated a linear export function in which industrial activity abroad was taken as one of the explanatory variables in addition to export prices and world income. He estimated export functions for India with regard to some individual world countries and for selected consumer goods and raw materials. By using both linear and log linear forms. Wadhwa estimated price and income elasticity for 1954-70, explanatory variables being export prices and world income. World exports was used as a proxy for world income in his study. Biswas also estimated export demand elasticity with respect to price and world income by using data pertaining to India's exports from 1952-53 to 1972-73. In his study, while using world exports as a proxy for world income, India's exports were not excluded from world exports. He used variables in current prices as well as constant prices. In his analysis of India's engineering exports, K.C.Reddy estimated aggregate export function in which the explanatory variables are domestic demand for the products, world demand, export prices and a policy variable. In a similar way, D. Harinarayana analyzed the determinants of engineering exports at the aggregate level. RITC division as well region wise and the study also included country wise analysis at disaggregate level. The explanatory variables included are relative prices (ratio of price for India's engineering goods to the price of engineering exports of the competitors), world income, domestic demand and the growth of import substitution. In most cases, these variables are considered to be significant. M.S. Rao as a part of his study,

estimated exports and import functions for the data pertaining to 1962-85. Income and price elasticity were estimated for India's aggregate exports as well as for individual commodity groups. In his study, world exports was used as a proxy for world income as it was done in most of the studies. In many studies reviewed above, export price and income elasticity are less than one. While import price and income elasticity are more than one in some studies, it is observed that they are less than one in others. Further the import price elasticity is positive in certain cases and negative in others.

## **2.2 SAARC STUDIES :**

Raj Pandey examines the prospects of Trade Expansion in the SAARC region. The Association was set up to accelerate the process of economic, social and cultural development and promote and strengthen collective reliance through joint action in certain agreed areas of co-operation. His conclusion is that though the trade performance of the region and the countries individually has been quite impressive (they achieved far higher rates of export growth during the 1986-87 period than the developing countries) they have experienced huge and progressively increasing trade deficits which may partly explained by their inability to create export surplus and partly because of a weak world growth environment. He uses the trade intensity index to measure the extent to which one country's share in another country's exports (imports) is larger or smaller in relation to the former. The major conclusion emerging from the above analysis is that the fundamental cause for the existing low level of intra-regional trade is the

presence of low degree of complementarities in the production and trade structures of the countries of the region.

N.N. Dhuldaya<sup>7</sup> remarked that no South Asian country would be able to enjoy the fruits of development if it did not join hands with others in the region. Further, there would also be a possibility of other well-graded countries from outside the regional shaping the destinies of ungrouped ones. He stated that a set of guiding principles, the complementarities of interests, subsidiary of functions, identification of specific areas of inter-regional co-operation and mutual understanding on international trade in terms of common interest would help. Further, according to him there would also be freedom of operation across physical front to get the most out of available resources. As reported in the Financial Express, SAARC has made remarkable progress in terms of preparing a comprehensive regional study on the “causes and consequences of natural disasters and the protection and preservation of the environment”. The committee on Environment, which was subsequently established, is fully engaged in the task of translating the recommendations of the study into concrete programs and activities.

Arif A. Waquif<sup>8</sup> examined the development from SAARC to RECSA. India, Bangladesh, Nepal, and Sri Lanka formed the Committee on Studies for Co-operation in Development (CSCD) in South Asia, which began its exploratory regional research program in 1977-78. In the first phase 1977-78 to 1982-83, the

CSCD initiated and coordinated exploratory research primarily in the areas of Regional Economic Co-operation in South Asia (RECSA). These studies dealt mostly with potential areas of regional co-operation in trade and natural resources and infrastructure development. During its second phase, the CSCD organized regional research studies in other potential areas of co-operation including foreign exchange payments, industry, energy, technology and even politics and interregional relations. The third phase is collaboration with an increasing number of institutions and expanded still further the scope of CSCD studies into areas like collaborative regional industrial development and co-operation in media. He argues that bilateral issues and political militants should not hinder the growth of regional economic co-operation between SAARC countries. The benefits of such co-operation and the costs of non-co-operation are both substantial. What will accelerate the movement from SAARC to RECSA is the underlying belief supported by the analysis of the benefits of co-operation and the costs of non-co-operation that regional co-operation may be difficult but it must succeed.

Indra Nath Mukherji<sup>9</sup> analyses the preferential trading arrangement. He points out that preferential trading arrangement is the mildest form of integrative arrangement among participating states since it implies neither the function of a free trade area nor the establishment of Customs Union. The proposal for South Asian Preferential Trading Arrangement (SAPTA) seeks to establish formal and full-fledged preferential trading arrangement within the institutional framework of

SAARC in a phased out manner by progressive, across the board reduction in all tariffs and complete standstill and roll back of all non-tariff barriers to the expansion of intra-regional trade. One of the foremost objectives of SAPTA should be to eliminate discriminatory trade practices among members. The second objective should be to freeze the current incidence of both tariff and non-tariff barriers to trade among the member countries. The next step for member countries of SAPTA would be to extend preferential tariffs to each other. The proposal for SAPTA must take note of the existing preferences exchanged among SAARC countries along with other developing countries.

A.R. Kemal<sup>10</sup> examines the prospects for trade development in South Asia. He comments that the low level of trade among South Asian countries is very disturbing. It is often seen that when a South Asian country is importing a certain product from outside the region, the same product is being exported by a neighboring South Asian country to countries other than those of the region. The factors responsible for this he cites are differences in specifications, resource constraints, communication gaps and restrictive trade policies.

According to the study made by the Research and Information System<sup>11</sup> Expansion of trade between the SAARC countries has more profound economic basis than achievement of regional self-reliance. The study says, "Potential for expanding economic co-operation among regional countries, remains largely untapped". Potential areas of intra SAARC trade identified by the study include

iron ore, natural rubber, tea and coffee among primary commodities and minerals. Major areas for joint ventures and technology transfer include food processing industries, textiles and other products, metals and allied products, electrical equipment and machinery, chemicals, plastic products and energy. L.P. Srivastava, in his study, comments that economically South Asian nations have many things in common and are agriculturally and industrially better developed than many other developing regions. Their strong point is adequate trained manpower to usher in a factor pace by economic and industrial co-operation.

Fernando studies the prospects of trade liberalization in South Asia and explores the mechanisms of achieving this objective. His argument is that regional co-operation should not be seen as a by-product of trade liberalization but as a strategy for trade expansion. The aim should be to liberalize all intra-regional trade in the long run or to develop the regional into a customs union. The strategy according to him would be for the region to develop its inter-regional exports using a common strategy while attempting a regional import substitution of investment goods and intermediate goods for which some countries in the regional have developed sufficient comparative advantage and production capacity.

Kanesalingam studies a general overview of SAARC's achievement. His argument is that while the task of strengthening and consolidating the SAARC process is mainly that of all the seven nations, India has no doubt a predominant

role in this regard. His opinion is that the Association's contribution to regional development would emerge as a by-product of a political process that will be successful only if the countries believe that they derive political benefits from participation. The realization of these political correlations is a challenge, which SAARC has to face now and in the decades ahead.

I.N. Mukherji presents a regional synthesis. It is argued by the author that the prospects and possibilities of trade expansion at any regional level cannot be properly assessed without first analyzing the role that foreign trade plays in the national economies of the regional countries. It is in this context that the existing trends in composition, structure and direction of foreign trade at the global level is examined. The conclusions are that foreign trade plays an important role in the economies of South Asian countries. The small island economies of Maldives and Sri Lanka are much more dependent on foreign trade for their development than the larger mainland countries such as India, Bangladesh and Pakistan. Intra-South Asian trade accounts for marginal share of the total of South Asian countries. All South Asian countries have high geographic concentration of trade. The commodity concentration of trade is also high in South Asian countries. The article suggests that the main objective of South Asian countries should be to deliberately create a new pattern of complementarities in their production structure on the basis of which new lines of trade will be created. Joint venture collaboration of various sectors of industries offers a good opportunity for expansion of trade among collaborating countries. The author points out that the



impact of trade liberalization is likely to be greatest in manufacturing sector. It is not only likely to increase demand for current trade products but also new products. Further to the extent that trade liberalization helps in the expansion of intra-regional trade, employment opportunities will also improve in the region.

Sultan Hafeez Rahman constructed the Bangladesh country model. He attempts to capture the structure of Bangladesh trade with other important SAARC countries quantitatively within a macro economic framework so that the magnitude of interdependence between the macro economy and trade with the important South Asian economies can be better understood and predicted. The analysis allows the impact specific trade policy changes in South Asian countries in macro economic aggregates of the Bangladesh economy to be simulated. The model is estimated using a single equation instrumental variables method. The model is a static model and provides solutions for the set of endogenous variables each year given the annual values of the exogenous variables. Growth rates show that GNP growth increased from 4.23 percent per annum to 4.47 percent per annum when exports of Bangladesh to other South Asian countries increased by 25 percent. The trade GNP ratio is small.

Taking regional co-operation into consideration, Khanal and Sharma construct a country model for Nepal within the framework of a SAARC link model to examine economic structure, in general, and to analyze the likely effect of regional trade on the Nepalese economy in particular. In the context of Nepal,

econometric modeling is a challenge and difficult tasks due to poor database, lack of sufficient experience and availability of computer software necessary to run the mode. The model comprises five blocs representing the real sector (supply) effective demand, foreign trade, government and monetary sector and prices. The author concludes that the Nepalese imports from almost all the countries are governed by income, institutional and structural factors. In general, neither relative prices nor exports have a major role to play in determining imports from SAARC or non-SAARC countries. The direction and composition of Nepalese foreign trade show that India still has a dominant place in supplying goods ranging from essentially consumer to luxury items. Estimated equations for prices, output, expenditure, government finance and money supply indicate that Nepalese economy is moving forward.

Syed Nawab Haisder Naqui and Ashfaq H. Khan developed a PIDE model, which is dynamic for Pakistan. It is non-linear in variables but linear in parameters. It has three sub-models, namely, production expenditure sub-models, foreign trade sub-models and fiscal and monetary sub-models. The entire model was estimated simultaneously using the instrumental variable variant of two stages least squares estimation technique. The production block represents the supply side of the economy and the expenditure block together with foreign trade sub-model represents the demand side of the economy. The conclusion is that the foreign trade sector in Pakistan, though very important, is not a dominant one.

The authors conclude that the PIDE model predicts reasonably well the actual behavior of some of the important macro economic variables.

Naqui and Khan constructed a link model for the South Asian regions comprising five countries namely Pakistan, India, Bangladesh, Sri Lanka and Nepal. The model recognizes explicitly the linkage between domestic and foreign trade policies for each country and that between the foreign trade policies of each pair of countries included in the model. The job of modeling the economies of South Asian region, according to the authors, is a difficult one. The regional presents a picture of disintegration rather than integration. Each country model is divided into three sub-models expenditure, foreign trade and monetary. Each national model is estimated separately but the link among the five country models is provided through bilateral trade equations. Most of the equations have a good fit and differ relatively little from the standard econometric problem that arises when time series data are used. The period of study in these models is 1970-1984, which was marked by some abnormal events. The purpose of the study was to analyze the possibilities of trade expansion among these countries by constructing a regional link model. A set of fiscal, monetary, trade and other policies have been examined for each country in terms of their impact on the macro economic variables of that country and those of other SAARC member countries.

### **2.3 SAPTA STUDIES :**

The existing literature provides mixed responses on the implications of different rounds of SAPTA on regional trade. The study of Wadhva (1996) observed that very small number of products is considered for tariff concessions in SAPTA I for regional trade liberalization. In this situation the size of gains in terms of additional regional trade could be very minimal. In another study, Bhuyan (1996) concluded that the effectiveness of SAPTA-I could have improved with the inclusion of Tariffs and Para-tariffs in the concessions of national schedules. In order to make the SAPTA process effective there is a need for granting deeper cuts in the concessional rates.

Number of studies has attempted to examine the implication of SAPTA on intra-regional trade. Srinivasan and Canonero (1993) attempted to examine the consequences of tariff liberalization at the regional level using gravity model approach. They used various criteria to categorise the regionally traded commodities into nine broad commodity groups. From policy-making point of view, these product groups are aggregative elasticity's for non-homogeneous products may be inappropriate in simulating implications of tariff removal on bilateral trade flows.

In another study, Mehta and Bhattacharya<sup>12</sup> (2000) examined the implications of first three rounds of SAPTA on four large economies of the region, namely

India, Bangladesh, Pakistan and Sri Lanka. For the simulation exercise they used gravity model estimates of Srinivasan and Canonero (1993). They used data for the year 1993/94 and 1994 for this purpose, which may not be appropriate to predict the actual effects of SAPTA I, II and III on regional trade. SAPTA was first implemented in December 7<sup>th</sup> 1995 and the effect of the agreement might be felt after 1995. The study has concluded based on their empirical results that the SAPTA process would promote intra-regional trade, particularly in the manufacturing sector.

Examining the trade structure of South Asian trade, the empirical study of Srinivasan (1994) found that the unilateral trade liberalization might result in substantial gains to the region. Using the gravity model approach, the study observed that complete removal of tariff is likely to result in increase in GDP of India by 3 percent and that of Nepal by 59 percent. Similar benefits for other regional partners could be between these two values. If the regional partners propose to undertake a 50 percent tariff reduction, India's GDP is likely to go up by 1 percent and Nepal by 9 percent. The gains for other regional partners could be substantial.

Bhattacharya (2001) attempted to analyse the effects of first three rounds of SAPTA on the region as a whole. Examining all the three rounds of SAPTA, it is found that the net increase in the regional trade after the conclusion of the third round is very small. Deeper tariff cuts and selection of highly traded products for

trade liberalisation within the region could have improved the trade prospects of the region.

The implication of three rounds of SAPTA Agreements on the Indian economy is examined by Mukherjee (2002). Using time series bilateral trade flow data, the study examined the implications of SAPTA on India's exports and imports. The study tried to examine the combined effects of SAPTA I, II and III to understand the impact of regional tariff liberalization on India's external sector. As discussed earlier, different rounds of SAPTA were launched at different points of time in the latter half of the 90s. In order to study the efficacy of each round there is a need for examining their effects separately. The study observed that the Second and Third round were effective in boosting intra-regional trade.

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## **CHAPTER – III**

### **ORIGIN AND DEVELOPMENT OF REGIONAL ECONOMIC INTEGRATION**

Regional economic integration is one of the most important trends in the contemporary world economy. Over the past decade and a half, the world economy has seen the emergence of many strong regional trading blocs in different parts of the world. These include EU (European Union), NAFTA (North American Free Trade Area), CIS (Commonwealth of Independent States), LAL (Latin American Integration Association), ASEAN (Association of South East Asian Nations), and OECD (Organisation for Economic Co-operation and Development), among others. Countries have responded by forming regional trading blocs to mobilize their resources to strengthen their competitiveness in the world market. The structure of this chapter is as follows. Section (A) discusses various approaches/stages/modalities that have been adopted by the World countries towards mutual co-operation (Regional Economic Integration). The role of REI (Regional Economic Integration) in the background of WTO (World Trade Organisation) etc., Section (B) reviews the Historical background of SAARC (South Asian Association for Regional Co-operation) and SAPTA (South Asian Preferential Trade Agreement), its achievements and broad features, also presents a brief Profile of SAARC countries.

### **(A) GENERAL CONCEPTUAL ISSUES:**

Regional as opposed to global integration takes place due to the greater ease in promoting co-operation on a smaller scale as well as to achieve the advantages of expanded market size. One of the most pervasive and characteristic features of the post world war II era has been the emergence and growing importance of regional economic groups in different parts of the world. Those largely combine the elements of export oriented and inward looking import substitution policies at the regional level to boost trade within and outside the region. Promote Industrialization more efficiently. Increase efficiency and improve the allocation of scarce resources through removal of trade barriers. Speed up the process of overall economic progress through collective self-reliance on a regional basis.

The term 'Regional Economic Co-operation' means, the collaboration of a group of nations comprising the region on economic matters to exploit the greater benefits than what would be possible in the course of normal economic relationships without co-operation. Regional Economic Co-operation can be in different forms. In a very simple form, the extent of co-operation among nations may be confined to specific or selected economic issues such as mutual trade agreements and preferential tariff. In a very broad form, It can cover a wide range of economic issues like trade tariffs, technology, investment, joint ventures, fiscal and monetary policies.

### 3.1 Stages (Forms) of Regional Economic Co-operation :

REC (Regional Economic Co-operation) is an evolutionary process, consists of several stages of harmonization of the economic policies of the participating countries, each stage reflects the extent or degree of co-operation between the member countries for the common benefit of the group as a whole.

**Table 3.1**

**Stages of Regional Economic Co-operation and their features**

Stage	Preferential Tariff Arrangements	Free Trade Among members	Common External Tariff	Free mobility of factors of production	Harmonization of Economic Policy	Unit of Eco Poli
1. Trade Policy coordination	**					
2. Free Trade Area (FTA)	**	**				
3. Customs Union (CU)	**	**	**			
4. Common Market (CM)	**	**	**	**		
5. Economic Union (EU)	**	**	**	**	**	
6. Complete Economic Integration (EI)	**	**	**	**	**	

Source : Hitris S, "Varieties of Pacific Economic Co-operation", The Pacific Review 1991

The Important features of the different stages of REC as given in the table 3.1 are described in the following pages.

**Co-ordination of trade policies:**

The basic principle is to avoid discrimination in trade among the member countries. This usually reveals the form of a limited co-operation in terms of preferential tariff arrangements for selected commodities between the member countries.

**Free Trade Area:**

Havana Charter defines Free Trade Agreement, as “A Free Trade Area shall be understood to mean a group of two or more Customs territories in which the duties and other restrictive regions of commerce are eliminated on substantially all the trade between the consistent territories in products originating in such territories”.

Accordingly the main features of FTA can be listed as follows:

- All Tariff and Non-tariff restrictions on commodity trade between Participating countries are eliminated.
- There is no common external tariff, i.e., each country retains its own Tariff against Non-member.

**Customs Union:**

The main features of Customs Union are “Blocks of countries with free internal trade and with a common tariff for the outside world” should be understood to mean. Besides the suppression of discrimination in the field of

commodity movements within the union, the creation of a common tariff wall against non-members.

**Common Market:**

A common market provides full scope for the operation of competitive market forces. Intra-regional trade within the common market would depend solely on comparative advantage in terms of cost of production based on specially natural resources endowments. The mechanism of a common market eliminates all restrictions on factor movements apart from removal of all barriers in trade in goods and services among the member nations.

**Regional Economic Union:**

In an Economic Union, there will be great degree of harmonization of economic policies in all areas viz., agriculture, industry, transport, trade, and commerce, fiscal and monetary areas. It is a minor stage of transition before a common market becomes a fully economically integrated community.

**Regional Economic Integration:**

Regional Economic Integration represents the most advanced and perhaps the ultimate stage of economic Co-operation. At this stage, a regional authority is established which decides on all regional policy issues and also implements them. The member nations are represented in the regional authority and as such they became a party to the decisions on the regional authority. The decisions of the

regional authority are binding on all the member nations and this abridges to some extent the sovereign authority of the national governments of the participating nations.

The success or failure of Regional Economic Co-operation depends essentially on the collective action of the member countries in terms co-ordination and harmonization of economic policies. Some countries may have to sacrifice their national sovereignty to some extent for the success of Regional Economic Co-operation.

### **3.2 Globalisation and Regionalism :**

The important basic concern today amongst the world economists is about the implications of regional trade blocs for global welfare and multilaterality. There are apprehensions in a section, that the formation of big regional economic groups such as the European Common market and the North American Free Trade Area will tilt the balance away from multilaterality and lead to fragmentation of the world trading system.

Some economists,<sup>5</sup> view regionalism as a means of achieving locally what seems impossible to attain globally. They even feel, more the regional blocs, more the benefits to members. There must be a healthy competition among different regional economic blocs to attract member countries, so that the member

countries will get the most out of a regional bloc. This will naturally enhance and facilitate the multilaterality.

However, most economists would agree that complete free trade in the world is the most desirable objective and that present framework of global trading system is not necessarily the best. Even though there are good reasons to believe that regional economic co-operation and integration, especially among developing countries, can greatly help in expanding world trade. Whether regionalism can even advance the cause of multilateralism are issues that are still being debated.

The raising inspiration for the emergence for new regional trading blocs is the desire on the part of a group of countries to strengthen their national economies by relaxing different kinds of barriers to trade and other related areas. This is based on the perception that it is premature to envisage the removal of trade barriers across all the countries or the introduction of free trade or even that of preferential tariff arrangements among a group of countries can be expected to facilitate the process of industrialization through exploitation of complementarities and strengthening of competitiveness of the economies within the region. Such arrangements would ultimately lead to specialization and regional economic integration based on utilizing economies of scale for producing for the regional market as a whole.



The establishment of new institutional arrangements or strengthening the existing ones for regional economic co-operation among developing countries can also be viewed as their response to the increasing importance of the process of globalization of the world economy. A process that is characterized by features such as the technological paradigm, the new sourcing (Out-sourcing) practices of the global firms, the crucial role of information flows facilitated by the rapid development in global communication networks, global flows of private capital and the growing importance of trade in services.

The formation of regional economic groups does not contradict the principles underlying multilateralism is evident from the fact that the very first United Nations Conference on Trade and Development (UNCTAD) held in the early 1960's envisaged the role of regional economic co-operation as potential instrument for accelerating economic growth in the developing countries. The final act of the first UNCTAD conference held in 1964 stated:

“Regional Economic Groupings, integration or other forms of economic co-operation should be promoted among developing countries as a means of expanding intra-regional and extra-regional trade and encouraging their economic growth and their industrial and agricultural diversification with due regard to the special features of development of the various countries concerned as well as their economic and social systems”.

It is also important to note that Article 24 of WTO (GATT) Treaty has the provision that permits the establishment of trading blocs among countries, which grant each other reciprocal trade preferences without requiring that they necessarily be extended to the rest of the countries. The implication of this provision is that the establishment of regional trading arrangements does not negate the spirit of multilaterally enunciated by the WTO Treaty.

In sum, Regionalism helps in stimulating the forces of competition within a regional and the region's competitive edge in global markets. Regionalism can thus be a response to globalization and at the same time stimulate the microeconomic forces that drive globalization.

### **3.3 Rationale for Regional Economic Co-operation :**

Regional Economic Co-operation among developing countries is generally considered to make an essential contribution towards their economic development. The rationale for Regional Economic Co-operation is based on a number of factors, including some, which may not be considered as economic in nature.

- Regional Economic Co-operation enables the participating countries to overcome the small size of their domestic markets, which is particularly important for small economies that are faced with the problem of achieving "threshold" levels in many

economic and technological activities. Regional co-operation helps the member countries in achieving larger economies of scale in production and attain specialization.

- Regional Economic Co-operation enables the participating countries to make much fuller use of underutilized economic potential in terms of human, natural and technological resources. This helps in industrial diversification and in reducing economic dependence.
  
- Regional Economic Co-operation enables the participating countries to exploit the potential of complementarities and also to establish strategic alliances between enterprises with a view to improve their competitiveness in global markets.
  
- Regional Economic Co-operation facilitates increased levels of co-operation among service enterprises, academic and research institutions, professional and technical experts and the common people. Thus, regional economic co-operation would provide the basis for wider co-operation in many other areas such as arts, culture, sports, education and other related fields, all of which combined together would go to improve the quality of human life in the participating countries.

## **(B) SAARC TO SAPTA – A JOURNEY**

The idea of regional co-operation in the South Asian region is not new. The countries of the region have worked together on bilateral and multilateral bases under the Economic and Social Commission of Asia and Pacific (ESCAP), the Non-Aligned Movement and within the Commonwealth. Realizing that the existing efforts have not fully exploited the vast potential of regional co-operation that exists. A fresh initiative in this regard was expressed in November 1980 by Bangladesh. The Bangladesh proposal argued that inherent logic strongly justified regional co-operation, particularly among South Asian countries, because the countries in the region enjoy geographical contiguity, historical, social, cultural and ethnic affinities which would act as centripetal forces and thus, contribute substantively to facilitate coordination and to reducing of transaction costs. Thereafter, a series of meetings among the foreign secretaries of members of the region took place for the formation of regional group. In August 1983, the Foreign Ministers in their first meeting in New Delhi adopted the declaration on South Asian Regional Co-operation (SARC) and formally launched the Integrated Program of Action (IPA) in the five agreed areas. Viz., Agriculture, Rural Development, Telecommunications, Meteorology, and Health and Population Activities. Later, Transport, Postal Services, Scientific and Technological Co-operation, sports, Arts and Culture were added to the IPA. So far the other broad areas co-operation covered are forestry, drug trafficking and abuse, anti-terrorism,

control of environment degradation and disaster management, food security, and audiovisual exchange etc

The Heads of State or Government at their First SAARC Summit held in Dhaka on 7-8 December 1985 adopted the Charter formally establishing the South Asian Association for Regional Co-operation (SAARC).

**Objectives of the Association:**

Article 1 of the SAARC charter lists following objectives of the Association.

- To promote the welfare of the people of South Asia and to improve their quality of life.
- To accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and realize their full potentials.
- To promote and strengthen collective self-reliance among the countries of South Asia.
- To contribute to mutual trust, understanding and appreciation of each other's problems.
- To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields.
- To strengthen co-operation with other developing countries.
- To strengthen co-operation among themselves in international matters of common interest.
- To co-operate with international and regional organizations with similar aims and purposes.

**Principles of the Association:**

- Co-operation within the framework of the Association is based on respect for the principles of sovereign equality, territorial integrity, political independence, non-interference in the internal affairs of other States and mutual benefit.
- Such co-operation is to complement and not to substitute bilateral or multilateral co-operation.
- Such co-operation should be consistent with bilateral and multilateral obligations of Member States.

**SAARC'S achievements:**

The highest authority of the Association rests with the Heads of State or Government, who meet annually at summit level. To date, 12 such summit level meetings have been taken place.

The Council of ministers comprised of SAARC Foreign Ministers is responsible for policy formulation and view of activities, it meets twice a year and may also meet in extraordinary session.

The Committee on Economic Co-operation, comprising of SAARC commerce secretaries, was established in 1991. The SAARC secretariat located in Kathmandu is headed by Secretary-General (nominated by member states in alphabetical rotation), seven directors, one from each member state and general staff.

Four SAARC regional centers have been set up:

- Agricultural Information Center – Dhaka
- Tuberculosis Prevention Center – Katmandu
- Meteorological Research Center – Dhaka
- Documentation Center – New Delhi
- A fifth regional center on HRD is being set up in  
Islamabad.

An independent South Asian Commission on poverty alleviation was established in 1991.

The SAARC convention on suppression of terrorism, The SAARC convention on Narcotic Drugs and psychotropic Substance came into effect from 1998 and 1993 respectively. A SAARC visa exemption scheme has been in operation from 1992 is promoting closer contact among the people of the SAARC countries.

The SAARC Chamber of commerce and industry (SCCI) has been established at Islamabad (Pakistan) in 1992. The Ninth SAARC Summit established the group of eminent persons in 1997 to undertake a comprehensive appraisal of SAARC. The GEP has submitted the report “SAARC vision beyond the year 2000”. Some of the important recommendations of the GEP are:

- Achievement of SAFTA in 2008
- Setting up of South Asian Development fund of around \$ 500 million.

- Setting up of South Asian Development Bank.
- Adoption of Social Charter for SAARC.

The first and third recommendations of the above have been accepted in 10<sup>th</sup> SAARC Summit held at Colombo in 1998.

The Framework Agreement on the SAARC Preferential Trading Arrangement (SAPTA) was signed in 1993, which came into force from December 1995 provided a boost to trade within the region.

The thrust of present study is to explore and analyze the benefits or growth achieved in trade by implementing SAPTA, and to find the avenues to enhance it further. A detailed study is presented in later chapters.



### **(C) A PROFILE OF SAARC COUNTRIES**

This section takes a brief look at the profiles of the South Asian countries in terms of Population, Forms of Government, Merchandise Trade, and other basic characteristic features.

#### **Bangladesh**

Bangladesh emerged as an independent country on 16<sup>th</sup> December 1971. Its official name is the “People’s Republic of Bangladesh”. Dhaka is the capital of Republic and Bangla is the state language. The Independence and National Day of Bangladesh is 26 March.

The population of the country stands at 123.15 million (2001). About 80 percent of the people live in rural areas. Sixty percent of the people depend on agriculture for their livelihood.

The four major religions in the country are Islam, Hinduism, Buddhism and Christianity. The Muslims constitute about 88% of the population and Hindus about 10%. The constitution guarantees religious and cultural freedom to all citizens of Bangladesh.

Bangladesh is a unitary, independent and sovereign republic comprising three basic organs: the Executive, the Legislature, and the Judiciary. The President is

the Head of State and is elected by the members of Parliament. The President acts in accordance with the advice of the Prime Minister, who is the Executive Head.

Bangladesh is primarily an agrarian economy. Agriculture is the single largest sector in the economy producing about 30% of the country's GDP and employing around 60% of the total labor force. The country has a considerable number of large, medium and small-sized industries in both the public and the private sectors based on both indigenous and imported raw materials. Among them are jute, cotton, textiles, fertilizer, engineering, shipbuilding, steel, oil-refinery, paper, newsprint, sugar, chemicals, cement and leather.

The total Exports and Imports of Bangladesh in 2000 is US \$5590 Million and US \$8993 Million respectively, out of which 11.68 percent of imports and 1.57 percent of exports are from SAARC countries.

### **Bhutan**

The Bhutanese call their country Druk-yul, the land of the Drukpas (the people) and of the Druk (Thunder Dragon as in the national flag of Bhutan). Dzongkha is the official language. The ancient history of the kingdom remains shrouded in mystery. Since the 8<sup>th</sup> century A.D., however, it is clear that Buddhism has played a large part in shaping the course of Bhutan's history. Bhutan has remained an independent country throughout its history and it was unified under central authority in the 17<sup>th</sup> century.

Bhutan's population currently(2003) stands at 638,000 people. The people of Bhutan may be divided into two main groups – the Drukpas who are Buddhists, and the Lhotsampas, or the southerners who are mainly Hindus of Nepali origin.

Bhutan is a monarchy, ruled by the Wangchuck dynasty, which was founded in 1907 by king Ugyen Wangchuck. Over the years, the monarchs of Bhutan have been the fountainhead of far-reaching and often dramatic changes in the legislative, judicial and administrative systems in the country. In 1998, the present monarch King Jigme Singye Wangchuck devolved full executive powers to a new Council of Ministers elected by the National Assembly.

With over 80% of the people dependent on subsistence farming, the Bhutanese economy is predominantly rural. The share of the agriculture sector in the gross domestic product has dropped to less than 50% with the increase in the contribution of hydroelectric power generation and sale, which now accounts for over 30%. The country has the potential to generate 30,000 MW of power from its rivers. Besides electricity, Bhutan exports calcium carbide, wood products and cement.

Bhutan has followed a unique development philosophy called Gross National Happiness (GNH), which is receiving worldwide attention. It lays emphasis on good governance, cultural promotion, environmental preservation and economic development.

## **India**

India is an ancient civilization whose roots stretch back to over 5000 years in the course of which a composite culture emerged making it a land of unity in diversity. India today is the seventh largest and the second most populous country in the world. It gained independence from the British on 15<sup>th</sup> August 1947. India became a Republic on 26 January 1950 when its constitution, which envisages a parliamentary form of government, came into force.

The President of India is the Head of State but the real executive power vests in the Council of Ministers, headed by the Prime Minister, which aids and advises the President. The Parliament consists of two Houses, known as the Council of States (Rajya Sabha) and the House of the People (Lok Sabha). The Council of Ministers is responsible to the House of the People.

There are eighteen languages recognized by the Indian Constitution of which Hindi, spoken by about 30% of the people, is the official language. Nearly every major religion of the world is represented in India. India ranks among the top ten industrial nations of the world and has an increasingly affluent middle class. In terms of purchasing power parity, the Indian economy is the fifth largest in the world<sup>18</sup>. Major exports include textiles, tea, marine products, jute and jute products, gems and jewelry chemicals, engineering goods, computer software. Exports have diversified in recent years with the biggest growth being in technology and knowledge-based products and services. Imports consist mainly

of fertilizer, petrol and petroleum products, newsprint, medicinal and pharmaceutical products, and organic and inorganic chemicals. The agriculture sector continues to be an important sector of the economy as it contributes 27% of the GDP, provides employment to 65% of the workforce and accounts for 18% share of the total value of exports.

The total Exports and Imports of India in 2000 is US \$44,289 Million and US \$49,724 Million respectively, out of which 0.73 percent of Imports and 4.43 percent of Exports are from SAARC countries.

### **The Maldives**

The civilizations of the Maldives date back to more than 2000 years. Archeological findings from many ancient sites in the Maldives show ruins of old Buddhist structures, some date back to 3<sup>rd</sup> and 4<sup>th</sup> centuries. The evidence shows that at the time of conversion to Islam in 1153 A.D. the population of the Maldives was mainly Buddhist.

The archipelago of the Republic of Maldives is made up of a chain of 1190 small and low-lying islands, stretching over 800 kms from north to south. Out of them only 198 islands are inhabited.

The population of the Maldives is 270,101 (2000 census). Maldivians comprise a mixed race, unified through sharing common history, language and

religion. Dhivehi is official language. Islam is the strength and backbone of the country, permeating the entire fabric of the Maldivian culture, polity and civil society.

The Maldives' political system is a unique blend of its history, traditions, Islamic faith and modern democratic principle. It has evolved over a period of many years, the first written constitution having been proclaimed in 1932, though unwritten constitutional principles had been in existence long before then. A republican form of government in 1968 replaced the constitutional monarchy, with an Executive President as the Head of State. A new Constitution, that is more comprehensive and in tune with the country's democratic principles was adopted by the country on 1<sup>st</sup> January 1998.

The mainstay of the Maldives economy today comprises fisheries and tourism. Nearly 19% of the labor force is engaged in the fisheries sector, which account for over 6% of the GDP. Tourism, which became a major industry since the mid-eighties, accounts for 33% of the GDP. Industrial activity consists of a traditional and a modern sector. The traditional sector consists of boat building, mat-weaving, rope making, black-smithing, handicrafts and other cottage industries. The activities in the modern sector include fish canning, manufacture of garments, construction of fiberglass boats, production of cleaning fluids and bottling of aerated water.

## **Nepal**

The documented history of Nepal begins with the Changu Narayan temple inscription of King Manadeva I (464 A.D.) followed by Malla rulers among other important ones. Before Nepal's emergence as a unified nation in the latter half of the eighteenth century, the designation of Nepal was applied only to the Kathmandu Valley. Nepal had been segmented into more than 52 small principalities. Prithvi Narayan Shah, the "Great King of Gorkha" was the maker of modern Nepal, who united the country by 1769 by conquering Kathmandu Valley and making it the Capital.

Nepal has a population of about 23.9 million made up of over 61 ethnic groups living in different regions speaking 70 languages and dialects. Nepali is the national language. Hinduism is the official religion of Nepal and Hindus constitute over 85% of the population. Buddha, the founder of Buddhism, was born in Nepal about 563 B.C. and Buddhists account for 7.8% of the population. A small minority of Nepalese adheres to Islam and Christianity.

After 1951, Nepal has exercised multi-party democracy except during the period of about three decades from 1961 to 1990 when a party-less panchayat system existed. But again, following the democratic movement of 1990, Nepal restored a multiparty system with a constitutional monarchy. His Majesty The King, Gyanendra Bir Bikram Shah Dev is the Head of State. The Prime Minister serves as Head of the Government. Constitutionally, there are two houses of

parliament namely Pratinidhi Sabha (House of Representatives) and Rastriya Sabha (National Assembly). The House of Representative consists of 205 members elected by the people for a five-year term. The National Assembly comprises 60 members, 10 of them are nominated by His Majesty the King while remaining 50 are elected by 15 members of the Pratinidhi Sabha and 15 members of local bodies.

The mainstay of the Nepalese economy is agriculture, which accounts for 41% of the GDP with more than 80% of the people dependent on it. The main crops grown are paddy, maize and wheat. Manufacturing, trade and tourism follow farming as the main economic activities of the country. Hand knitted woolen carpets and readymade garments are flourishing industries in the country, whose total share in the exports from Nepal is about 32 %. Petroleum products, chemicals and drugs, food and live animals, vehicles, machinery and equipment are the major imports of Nepal.

The total Exports and imports of Nepal in 2000 is US \$679 Million and US \$1,626 Million respectively. Of which 33.15 percent of imports and 26.95 percent of exports are from developed countries.



## **Pakistan**

The Islamic Republic of Pakistan appeared on the world map on 14<sup>th</sup> August 1947 under the leadership of Muhammad Ali Jinnah, Quaid-e-Azam (the Great Leader), who is revered as the father of the Nation. Pakistan is divided into four provinces: Sindh Baluchistan, Punjab and the North-West Frontier Province. Islamabad is the capital of the country.

The area of Pakistan is 796,095 Sq. km. And population (2002) is 145.96 million. The national language is Urdu while the official language is English. The leading religion of Pakistan is Islam having 95% Muslim population. Other important religions are: Hinduism and Christianity, small religious groups of Sikhs, Parsis and Budhist also exist.

Pakistan has a federal structure. The Parliament consists of Lower House (National Assembly) and the Upper House (Senate). The administration consists of the President, the Prime Minister, and the National Security Council.

Agriculture and related activities engage 46.1 % of the workforce and provide 25% of GDP. The current growth rate of GDP is 3.6%. The main imports include machinery, electrical equipment, petroleum products, transportation equipment, metal and metal products, fertilizer and foodstuffs. The major exports are cotton textiles, cotton yarn and thread, clothing, raw cotton, rice, carpets and rugs, leather, sports goods, handicraft, fish and fruit.

The total Exports and Imports of Pakistan in 2000 is US \$9,156 Million and US \$11,049 Million respectively, out of which 2.32 percent of Imports and 2.92 percent of Exports are from SAARC countries.

### **Sri Lanka**

Lanka means “resplendent” (from the Pali “alankara”). Stone-age implements found on the island date back at least ten millennia, while evidence is available that the domestication of plants may have taken place around 1500 B.C. Given Sri Lanka’s central location on the trade routes of the ancient world and the attraction then of her “products”, pearls, timber, gems and ivory, and later spices, the island had become a center of East-West commerce well before the Christian era. The direct influence of European maritime powers was felt beginning from the 16<sup>th</sup> century with the arrival of the Portuguese, Dutch and later British. Sri Lanka gained independence from the British on 4th February 1948.

The population of Sri Lanka (1998 estimate) is 18.77 million. The country is a multi-ethnic nation. The Sinhalese of Indo-Aryan origin, comprise 74% percent of the population, the Sri Lankan Tamils of Dravidian origin who migrated to the island 12.6%. Indian Tamils descendants of migrant workers from South India recruited in the last century by the British 5.5%. The Moors, descendants from Arab traders who arrived in the island from about 12<sup>th</sup> century AD 7.1%. And others (who include Burghers, descendants of the Dutch and Portuguese) 0.8%. Sinhalese and Tamil are official languages while English is the national language.

Four major religions are freely practice in Sri Lanka. Buddhists account for 69.3 percent of the population, Hindus for 15.5 %, Christians for 7.6% and Muslims for 7.5 %.

At the time of independence i.e., 1948, Sri Lanka adopted a Westminster system of Parliamentary government with a House of Representatives, a Senate and a Cabinet headed by a Prime Minister. The British monarch was retained as constitutional head of state, and was represented in the Island by a Governor-General. In 1972, a Republican Constitution was adopted with a single legislature (the national State Assembly) and a constitutional president thus formally severing links with the British Crown. Following the amendment on the Constitution in 1978, an Executive Presidential system of government prevails.

The President is directly elected by the people for a term of six years. The supreme legislative body is a unicameral parliament consisting of 225 members elected by a system of proportional representation. A multi-party system prevails and many smaller parties are allied to either the government or the opposition group. The leader of the majority party in the parliament is elected as the Prime Minister.

Ninety percent of the economy of the country at independence depended on the export of the three plantation crops of tea, rubber and coconut. Since the late 1970s, the economy has been progressively liberalized. Industrial policy has

shifted from import substitution to export-oriented production. The service center now accounts for 52% in the sectoral composition of the GDP: the manufacturing sector for 16.5%; agriculture for 21.1%; construction for 7.6%; and mining for 1.9%.

Colombo is the largest Tea Auction Center in the world since London auctions ceased to function in June 1998. Other exports include textiles and garments, coconut products, spices, cocoa, coffee, essential oils, gems, fishery products, rubber, machinery, foot ware and leather products and petroleum by-products. Major imports include rice, wheat and sugar, fertilizer, crude oil and investment goods such as raw materials, building materials, transport equipment and machinery.

The total Exports and Imports of Sri Lanka in 2000 is US \$5,459 Million and US \$6,683 Million respectively, out of which 10.11 percent of Imports and 1.81 percent of Exports are from SAARC countries.

**(D) SAPTA (SAARC PREFERENTIAL TRADING  
AGREEMENT)**

The persistence of global asymmetries has strengthened the process of regionalism in different parts of the world. The inclusion of several issues which were not initially part of the trade issue in the WTO, such as IPR, Labor standards, environment, TRIPS, etc., have further denigrated the relevance of multilateralism as a source of enhancing national, regional and global welfare. The Industrialised countries have taken recourse to regionalism in a bid to keep their market intact. At present more than 60 percent of the global trade is channelised through bilateral and Regional Trading Arrangements (RTAs). In the process, the developing countries were getting marginalized.

The experience of developing countries with regional and sub-regional preferential trading arrangements (PTAs) is manifold. Some have succeeded, while many others have failed. Nonetheless, despite these disappointments and shortcomings, developing countries have not been deterred from either reviving failed arrangements or starting new ones. The major inspiration and encouragement to these efforts has been provided by the discriminatory approach of the developed world.

Much before the emergence of so-called second wave of liberalisation the South Asian countries have realised that the long-term interest of the countries in the region lies in the formation of a regional economic grouping.

In 1996 the first Ministerial Meeting on International Economic Issues was held in Islamabad. The Declaration of this Ministerial Meeting stressed the need for intensifying economic co-operation among SAARC countries and also agreed that SAARC countries should coordinate their positions at the various headquarters of regional and international organizations, as well as in relevant international conferences to further the common objectives of member countries.

In 1987, the representatives of the National Planning Organisations met for the second time in Islamabad and recommended that in view of adverse international economic situation facing the region; there was a need to pool resources for long-term regional co-operation. Recognizing asymmetries at the development levels and the fact that the share of SAARC in world trade was relatively small, the meeting recommended that analytical studies need to be carried out in the first instance to facilitate identification of priority areas for economic co-operation. As a result of this recommendation, a consultant was commissioned to carry out a Study on Trade, Manufactures and Services (TMS) in the South Asian region. Meanwhile, the National Planning Organizations continued to meet and agreed on a series of initiatives, which would intensify the

consultative process particularly in basic needs programmes and poverty alleviation.

The TMS study, which was completed in 1991, considered economic co-operation among the countries of the SAARC region as an inevitable imperative for promoting all-round development of region. In May 1991, the Council of Ministers at their Ninth Session at Male endorsed the Study and established a high level committee known as the Committee on Economic Co-operation (CEC) comprising Commerce/Trade Secretaries of the SAARC Member States.

The CEC was mandated to formulate and oversee implementation of specific measures, policies and programmes within the SAARC framework to strengthen and enhance intra-regional co-operation in the fields of trade and economic relations. With the creation of the CEC, regional economic co-operation was formally institutionalized. To date, the CEC has held ten meetings.

Over the years, the CEC has emerged as one of the most important groups within the SAARC having a mandate over economic and trade issues. The CEC has provided recommendations and guidance in identifying new areas for co-operation on economic and trade related matters as well as considering reports of constituted groups. In fact, the mandate of the CEC includes monitoring co-operation in areas such as standards and measurement; customs and the harmonization of procedures; preferential trading arrangement; rules of origin;

agreements for the promotion and protection of investments within the SAARC Region as also for the avoidance of double taxation; setting up of a SAARC Arbitration Council; sharing information on economic and trade related matters; taking note of special circumstances of Least Developed Countries within the Region; and formulation of joint strategies to be adopted in multilateral negotiation. The recommendations of the CEC are submitted to the Standing Committee (of Foreign Secretaries) and through it to higher bodies, namely the council of Ministers and the Summit.

In December 1991, the Sixth Summit held in Colombo approved the establishment of an Inter-Governmental Group (IGG) to formulate an agreement to establish a SAARC Preferential Trading Arrangement (SAPTA) by 1997. Given the consensus within the SAARC, the framework Agreement on SAPTA was finalized in 1993, and formally came into operation in December 1995, well in advance of the date stipulated by the Colombo Summit. The Agreement reflected the desire of the SAARC countries to promote and sustain mutual trade and economic co-operation within the SAARC region through exchange of concessions.



### **Principles of Sapta :**

The basic principles of SAPTA are as follows:

- SAPTA shall be based and applied on the principles of overall reciprocity and mutuality of advantages in such a way as to benefit equitably all contracting states, taking into account their respective levels of economic and Industrial development, the pattern of their external trade and their trade policies and systems.
- SAPTA shall be negotiated step-by-step, improved and extended in successive stages with periodic reviews.
- The special needs of the least developed Contracting States shall be clearly recognised and concrete preferential measures in their favor should be agreed upon. The special treatment for the least developed contracting states include, inter alia, duty-free access, exclusive tariff preferences of deeper tariff preferences in respect of specific products, removal of non-tariff and para-tariff barriers. These preferential measures are not required to be multilateralised among other developing country Contracting States.
- The concessions agreed to under SAPTA, except those made exclusively to the least developed Contracting States; shall be extended unconditionally to all Contracting States.
- The tariff, para-tariff and non-tariff concessions negotiated and exchanged amongst contracting states shall be incorporated in the National Schedules of concessions.

- Products contained in the National Schedules of Concessions shall be eligible for preferential treatment if they satisfy the rule of origin established under SAPTA.
- The concessions agreed upon shall not be diminished or mollified by the application of any measure restricting trade by the contracting States except under the provisions specified in the Agreement.
- Safeguard measures can be taken in the event of injury to domestic producers from imports under SAPTA or in the event of deterioration of balance of payment position during the implementation of SAPTA.

One of the core principles of the SAPTA Agreement listed above is that there should be special treatment for Least Developed Countries through the consideration of additional measures. It was accordingly decided in 1999 to reduce the domestic content requirement further under the SAPTA Rules of Origin to enable the smaller and Least Developed Countries to benefit equitably from economic liberalization. This reduction would apply to all products covered so far in the trade negotiations. The Table 3.2 below shows the reduction in the rules of origin criteria which has been approved by the Member States:

(Table 3.2)

SAPTA Rules of Origin  
Extent of Domestic Value Addition required  
Before and After Downward Revision in the SAPTA Rules of Origin

	BEFORE AMENDMENT		AFTER AMENDMENT	
	For Non-LDCs	For LDCs	For Non-LDCs	For LDCs
<b>Rule 3 (a) : Not wholly produced or obtained</b>				
Domestic Value Addition in an Exporting Country	50%	40%	40%	30%
Maximum Input permitted from Non-Contracting States (i.e., from Outside the SAARC region)	50%	60%	60%	70%

<b>Rule 4 : Cumulative Rules of Origin</b>				
Aggregate Domestic Value Addition in an Exporting Country including inputs sourced from within the SAARC region	60%	50%	50%	40%
Maximum Input permitted from outside the SAARC Region	40%	50%	50%	60%

Source : Publications from SAARC Secretariat, Kathmandu.

Since 1995, four rounds of SAPTA negotiations are completed. The SAPTA-IV is just completed and the customs notifications are to be issued by individual countries for its implementation. The Table 3.3 shows the number of products on which preferential tariff concessions have been granted by the member states in the three rounds of trade negotiations and the depth of preferential tariff concessions.

**(Table 3.3)**

Number of Products covered and the Depth of Preferential Tariff Concessions  
Agreed to by SAARC Member States  
In the first three rounds of trade negotiations under SAPTA

Country	No. Of Products	Depth of Tariff Concessions
Bangladesh	572	10% and 15%
Bhutan	266	10%, 13%, 15%, 18%, and 20%
India	2402	10%, 15%, 20%, 25%, 30%, 40%, 50%, 90%, and 100%
Maldives	390	5%, 7.5%, 10%, and 15%
Nepal	425	10% and 15%
Pakistan	685	10%, 15%, 20% and 30%
Sri lanka	211	10%, 15%, 20%, 30%, 50%, 60% and 75%
<b>TOTAL</b>	<b>4951</b>	

Source : Publications from SAARC Secretariat, Kathmandu.

During the first and second round, trade negotiations were conducted on a product-by-product basis. In the third round, the negotiations were also conducted chapter-wise. In the fourth round, negotiations were conducted on chapter-wise, sectoral and Across-the-Board basis.

Since 1997, attempts have been made to clear the duck for the smooth transition of region from SAPTA to SAFTA. Owing to geo-political situation in the region, the ambitious target of SAFTA implementation had been deferred to 2003, recently in-principle agreement has been reached to implement SAFTA.

It is here the need for this study arises. It is imperative and all the more important to understand, SAPTA's actual achievements viz., Growth in trade, Scope for improvements, Bottlenecks on the road to SAFTA etc., before moving in for SAFTA. This study aims to address the above in order to exploit all advantages of SAFTA from the point of view of India.

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## CHAPTER – IV

### **Revealed Comparative Advantage And Trade Complementarity : An Analysis**

The prospects and possibilities of trade expansion at the regional level among SAARC countries cannot be properly assessed without first analysing the existing structure of trade of the member countries in terms of their commodity composition and their geographic distribution. The issue of Comparative Advantage, Complementarity and Competitiveness assumes crucial importance in assessing the prospects of regional co-operation, and more especially the prospects of expansion of intra-regional trade. Part 4.1 of this chapter analyses the Revealed Comparative Advantage and Part 4.2 analyses the Trade Complementarity of SAARC countries against the background of economic reforms and SAPTA.

#### **4.1. REVEALED COMPARATIVE ADVANTAGE**

Revealed comparative advantage ratios, developed by Balassa (1965), have been widely used to study profiles of revealed comparative advantage in various export products. The ratio is defined as:

$$R_{ih} = \frac{X_{ih} / X_{it}}{X_{wh} / X_{wt}}$$

Where



$R_{ih}$  = Revealed comparative advantage ratio for country  $i$  in product  $h$ .

$X_{ih}$  = Country  $i$ 's exports of product  $h$ .

$X_{it}$  = Total exports of country  $i$ .

$X_{wh}$  = World exports of product  $h$ .

$X_{wt}$  = Total World exports.

It is evident from the above equation that revealed comparative advantage is simply a ratio of the share of a given product in a country's exports to its share in world exports, and a country is said to have a revealed comparative advantage (disadvantage) in product  $h$  if  $R_{ih} > (<) 1$ . It must, however, be cautioned here that the export shares that underlie the revealed comparative advantage ratios are influenced by external and internal trade policy distortions such as protectionist barriers in export markets and anti-export bias in domestic trade policy. Therefore, to the extent that these distortions may be present, the pattern of "true" comparative advantage may differ from the one suggested by the revealed comparative advantage ratios.

The revealed comparative advantage ratios can be computed at various levels of commodity aggregation according to the SITC classification. The finer the disaggregation, the better the identification of the products in which potential for exports exists. Accordingly, the three-digit SITC commodity classification on which we had the data is used for identification of products of export interest to each country.

#### 4.1.1 BANGLADESH :

The revealed comparative advantage (Table 4.1) ratios at 1-digit SITC classification for the period 1985 to 1998 indicate that Bangladesh has comparative advantage in food and live animals, basic manufactures, and miscellaneous manufactured goods. In the last category, it has acquired comparative advantage over time, as indicated by the significantly high ratios after 1987. Disaggregation at the 2-digit SITC classification shows a rather interesting picture. In the category of food and live animals, the country seems to have lost comparative advantage in meat and meat preparations since 1989. However, in fish crustaceans and molluscs, and coffee, tea, cocoa, and spices it continued to have the advantage till 1997 though it is losing share in the world market. Other items in which Bangladesh has revealed comparative advantage include textile fibers, leather and leather goods, textile yarn and fabrics, clothing, and fertilizer. In the last two items, the country gained significant comparative advantage after 1987-88. The 3-digit classification indicates that though Bangladesh lost advantage in meat of bovine animals, it continues to have an advantage in fish, vegetables, and tea. As expected, the revealed comparative advantage ratio for Jute is very high. In the category of basic and miscellaneous manufactured goods, Bangladesh has comparative advantage in leather, textile yarn, made-up articles of textile material, clothing, and woven cotton fabrics. In the last category, however, the country has gained a slight advantage only after 1992.

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
0	Food And Live Animals	2.09	1.99	1.64	1.42	1.52	1.50	1.35	1.33	1.16	1.04
01	Meat, Meat Preparations	1.10	0.31	0.13	0.08	0.00	0.00	0.00	0.00	0.00	0.00
011	Meat of bovine animals, fresh, chilled or frozen	1.35	0.37	0.16	0.10	0.00	0.00	0.00	0.00	0.00	0.00
03	Fish, Crustaceans, Mollusc	13.62	11.99	8.67	8.35	8.59	8.16	9.11	9.62	8.04	6.29
034	Fish, fresh (live or dead), chilled or frozen	3.40	1.37	1.59	1.56	1.77	1.42	1.86	1.75	2.33	0.89
035	Fish, dried etc.; smoked fish; flours, meals etc.	7.33	8.45	5.24	8.46	6.38	5.41	6.04	4.26	3.83	2.81
036	Crustaceans etc. chilled, frozen, dried, salted etc.	31.65	32.08	22.76	20.80	21.13	20.75	21.83	25.43	20.33	17.36
04	Cereals, Cereal Preparations	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
042	Rice	0.00	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.01
048	Cereal preparations & preparations of flour or fruits etc.	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.01
05	Vegetables And Fruits	0.94	0.44	0.18	0.24	0.31	0.53	0.00	0.00	0.02	0.36
054	Vegetables, fresh, chilled, etc.	3.07	1.15	0.42	0.66	0.83	1.49	0.00	0.00	0.06	1.03
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
057	Fruits and nuts (not including oil nuts), fresh or dried	0.12	0.10	0.10	0.06	0.09	0.05	0.00	0.00	0.00	0.00
058	Fruit, preserved, & fruit preparations (excl. fruit juices)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06	Sugar, Sugar Preparations, Honey	0.00	0.14	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00
061	Sugar, molasses & honey	0.00	0.17	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00
07	Coffee, Tea, Cocoa, Spices	3.60	3.91	4.12	3.00	2.94	2.00	1.36	1.28	1.16	1.38
074	Tea & mate	37.81	32.28	36.09	28.84	29.25	30.79	20.61	17.15	14.10	14.77
075	Spices	0.25	0.14	0.02	0.34	2.14	0.13	0.07	0.03	0.08	0.01
09	Misc. Edible Products Etc.	0.03	0.06	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01
098	Edible products & preparations, N. E. S.	0.03	0.07	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.02
1	Beverages And Tobacco	0.07	0.12	0.12	0.19	0.06	0.03	0.03	0.05	0.10	0.12
11	Beverages	0.00	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.03
112	Alcoholic beverages	0.00	0.02	0.00	0.01	0.01	0.01	0.02	0.01	0.03	0.04
12	Tobacco, Tobacco Manufactures	0.16	0.24	0.25	0.40	0.13	0.06	0.05	0.10	0.20	0.24
121	Tobacco unmanufactured, tobacco refuse	0.33	0.78	0.82	1.45	0.48	0.22	0.19	0.25	0.55	0.71
122	Tobacco, manufactured	0.00	0.03	0.00	0.00	0.01	0.00	0.01	0.06	0.08	0.08
2	Crude Materials, Excl. Fuels	2.14	1.30	0.98	0.96	0.65	0.39	0.49	0.44	0.59	0.41
21	Hides, Skins, Furskins, Raw	0.42	0.04	0.00	0.01	0.01	0.03	1.64	0.01	0.01	0.00
211	Hides & skins (except furskins), raw	0.59	0.04	0.00	0.01	0.01	0.03	1.96	0.01	0.02	0.00

(contd.)

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
26	Textile Fibers	15.27	10.60	7.91	8.23	5.90	3.24	3.40	3.74	5.04	3.83
263	Cotton	0.00	0.02	0.00	0.01	0.01	0.04	0.02	0.07	0.00	0.01
264	Jute and other textile bast fibers, N. E. S., raw etc.	1510.02	1726.30	1225.60	1336.15	1597.31	1103.55	1194.88	1169.32	1134.75	850.95
265	Vegetable textile fibers, raw or processed, waste	0.78	0.13	0.24	0.18	0.08	0.03	0.05	0.26	0.12	0.02
267	Other man-made fibers suitable for spinning, waste thereof	0.19	0.06	0.00	0.02	0.00	0.08	0.07	0.15	0.09	0.01
269	Worn clothing and other worn textile articles, rags	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.03
27	Crude Fertilizer, Mineral	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.11	0.00
278	Other crude minerals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
28	Metalliferous Ores, Scrap	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
282	Ferrous waste & scrap, remelting scrap ingots of iron etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
29	Crude Animal, Veg. Material	1.21	0.23	0.13	0.13	0.14	0.13	0.11	0.07	0.28	0.17
291	Crude animal vegetable materials, N. E. S.	0.95	1.13	0.66	0.73	0.74	0.63	0.49	0.20	1.20	0.72
292	Crude vegetable materials, N. E. S.	1.27	0.02	0.00	0.01	0.01	0.02	0.02	0.04	0.05	0.04
3	Mineral Fuels, Etc	0.16	0.15	0.20	0.11	0.10	0.06	0.06	0.07	0.10	0.07
33	Petroleum, Petrol Product	0.18	0.18	0.25	0.13	0.12	0.07	0.07	0.12	0.17	0.13
334	Petroleum oils, preparations, N. E. S.	0.57	0.56	0.73	0.41	0.36	0.25	0.25	0.13	0.18	0.14
5	Chemicals, Related Products, Nes	0.02	0.12	0.24	0.13	0.31	0.19	0.30	0.31	0.18	0.09
52	Inorganic Chemicals	0.01	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.10	0.15
522	Inorganic Chemical Elements, Oxides and Halogen Salts	0.00	0.00	0.01	0.00	0.00	0.00	0.22	0.00	0.19	0.29
523	Metal Salts and Peroxysalts, or Inorganic Acids	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
53	Dyes, Colouring Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
533	Pigments, paints, varnishes & related materials	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	Medicinal, Pharm. Products	0.00	0.01	0.02	0.04	0.06	0.01	0.01	0.00	0.00	0.00
541	Medicinal & pharm. products (excl. group 542)	0.00	0.01	0.02	0.04	0.06	0.01	0.01	0.00	0.00	0.00
55	Essential Oils, Perfume Etc	0.00	0.10	0.05	0.04	0.04	0.00	0.00	0.02	0.01	0.01
551	Essential Oils, Perfumes and Flavour Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
553	Perfumery, cosmetic or toilet preparations (excl. soaps)	0.00	0.22	0.09	0.09	0.43	0.01	0.01	0.04	0.02	0.01
554	Soap, cleansing & cleaning preparations	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
56	Fertilizer Except Grp. 272	0.00	2.57	4.10	2.66	7.74	5.67	8.74	7.81	5.04	2.41
562	Fertilizers (other than those of group 272)	0.00	2.57	4.10	2.66	7.74	5.67	8.74	7.81	5.04	2.41
58	Plastics, Non Primary Form	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01

(contd.)

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
583	Monofilament, rods, sticks etc. of plastic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
585		0.00	0.00	0.00	0.07	0.27	1.54	1.39	1.22	2.15	1.93
59	Chemical Materials Nés	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00
591	Insecticides, herbicides etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.00
6	Basic Manufactures	3.03	2.07	1.59	1.55	1.38	1.27	1.13	1.10	0.98	0.73
61	Leather, Leather Goods	19.75	30.52	19.34	17.39	13.79	12.86	11.77	9.09	6.98	5.07
611	Leather	30.41	43.49	28.30	25.44	19.78	18.74	17.03	13.58	10.47	7.66
612	Manufactures of leather etc. N. E. S.; saddlery etc.	0.00	0.48	0.60	1.27	0.78	0.26	0.11	0.21	0.15	0.10
63	Cork, Wood Manufactures	0.00	0.00	0.04	0.23	0.38	0.76	0.55	0.88	0.41	0.47
634	Veneers, plywood, particle board etc., N. E. S.	0.00	0.00	0.08	0.44	0.69	1.45	1.08	1.74	0.83	1.03
635	Wood manufactures, N. E. S.	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Paper, Paperboard Etc	0.49	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
641	Paper & paperboard	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
642	Pape and Paperboard, Cut to Size or Shape, and Articles of Paper or Paperboard	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.05	0.04
65	Textile Yarn, Fabric Etc	13.20	7.02	5.65	5.21	4.73	4.06	3.76	3.98	3.68	2.85
651	Textile yarn	3.50	3.99	2.56	2.17	1.88	1.96	1.97	2.39	2.38	1.78
652	Cotton fabrics, woven	0.07	0.88	0.83	0.75	1.28	1.62	3.06	2.92	3.50	2.81
653	Fabrics, woven, of man-made textile materials	0.00	0.01	0.00	0.01	0.01	0.04	0.23	1.17	1.44	1.14
654	Other textile fabrics, woven	83.08	42.10	25.63	23.55	15.55	17.03	12.24	12.03	10.36	7.60
655	Knitted or crocheted fabrics, N. E. S.	0.00	0.00	0.00	0.01	0.00	0.00	0.71	0.44	0.00	0.45
656	Tulles, lace, Embroidery, Ribbons, Trimmings and Other Smallware	0.00	0.00	0.01	0.00	0.02	0.04	0.02	0.03	0.00	0.01
657	Special yarns, special textile fabrics etc.	1.20	1.76	5.61	7.15	7.46	5.88	5.34	4.19	3.23	2.78
658	Made-up articles, of textile materials, N. E. S.	80.69	32.31	29.20	25.02	24.69	15.05	15.57	16.24	14.32	10.04
659	Floor coverings, etc.	0.33	0.67	0.59	0.99	1.18	3.39	0.52	0.75	0.56	0.27
66	Non-Metal Mineral Manufactures	0.00	0.06	0.10	0.11	0.12	0.13	0.38	0.14	0.15	0.10
662	Clay & refractory construction materials	0.00	0.00	0.00	0.00	0.00	0.01	0.46	0.00	0.01	0.00
664	Glass	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
665	Glassware	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
666	Pottery	0.00	0.91	1.60	1.88	1.92	2.31	5.22	2.66	2.67	1.77

(contd.)

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
67	Iron And Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
673	Flat-rolled products; iron or non-alloy steel, not clad etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
674	Flat-rolled products of iron or non-alloy steel, clad etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
677	Rails or Railway Track Construction Material, of Iron or Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
678	Wire of iron or steel	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.04	0.00
679	Tubes, Pipes and Hollow Profiles, and Tube or Pipe Fittings, of Iron or Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	Metal Manufactures Nes	0.35	0.05	0.06	0.08	0.05	0.05	0.07	0.12	0.16	0.11
691	Structures and Parts of Structures, N.E.S., of Iron, Steel or Aluminium	0.01	0.00	0.00	0.01	0.02	0.02	0.04	0.04	0.04	0.01
692	Metal Containers for Storage or Transport	0.27	0.37	0.49	0.23	0.44	0.27	0.15	0.16	0.15	0.07
693	Wire Products (Excluding Insulated Electrical Wiring) and Fencing Grills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
695	Tools for use in the hand or in machines	0.01	0.01	0.00	0.20	0.00	0.00	0.00	0.01	0.15	0.01
696	Cutlery	0.04	0.00	0.01	0.01	0.07	0.07	0.09	0.09	0.15	0.14
697	Household equipment of base metal, N. E. S.	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01
699	Manufactures of base metals, N. E. S.	1.03	0.06	0.06	0.07	0.03	0.06	0.14	0.26	0.30	0.23
7	Machines, Transport Equipment	0.05	0.02	0.05	0.10	0.03	0.02	0.04	0.01	0.04	0.02
71	Power Generating Machines	0.06	0.03	0.00	0.03	0.00	0.03	0.10	0.01	0.05	0.04
713	Internal combustion piston engines & parts, N.E.S.	0.00	0.00	0.00	0.01	0.00	0.03	0.20	0.02	0.02	0.03
714	Engines and Motors, Non-electric (other than those of Groups 712, 713, 718); Parts, N.E.S., of these Engines and Motors	0.00	0.12	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.07
716	Rotating Electric Plant and Parts Thereof, N.E.S.	0.00	0.00	0.01	0.10	0.00	0.09	0.03	0.01	0.20	0.01
72	Special Industrial Machinery	0.10	0.09	0.29	0.67	0.10	0.13	0.23	0.04	0.21	0.19
721	Agricultural Machinery (Excluding Tractors) and Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
723	Civil engineering etc. equipment, parts thereof	0.18	0.24	0.04	0.91	0.10	0.04	0.21	0.04	0.51	0.34
724	Textile & leather machinery & parts thereof, N. E. S.	0.01	0.00	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
727	Food Processing Machines (Excluding Domestic); Parts Thereof	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02
728	Other machinery etc. for particular industries, N.E.S.	0.21	0.16	0.73	1.34	0.23	0.34	0.47	0.07	0.31	0.35
73	Metal Working Machinery	0.16	0.38	0.22	0.15	0.00	0.00	0.00	0.00	0.00	0.01

(contd.)

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
736	Metalworking machinery - tools	0.21	0.48	0.27	0.20	0.00	0.00	0.00	0.01	0.00	0.01
737	Metalworking Machinery (Other Than Machine Tools) and Parts Thereof, N.E.S.	0.00	0.00	0.06	0.01	0.00	0.00	0.02	0.00	0.01	0.00
74	General Industrial Machinery, Nes	0.05	0.00	0.06	0.30	0.11	0.02	0.06	0.01	0.13	0.01
741	Heating & cooling equipment, parts thereof, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
742	Pumps for Liquids, Whether or Not Fitted With A Measuring Device; Liquid Elevators; Parts for Such Pumps and Liquid Elevators	0.00	0.01	0.01	0.77	0.00	0.00	0.00	0.01	0.02	0.01
743	Pumps (Other Than Pumps for Liquids), Air or Other Gas Compressors and Fans; Ventilating or Recycling Hoods; Centrifuges; Filtering or Purifying Apparatus; Parts Thereof	0.12	0.00	0.29	1.31	0.69	0.12	0.04	0.00	0.74	0.07
744	Mechanical handling equipment, parts, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
745	Non-electrical Machinery, Tools and Mechanical Apparatus and Parts Thereof, N.E.S.	0.00	0.00	0.01	0.01	0.01	0.02	0.06	0.01	0.01	0.01
77	Electrical Machinery Appar. Parts, Nes	0.00	0.01	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.01
771	Electric power machinery & parts thereof	0.05	0.03	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.02
772	Electrical apparatus for switching circuits, resistors etc	0.00	0.02	0.02	0.02	0.02	0.01	0.07	0.00	0.00	0.00
778	Electrical machinery & apparatus, N. E. S.	0.00	0.02	0.01	0.02	0.02	-	-	0.07	0.06	0.04
78	Road Vehicles	0.00	0.00	0.01	0.02	0.02	0.00	0.01	0.03	0.02	0.01
781	Motor cars & other motor vehicles	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
782	Motor Vehicles for the Transport of Goods and Special Purpose Motor Vehicles	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
784	Parts & accessories of groups 722, 781, 782 & 783	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.04	0.00	0.00
785	Motor cycles & cycles etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.48	0.45	0.14
786	Trailers and Semi-Trailers; Other Vehicles, Not Mechanically Propelled; Specially Designed & Equip. Transp. Containers	0.01	0.00	0.01	0.42	0.00	0.00	0.00	0.00	0.00	0.14
79	Other Transport Equipment	0.27	0.01	0.02	0.06	0.00	0.03	0.00	0.00	0.06	0.03
792	Aircraft & associated equipment; spacecraft etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
793	Ships, boats (incl. hovercraft) & floating structures	0.70	0.03	0.09	0.23	0.00	0.11	0.01	0.01	0.21	0.13
8	Miscellaneous Manufactured Goods	1.85	3.56	4.18	4.31	4.44	4.47	4.46	4.98	5.16	5.74
81	Prefab Building, Fittings Etc	0.00	0.10	0.30	0.29	0.31	0.28	1.22	0.93	0.93	0.66

(contd.)

**Table 4.1: Revealed Comparative Advantage Ratios for Bangladesh: Selected Years**

SITC Code	Classification	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
812	Sanitary, Plumbing and Heating Fixtures and Fittings, N.E.S.	0.00	0.10	0.30	0.29	0.31	0.28	1.22	0.93	0.93	0.66
83	Travel Goods, Handbags, Etc.	0.00	0.13	0.02	0.02	0.11	0.14	0.07	0.06	0.05	0.06
831	Trunks, suitcases etc, other traveling goods	0.00	0.13	0.02	0.02	0.11	0.14	0.07	0.06	0.05	0.06
84	Clothing And Accessories	7.51	13.97	14.76	15.18	15.81	16.02	16.14	18.08	18.23	20.40
842	Women's clothing (other than sub-group 842.2)	6.62	25.22	26.81	27.17	29.15	26.58	24.09	26.28	30.56	35.82
843	Men's clothing (other than those of sub-group 845.2)	5.31	12.08	10.16	9.41	11.19	11.03	11.74	10.61	12.09	14.71
844	Women's clothing, knitted or crocheted	63.12	65.32	67.94	67.94	58.34	62.01	68.52	76.17	64.74	67.46
845	Articles of apparel, of textile fabrics, N. E. S.	0.75	4.33	4.32	5.73	4.23	4.41	6.70	8.88	10.74	12.23
846	Clothing accessories of textile fabrics, etc.	0.00	7.14	12.61	10.30	13.83	13.80	12.43	17.08	16.08	14.64
847	Textile clothing accessories, N. E. S.	0.23	1.03	0.95	1.21	0.84	0.64	0.59	0.79	0.52	0.68
848	Articles of apparel etc. of other than textile fabrics, etc.	0.00	0.00	0.15	0.19	0.26	0.29	0.05	0.03	0.02	0.16
85	Footwear	0.00	0.07	0.23	0.29	0.31	0.70	0.69	0.89	0.75	0.95
851	Footwear	0.00	0.07	0.23	0.29	0.31	0.70	0.69	0.89	0.75	0.95
87	Scientific Equipment, Nes	0.02	0.01	0.00	0.01	0.01	0.05	0.05	0.07	0.10	0.09
871	Optical Instruments and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.05	0.26	0.49	0.69	0.77	0.63
872	Instruments etc., N.E.S. for medical etc. sciences	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
874	Measuring, Checking, Analysing and Controlling Instruments and Apparatus, N.E.S.	0.02	0.01	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00
88	Photo. Apparat. Nes, Colours	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03
882	Photographic and Cinematographic Supplies	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02
884	Optical Goods, N.E.S.	0.00	0.00	0.00	0.01	0.05	0.07	0.11	0.14	0.13	0.19
89	Misc. Manufactured Goods, Nes	0.06	0.04	0.04	0.07	0.10	0.06	0.41	0.43	0.28	0.31
892	Printed Matter	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00
893	Articles, N. E. S., of plastics	0.00	0.00	0.00	0.00	0.02	0.01	0.12	0.26	0.34	0.33
894	Baby carriages, toys, games & sporting goods	0.00	0.00	0.01	0.16	0.28	0.14	1.79	1.71	0.85	1.02
895	Office and Stationery Supplies, N.E.S.	0.00	0.00	0.00	0.02	0.02	0.00	0.04	0.00	0.00	0.01
898	Musical instruments, parts & accessories, records etc.	0.00	0.00	0.00	0.02	0.03	0.03	0.02	0.01	0.00	0.00
899	Miscellaneous Manufactured Articles, N. E. S.	0.55	0.46	0.34	0.33	0.36	0.28	0.22	0.16	0.16	0.13
9	Goods Not Classified By Kind	0.17	0.04	0.03	0.03	0.03	0.03	1.46	0.10	0.06	0.05
93	Special Transactions And Commodities Not Classified	0.24	0.04	0.04	0.04	0.03	0.02	5.23	0.11	0.07	0.05
931	Special transactions etc. not classed by kind	0.24	0.04	0.04	0.04	0.03	0.02	5.23	0.11	0.07	0.05

Source: Computed from UNCOMTRADE Database



#### 4.1.2 INDIA :

India has revealed comparative advantage (Table 4.2) in food and live animals, basic manufactures, miscellaneous manufactured goods, chemicals and related products and animals and vegetable oils and fats at the 1-digit commodity classification. At the next level of disaggregation (2-digit SITC), it has revealed comparative advantage in 6 out of 10 sub-categories of 'food and live animals', including fish, cereals, vegetables and fruits, tea, and feeding stuff for animals. India's comparative advantage in 'crude materials' is confined to tobacco and tobacco manufactures, textile fibers, crude fertilizer, ores, and crude animal and vegetable material. The country lost comparative advantage in tobacco and tobacco manufactures in 1993 and for a few subsequent years, and gained some advantage in oilseeds. In the category of 'chemicals and related products', India's comparative advantage lies in exports of dyes and coloring materials, medicinal and pharmaceutical products, organic chemicals, and essential oils and perfumes. Revealed comparative advantage is also indicated in the export of 'basic manufactures' namely textile yarn, fabrics etc, non-metal mineral manufactures, iron and steel and metal manufactures. Among the miscellaneous manufactured goods, India has comparative advantage in travel goods, and handbags, clothing and accessories, footwear and miscellaneous manufactured goods. At the 3-digit SITC classification, India has comparative advantage in a wide-range of food, beverages and tobacco products including meat, fish, crustaceans, rice, fruits and nuts, tea and coffee, spices, feeding stuff for animals, and tobacco and tobacco

products. The country, however, acquired comparative advantage in fish only after 1991 and lost its edge in tobacco manufactures after 1986. A number of items in the category of 'crude materials' appear in the revealed comparative advantage profile of India. These items include oilseeds, cotton, stone, sand and gravel, Iron ore, ores and concentrates of basic metals, and crude animal and vegetable materials. The country however lost its advantage in cotton after 1993. In some years, India also enjoyed comparative advantage in petroleum, oils and preparations, and fixed vegetable oils. The country's comparative advantage in 'chemicals and related products' lies in nitrogen-function compounds, other organic chemicals, synthetic organic coloring material, medicinal and pharmaceutical products, perfumery, cosmetic and soaps, and insecticides and herbicides. In the category of basic and miscellaneous manufactured goods, India's comparative advantage is indicated in a wide-range of products, prominent among them being machine tools, household equipment, and steel products, besides leather and articles of textile and clothing. It is noteworthy that India also enjoys revealed comparative advantage in transport equipment such as motor vehicles, motor cycles, and cycles.

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
0	Food And Live Animals	2.71	2.49	1.94	2.51	1.59	2.19	2.24	2.21	2.31	1.96	1.96
00	Live Animals Other Than Those Of Div. 03	0.09	0.00	0.01	0.04	0.01	0.04	0.03	0.01	0.02	0.02	0.02
001	Live animals other than division 03	0.09	0.00	0.01	0.04	0.01	0.04	0.03	0.01	0.02	0.02	0.02
01	Meat, Meat Preparations	0.73	0.57	0.46	0.60	0.42	0.58	0.62	0.67	0.65	0.61	0.91
011	Meat of bovine animals, fresh, chilled or frozen	0.86	0.67	0.55	0.71	0.49	0.68	0.74	0.81	0.78	0.72	1.09
012	Other meat & edible meat offal unfit for human consumption	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
02	Dairy Products, Bird Eggs	0.05	0.03	0.07	0.06	0.07	0.06	0.16	0.15	0.11	0.13	0.21
022	Milk, cream & milk products other than butter or cheese	0.05	0.01	0.02	0.05	0.11	0.06	0.02	0.03	0.02	0.08	0.17
023	Butter & other fats & oils derived from milk	0.16	0.06	0.09	0.07	0.09	0.07	0.07	0.04	0.11	0.20	0.25
024	Cheese and curd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
025	Eggs, birds', & egg yolks, fresh etc., egg albumin	0.07	0.23	0.89	0.49	0.25	0.61	2.65	2.61	1.75	1.51	2.12
03	Fish, Crustaceans, Mollusc	4.78	4.11	3.15	4.23	3.21	3.05	3.58	3.76	3.47	3.53	3.57
034	Fish, fresh (live or dead), chilled or frozen	0.75	0.99	1.04	1.30	1.17	1.55	1.94	2.18	1.30	1.52	1.92
035	Fish, dried etc.; smoked fish, flours, meals etc.	1.23	0.29	0.14	0.17	0.20	0.23	0.24	0.25	0.28	0.35	0.34
036	Crustaceans etc. chilled, frozen, dried, salted etc.	11.81	10.83	7.85	10.36	7.69	6.62	8.11	8.43	8.80	8.70	8.14
037	Fish, crustaceans etc. prepared or preserved, N.E.S.	0.17	0.00	0.01	0.07	0.07	0.04	0.11	0.04	0.02	0.12	0.05
04	Cereals, Cereal Preparations	1.22	1.61	1.45	2.00	1.07	4.02	2.77	2.25	4.03	1.96	1.96
041	Wheat (including spelt) and meslin, unmilled	0.56	0.29	0.04	0.00	0.11	0.92	1.42	0.00	0.00	0.00	0.82
042	Rice	10.49	17.05	14.33	19.21	8.71	31.21	17.84	17.78	24.04	13.07	12.94
043	Barley, unmilled	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
044	Maize (not including sweet corn), unmilled	0.02	0.00	0.00	0.07	0.03	0.04	0.12	0.01	0.01	0.02	0.09
045	Cereals, unmilled (other than wheat, rice, barley & maize)	0.22	0.26	0.38	0.99	0.52	0.15	0.22	0.27	0.17	0.12	0.23
046	Meal & flour of wheat & flour of meslin	0.11	0.00	0.02	0.09	0.08	5.96	6.72	0.28	0.09	0.02	2.43
047	Other cereal meals & flours	0.06	0.06	0.10	0.45	0.08	0.71	0.54	0.66	0.48	0.31	0.36
048	Cereal preparations & preparations of flour or fruits etc.	0.46	0.30	0.24	0.32	0.21	0.25	0.26	0.28	0.23	0.25	0.28
05	Vegetables And Fruits	2.64	2.06	1.57	2.06	1.34	1.37	1.38	1.57	1.48	1.94	1.76
054	Vegetables, fresh, chilled, etc.	1.47	1.16	0.81	1.08	0.71	0.91	0.92	1.27	0.92	1.15	1.35
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	0.75	0.71	0.98	0.99	0.81	0.89	0.87	1.02	1.01	1.11	1.41
057	Fruits and nuts (not including oil nuts), fresh or dried	4.19	3.87	2.84	3.69	2.35	2.26	2.31	2.30	2.43	3.34	2.53
058	Fruit, preserved, & fruit preparations (excl. fruit juices)	1.99	0.71	0.54	0.72	0.47	0.53	0.48	0.64	0.63	0.72	0.97
06	Sugar, Sugar Preparations, Honey	0.26	0.35	1.75	0.83	0.18	1.24	2.29	0.59	0.12	0.17	1.10
061	Sugar, molasses & honey	0.27	0.40	2.14	1.01	0.22	1.56	2.90	0.74	0.13	0.17	1.47
062	Sugar confectionery	0.15	0.05	0.05	0.07	0.05	0.14	0.07	0.07	0.08	0.17	0.16

(contd.)

Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
07	Coffee, Tea, Cocoa, Spices	8.84	9.97	5.14	5.91	3.57	4.34	4.21	5.12	5.35	4.84	4.25
071	Coffee & coffee substitutes	3.65	4.30	3.35	4.35	2.85	4.22	4.22	3.93	3.98	3.57	2.80
072	Cocoa	0.02	0.09	0.00	0.01	0.04	0.03	0.03	0.01	0.00	0.00	0.03
073	Chocolate & other food preparations containing cocoa	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.04
074	Tea & mate	49.46	57.21	29.25	31.41	21.37	23.28	17.03	25.03	24.42	20.40	18.12
075	Spices	36.43	19.92	14.58	21.40	13.38	13.69	18.48	17.02	16.96	16.64	11.98
08	Feeding Stuff For Animals	2.81	5.34	5.93	8.54	4.67	4.91	6.11	5.65	3.56	2.92	2.93
081	Feeding stuff for animals (not incl. unmilled cereals)	2.81	5.34	5.93	8.54	4.67	4.91	6.11	5.65	3.56	2.92	2.93
09	Misc. Edible Products Etc.	0.47	0.28	0.33	0.28	0.15	0.19	0.28	0.28	0.45	0.32	0.34
091	Margarine and shortening	0.18	0.25	0.77	0.53	0.42	0.44	0.58	0.36	0.26	0.32	0.42
098	Edible products & preparations, N. E. S.	0.52	0.28	0.28	0.26	0.12	0.16	0.25	0.26	0.47	0.32	0.34
1	Beverages And Tobacco	1.54	0.96	0.75	0.75	0.28	0.37	0.55	0.73	0.51	0.61	0.48
11	Beverages	0.01	0.08	0.08	0.11	0.08	0.05	0.06	0.04	0.06	0.05	0.07
111	Non-alcoholic beverages, NES	0.01	0.01	0.02	0.03	0.01	0.02	0.01	0.02	0.01	0.01	0.02
112	Alcoholic beverages	0.01	0.08	0.08	0.12	0.09	0.06	0.06	0.04	0.07	0.06	0.08
12	Tobacco, Tobacco Manufactures	3.38	2.06	1.56	1.50	0.51	0.80	1.17	1.61	1.14	1.47	1.12
121	Tobacco unmanufactured, tobacco refuse	5.62	5.44	4.20	4.69	1.33	3.19	4.19	5.19	3.24	4.20	3.25
122	Tobacco, manufactured	1.26	0.76	0.54	0.41	0.20	0.15	0.20	0.31	0.38	0.40	0.36
2	Crude Materials, Excl. Fuels	1.66	2.36	1.09	1.47	0.91	0.90	1.02	1.13	0.97	0.95	0.95
21	Hides, Skins, Furskins, Raw	0.00	0.01	0.01	0.03	0.01	0.00	0.01	0.01	0.00	0.00	0.00
211	Hides & skins (except furskins), raw	0.00	0.01	0.02	0.04	0.01	0.00	0.01	0.01	0.00	0.00	0.01
212	Furskins, raw, other than group 211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Oil Seed, Oleaginous Fruit	0.48	2.08	0.87	1.72	1.06	1.79	1.80	2.21	1.25	2.03	2.14
222	Oil-seeds etc. used for extraction of "soft" oils	0.39	1.98	0.69	1.55	1.00	1.71	1.65	2.13	1.12	1.88	1.88
223	Oil-seeds & oleaginous fruits, whole or broken etc.	1.87	3.89	4.35	4.70	2.06	2.88	4.47	3.49	3.26	4.38	6.63
23	Crude Rubber	0.01	0.04	0.18	0.08	0.12	0.10	0.12	0.07	0.11	0.10	0.11
231	Natural rubber, balata etc in primary forms, or in plates etc.	0.00	0.00	0.17	0.01	0.07	0.07	0.11	0.05	0.05	0.06	0.13
232	Synthetic rubber, reclaimed rubber, waste, parings etc.	0.02	0.07	0.18	0.15	0.18	0.15	0.13	0.10	0.16	0.13	0.11
24	Cork And Wood	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01
244	Cork, natural, raw and waste	0.00	0.01	0.02	0.05	0.04	0.00	0.04	0.02	0.02	0.03	0.11
245	Fuel Wood (excluding wood waste) & wood charcoal	0.03	0.04	0.00	0.22	0.48	0.06	0.15	0.07	0.14	0.45	0.74
246	Wood in chips or particles and wood waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
247	Wood in the rough or roughly squared	0.03	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.01	0.02

(contd)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
248	Wood, simply worked, & railway sleepers of wood	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
25	Pulp And Waste Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01
251	Pulp and waste paper	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01
26	Textile Fibers	0.87	5.69	0.86	2.39	0.50	0.41	0.41	1.52	0.64	0.59	0.74
261	Silk	1.71	0.30	0.19	0.41	1.10	0.58	1.69	3.27	4.63	3.28	3.36
263	Cotton	2.26	13.72	1.56	5.81	0.77	0.64	0.56	3.11	0.82	0.34	0.82
264	Jute and other textile bast fibers, N. E. S., raw etc.	4.91	12.42	4.12	2.10	1.02	0.50	2.52	3.62	3.34	3.14	2.17
265	Vegetable textile fibers, raw or processed; waste	0.00	0.07	0.35	0.15	0.21	0.18	0.21	0.50	0.66	0.70	0.61
266	Synthetic fibers suitable for spinning	0.01	1.89	0.96	0.55	0.67	0.43	0.44	0.42	0.65	1.58	1.04
267	Other man-made fibers suitable for spinning; waste thereof	0.12	0.25	0.39	0.36	0.33	0.17	0.21	0.24	0.18	0.25	0.40
268	Wool & other animal hair (excluding wool tops)	0.06	0.08	0.06	0.04	0.04	0.04	0.06	0.18	0.16	0.06	0.15
269	Worn clothing and other worn textile articles; rags	0.08	0.21	0.07	0.05	0.09	0.07	0.08	0.12	0.10	0.07	0.50
27	Crude Fertilizer, Mineral	2.07	2.89	2.45	3.07	2.48	2.72	2.85	1.77	2.06	3.08	3.45
272	Fertilizers, crude (other than those of group 56)	8.85	10.87	8.99	10.24	8.85	7.92	8.23	4.78	5.68	9.36	8.73
273	Stone, sand & gravel	0.00	0.00	0.01	0.02	0.05	0.03	0.04	0.05	0.10	0.02	0.03
274	Sulphur and unroasted iron pyrites	0.13	1.66	1.50	2.15	0.42	1.84	3.20	1.73	1.94	2.31	5.13
278	Other crude minerals	2.16	1.56	0.76	0.95	0.99	0.94	0.91	0.81	0.92	0.84	1.18
28	Metalliferous Ores, Scrap	2.96	3.02	1.54	1.83	1.28	1.21	1.27	1.17	0.96	0.69	0.77
281	Iron ore & concentrates	14.66	19.93	10.26	10.33	8.95	9.26	8.23	7.37	6.23	4.82	5.20
282	Ferrous waste & scrap, remelting scrap ingots of iron etc	0.13	0.12	0.04	0.02	0.00	0.00	0.16	0.10	0.03	0.01	0.01
287	Ores & concentrates of basic metals, N. E. S.	1.57	3.01	1.64	2.19	1.61	1.33	1.58	1.35	0.98	0.81	0.92
288	Non-ferrous base metal waste and scrap, NES	0.00	0.28	0.02	0.01	0.03	0.03	0.07	0.01	0.04	0.16	0.01
289	Ores & concentrates of precious metals, waste, scrap etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
29	Crude Animal, Veg. Material	5.71	3.80	2.49	2.83	2.11	2.38	2.84	3.46	3.82	3.38	3.00
291	Crude animal vegetable materials, N. E. S.	4.78	3.80	2.73	3.02	1.99	1.68	2.14	2.08	1.73	1.75	1.67
292	Crude vegetable materials, N. E. S.	5.91	3.80	2.44	2.79	2.13	2.55	3.01	3.80	4.31	3.72	3.30
3	Mineral Fuels, Etc	0.37	0.43	0.33	0.32	0.26	0.23	0.42	0.30	0.14	0.08	0.93
32	Coal, Coke, Briquettes	0.11	0.06	0.18	0.21	0.29	0.20	0.16	0.15	0.24	0.21	0.25
322	Briquettes, lignite and peat	0.12	0.07	0.20	0.23	0.27	0.22	0.17	0.17	0.27	0.24	0.27
33	Petroleum, Petrol Product	0.43	0.51	0.37	0.31	0.25	0.24	0.68	0.47	0.18	0.08	1.48
334	Petroleum oils; preparations, N. E. S.	1.06	1.59	1.17	0.96	0.83	0.80	0.71	0.49	0.17	0.06	1.56
335	Residual petroleum products, N. E. S., etc	0.00	0.03	0.22	0.04	0.19	0.25	0.19	0.16	0.25	0.35	0.28
34	Gas, Natural, Manufactured	0.00	0.00	0.16	0.47	0.30	0.15	0.00	0.02	0.02	0.02	0.00

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
341	Gas, natural & manufactured	0.00	0.00	0.16	0.47	0.30	0.15	0.00	0.02	0.02	0.02	0.00
4	Animal, Vegetable Oil, Fat	0.62	0.90	0.70	1.43	1.13	1.42	1.15	0.97	0.96	1.54	1.57
41	Animal Oils And Fats	0.04	0.06	0.04	0.02	0.03	0.00	0.02	0.01	0.04	0.05	0.24
411	Animal Oils and Fats	0.04	0.06	0.04	0.02	0.03	0.00	0.02	0.01	0.04	0.05	0.24
42	Fixed Veg. Fats And Oils	0.78	1.04	0.74	1.73	1.21	1.58	1.24	1.02	1.02	1.67	1.72
424	Fixed vegetable oil, nonsoft	1.58	2.92	1.72	3.81	2.79	3.51	2.75	2.16	2.38	3.59	3.58
43	Processed Animal, Veg. Oil, Etc.	0.16	0.72	0.87	0.86	1.22	1.34	1.17	1.19	1.04	1.49	1.43
431	Animal or Vegetable Fats & Oils, Processed; Waxes; Inedible Mixtures or Prep. of Animal or Vegetable Fats or Oils, N.E.S.	0.16	0.72	0.87	0.86	1.22	1.34	1.17	1.19	1.04	1.49	1.43
5	Chemicals, Related Products, Nes	0.44	1.05	0.77	1.03	0.86	0.80	0.95	1.03	0.96	1.03	1.09
51	Organic Chemicals	0.12	0.76	0.76	1.00	0.93	0.94	1.23	1.39	1.29	1.43	1.42
511	Hydrocarbons, N.E.S. & their nitrated etc. derivatives	0.03	0.50	0.36	0.63	0.54	0.68	0.76	0.79	0.78	1.38	0.86
512	Alcohols, Phenols, Phenol - Alcohols, and Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.13	0.67	0.74	0.77	0.70	0.67	2.12	1.46	1.10	1.38	1.51
513	Carboxylic Acids and Their Anhydrides, Halides, Peroxides and Peroxyacids; Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.04	0.25	0.42	0.74	0.94	0.95	0.94	1.14	0.75	1.06	1.77
514	Nitrogen-function compounds	0.27	1.25	1.13	1.34	1.24	1.08	1.12	1.30	0.94	0.92	0.87
515	Organo - Inorganic Compounds, Heterocyclic Compounds, Nucleic Acids and Their Salts, and Sulphonamides	0.02	0.47	0.41	0.65	0.60	0.54	0.52	0.58	0.56	0.55	0.70
516	Other organic chemicals	0.32	1.43	1.77	1.90	1.75	2.05	3.08	4.32	5.38	5.47	4.91
52	Inorganic Chemicals	0.22	0.52	0.49	0.54	0.49	0.51	0.59	0.53	0.58	0.65	0.74
522	Inorganic Chemical Elements, Oxides and Halogen Salts	0.05	0.39	0.42	0.45	0.35	0.46	0.61	0.50	0.61	0.62	0.73
523	Metal Salts and Peroxysalts, or Inorganic Acids	0.70	1.06	0.94	1.01	0.71	0.81	0.81	0.80	0.77	0.96	0.99
524	Other Inorganic Chemicals; Organic and Inorganic Compounds of Precious Metals	0.00	0.00	0.00	0.01	0.42	0.01	0.02	0.05	0.02	0.00	0.12
53	Dyes, Colouring Materials	1.45	2.48	2.40	2.86	2.21	1.70	2.08	2.18	1.83	1.96	1.99
531	Synthetic organic colouring matter etc.	1.97	4.75	5.87	7.03	5.58	4.65	5.68	6.01	5.56	6.48	6.76
532	Dyeing, tanning extracts & synthetic tanning materials	0.51	1.57	1.14	1.14	0.93	1.00	1.28	1.93	1.64	1.60	1.49
533	Pigments, paints, varnishes & related materials	1.17	0.94	0.22	0.23	0.23	0.13	0.16	0.20	0.14	0.14	0.23
54	Medicinal, Pharm. Products	1.54	2.78	1.57	1.94	1.47	1.42	1.55	1.67	1.52	1.45	1.47
541	Medicinal & pharm. products (excl. group 542)	1.54	2.78	1.57	1.94	1.47	1.42	1.55	1.67	1.52	1.45	1.47
55	Essential Oils, Perfume Etc	1.28	2.69	0.76	2.30	0.92	0.68	0.69	0.67	0.67	0.64	0.70
551	Essential Oils, Perfume and Flavour Materials	1.72	2.75	1.31	1.56	1.37	1.19	1.44	1.28	1.28	1.12	1.25

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
553	Perfumery, cosmetic or toilet preparations (excl. soaps)	1.95	2.67	0.82	11.06	0.84	0.63	0.62	0.67	0.68	0.69	0.77
554	Soap, cleansing & cleaning preparations	0.21	2.69	0.41	1.30	0.84	0.51	0.39	0.32	0.27	0.27	0.27
56	Fertilizer Except Grp. 272	0.00	0.00	0.02	0.07	0.29	0.27	0.19	0.06	0.07	0.02	0.07
562	Fertilizers (other than those of group 272)	0.00	0.00	0.02	0.07	0.29	0.27	0.19	0.06	0.07	0.02	0.07
57	Plastics In Primary Form	0.10	0.42	0.55	0.66	0.31	0.47	1.06	1.07	0.64	0.72	0.97
572	Polymers of Styrene, In Primary Forms	0.10	0.42	0.55	0.66	0.31	0.47	1.06	1.07	0.64	0.72	0.97
58	Plastics, Non Primary Form	0.03	0.10	0.12	0.17	0.30	0.30	0.32	0.32	0.26	0.32	0.53
582	Plates, sheets, films etc. of plastic	0.01	0.12	0.19	0.32	0.51	0.70	0.61	0.55	0.57	0.56	0.69
583	Monofilament, rods, sticks etc. of plastic	0.04	0.09	0.08	0.12	0.22	0.15	0.20	0.22	0.15	0.23	0.47
59	Chemical Materials Nes	0.32	0.50	0.50	0.50	0.50	0.60	0.71	0.89	0.88	0.98	0.99
591	Insecticides, herbicides etc.	1.01	1.74	1.70	1.64	1.42	2.12	2.57	2.55	2.81	2.94	3.20
592	Starches, Inulin & Wheat Gluten, Albuminoidal Substances	0.02	0.06	0.15	0.15	0.13	0.27	0.39	0.21	0.40	0.52	0.74
598	Miscellaneous chemical products, N. E. S.	0.05	0.18	0.22	0.26	0.30	0.22	0.20	0.57	0.41	0.52	0.49
6	Basic Manufactures	2.22	1.72	2.60	2.00	2.51	2.23	2.32	2.42	2.44	2.79	2.60
61	Leather, Leather Goods	15.64	15.48	7.66	7.04	5.41	4.70	3.99	4.17	4.72	4.10	4.44
611	Leather	14.96	11.89	5.71	5.10	4.43	3.52	2.93	2.85	2.96	2.57	3.18
612	Manufactures of leather etc. N. E. S.; saddlery etc.	30.95	33.14	15.19	14.18	9.26	9.08	7.96	8.63	9.84	8.10	8.17
613	Furskins, tanned etc. other than those of 848.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Rubber Manufactures, Nes	1.14	1.27	1.50	1.82	1.30	1.09	1.11	1.14	0.99	0.93	1.02
621	Materials of Rubber (e.g. pastes, plates, sheets, Rods, Thread, Tubes of Rubber)	0.85	0.36	0.24	0.60	0.21	0.22	0.21	0.21	0.25	0.34	0.33
625	Rubber tyres, interchangeable tyre treads etc.	0.96	1.61	2.06	2.52	1.87	1.49	1.46	1.56	1.22	1.10	1.20
628	Rubber articles, N. E. S.	1.98	1.01	0.79	0.82	0.61	0.71	0.82	0.75	0.97	0.92	1.06
63	Cork, Wood Manufactures	0.31	0.18	0.13	0.43	0.23	0.17	0.17	0.14	0.10	0.11	0.11
633	Cork Manufactures	0.07	0.05	0.05	0.07	0.03	0.04	0.02	0.03	0.02	0.22	0.14
634	Veneers, plywood, particle board etc., N. E. S.	0.34	0.24	0.18	0.69	0.37	0.26	0.28	0.20	0.14	0.14	0.12
635	Wood manufactures, N. E. S.	0.29	0.11	0.07	0.12	0.07	0.08	0.07	0.08	0.08	0.07	0.10
64	Paper, Paperboard Etc	0.04	0.05	0.08	0.11	0.15	0.16	0.16	0.13	0.13	0.16	0.23
641	Paper & paperboard	0.03	0.05	0.08	0.10	0.15	0.17	0.16	0.11	0.11	0.16	0.21
642	Paper and Paperboard, Cut to Size or Shape, and Articles of Paper or Paperboard	0.06	0.06	0.07	0.14	0.15	0.13	0.16	0.19	0.19	0.19	0.26
65	Textile Yam, Fabric Etc	4.05	4.92	4.44	5.34	4.35	4.09	4.73	4.81	4.58	4.89	4.86
651	Textile yarn	0.98	3.64	4.64	5.89	5.60	5.76	7.82	8.16	6.65	7.54	7.64

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
652	Cotton fabrics, woven	9.08	8.78	7.40	8.70	7.38	6.42	6.71	6.28	6.69	6.72	6.31
653	Fabrics, woven, of man-made textile materials	0.38	1.66	1.52	2.09	1.84	1.83	1.65	1.77	1.91	2.06	2.27
654	Other textile fabrics, woven	9.11	5.59	4.10	4.08	3.08	2.71	2.98	3.82	3.78	4.25	5.10
655	Knitted or crocheted fabrics, N. E. S.	0.01	2.99	1.59	1.46	1.28	1.01	0.85	0.55	0.48	0.35	0.33
656	Tulles, lace, Embroidery, Ribbons, Trimmings and Other Smallware	0.83	1.27	1.78	2.14	1.33	0.85	1.15	1.96	1.77	2.53	1.96
657	Special yarns, special textile fabrics etc.	0.23	0.36	0.51	0.73	0.53	0.53	0.66	0.54	0.67	0.73	0.61
658	Made-up articles, of textile materials, N. E. S.	10.88	10.16	7.51	9.25	7.41	7.17	8.08	8.59	7.97	8.10	8.67
659	Floor coverings, etc.	11.57	13.24	12.39	15.49	9.83	8.63	9.55	8.10	10.10	10.61	8.88
66	Non-Metal Mineral Manufactures	7.21	0.29	7.56	0.70	7.19	6.86	6.23	6.57	7.79	8.90	7.15
661	Lime, cement, fabricated construction materials	0.28	1.44	2.42	4.51	3.76	2.99	3.30	3.72	3.21	3.74	4.85
662	Clay & refractory construction materials	0.13	0.22	0.37	4.00	0.34	0.25	0.26	0.24	0.29	0.30	0.54
663	Mineral Manufactures, N.E.S.	0.72	0.42	0.25	0.31	0.24	0.23	0.30	0.26	0.36	0.35	0.36
664	Glass	0.21	0.11	0.10	0.21	0.27	0.43	0.27	0.25	0.23	0.34	0.42
665	Glassware	0.49	0.53	0.62	0.76	0.64	0.53	0.48	0.43	0.43	0.60	0.71
666	Pottery	0.02	0.09	0.09	0.08	0.06	0.12	0.10	0.07	0.11	0.14	0.16
667	Pearls & precious stones etc., unworked or worked	18.22	23.80	18.53	24.25	16.51	16.53	14.91	15.68	19.78	20.50	14.82
67	Iron And Steel	0.14	0.61	0.90	1.52	1.01	1.00	1.09	1.27	0.98	1.30	1.33
671	Pig-iron etc., iron & steel granules, powders etc.	0.07	1.37	2.98	5.27	4.15	3.59	2.59	3.40	2.33	1.49	1.93
672	Ingots etc., of iron & steel; semi-finished products	0.03	0.41	0.62	1.27	0.63	0.58	0.70	0.79	0.59	0.88	0.85
673	Flat-rolled products, iron or non-alloy steel, not clad etc.	0.05	0.75	1.96	1.88	1.16	1.23	1.38	1.31	0.74	0.87	0.99
674	Flat-rolled products of iron or non-alloy steel, clad etc.	0.01	0.26	0.25	0.93	0.54	0.53	0.82	1.14	0.91	1.64	1.47
676	Iron & Steel Bars, Rods, Angles etc. (including Sheet Piling)	0.42	0.13	0.03	0.68	0.14	0.62	0.46	1.93	0.39	0.07	0.19
677	Rails or Railway Track Construction Material, of Iron or Steel	0.12	1.84	1.84	2.14	1.51	2.53	2.51	1.84	1.51	1.40	2.02
678	Wire of iron or steel	0.36	0.49	0.46	0.88	0.61	0.60	0.69	0.81	0.79	0.79	0.89
679	Tubes, Pipes and Hollow Profiles, and Tube or Pipe Fittings, of Iron or Steel	2.40	3.92	2.33	3.04	4.00	3.26	2.65	3.31	3.52	4.20	4.83
68	Non Ferrous Metals	0.20	0.30	0.54	0.40	0.37	0.23	0.35	0.38	0.21	0.37	0.47
681	Silver, Platinum and Other Metals of the Platinum Group	0.00	0.02	0.08	0.04	0.01	0.02	0.04	0.05	0.04	0.14	0.18
682	Copper	0.17	0.05	0.07	0.10	0.11	0.09	0.10	0.10	0.12	0.10	0.35
683	Nickel	0.00	0.01	0.34	0.02	0.00	0.02	0.07	0.06	0.02	0.03	0.02
684	Aluminum	0.28	0.69	1.19	0.88	0.71	0.43	0.65	0.74	0.35	0.71	0.76
685	Lead	0.02	0.14	0.28	0.09	0.34	0.33	0.26	0.16	0.04	0.04	0.03
686	Zinc	0.01	0.01	0.09	0.14	0.30	0.01	0.05	0.19	0.17	0.01	0.12



**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
687	Tin	0.01	0.16	0.39	0.14	0.31	0.27	1.02	0.81	0.39	0.62	1.05
689	Miscellaneous Non-Ferrous Base Metals Employed in Metallurgy, and Cermets	1.04	0.00	0.04	0.03	0.09	0.07	0.10	0.08	0.16	0.07	0.07
69	Metal Manufactures Nes	0.71	1.16	1.18	1.34	0.90	0.82	0.93	0.92	1.02	1.15	1.27
691	Structures and Parts of Structures, N.E.S., of Iron, Steel or Aluminium	0.55	0.37	0.72	1.16	0.77	0.44	0.84	0.52	1.02	0.97	0.80
692	Metal Containers for Storage or Transport	0.25	0.92	0.32	0.69	0.36	0.25	0.28	0.20	0.22	0.22	0.35
693	Wire Products (Excluding Insulated Electrical Wiring) and Fencing Grills	0.72	1.09	2.22	1.17	0.95	0.87	0.88	1.67	1.80	1.58	1.46
694	Nails, screws, etc, of iron, steel, copper or aluminium	0.55	0.72	1.10	1.40	0.84	0.76	0.75	0.67	0.79	0.93	1.06
695	Tools for use in the hand or in machines	0.91	1.32	1.31	1.59	1.00	1.01	1.05	0.95	0.96	1.13	1.21
696	Cutlery	0.63	1.38	0.74	1.36	1.25	1.09	1.26	1.45	1.30	1.00	1.06
697	Household equipment of base metal, N. E. S.	1.44	1.59	1.84	2.22	1.81	1.79	2.01	2.16	2.35	3.26	4.31
699	Manufactures of base metals, N. E. S.	0.64	1.43	1.24	1.17	0.73	0.70	0.78	0.79	0.82	0.90	0.89
7	Machines, Transport Equipment	0.19	0.24	0.18	0.23	0.20	0.20	0.20	0.19	0.16	0.16	0.18
71	Power Generating Machines	0.28	0.37	0.31	0.38	0.22	0.21	0.26	0.26	0.22	0.22	0.26
711	Steam or Other Vapour Generating Boilers, Superheated Water Boilers, and Auxiliary Plant for Use Therewith; Parts Thereof	1.34	1.41	0.90	0.56	0.62	0.43	0.74	0.69	0.54	0.59	0.60
712	Steam Turbines & Other Vapour Turbines & Parts, N.E.S.	0.01	0.02	0.12	0.34	0.03	0.21	0.32	0.33	0.91	0.14	0.09
713	Internal combustion piston engines & parts, N.E.S.	0.46	0.59	0.47	0.58	0.33	0.30	0.33	0.38	0.29	0.34	0.37
714	Engines and Motors, Non-electric (other than those of Groups 712, 713, 718); Parts, N.E.S., of these Engines and Motors	0.00	0.00	0.01	0.15	0.03	0.02	0.06	0.04	0.01	0.04	0.02
716	Rotating Electric Plant and Parts Thereof, N.E.S.	0.11	0.34	0.37	0.25	0.17	0.20	0.30	0.24	0.26	0.26	0.40
718	Power Generating Machinery and Parts Thereof, N.E.S.	0.03	0.05	0.16	0.31	0.03	0.07	0.14	0.14	0.12	0.07	0.15
72	Special Industrial Machinery	0.33	0.44	0.27	0.28	0.25	0.22	0.26	0.29	0.27	0.24	0.29
722	Agricultural Machinery (Excluding Tractors) & Parts Thereof	0.56	0.32	0.15	0.15	0.12	0.15	0.16	0.28	0.21	0.22	0.24
723	Tractors (Other Than Those of Headings 744.14 and 744.15)	0.07	0.08	0.16	0.21	0.27	0.30	0.36	0.24	0.28	0.24	0.38
724	Civil engineering etc. equipment, parts thereof	0.19	0.06	0.11	0.10	0.08	0.05	0.08	0.19	0.05	0.03	0.05
725	Textile & leather machinery & parts thereof, N. E. S.	0.64	0.98	0.54	0.55	0.52	0.42	0.60	0.62	0.51	0.53	0.75
725	Paper Mill and Pulp Mill Machinery, Paper Cutting Machines and Other Machinery for the Manufacture of Paper Articles; Parts Thereof	0.03	0.11	0.17	0.19	0.17	0.14	0.16	0.18	0.16	0.14	0.22
726	Printing and Bookbinding Machinery and Parts Thereof	0.28	0.39	0.20	0.20	0.18	0.20	0.23	0.22	0.23	0.25	0.26

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
727	Food Processing Machines (Excluding Domestic); Parts Thereof	0.77	0.88	0.51	0.62	0.61	0.88	0.47	0.74	0.95	0.62	0.55
728	Other machinery etc. for particular industries, N.E.S.	0.25	0.40	0.24	0.24	0.20	0.16	0.20	0.21	0.26	0.22	0.25
73	Metal Working Machinery	0.79	0.41	0.32	0.38	0.27	0.23	0.22	0.30	0.34	0.29	0.37
736	Metalworking machinery - tools	0.91	0.47	0.34	0.41	0.29	0.23	0.20	0.31	0.34	0.28	0.35
737	Metalworking Machinery (Other Than Machine Tools) and Parts Thereof, N.E.S.	0.36	0.18	0.26	0.30	0.22	0.22	0.28	0.28	0.35	0.31	0.45
74	General Industrial Machinery, Nes	0.21	0.22	0.19	0.23	0.17	0.15	0.19	0.22	0.26	0.24	0.27
741	Heating & cooling equipment, parts thereof, N. E. S.	0.18	0.19	0.12	0.19	0.14	0.11	0.16	0.18	0.15	0.17	0.16
742	Pumps for Liquids, Whether or Not Fitted With A Measuring Device; Liquid Elevators; Parts for Such Pumps and Liquid Elevators	0.52	0.48	0.45	0.52	0.31	0.27	0.36	0.43	0.53	0.42	0.51
743	Pumps (Other Than Pumps for Liquids), Air or Other Gas Compressors and Fans; Ventilating or Recycling Hoods Incorporating Fan, Whether or Not Fitted With Filters; Centrifuges; Filtering or Purifying Apparatus; Parts Thereof	0.36	0.32	0.22	0.22	0.18	0.14	0.17	0.20	0.24	0.19	0.24
744	Mechanical handling equipment, parts, N. E. S.	0.19	0.20	0.15	0.17	0.10	0.10	0.10	0.11	0.13	0.10	0.12
745	Non-electrical Machinery, Tools and Mechanical Apparatus and Parts Thereof, N.E.S.	0.09	0.16	0.17	0.21	0.21	0.15	0.19	0.20	0.22	0.22	0.23
749	Non-electric Parts and Accessories of Machinery, N.E.S.	0.11	0.14	0.15	0.21	0.17	0.16	0.21	0.27	0.35	0.35	0.38
75	Office Machines, Adp. Machines	0.06	0.22	0.09	0.15	0.13	0.14	0.17	0.14	0.04	0.06	0.10
751	Office Machines	0.03	0.20	0.10	0.05	0.06	0.07	0.08	0.11	0.13	0.10	0.12
752	Automatic data processing machines etc., N. E. S.	0.01	0.22	0.08	0.14	0.13	0.11	0.17	0.14	0.03	0.03	0.05
759	Parts etc, for use with groups 751 & 752	0.14	0.22	0.11	0.19	0.14	0.19	0.19	0.13	0.06	0.10	0.15
76	Telecomm. Sound Equip Etc	0.02	0.08	0.07	0.08	0.07	0.11	0.11	0.09	0.07	0.06	0.05
761	Television Receivers, Whether or Not Incorporating Radio-Broadcast Receivers or Sound- or Video Recording or Reproducing Apparatus	0.00	0.14	0.26	0.22	0.20	0.24	0.30	0.20	0.14	0.13	0.12
762	Radio Broadcast Receivers, Whether or Not Incorporating Sound-Recording or Reproducing Apparatus or A Clock	0.02	0.04	0.02	0.02	0.00	0.00	0.00	0.01	0.01	0.00	0.00
763	Sound Recorders or Reproducers; Television Image & Sound Recorders or Reproducers; Prepared Unrecorded Media	0.00	0.08	0.01	0.02	0.04	0.04	0.16	0.11	0.15	0.07	0.04

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
764	Telecommunication Equipment, N.E.S., and Parts, N.E.S., and Accessories of Apparatus Falling Within Division 76	0.03	0.06	0.05	0.07	0.06	0.11	0.08	0.08	0.06	0.06	0.05
77	Electrical Machinery Appar, Parts, Nes	0.30	0.30	0.11	0.19	0.34	0.38	0.18	0.17	0.16	0.17	0.18
771	Electric power machinery & parts thereof	0.18	0.13	0.02	0.34	0.30	0.29	0.36	0.50	0.42	0.36	0.36
772	Electrical apparatus for switching circuits, resistors etc	0.16	0.19	0.23	0.30	0.18	0.21	0.23	0.21	0.17	0.18	0.20
773	Equipment for distributing electricity, N. E. S.	0.74	0.92	0.36	0.27	0.34	0.23	0.28	0.32	0.36	0.36	0.40
774	Electrodiagnostic Apparatus for Medical, Surgical, Dental or Veterinary Sciences and Radiological Apparatus	0.23	0.14	0.14	0.13	0.09	0.18	0.17	0.28	0.23	0.80	0.80
775	Household-Type Electrical and Non-electrical Equipment, N.E.S.	0.26	0.09	0.14	0.12	0.10	0.10	0.11	0.12	0.13	0.13	0.15
78	Road Vehicles	0.15	0.20	0.29	0.34	0.28	0.28	0.28	0.24	0.20	0.18	0.21
781	Motor cars & other motor vehicles	0.02	0.03	0.08	0.10	0.10	0.11	0.14	0.12	0.07	0.05	0.04
782	Motor Vehicles for the Transport of Goods and Special Purpose Motor Vehicles	0.06	0.07	0.13	0.14	0.14	0.11	0.17	0.18	0.13	0.09	0.15
783	Road motor vehicles, N. E. S.	1.15	1.22	1.14	0.49	0.56	0.46	0.44	0.46	0.46	0.49	0.53
784	Parts & accessories of groups 722, 781, 782 & 783	0.22	0.32	0.32	0.43	0.36	0.32	0.33	0.29	0.27	0.27	0.33
785	Motor cycles & cycles etc.	1.54	0.34	3.22	3.42	2.49	3.02	2.31	1.77	1.92	1.92	2.09
786	Trailers & Semi-Trailers; Other Vehicles, Not Mechanically Propelled; Specially Designed & Equip. Transp. Containers	0.32	1.28	0.72	0.62	0.12	0.04	0.08	0.15	0.07	0.07	0.08
79	Other Transport Equipment	0.10	0.12	0.03	0.03	0.05	0.02	0.08	0.13	0.07	0.10	0.10
791	Railway Vehicles (Including Hovertrains) and Associated Equipment	0.89	0.34	0.19	0.36	0.38	0.22	0.28	0.14	0.08	0.05	0.13
792	Aircraft & associated equipment; spacecraft etc.	0.11	0.02	0.02	0.02	0.02	0.01	0.01	0.07	0.02	0.04	0.07
793	Ships, boats (incl. hovercraft) & floating structures	0.01	0.32	0.00	0.01	0.05	0.00	0.17	0.26	0.21	0.28	0.17
8	Miscellaneous Manufactured Goods	1.54	1.37	1.60	1.39	1.51	1.40	1.40	1.37	1.62	1.54	1.53
81	Prefab Building, Fittings Etc	0.24	0.31	0.17	0.28	0.21	0.21	0.22	0.19	0.16	0.17	0.20
812	Sanitary, Plumbing and Heating Fixtures and Fittings, N.E.S.	0.24	0.31	0.17	0.28	0.21	0.21	0.22	0.19	0.16	0.17	0.20
82	Furniture, Parts Thereof	0.07	0.02	0.05	0.06	0.04	0.04	0.04	0.05	0.06	0.08	0.10
821	Furniture & parts thereof; bedding, mattresses etc.	0.07	0.02	0.05	0.06	0.04	0.04	0.04	0.05	0.06	0.08	0.10
83	Travel Goods, Handbags, Etc.	3.08	4.55	3.90	3.88	3.03	3.00	2.42	3.01	3.52	2.89	2.68
831	Trunks, suitcases etc, other traveling goods	3.08	4.55	3.90	3.88	3.03	3.00	2.42	3.01	3.52	2.89	2.68
84	Clothing And Accessories	4.45	3.62	4.25	2.96	3.79	3.64	3.70	3.42	3.95	3.95	3.88
842	Women's clothing (other than sub-group 842.2)	1.16	1.18	0.73	0.90	0.87	0.82	0.79	0.75	1.23	1.24	1.58

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
843	Men's clothing (other than those of sub-group 845.2)	8.74	9.18	6.45	6.36	5.62	5.44	5.53	5.63	6.42	5.84	5.57
844	Women's clothing, knitted or crocheted	12.69	14.73	9.42	9.83	8.50	9.02	9.65	9.35	8.84	8.92	8.94
845	Articles of apparel, of textile fabrics, N. E. S.	2.07	2.98	1.82	2.32	1.61	1.45	1.55	1.27	1.53	1.91	1.84
846	Clothing accessories of textile fabrics, etc.	1.55	5.60	4.24	4.96	3.57	3.48	3.55	2.97	4.06	4.37	4.03
847	Textile clothing accessories, N. E. S.	2.73	5.67	4.02	5.61	4.31	3.09	2.54	2.69	2.77	4.21	4.25
848	Articles of apparel etc. of other than textile fabrics, etc.	1.61	8.32	7.23	7.19	5.52	5.03	5.47	5.41	5.37	4.91	4.87
85	Footwear	0.70	1.84	1.34	1.76	1.39	1.20	1.18	0.97	1.27	1.36	1.19
851	Footwear	0.70	1.84	1.34	1.76	1.39	1.20	1.18	0.97	1.27	1.36	1.19
87	Scientific Equipment, Nes	0.11	0.20	0.10	0.14	0.10	0.09	0.11	0.12	0.14	0.14	0.16
871	Optical Instruments and Apparatus, N.E.S.	0.01	0.48	0.07	0.14	0.08	0.09	0.10	0.08	0.09	0.08	0.20
872	Instruments etc., N.E.S. for medical etc. sciences	0.30	0.34	0.15	0.24	0.19	0.16	0.17	0.20	0.22	0.20	0.26
873	Meters and Counters, N.E.S.	0.01	0.00	0.01	0.02	0.03	0.07	0.05	0.05	0.14	0.14	0.40
874	Measuring, Checking, Analysing and Controlling Instruments and Apparatus, N.E.S.	0.07	0.15	0.09	0.11	0.09	0.07	0.09	0.10	0.12	0.13	0.11
88	Photo. Apparatus, Nes; Colours	0.19	0.14	0.13	0.16	0.14	0.13	0.17	0.18	0.22	0.22	0.21
881	Photographic Equipment and Apparatus, N.E.S.	0.02	0.24	0.04	0.05	0.03	0.02	0.09	0.03	0.03	0.03	0.04
882	Photographic and Cinematographic Supplies	0.02	0.04	0.12	0.05	0.06	0.04	0.04	0.11	0.16	0.15	0.11
883	Cinematographic Film, Exposed & Developed, Whether or Not Incorp. Soundtrack or Consisting Only of Soundtrack	4.93	6.17	4.07	3.93	3.62	4.75	5.67	8.80	9.06	8.94	8.31
884	Optical Goods, N.E.S.	0.98	0.14	0.14	0.23	0.17	0.12	0.16	0.17	0.24	0.16	0.13
885	Watches and Clocks	0.02	0.04	0.10	0.20	0.19	0.20	0.23	0.20	0.21	0.28	0.34
89	Misc. Manufactured Goods, Nes	1.02	0.62	0.64	1.00	0.85	0.81	0.82	0.86	1.11	0.97	1.05
892	Printed Matter	0.37	0.24	0.20	0.25	0.22	0.22	0.25	0.21	0.27	0.29	0.30
893	Articles, N. E. S., of plastics	0.16	0.41	0.39	1.16	0.81	0.68	0.51	0.41	0.40	0.45	0.43
894	Baby carriages, toys, games & sporting goods	0.48	0.41	0.22	0.28	0.27	0.23	0.25	0.25	0.22	0.18	0.17
895	Office and Stationery Supplies, N.E.S.	0.29	0.29	0.40	1.22	1.22	1.17	1.10	0.88	0.94	1.03	1.26
896	Works of art, collectors pieces etc.	7.22	0.01	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
897	Jewellery etc., & other articles of precious etc. stones	2.15	3.30	3.56	4.07	3.43	3.43	4.00	4.42	6.43	5.61	5.47
898	Musical instruments, parts & accessories, records etc.	0.11	0.33	0.32	0.62	0.72	0.78	0.79	1.05	1.09	0.93	1.44
899	Miscellaneous Manufactured Articles, N. E. S.	0.32	0.50	0.34	0.52	0.37	0.42	0.53	0.47	0.57	0.54	0.56
9	Goods Not Classified By Kind	0.04	0.73	0.60	0.82	0.61	1.72	0.56	0.59	0.68	0.64	0.67
93	Special Transactions And Commodities Not Classified	0.03	0.95	0.79	1.25	0.88	6.18	0.59	0.61	0.71	0.66	0.69
931	Special transactions etc. not classed by kind	0.03	0.95	0.79	1.25	0.88	6.18	0.59	0.61	0.71	0.66	0.69

(contd.)

**Table 4.2: Revealed Comparative Advantage Ratios for India: Selected Years**

SITC Code	Classification	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
94	Zoo Animals, Pets Etc.	0.30	0.09	0.00	0.00	0.03	0.01	0.01	0.01	0.00	0.00	0.02
941	Zoo Animals, Pets Etc.	0.30	0.09	0.00	0.00	0.03	0.01	0.01	0.01	0.00	0.00	0.02
95	War Firearms, Ammunition	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.03
951	War Firearms, Ammunition	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.03

Source: Computed from UNCOMTRADE Database

#### **4.1.3 NEPAL :**

At the 1-digit SITC classification, Nepal (Table 4.3) has revealed comparative advantage in food and live animals, basic manufactures, miscellaneous manufactured goods, crude materials excluding fuels, chemicals and related products and animal and vegetable oils and fat. In the last two categories, the country lost its comparative advantage in the 1990s. There are only 4 out of the 71 product categories under the 2-digit SITC classification in which Nepal maintained its comparative advantage during most of the period under consideration: these are essential oils, perfumes etc., textile yarn, fabrics etc, clothing and accessories, and special commodities and transactions not classed. For some years during the period under consideration, there is evidence of comparative advantage in cereals and cereal preparations, leather and leather goods, and vegetables and fruits. Further disaggregation (3-digit SITC) shows Nepal has lost ground in terms of its revealed comparative advantage in many export products during the period 1985 to 2000. Nepal's comparative advantage structure has undergone change over time. Whereas in the mid 1980s the country had comparative advantage in 6 commodity groups, it lost advantage in half of them by 2000 and gained some advantage in 2 new commodities. The most recent export profile of Nepal (2000) indicates the country's revealed comparative advantage in men and women's clothing, knitted or crocheted, floor coverings, textile clothing accessories, and essential oils and perfumes etc.

**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
0	Food And Live Animals	3.79	1.58	1.16	0.52	0.75	0.90	1.15	1.07	1.68	1.69
00	Live Animals Other Than Those Of Div. 03	0.51	0.39	0.05	0.04	0.05	0.04	0.03	0.00	0.04	0.00
001	Live animals other than division 03	0.51	0.39	0.05	0.04	0.05	0.04	0.03	0.00	0.04	0.00
01	Meat, Meat Preparations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
011	Meat of bovine animals, fresh, chilled or frozen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
012	Other meat & edible meat offal unfit for human consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02	Dairy Products, Bird Eggs	0.11	0.05	0.01	0.03	0.01	0.01	0.04	0.01	0.02	0.93
022	Milk, cream & milk products other than butter or cheese	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
023	Butter & other fats & oils derived from milk	0.11	0.05	0.01	0.03	0.01	0.01	0.04	0.01	0.02	0.93
024	Cheese and curd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
025	Eggs, birds', & egg yolks, fresh etc., egg albumin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03	Fish, Crustaceans, Mollusc	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
034	Fish, fresh (live or dead), chilled or frozen	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
035	Fish, dried etc.; smoked fish; flours, meals etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
036	Crustaceans etc. chilled, frozen, dried, salted etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
037	Fish, crustaceans etc. prepared or preserved, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04	Cereals, Cereal Preparations	1.48	0.03	0.02	0.03	0.04	0.07	0.11	0.13	0.50	0.09
041	Wheat (including spelt) and meslin, unmilled	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
042	Rice	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.20	0.00
043	Barley, unmilled	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
044	Maize (not including sweet corn), unmilled	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
045	Cereals, unmilled (other than wheat, rice, barley & maize)	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
046	Meal & flour of wheat & flour of meslin	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
047	Other cereal meals & flours	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
048	Cereal preparations & preparations of flour or fruits etc.	0.05	0.02	0.02	0.02	0.04	0.06	0.11	0.07	0.10	0.09
05	Vegetables And Fruits	0.90	0.58	0.83	0.21	0.33	0.46	0.61	0.58	0.60	0.35
054	Vegetables, fresh, chilled, etc.	0.87	0.56	0.83	0.21	0.33	0.46	0.61	0.58	0.51	0.35
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
057	Fruits and nuts (not including oil nuts), fresh or dried	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
058	Fruit, preserved, & fruit preparations (excl. fruit juices)	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
06	Sugar, Sugar Preparations, Honey	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
061	Sugar, molasses & honey	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01

(contd.)

**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
062	Sugar confectionery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07	Coffee, Tea, Cocoa, Spices	0.36	0.28	0.16	0.07	0.19	0.22	0.24	0.21	0.21	0.15
071	Coffee & coffee substitutes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
072	Cocoa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
073	Chocolate & other food preparations containing cocoa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
074	Tea & mate	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01
075	Spices	0.36	0.27	0.15	0.07	0.18	0.21	0.22	0.21	0.19	0.14
08	Feeding Stuff For Animals	0.37	0.24	0.10	0.10	0.12	0.10	0.12	0.13	0.22	0.16
081	Feeding stuff for animals (not incl. unmilled cereals)	0.37	0.24	0.10	0.10	0.12	0.10	0.12	0.13	0.22	0.16
09	Misc. Edible Products Etc.	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.07	0.00
091	Margarine and shortening	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
098	Edible products & preparations, N. E. S.	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
1	Beverages And Tobacco	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.00
11	Beverages	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
111	Non-alcoholic beverages, NES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	Alcoholic beverages	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
12	Tobacco, Tobacco Manufactures	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
121	Tobacco unmanufactured, tobacco refuse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
122	Tobacco, manufactured	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2	Crude Materials, Excl. Fuels	0.82	0.57	0.44	0.37	0.28	0.46	0.28	0.17	0.21	0.13
21	Hides, Skins, Furskins, Raw	0.01	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.05
211	Hides & skins (except furskins), raw	0.01	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.05
212	Furskins, raw, other than group 211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Oil Seed, Oleaginous Fruit	0.14	0.11	0.30	0.19	0.11	0.31	0.19	0.08	0.05	0.02
222	Oil-seeds etc. used for extraction of "soft" oils	0.02	0.07	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00
223	Oil-seeds & oleaginous fruits, whole or broken etc.	0.11	0.04	0.30	0.17	0.11	0.30	0.18	0.08	0.05	0.01
23	Crude Rubber	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	Natural rubber, balata etc in primary forms, or in plates etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	Synthetic rubber, reclaimed rubber, waste, parings etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Cork And Wood	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
244	Cork, natural, raw and waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
245	Fuel Wood (excluding wood waste) & wood charcoal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)



**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
246	Wood in chips or particles and wood waste	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
247	Wood in the rough or roughly squared	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
248	Wood, simply worked, & railway sleepers of wood	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Pulp And Waste Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
251	Pulp and waste paper	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
26	Textile Fibers	0.23	0.38	0.03	0.05	0.06	0.02	0.00	0.00	0.00	0.00
261	Silk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
263	Cotton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
264	Jute and other textile bast fibers, N. E. S., raw etc.	0.21	0.38	0.03	0.02	0.06	0.02	0.00	0.00	0.00	0.00
265	Vegetable textile fibers, raw or processed; waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
266	Synthetic fibers suitable for spinning	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
267	Other man-made fibers suitable for spinning; waste thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
268	Wool & other animal hair (excluding wool tops)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
269	Worn clothing and other worn textile articles; rags	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Crude Fertilizer, Mineral	0.02	0.03	0.02	0.01	0.02	0.01	0.02	0.02	0.03	0.03
273	Stone, sand & gravel	0.01	0.00	0.02	0.01	0.02	0.01	0.02	0.02	0.03	0.03
274	Sulphur and unroasted iron pyrites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
277	Natural Abrasives, N.E.S. (Including Industrial Diamonds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
278	Other crude minerals	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Metaliferous Ores, Scrap	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
281	Iron ore & concentrates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
282	Ferrous waste & scrap; remelting scrap ingots of iron etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
286	Uranium or thorium ores & concentrates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
287	Ores & concentrates of basic metals, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
288	Non-ferrous base metal waste and scrap, NES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
289	Ores & concentrates of precious metals; waste, scrap etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	Crude Animal, Veg. Material	0.32	0.04	0.01	0.03	0.08	0.11	0.07	0.06	0.06	0.02
291	Crude animal vegetable materials, N. E. S.	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292	Crude vegetable materials, N. E. S.	0.30	0.04	0.01	0.03	0.08	0.11	0.07	0.06	0.05	0.02
3	Mineral Fuels, Etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	Coal, Coke, Briquettes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
322	Briquettes, lignite and peat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
33	Petroleum, Petrol Product	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
333	Petroleum oils etc. obt. from bituminous minerals, crude	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
334	Petroleum oils; preparations, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
335	Residual petroleum products, N. E. S., etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	Gas, Natural, Manufactured	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
341	Gas, natural & manufactured	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Animal, Vegetable Oil, Fat	0.17	0.12	0.00	0.07	0.15	0.09	0.06	0.05	1.49	0.00
41	Animal Oils And Fats	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
411	Animal Oils and Fats	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Fixed Veg. Fats And Oils	0.17	0.06	0.00	0.07	0.15	0.09	0.06	0.00	0.04	0.00
424	Fixed vegetable oil, nonsoft	0.16	0.05	0.00	0.07	0.15	0.09	0.06	0.00	0.04	0.00
43	Processed Animal, Veg. Oil, Etc.	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.05	1.45	0.00
431	Animal or Vegetable Fats & Oils, Processed; Waxes; Inedible Mixtures or Prep. of Animal or Vegetable Fats or Oils, N.E.S.	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.05	1.45	0.00
5	Chemicals, Related Products, Nes	0.41	0.07	0.08	0.16	0.16	0.24	0.28	0.50	1.40	1.47
51	Organic Chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
511	Hydrocarbons, N.E.S. & their nitrated etc. derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
512	Alcohols, Phenols, Phenol - Alcohols, and Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
513	Carboxylic Acids and Their Anhydrides etc.; Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
514	Nitrogen-function compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
516	Other organic chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	Inorganic Chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
522	Inorganic Chemical Elements, Oxides and Halogen Salts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
523	Metal Salts and Peroxysalts, or Inorganic Acids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
524	Other Inorganic Chemicals; Organic and Inorganic Compounds of Precious Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	Dyes, Colouring Materials	0.41	0.04	0.04	0.02	0.01	0.02	0.03	0.04	0.07	0.07
531	Synthetic organic colouring matter etc.	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
532	Dyeing, tanning extracts & synthetic tanning materials	0.41	0.04	0.04	0.01	0.01	0.02	0.03	0.04	0.07	0.07
533	Pigments, paints, varnishes & related materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

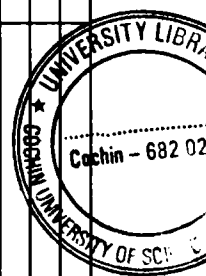
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Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
54	Medicinal, Pharm. Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.18
541	Medicinal & pharm. products (excl. group 542)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.18
55	Essential Oils, Perfume Etc	0.00	0.02	0.00	0.10	0.15	0.21	0.24	0.45	1.01	1.16
551	Essential Oils, Perfume and Flavour Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
553	Perfumery, cosmetic or toilet preparations (excl. soaps)	0.00	0.02	0.00	0.09	0.14	0.21	0.24	0.45	0.61	0.79
554	Soap, cleansing & cleaning preparations	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.39	0.37
56	Fertilizer Except Grp. 272	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
562	Fertilizers (other than those of group 272)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	Plastics In Primary Form	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
572	Polymers of Styrene, In Primary Forms	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	Plastics, Non Primary Form	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
582	Plates, sheets, films etc. of plastic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
583	Monofilament, rods, sticks etc. of plastic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	Chemical Materials Nes	0.00	0.00	0.04	0.03	0.00	0.01	0.01	0.01	0.11	0.06
591	Insecticides, herbicides etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
592	Starches, Inulin & Wheat Gluten; Albuminoidal Substances	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
598	Miscellaneous chemical products, N. E. S.	0.00	0.00	0.04	0.02	0.00	0.01	0.01	0.01	0.11	0.06
6	Basic Manufactures	3.86	7.28	7.70	7.10	6.54	6.36	6.62	5.85	6.03	4.61
61	Leather, Leather Goods	1.20	0.82	0.20	0.15	0.42	0.42	0.27	0.30	0.20	0.07
611	Leather	1.20	0.81	0.18	0.15	0.42	0.37	0.25	0.29	0.20	0.07
612	Manufactures of leather etc. N. E. S.; saddlery etc.	0.01	0.00	0.02	0.00	0.00	0.05	0.02	0.00	0.00	0.00
613	Furskins, tanned etc. other than those of 848.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Rubber Manufactures, Nes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
621	Materials of Rubber	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
625	Rubber tyres, interchangeable tyre treads etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
628	Rubber articles, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	Cork, Wood Manufactures	0.04	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.05	0.02
633	Cork Manufactures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
634	Veneers, plywood, particle board etc., N. E. S.	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01
635	Wood manufactures, N. E. S.	0.04	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01
64	Paper, Paperboard Etc	0.01	0.00	0.02	0.01	0.03	0.03	0.04	0.04	0.10	0.07
641	Paper & paperboard	0.01	0.00	0.02	0.01	0.03	0.03	0.04	0.00	0.08	0.02

(contd.)



**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
642	Paper & Paperboard, Cut to Size/Shape, & Articles thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.05
65	Textile Yarn, Fabric Etc	2.56	6.41	7.37	6.89	5.98	5.76	6.15	5.47	5.19	4.43
651	Textile yarn	0.00	0.01	0.01	0.19	0.18	0.16	0.20	0.30	0.35	0.22
652	Cotton fabrics, woven	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.00
653	Fabrics, woven, of man-made textile materials	0.01	0.03	0.01	0.02	0.00	0.00	0.00	0.00	0.07	0.00
654	Other textile fabrics, woven	0.49	0.05	0.05	0.04	0.01	0.05	0.05	0.09	0.08	0.09
655	Knitted or crocheted fabrics, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
656	Tulles, lace, Embroidery, Ribbons, Trimmings etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
657	Special yarns, special textile fabrics etc.	0.24	0.00	0.07	0.07	0.16	0.23	0.26	0.16	0.12	0.20
658	Made-up articles, of textile materials, N. E. S.	0.53	0.03	0.02	0.10	0.06	0.02	0.05	0.29	0.19	0.36
659	Floor coverings, etc.	1.29	6.29	7.19	6.46	5.57	5.30	5.60	4.63	4.34	3.56
66	Non-Metal Mineral Manufactures	0.02	0.01	0.00	0.01	0.01	0.03	0.02	0.03	0.00	0.00
661	Lime, cement, fabricated construction materials	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.03	0.00	0.00
662	Clay & refractory construction materials	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
663	Mineral Manufactures, N.E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
664	Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
665	Glassware	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
666	Pottery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
667	Pearls & precious stones etc., unworked or worked	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	Iron And Steel	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.32	0.00
671	Pig-iron etc., iron & steel granules, powders etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
672	Ingots etc., of iron & steel; semi-finished products	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
673	Flat-rolled products; iron or non-alloy steel, not clad etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
674	Flat-rolled products of iron or non-alloy steel, clad etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
675	Flat - Rolled Products of Alloy Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
676	Iron and Steel Bars, Rods, Angles, Shapes and Sections (including Sheet Piling)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
677	Rails or Railway Track Construction Material, of Iron or Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
678	Wire of iron or steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
679	Tubes, Pipes & Hollow Profiles, Fittings thereof, of Iron/Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Non Ferrous Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.01
681	Silver, Platinum and Other Metals of the Platinum Group	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
682	Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01
683	Nickel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
684	Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
686	Zinc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
687	Tin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
689	Miscellaneous Non-Ferrous Base Metals Employed in Metallurgy, and Cermets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	Metal Manufactures Nes	0.02	0.03	0.10	0.03	0.09	0.11	0.13	0.00	0.03	0.01
691	Structures and Parts of Structures, N.E.S., of Iron, Steel or Aluminum	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
692	Metal Containers for Storage or Transport	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
693	Wire Products (Excluding Insulated Electrical Wiring) and Fencing Grills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
694	Nails, screws, etc, of iron, steel, copper or aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
695	Tools for use in the hand or in machines	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
696	Cutlery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
697	Household equipment of base metal, N. E. S.	0.01	0.03	0.10	0.00	0.09	0.11	0.13	0.00	0.00	0.01
699	Manufactures of base metals, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Machines, Transport Equipment	0.00	0.00	0.00	0.41	0.02	0.02	0.02	0.03	0.07	0.08
71	Power Generating Machines	0.00	0.00	0.00	0.04	0.00	0.02	0.02	0.00	0.00	0.00
711	Steam or Other Vapour Generating Boilers, Superheated Water Boilers, and Auxiliary Plant for Use Therewith, Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
712	Steam Turbines & Other Vapour Turbines & Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
713	Internal combustion piston engines & parts, N.E.S.	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
714	Engines and Motors, Non-electric (other than those of Groups 712, 713, 718); Parts, N.E.S., of these Engines and Motors	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
716	Rotating Electric Plant and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.00
718	Power Generating Machinery and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Special Industrial Machinery	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.05
721	Agricultural Machinery (Excluding Tractors) and Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
722	Tractors (Other Than Those of Headings 744.14 and 744.15)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
723	Civil engineering etc. equipment, parts thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
724	Textile & leather machinery & parts thereof, N. E. S.	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
725	Paper & Pulp Mill Machinery, Paper Cutting Machines, Other Machinery for Manufacture of Paper Articles; Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
726	Printing and Bookbinding Machinery and Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
727	Food Processing Machines (Excluding Domestic); Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
728	Other machinery etc. for particular industries, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	Metal Working Machinery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
736	Metalworking machinery - tools	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
737	Metalworking Machinery (Other Than Machine Tools) and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	General Industrial Machinery, Nes	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
741	Heating & cooling equipment, parts thereof, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
742	Pumps for Liquids, Whether or Not Fitted With A Measuring Device; Liquid Elevators; Parts thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
743	Pumps (Other Than Pumps for Liquids), Air or Other Gas Compressors and Fans; Ventilating or Recycling Hoods; Centrifuges; Filtering or Purifying Apparatus; Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
744	Mechanical handling equipment, parts, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
745	Non-electrical Machinery, Tools and Mechanical Apparatus and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
749	Non-electric Parts and Accessories of Machinery, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	Office Machines, Adp. Machines	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00
751	Office Machines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
752	Automatic data processing machines etc., N. E. S.	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
759	Parts etc. for use with groups 751 & 752	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00
76	Telecomm, Sound Equip Etc	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
761	Television Receivers, Whether or Not Incorporating Radio-Broadcast Receivers or Sound- or Video Recording or Reproducing Apparatus	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
762	Radio Broadcast Receivers, Whether or Not Incorporating Sound-Recording or Reproducing Apparatus or A Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
763	Sound Recorders or Reproducers; Television Image and Sound Recorders or Reproducers; Prepared Unrecorded Media	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
764	Telecommunication Equipment, N.E.S., and Parts, N.E.S., and Accessories of Apparatus Falling Within Division 76	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
77	Electrical Machinery Appar, Parts, Nes	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.03	0.07	0.02
771	Electric power machinery & parts thereof	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.04	0.02
772	Electrical apparatus for switching circuits, resistors etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
773	Equipment for distributing electricity, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
774	Electrodiagnostic Apparatus for Medical, Sturgical, Dental or Veterinary Sciences and Radiological Apparatus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
775	Household-Type Electrical and Non-electrical Equipment, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
776	Thermionic etc. valves & tubes; diodes etc., parts thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
778	Electrical machinery & apparatus, N. E. S.	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
78	Road Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
781	Motor cars & other motor vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
782	Motor Vehicles for Transp. of Goods & Special Purp. Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
783	Road motor vehicles, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
784	Parts & accessories of groups 722, 781, 782 & 783	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
785	Motor cycles & cycles etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
786	Trailers & Semi-Trailers; Other Vehicles, Not Mechanically Propelled, Specially Designed & Equip. Transp. Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	Other Transport Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
791	Railway Vehicles (Inc. Hovertrains) & Associated Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
792	Aircraft & associated equipment; spacecraft etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
793	Ships, boats (incl. hovercraft) & floating structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Miscellaneous Manufactured Goods	2.65	4.35	3.16	2.48	4.13	3.91	3.91	3.74	4.62	5.35
81	Prefab Building, Fittings Etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
812	Sanitary, Plumbing and Heating Fixtures and Fittings, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	Furniture, Parts Thereof	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
821	Furniture & parts thereof, bedding, mattresses etc.	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	Travel Goods, Handbags, Etc.	0.00	0.01	0.00	0.01	0.02	0.00	0.00	0.02	0.01	0.04
831	Trunks, suitcases etc, other traveling goods	0.00	0.01	0.00	0.01	0.02	0.00	0.00	0.02	0.01	0.04
84	Clothing And Accessories	2.52	3.87	3.11	2.31	4.02	3.81	3.80	3.47	4.10	5.09
842	Women's clothing (other than sub-group 842.2)	0.03	1.95	0.39	0.14	0.36	3.57	3.44	0.55	0.67	0.64
843	Men's clothing (other than those of sub-group 845.2)	2.29	1.38	1.79	0.82	1.87	0.00	0.00	1.12	1.72	1.86
844	Women's clothing, knitted or crocheted	0.18	0.48	0.63	0.76	1.18	0.00	0.00	1.52	1.40	1.18
845	Articles of apparel, of textile fabrics, N. E. S.	0.01	0.06	0.26	0.48	0.49	0.10	0.13	0.11	0.07	0.19
846	Clothing accessories of textile fabrics, etc.	0.00	0.00	0.03	0.09	0.03	0.14	0.22	0.12	0.07	0.16
847	Textile clothing accessories, N. E. S.	0.00	0.01	0.02	0.00	0.06	0.00	0.00	0.03	0.08	1.02
848	Articles of apparel etc. of other than textile fabrics, etc.	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.01	0.10	0.05
85	Footwear	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.00
851	Footwear	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.00
87	Scientific Equipment, Nes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
871	Optical Instruments and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
872	Instruments etc, N.E.S. for medical etc. sciences	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
873	Meters and Counters, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
874	Measuring, Checking, Analysing and Controlling Instruments and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	Photo. Appar. Nes; Colours	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03
881	Photographic Equipment and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
882	Photographic and Cinematographic Supplies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
883	Cinematographic Film, Exposed and Developed, Whether or Not Incorporating Soundtrack or Consisting Only of Soundtrack	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
884	Optical Goods, N.E.S.	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
885	Watches and Clocks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	Misc. Manufactured Goods, Nes	0.12	0.46	0.05	0.13	0.09	0.10	0.11	0.25	0.46	0.18
892	Printed Matter	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
893	Articles, N. E. S., of plastics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.24	0.06
894	Baby carriages, toys, games & sporting goods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Office and Stationery Supplies, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
896	Works of art, collectors pieces etc.	0.10	0.37	0.00	0.06	0.00	0.00	0.00	0.02	0.09	0.05

(contd.)



**Table 4.3: Revealed Comparative Advantage Ratios for Nepal: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
897	Jewellery etc., & other articles of precious etc. stones	0.00	0.07	0.05	0.03	0.07	0.07	0.08	0.09	0.06	0.04
898	Musical instruments, parts & accessories, records etc.	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
899	Miscellaneous Manufactured Articles, N. E. S.	0.00	0.02	0.00	0.01	0.01	0.02	0.02	0.03	0.07	0.02
9	Goods Not Classified By Kind	0.00	0.04	0.44	0.00	0.93	1.26	1.79	3.27	0.00	3.91
91	Postal Packages Not Classified According To Kind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
911	Postal Packages Not Classified According To Kind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	Special Transactions And Commodities Not Classified	0.00	0.00	0.44	0.00	0.93	1.26	1.79	3.25	0.00	3.90
931	Special transactions etc. not classed by kind	0.00	0.00	0.44	0.00	0.93	1.26	1.79	3.25	0.00	3.90
94	Zoo Animals, Pets Etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
941	Zoo Animals, Pets Etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
95	War Firearms, Ammunition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
951	War Firearms, Ammunition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	Coin, Not Being Legal Tender	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
961	Coin (Other than Gold Coin), Not Being Legal Tender	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	Gold, Non Monetary	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
971	Gold, non-monetary	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Computed from UNCOMTRADE Database

#### **4.1.4 PAKISTAN:**

Pakistan's comparative advantage (Table 4.4) at the highest level of commodity aggregation (1-digit SITC) is indicated in food and live animals, basic manufactures, miscellaneous manufactured goods, and crude materials excluding fuels. In the last category, it lost its advantage after 1992. At the next level of disaggregation, the country consistently maintained its comparative advantage in only 9 product categories, including fish, cereals, sugar, textile fibers, crude animal and vegetable material, leather and leather products, textile yarn and fabrics, clothing and accessories, and vegetables and fruits. Pakistan enjoyed comparative advantage in a number of other commodity groups in 1985, and retained this ratio till 2000. For example, the number of commodities in which it had comparative advantage declined from 12 in 1985 to 11 in 2000. Pakistan's revealed comparative advantage in food products at the 3-digit SITC classification is mainly indicated in fish and crustaceans, rice, fresh and dried fruits, sugar, molasses and honey, and spices. The comparative advantage in fruits was, however, lost after 1990 and regained fully in 1996. The trend of comparative advantage for fresh fish oscillated till 1994 before showing a general increase. The advantage in vegetables, roots and tubers was fully lost in 1993. In the category of 'crude materials except fuels', Pakistan enjoys substantial revealed comparative advantage in cotton, besides oilseeds and oleaginous fruits, worn clothing, stone, sand and gravel and crude animal and vegetable materials. As in the case of other

countries in the region, the textile and clothing group dominates in the revealed comparative advantage profile of Pakistan. Other products in which Pakistan has revealed comparative advantage include leather, floor coverings, medical instruments, baby carriages and toys and cutlery.

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
0	Food And Live Animals	1.98	1.23	1.20	1.05	1.48	1.17	1.40	1.94	1.97	1.75
00	Live Animals Other Than Those Of Div. 03	1.47	0.38	0.14	0.05	0.01	0.00	0.03	0.04	0.03	0.21
001	Live animals other than division 03	1.47	0.38	0.14	0.05	0.01	0.00	0.03	0.04	0.03	0.21
01	Meat, Meat Preparations	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.10
011	Meat of bovine animals, fresh, chilled or frozen	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.01	0.09	0.11
012	Other meat & edible meat offal unfit for human consumption	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
014		0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02	Dairy Products, Bird Eggs	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.02	0.04
022	Milk, cream & milk products other than butter or cheese	0.00	0.00	0.00	0.03	0.01	0.01	0.02	0.05	0.03	0.05
023	Butter & other fats & oils derived from milk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
024	Cheese and curd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
025	Eggs, birds', & egg yolks, fresh etc., egg albumin	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.04	0.03	0.24
03	Fish, Crustaceans, Mollusc	3.74	2.15	2.70	1.47	1.79	1.67	2.23	1.74	1.87	1.89
034	Fish, fresh (live or dead), chilled or frozen	1.07	0.58	2.82	0.77	0.97	0.96	1.17	1.02	1.34	1.25
035	Fish, dried etc.; smoked fish; flours, meals etc.	4.47	4.08	3.51	1.96	2.84	2.49	3.15	2.76	2.97	2.74
036	Crustaceans etc. chilled, frozen, dried, salted etc.	7.89	4.61	3.55	2.86	3.14	3.17	4.49	3.35	3.33	3.44
037	Fish, crustaceans etc. prepared or preserved, N.E.S.	0.47	0.43	0.46	0.22	0.48	0.27	0.30	0.24	0.26	0.34
04	Cereals, Cereal Preparations	5.31	3.51	3.16	2.85	4.71	3.89	4.68	6.00	6.74	6.42
041	Wheat (including spelt) and meslin, unmilled	0.14	0.00	0.04	0.00	0.02	0.00	0.00	0.06	0.00	0.19
042	Rice	58.34	41.57	32.28	25.76	42.75	35.60	38.29	36.18	46.73	52.37
043	Barley, unmilled	0.02	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.17
044	Maize (not including sweet corn), unmilled	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
045	Cereals, unmilled (other than wheat, rice, barley & maize)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
046	Meal & flour of wheat & flour of meslin	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	1.91
047	Other cereal meals & flours	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
048	Cereal preparations & preparations of flour or fruits etc.	0.33	0.09	0.08	0.09	0.10	0.15	0.19	0.17	0.17	0.15
05	Vegetables And Fruits	1.14	0.82	0.59	0.41	0.42	0.62	0.76	0.88	1.11	1.16
054	Vegetables, fresh, chilled, etc.	0.45	0.34	0.11	0.07	0.04	0.10	0.08	0.69	1.29	0.86
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	1.96	1.29	0.88	0.70	0.81	0.81	0.74	0.68	0.53	0.60
057	Fruits and nuts (not including oil nuts), fresh or dried	1.87	1.52	1.12	0.79	0.74	1.15	1.45	1.32	1.49	1.96

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
058	Fruit, preserved, & fruit preparations (excl. fruit juices)	0.03	0.05	0.15	0.07	0.20	0.37	0.41	0.31	0.19	0.19
06	Sugar, Sugar Preparations, Honey	1.78	1.91	2.72	4.14	6.99	1.51	2.39	9.60	6.83	2.57
061	Sugar, molasses & honey	1.90	2.12	2.97	4.83	8.70	1.74	2.79	12.26	8.78	3.06
062	Sugar confectionery	0.48	0.55	1.67	1.19	1.07	0.67	1.02	0.85	1.21	1.33
07	Coffee, Tea, Cocoa, Spices	0.35	0.44	0.28	0.39	0.18	0.22	0.20	0.24	0.30	0.36
071	Coffee & coffee substitutes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
072	Cocoa	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
073	Chocolate & other food preparations containing cocoa	0.10	0.21	0.19	0.15	0.11	0.10	0.09	0.09	0.05	0.06
074	Tea & mate	0.12	0.00	0.08	2.55	0.01	0.00	0.01	0.00	0.00	0.01
075	Spices	5.75	6.05	3.78	3.88	2.55	3.11	2.63	3.00	3.26	3.53
08	Feeding Stuff For Animals	0.37	0.14	0.05	0.10	0.01	0.05	0.02	0.00	0.01	0.05
081	Feeding stuff for animals (not incl. unmilled cereals)	0.37	0.14	0.05	0.10	0.01	0.05	0.02	0.00	0.01	0.05
09	Misc. Edible Products Etc.	0.03	0.11	0.15	0.11	0.10	0.16	0.29	0.28	0.35	0.45
091	Margarine and shortening	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
098	Edible products & preparations, N. E. S.	0.03	0.13	0.16	0.12	0.11	0.17	0.33	0.32	0.39	0.49
1	Beverages And Tobacco	0.32	0.10	0.06	0.05	0.05	0.01	0.03	0.07	0.05	0.07
11	Beverages	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	Non-alcoholic beverages, NES	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01
112	Alcoholic beverages	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Tobacco, Tobacco Manufactures	0.70	0.23	0.14	0.10	0.11	0.03	0.08	0.15	0.14	0.17
121	Tobacco unmanufactured, tobacco refuse	0.00	0.12	0.12	0.04	0.11	0.05	0.07	0.43	0.45	0.61
122	Tobacco, manufactured	1.35	0.28	0.15	0.13	0.11	0.02	0.08	0.06	0.01	0.02
2	Crude Materials, Excl. Fuels	3.00	2.09	0.94	0.50	0.79	1.35	0.66	0.54	0.45	0.83
21	Hides, Skins, Furskins, Raw	0.03	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.02
211	Hides & skins (except furskins), raw	0.04	0.00	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.02
212	Furskins, raw, other than group 211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Oil Seed, Oleaginous Fruit	0.31	1.44	0.52	0.82	0.95	0.45	0.32	0.54	0.36	0.40
222	Oil-seeds etc. used for extraction of "soft" oils	0.00	1.08	0.31	0.52	0.79	0.40	0.29	0.21	0.26	0.22
223	Oil-seeds & oleaginous fruits, whole or broken etc.	5.04	7.77	4.24	5.74	3.18	1.38	0.77	5.68	1.86	3.45
23	Crude Rubber	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
232	Synthetic rubber, reclaimed rubber, waste, parings etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233		0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.04	0.02	0.04
247	Wood in the rough or roughly squared	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
248	Wood, simply worked, & railway sleepers of wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Pulp And Waste Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
251	Pulp and waste paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	Textile Fibers	20.08	14.33	6.86	2.34	4.43	9.34	4.09	2.73	1.76	6.63
261	Silk	5.56	0.59	0.21	0.32	0.38	0.12	0.52	0.57	0.20	0.63
263	Cotton	55.91	36.31	16.87	5.12	8.99	20.66	8.73	5.49	3.32	15.70
264	Jute and other textile bast fibers, N. E. S., raw etc.	0.23	0.01	0.10	0.06	0.08	0.06	0.85	1.94	0.28	0.37
265	Vegetable textile fibers, raw or processed; waste	0.01	0.00	0.07	0.04	0.00	0.03	0.00	0.00	0.00	0.01
266	Synthetic fibers suitable for spinning	0.18	0.33	0.21	0.20	0.09	0.06	0.16	0.15	0.48	0.24
267	Other man-made fibers suitable for spinning, waste thereof	0.38	0.06	0.05	0.04	0.00	0.02	0.07	0.05	0.20	0.07
268	Wool & other animal hair (excluding wool tops)	2.79	1.73	1.17	1.16	1.52	1.79	1.65	0.99	0.56	0.32
269	Worn clothing and other worn textile articles; rags	0.01	1.50	1.88	2.16	1.93	1.67	2.19	2.38	2.56	2.25
27	Crude Fertilizer, Mineral	0.60	0.43	0.35	0.26	0.21	0.33	0.29	0.29	0.41	0.43
273	Stone, sand & gravel	1.52	0.83	0.39	0.52	0.50	0.63	0.82	0.94	1.10	1.23
274	Sulphur and unroasted iron pyrites	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
277	Natural Abrasives, N.E.S. (Including Industrial Diamonds)	0.00	0.11	0.03	0.00	0.00	0.01	0.00	0.00	0.01	0.02
278	Other crude minerals	0.14	0.21	0.05	0.08	0.07	0.05	0.08	0.09	0.23	0.16
28	Metalliferous Ores, Scrap	0.08	0.06	0.05	0.03	0.05	0.07	0.06	0.07	0.10	0.08
281	Iron ore & concentrates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
282	Ferrous waste & scrap,remelting scrap ingots of iron etc	0.20	0.07	0.06	0.04	0.06	0.09	0.04	0.02	0.02	0.01
287	Ores & concentrates of basic metals, N. E. S.	0.08	0.16	0.10	0.03	0.12	0.19	0.15	0.20	0.27	0.19
288	Non-ferrous base metal waste and scrap, NES	0.42	0.18	0.21	0.16	0.15	0.26	0.22	0.22	0.45	0.30
289	Ores & concentrates of precious metals; waste, scrap etc.	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
29	Crude Animal, Veg. Material	3.64	2.87	1.73	1.86	1.98	2.36	1.88	2.09	2.26	1.89
291	Crude animal vegetable materials, N. E. S.	5.24	4.70	2.88	2.57	3.06	4.18	3.51	3.51	3.32	3.15
292	Crude vegetable materials, N. E. S.	3.29	2.44	1.48	1.70	1.72	1.93	1.48	1.75	2.04	1.61
3	Mineral Fuels, Etc	0.09	0.15	0.11	0.10	0.14	0.20	0.22	0.10	0.27	0.31

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
32	Coal, Coke, Briquettes	0.00	0.11	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00
322	Briquettes, lignite and peat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
323		0.00	0.87	0.00	0.00	0.21	0.27	0.00	0.00	0.00	0.00
33	Petroleum, Petrol Product	0.10	0.17	0.13	0.12	0.16	0.34	0.39	0.18	0.45	0.50
334	Petroleum oils; preparations, N. E. S.	0.32	0.12	0.04	0.10	0.19	0.09	0.10	0.04	0.12	0.23
335	Residual petroleum products, N. E. S., etc	0.05	0.37	0.53	0.69	0.62	0.15	0.02	0.03	0.12	0.07
34	Gas, Natural, Manufactured	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
341	Gas, natural & manufactured	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Animal, Vegetable Oil, Fat	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.19	0.51	0.75
41	Animal Oils And Fats	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
411	Animal Oils and Fats	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Fixed Veg. Fats And Oils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
423		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
424	Fixed vegetable oil, nonsoft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	Processed Animal, Veg. Oil, Etc.	0.00	0.00	0.00	0.08	0.00	0.01	0.00	1.38	3.57	4.74
431	Animal or Vegetable Fats & Oils, Processed, Waxes; Inedible Mixtures or Prep. of Animal or Vegetable Fats or Oils, N.E.S.	0.00	0.00	0.00	0.08	0.00	0.01	0.00	1.38	3.57	4.74
5	Chemicals, Related Products, Nes	0.41	0.04	0.05	0.06	0.07	0.07	0.06	0.07	0.08	0.16
51	Organic Chemicals	0.05	0.04	0.03	0.03	0.02	0.00	0.01	0.03	0.04	0.14
511	Hydrocarbons, N.E.S. & their nitrated etc. derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
512	Alcohols, Phenols, Phenol - Alcohols, and Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.30	0.28	0.25	0.19	0.13	0.00	0.02	0.19	0.18	0.33
513	Carboxylic Acids and Their Anhydrides, etc.; Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.16	0.88
514	Nitrogen-function compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
515	Organo - Inorganic Compounds, Heterocyclic Compounds, Nucleic Acids and Their Salts, and Sulphonamides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
516	Other organic chemicals	0.09	0.02	0.00	0.02	0.03	0.01	0.04	0.03	0.02	0.00
52	Inorganic Chemicals	0.03	0.01	0.01	0.02	0.01	0.01	0.03	0.00	0.03	0.01
522	Inorganic Chemical Elements, Oxides and Halogen Salts	0.05	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.01

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
523	Metal Salts and Peroxysalts, or Inorganic Acids	0.00	0.03	0.03	0.02	0.00	0.00	0.08	0.01	0.09	0.01
524	Other Inorganic Chemicals; Organic and Inorganic Compounds of Precious Metals	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	Dyes, Colouring Materials	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.01
531	Synthetic organic colouring matter etc.	0.04	0.02	0.00	0.01	0.01	0.00	0.02	0.02	0.03	0.02
532	Dyeing, tanning extracts & synthetic tanning materials	0.00	0.27	0.23	0.19	0.19	0.18	0.23	0.28	0.13	0.20
533	Pigments, paints, varnishes & related materials	0.07	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01
54	Medicinal, Pharm. Products	0.10	0.18	0.20	0.29	0.25	0.29	0.23	0.26	0.20	0.24
541	Medicinal & pharm. products (excl. group 542)	0.10	0.18	0.20	0.29	0.25	0.29	0.23	0.26	0.20	0.24
55	Essential Oils, Perfume Etc	0.13	0.04	0.08	0.04	0.05	0.04	0.04	0.06	0.09	0.08
551	Essential Oils, Perfume and Flavour Materials	0.14	0.04	0.03	0.01	0.02	0.01	0.02	0.01	0.02	0.02
553	Perfumery, cosmetic or toilet preparations (excl.soaps)	0.13	0.06	0.66	0.06	0.08	0.08	0.06	0.09	0.12	0.09
554	Soap, cleansing & cleaning preparations	0.14	0.02	0.01	0.03	0.01	0.01	0.01	0.04	0.06	0.12
56	Fertilizer Except Grp. 272	6.39	0.02	0.03	0.00	0.20	0.06	0.00	0.01	0.25	0.86
562	Fertilizers (other than those of group 272)	6.39	0.02	0.03	0.00	0.20	0.06	0.00	0.01	0.25	0.86
57	Plastics In Primary Form	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.06	0.01	0.02
572	Polymers of Styrene, In Primary Forms	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.06	0.01	0.02
58	Plastics, Non Primary Form	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.04	0.19
582	Plates, sheets, films etc. of plastic	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.42
583	Monofilament, rods, sticks etc. of plastic	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.12
59	Chemical Materials Nes	0.03	0.04	0.05	0.06	0.05	0.07	0.07	0.07	0.05	0.07
591	Insecticides, herbicides etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
592	Starches, Inulin and Wheat Gluten; Albuminoidal Substances; Glues	0.07	0.26	0.30	0.36	0.36	0.44	0.42	0.40	0.31	0.36
598	Miscellaneous chemical products, N. E. S.	0.03	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.01
6	Basic Manufactures	2.84	3.34	3.56	3.61	3.22	3.48	3.57	3.45	3.58	3.55
61	Leather, Leather Goods	15.87	14.93	7.98	7.63	7.15	6.35	6.10	5.78	5.63	5.90
611	Leather	23.71	20.46	10.46	10.32	9.88	9.12	8.69	8.44	8.24	8.29
612	Manufactures of leather etc. N. E. S.; saddlery etc.	2.44	2.86	3.17	2.25	1.35	1.09	1.26	0.80	0.83	1.18
613	Furskins, tanned etc. other than those of 848.31	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

(contd.)



**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
62	Rubber Manufactures, Nes	0.10	0.03	0.03	0.01	0.01	0.01	0.01	0.02	0.01	0.02
621	Materials of Rubber	0.03	0.05	0.04	0.01	0.00	0.02	0.02	0.00	0.01	0.00
625	Rubber tyres, interchangeable tyre treads etc.	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.02
628	Rubber articles, N. E. S.	0.51	0.06	0.06	0.01	0.01	0.02	0.01	0.05	0.02	0.03
63	Cork, Wood Manufactures	0.02	0.07	0.04	0.03	0.03	0.04	0.04	0.05	0.04	0.06
633	Cork Manufactures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
634	Veneers, plywood, particle board etc., N. E. S.	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
635	Wood manufactures, N. E. S.	0.03	0.17	0.08	0.06	0.06	0.09	0.09	0.11	0.07	0.11
64	Paper, Paperboard Etc	0.04	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01
641	Paper & paperboard	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01
642	Paper & Paperboard, Cut to Size/Shape, & Articles Thereof	0.08	0.01	0.01	0.01	0.01	0.01	0.04	0.01	0.02	0.02
65	Textile Yarn, Fabric Etc	12.60	15.35	16.37	16.22	15.54	16.80	17.00	16.98	18.07	18.21
651	Textile yarn	12.75	25.95	27.50	27.17	27.41	25.89	24.01	20.14	22.43	22.45
652	Cotton fabrics, woven	27.64	23.80	27.22	27.94	27.97	33.26	33.57	32.98	35.02	30.46
653	Fabrics, woven, of man-made textile materials	2.08	7.56	11.37	12.12	8.51	8.65	10.79	11.50	9.55	11.33
654	Other textile fabrics, woven	0.63	0.02	0.07	0.03	0.05	0.03	0.02	0.08	0.17	0.19
655	Knitted or crocheted fabrics, N. E. S.	0.24	2.86	6.80	5.80	5.37	4.79	4.33	4.45	3.70	3.40
656	Tulles, lace, Embroidery, Ribbons, Trimmings and Other	2.03	0.90	1.44	1.91	2.61	2.59	1.65	1.06	1.82	1.08
	Smallware										
657	Special yarns, special textile fabrics etc.	0.81	1.41	1.68	1.32	1.32	1.22	1.17	1.52	1.37	1.42
658	Made-up articles, of textile materials, N. E. S.	37.53	36.71	35.09	29.94	31.39	35.92	39.09	43.71	47.50	50.11
659	Floor coverings, etc.	21.79	17.64	10.48	11.05	8.17	12.35	10.43	13.45	16.38	19.10
66	Non-Metal Mineral Manufactures	0.17	0.22	0.12	0.09	0.08	0.09	0.12	0.10	0.08	0.10
661	Lime, cement, fabricated construction materials	0.00	0.64	0.01	0.01	0.00	0.06	0.03	0.10	0.10	0.07
662	Clay & refractory construction materials	0.06	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.02
663	Mineral Manufactures, N.E.S.	0.87	0.62	0.67	0.56	0.43	0.44	0.61	0.36	0.38	0.62
664	Glass	0.01	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.04	0.03
665	Glassware	0.40	0.15	0.06	0.10	0.10	0.11	0.08	0.07	0.06	0.05
666	Pottery	0.03	0.06	0.02	0.02	0.03	0.05	0.05	0.06	0.04	0.05
667	Pearls & precious stones etc., unworked or worked	0.06	0.17	0.05	0.04	0.03	0.05	0.07	0.07	0.03	0.03

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
67	Iron And Steel	0.20	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.02	0.04
671	Pig-iron etc., iron & steel granules, powders etc.	3.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
672	Ingots etc., of iron & steel; semi-finished products	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00
673	Flat-rolled products; iron or non-alloy steel, not clad etc.	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
674	Flat-rolled products of iron or non-alloy steel, clad etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
676	Iron and Steel Bars, Rods, Angles, Shapes and Sections (including Sheet Piling)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
677	Rails or Railway Track Construction Material, of Iron or Steel	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
678	Wire of iron or steel	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.07	0.13	0.24
679	Tubes, Pipes and Hollow Profiles, Fittings Thereof, of Iron/Steel	0.00	0.04	0.12	0.17	0.05	0.05	0.37	0.02	0.01	0.01
68	Non Ferrous Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
681	Silver, Platinum and Other Metals of the Platinum Group	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
682	Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
683	Nickel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
684	Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
685	Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
686	Zinc	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
687	Tin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
689	Miscellaneous Non-Ferrous Base Metals Employed in Metallurgy, and Cermets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	Metal Manufactures Nes	0.34	0.15	0.21	0.18	0.16	0.15	0.15	0.15	0.16	0.20
691	Structures & Parts Thereof, N.E.S., of Iron, Steel or Aluminium	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02
692	Metal Containers for Storage or Transport	0.61	0.02	0.14	0.00	0.00	0.01	0.00	0.01	0.01	0.02
693	Wire Products (Excluding Insulated Electrical Wiring) and Fencing Grills	0.25	0.43	0.36	0.34	0.37	0.23	0.05	0.09	0.09	0.16
694	Nails, screws, etc. of iron, steel, copper or aluminum	0.05	0.02	0.03	0.02	0.02	0.09	0.11	0.07	0.06	0.05
695	Tools for use in the hand or in machines	0.05	0.02	0.02	0.01	0.02	0.01	0.01	0.03	0.03	0.03
696	Cutlery	4.89	1.99	2.96	2.57	2.75	2.60	2.71	2.55	2.75	3.43
697	Household equipment of base metal, N. E. S.	0.79	0.38	0.36	0.28	0.22	0.19	0.20	0.23	0.25	0.24
699	Manufactures of base metals, N. E. S.	0.03	0.04	0.04	0.07	0.02	0.02	0.03	0.03	0.02	0.03

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
7	Machines, Transport Equipment	0.03	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
71	Power Generating Machines	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
711	Steam or Other Vapour Generating Boilers, Superheated Water Boilers, and Auxiliary Plant for Use Therewith; Parts Thereof	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
712	Steam Turbines & Other Vapour Turbines & Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
713	Internal combustion piston engines & parts, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
714	Engines and Motors, Non-electric (other than those of Groups 712, 713, 718); Parts, N.E.S., of these Engines and Motors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
716	Rotating Electric Plant and Parts Thereof, N.E.S.	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01
718	Power Generating Machinery and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
72	Special Industrial Machinery	0.18	0.03	0.06	0.04	0.02	0.03	0.06	0.06	0.09	0.04
721	Agricultural Machinery (Excluding Tractors) & Parts Thereof	0.03	0.01	0.01	0.00	0.00	0.00	0.12	0.04	0.05	0.00
722	Tractors (Other Than Those of Headings 744.14 and 744.15)	0.02	0.01	0.09	0.01	0.01	0.06	0.13	0.38	0.07	0.31
723	Civil engineering etc. equipment, parts thereof	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
724	Textile & leather machinery & parts thereof, N. E. S.	0.64	0.06	0.03	0.07	0.03	0.04	0.03	0.08	0.03	0.05
725	Paper Mill and Pulp Mill Machinery, Paper Cutting Machines and Other Machinery for the Manufacture of Paper Articles, Parts Thereof	0.00	0.02	0.03	0.04	0.02	0.05	0.21	0.03	0.01	0.05
726	Printing and Bookbinding Machinery and Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
727	Food Processing Machines (Excl. Domestic); Parts Thereof	0.52	0.00	0.29	0.15	0.00	0.03	0.10	0.01	0.09	0.01
728	Other machinery etc. for particular industries, N.E.S.	0.18	0.04	0.09	0.05	0.03	0.05	0.07	0.07	0.18	0.04
73	Metal Working Machinery	0.02	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
736	Metalworking machinery - tools	0.03	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
737	Metalworking Machinery (Other Than Machine Tools) and Parts Thereof, N.E.S.	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.01
74	General Industrial Machinery, Nes	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02
741	Heating & cooling equipment, parts thereof, N. E. S.	0.05	0.02	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01
742	Pumps for Liquids, Whether or Not Fitted With A Measuring Device; Liquid Elevators; Parts Thereof	0.15	0.02	0.02	0.00	0.00	0.01	0.02	0.03	0.05	0.02

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
743	Pumps (Other Than Pumps for Liquids), Air or Other Gas Compressors and Fans; Ventilating or Recycling Hoods, Centrifuges; Filtering or Purifying Apparatus; Parts Thereof	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03
744	Mechanical handling equipment, parts, N. E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
745	Non-electrical Machinery, Tools and Mechanical Apparatus and Parts Thereof, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
749	Non-electric Parts and Accessories of Machinery, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
75	Office Machines, Adp. Machines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
751	Office Machines	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
752	Automatic data processing machines etc., N.E. S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
759	Parts etc, for use with groups 751 & 752	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
76	Telecomm, Sound Equip Etc	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
761	Television Receivers, Whether or Not Incorporating Radio-Broadcast Receivers or Sound- or Video Recording or Reproducing Apparatus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
762	Radio Broadcast Receivers, Whether or Not Incorporating Sound-Recording or Reproducing Apparatus or A Clock	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
763	Sound Recorders or Reproducers; Television Image & Sound Recorders or Reproducers; Prepared Unrecorded Media	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
764	Telecommunication Equipment, N.E.S., and Parts, N.E.S., and Accessories of Apparatus Falling Within Division 76	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	Electrical Machinery Appar, Parts, Nes	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
771	Electric power machinery & parts thereof	0.11	0.06	0.01	0.01	0.00	0.00	0.01	0.06	0.04	0.03
772	Electrical apparatus for switching circuits, resistors etc	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.01
773	Equipment for distributing electricity, N. E. S.	0.03	0.05	0.01	0.02	0.01	0.02	0.03	0.03	0.03	0.03
774	Electrodiagnostic Apparatus for Medical, Surgical, Dental or Veterinary Sciences and Radiological Apparatus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
775	Household-Type Electrical & Non-electrical Equipment, N.E.S.	0.03	0.00	0.09	0.00	0.00	0.01	0.01	0.01	0.03	0.06
78	Road Vehicles	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
781	Motor cars & other motor vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
783	Road motor vehicles, N. E. S.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
784	Parts & accessories of groups 722, 781, 782 & 783	0.01	0.00	0.02	0.00	0.01	0.01	0.01	0.02	0.01	0.01
785	Motor cycles & cycles etc.	0.00	0.00	0.02	0.02	0.01	0.03	0.02	0.06	0.08	0.05
786	Trailers and Semi-Trailers; Other Vehicles, Not Mechanically Propelled, Specially Designed and Equipped Transport Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
79	Other Transport Equipment	0.06	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
791	Railway Vehicles (Including Hovertrains) and Associated Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.08
792	Aircraft & associated equipment; spacecraft etc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
793	Ships, boats (incl. hovercraft) & floating structures	0.16	0.09	0.05	0.03	0.03	0.03	0.04	0.02	0.02	0.01
8	Miscellaneous Manufactured Goods	1.47	1.99	2.13	2.02	1.89	1.99	2.11	2.13	2.13	2.26
81	Prefab Building, Fittings Etc	0.52	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.02
812	Sanitary, Plumbing and Heating Fixtures and Fittings, N.E.S.	0.52	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.02
82	Furniture, Parts Thereof	0.07	0.06	0.07	0.11	0.06	0.06	0.07	0.09	0.09	0.11
821	Furniture & parts thereof; bedding, mattresses etc.	0.07	0.06	0.07	0.11	0.06	0.06	0.07	0.09	0.09	0.11
83	Travel Goods, Handbags, Etc.	0.24	0.25	0.22	0.17	0.13	0.08	0.11	0.12	0.07	0.08
831	Trunks, suitcases etc, other traveling goods	0.24	0.25	0.22	0.17	0.13	0.08	0.11	0.12	0.07	0.08
84	Clothing And Accessories	4.12	6.30	6.31	5.93	5.72	6.04	5.96	6.19	6.46	6.88
842	Women's clothing (other than sub-group 842.2)	2.73	4.38	4.98	4.84	4.34	4.74	5.86	5.97	6.69	7.38
843	Men's clothing (other than those of sub-group 845.2)	3.96	3.96	3.07	2.64	2.21	2.76	2.08	2.21	2.03	2.25
844	Women's clothing, knitted or crocheted	8.57	11.62	7.39	6.56	7.12	8.07	10.09	7.47	7.37	6.99
845	Articles of apparel, of textile fabrics, N. E. S.	0.63	3.35	3.50	3.14	3.17	3.49	2.89	3.42	3.75	4.36
846	Clothing accessories of textile fabrics, etc.	4.79	7.37	7.79	8.53	8.16	7.90	7.11	8.79	9.77	9.69
847	Textile clothing accessories, N. E. S.	7.96	8.79	12.54	12.45	13.61	11.76	10.65	8.71	9.43	10.00
848	Articles of apparel etc. of other than textile fabrics, etc.	9.45	17.50	20.24	17.98	16.33	17.88	19.69	21.05	20.64	21.37
85	Footwear	0.77	0.57	0.49	0.46	0.65	0.58	0.60	0.53	0.57	0.59
851	Footwear	0.77	0.57	0.49	0.46	0.65	0.58	0.60	0.53	0.57	0.59
87	Scientific Equipment, Nes	1.04	0.89	0.91	0.76	0.75	0.83	0.84	0.74	0.76	0.66
871	Optical Instruments and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00

(contd.)

**Table 4.4: Revealed Comparative Advantage Ratios for Pakistan: Selected Years**

SITC Code	Classification	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000
872	Instruments etc., N.E.S. for medical etc. sciences	6.27	4.49	4.16	3.66	3.59	3.78	3.80	3.25	3.11	3.12
873	Meters and Counters, N.E.S.	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.00	0.02
874	Measuring, Checking, Analy. & Control. Instruments & Apparatus, N.E.S.	0.01	0.05	0.04	0.01	0.01	0.01	0.04	0.06	0.15	0.06
88	Photo. Apparatus, N.E.S.	0.03	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01
881	Photographic Equipment and Apparatus, N.E.S.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
882	Photographic and Cinematographic Supplies	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
883	Cinematographic Film, Exposed and Developed, Whether or Not Incorp. Soundtrack or Consisting Only of Soundtrack	1.15	0.32	0.22	0.16	0.05	0.02	0.30	0.14	0.01	0.07
884	Optical Goods, N.E.S.	0.04	0.02	0.06	0.00	0.00	0.02	0.03	0.02	0.00	0.03
885	Watches and Clocks	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
89	Misc. Manufactured Goods, Nes	0.74	0.69	0.72	0.81	0.72	0.78	1.01	0.95	0.84	0.92
892	Printed Matter	0.17	0.13	0.16	0.15	0.14	0.11	0.10	0.08	0.09	0.08
893	Articles, N. E. S., of plastics	0.11	0.08	0.06	0.04	0.04	0.06	0.10	0.13	0.11	0.16
894	Baby carriages, toys, games & sporting goods	3.13	3.29	2.44	3.16	2.67	2.85	3.69	3.56	2.72	2.89
895	Office and Stationery Supplies, N.E.S.	0.45	0.20	0.44	0.18	0.18	0.19	0.14	0.14	0.15	0.16
896	Works of art, collectors pieces etc.	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
897	Jewellery etc., & other articles of precious etc. stones	0.37	0.17	0.20	0.15	0.16	0.16	0.13	0.20	0.35	0.63
898	Musical instruments, parts & accessories, records etc.	0.08	0.06	0.07	0.06	0.07	0.05	0.06	0.06	0.06	0.08
899	Miscellaneous Manufactured Articles, N. E. S.	1.08	1.44	1.54	1.41	1.39	1.54	1.91	1.68	2.06	2.05
9	Goods Not Classified By Kind	0.28	0.08	0.12	0.10	0.29	0.05	0.04	0.04	0.06	0.05
93	Special Transactions And Commodities Not Classified	0.40	0.09	0.18	0.14	0.96	0.05	0.04	0.04	0.05	0.05
931	Special transactions etc. not classified by kind	0.40	0.09	0.18	0.14	0.96	0.05	0.04	0.04	0.05	0.05
94	Zoo Animals, Pets Etc.	0.00	2.17	1.45	1.75	2.48	3.11	2.16	2.37	2.93	2.57
941	Zoo Animals, Pets Etc.	0.00	2.17	1.45	1.75	2.48	3.11	2.16	2.37	2.93	2.57
95	War Firearms, Ammunition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
951	War Firearms, Ammunition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01

Source: Computed from UNCOMTRADE Database

#### **4.1.5 SRI LANKA :**

Sri Lanka has comparative advantage (Table 4.5) in six of the nine commodity groupings at the 1-digit SITC classification, including food and live animals, basic manufactures, miscellaneous manufactured goods, machines and transport equipment, and chemicals and related products. Its comparative advantage in crude materials excluding fuel has, however, eroded after 1991. The pattern of revealed comparative advantage of Sri Lanka at the 2-digit SITC classification indicates that it has mostly maintained its comparative advantage in only 16 commodity groups, including fish, crustaceans and molluscs, vegetables and fruits, coffee, tea, cocoa and spices, crude rubber, textile fibers, rubber manufactures, non-metal mineral manufactures, and clothing and accessories. After 1991, the country also gained comparative advantage in tobacco and tobacco products, travel goods, handbags etc., electrical machinery, office machines and paper and paperboard. At a further level of disaggregation (3-digit SITC), the country's comparative advantage in 'food products' lies in fish, crustaceans, other cereal meals and flour, fruits and nuts, tea, and spices. The country gained comparative advantage in fish after 1987, and in other cereals and flour after 1990. Revealed comparative advantage is also indicated in a number of items in the category of crude materials, such as synthetic rubber, fuel wood, oilseeds and oleaginous fruits, paper and paperboard, vegetable textile fibers, and crude vegetable materials. In the categories of 'mineral fuels, and 'animal and vegetable

oils', the country lost its comparative advantage in petroleum oils and preparations, and fixed vegetable oil respectively after 1987 and 1990, whereas it maintained its comparative advantage in residual petroleum products. Sri Lanka's revealed comparative advantage in basic manufactures lies mainly in rubber tyres and articles, wood manufactures, made-up articles of textile materials, pottery, and pearls and precious stones. In addition, the country gained comparative advantage in materials of rubber, and textile yarn, and woven fabrics of textile materials respectively after 1989 and 1991. In the category of miscellaneous manufactured goods, Sri Lanka enjoys revealed comparative advantage predominantly in textile fabrics and clothing. Electric power machinery is a relatively recent addition to the list of export products in which Sri Lanka's comparative advantage is indicated.

#### **4.1.6 BHUTAN, MALDIVES :**

Since commodity aggregation according to the SITC classification is not available or the value of the exports is negligible, the Revealed Comparative Advantage is not computed for these two countries.

The above discussion provides useful insights into the nature and extent of revealed comparative advantage of the South Asian economies. First, it is evident that the pattern of revealed comparative advantage is quite similar across the South Asian countries. For example, the export structures of all five countries indicate that these countries have comparative advantage in food and live animals,



**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
0	Food And Live Animals	5.157	3.998	4.140	4.649	3.797	2.687	2.639	2.194	3.101
00	Live Animals Other Than Those Of Div. 03	0.001	0.005	0.002	0.003	0.001	0.001	0.000	0.000	0.000
001	Live animals other than division 03	0.001	0.005	0.002	0.003	0.001	0.001	0.000	0.000	0.000
01	Meat, Meat Preparations	0.022	0.032	0.039	0.055	0.069	0.053	0.040	0.028	0.023
011	Meat of bovine animals, fresh, chilled or frozen	0.022	0.031	0.041	0.061	0.080	0.060	0.045	0.030	0.022
012	Other meat & edible meat offal unfit for human consumption	0.070	0.072	0.081	0.001	0.004	0.005	0.007	0.001	0.026
02	Dairy Products, Bird Eggs	0.039	0.121	0.068	0.145	0.052	0.049	0.086	0.073	0.050
022	Milk, cream & milk products other than butter or cheese	0.078	0.282	0.092	0.210	0.051	0.039	0.125	0.105	0.030
023	Butter & other fats & oils derived from milk	0.014	0.024	0.038	0.252	0.055	0.061	0.069	0.068	0.068
024	Cheese and curd	0.007	0.009	0.013	0.013	0.019	0.018	0.017	0.005	0.016
025	Eggs, birds', & egg yolks, fresh etc., egg albumin	0.040	0.221	0.302	0.298	0.255	0.336	0.331	0.321	0.485
03	Fish, Crustaceans, Mollusc	1.735	1.670	1.518	1.310	0.993	1.207	1.415	1.500	1.775
034	Fish, fresh (live or dead), chilled or frozen	0.283	0.468	0.414	0.416	0.362	0.638	1.296	0.870	1.617
035	Fish, dried etc., smoked fish, flours, meals etc.	0.823	1.040	1.518	1.179	1.272	2.431	1.733	1.132	1.332
036	Crustaceans etc. chilled, frozen, dried, salted etc.	4.225	4.010	3.561	3.109	2.252	2.274	2.189	3.026	3.088
037	Fish, crustaceans etc. prepared or preserved, N.E.S.	0.000	0.019	0.016	0.025	0.004	0.008	0.034	0.055	0.014
04	Cereals, Cereal Preparations	0.008	0.037	0.020	0.020	0.045	0.041	0.058	0.191	0.060
041	Wheat (including spelt) and meslin, unmilled	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
042	Rice	0.007	0.072	0.077	0.103	0.160	0.118	0.176	1.444	0.130
043	Barley, unmilled	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001
044	Maize (not including sweet corn), unmilled	0.000	0.001	0.003	0.001	0.001	0.001	0.007	0.001	0.000
045	Cereals, unmilled (other than wheat, rice, barley & maize)	0.051	0.495	0.015	0.029	0.026	0.011	0.004	0.000	0.002
046	Meal & flour of wheat & flour of meslin	0.000	0.000	0.005	0.001	0.003	0.001	0.001	0.000	0.000
047	Other cereal meals & flours	0.016	0.476	0.428	0.584	1.638	1.562	1.542	1.291	1.012
048	Cereal preparations & preparations of flour or fruits etc.	0.043	0.060	0.053	0.029	0.070	0.082	0.104	0.096	0.102
05	Vegetables And Fruits	3.286	1.512	2.296	2.356	2.142	2.222	1.557	1.286	1.797
054	Vegetables, fresh, chilled, etc.	0.383	0.685	0.893	1.102	0.923	0.579	0.705	0.733	0.363
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	0.011	0.049	0.523	0.652	1.092	1.648	2.133	1.313	1.501
057	Fruits and nuts (not including oil nuts), fresh or dried	7.421	2.995	4.946	4.978	4.253	4.643	2.692	2.188	3.719
058	Fruit, preserved, & fruit preparations (excl. fruit juices)	0.153	0.308	0.244	0.197	0.266	0.279	0.245	0.235	0.427

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
06	Sugar, Sugar Preparations, Honey	0.006	0.109	0.362	0.024	0.021	0.020	0.016	0.144	0.040
061	Sugar, molasses & honey	0.005	0.121	0.410	0.027	0.019	0.014	0.018	0.165	0.040
062	Sugar confectionery	0.015	0.018	0.007	0.009	0.028	0.049	0.006	0.058	0.038
07	Coffee, Tea, Cocoa, Spices	30.484	30.868	36.513	47.046	38.545	26.337	25.361	17.327	26.167
071	Coffee & coffee substitutes	1.236	0.989	0.482	0.244	0.383	0.221	0.150	0.532	0.097
072	Cocoa	0.698	0.082	0.075	0.075	0.027	0.008	0.013	0.007	0.013
073	Chocolate & other food preparations containing cocoa	0.002	0.015	0.004	0.003	0.049	0.107	0.025	0.049	0.012
074	Tea & mate	298.142	374.458	303.091	359.932	307.287	226.689	236.855	239.191	254.081
075	Spices	23.431	44.457	47.439	53.704	53.548	44.837	42.346	31.317	34.767
08	Feeding Stuff For Animals	0.399	0.044	0.203	0.085	0.002	0.002	0.000	0.039	0.084
081	Feeding stuff for animals (not incl. unmilled cereals)	0.399	0.044	0.203	0.085	0.002	0.002	0.000	0.039	0.084
09	Misc. Edible Products Etc.	1.287	0.867	1.393	1.038	0.852	0.727	0.948	0.749	0.567
091	Margarine and shortening	0.029	0.102	0.047	0.042	0.079	0.042	0.043	0.025	0.058
098	Edible products & preparations, N. E. S.	1.505	0.935	1.594	1.172	0.937	0.800	1.034	0.819	0.627
1	Beverages And Tobacco	0.157	0.255	0.253	0.299	0.561	1.400	1.174	0.942	0.807
11	Beverages	0.024	0.062	0.038	0.020	0.031	0.021	0.025	0.025	0.035
111	Non-alcoholic beverages, NES	0.095	0.000	0.001	0.002	0.084	0.038	0.064	0.043	0.149
112	Alcoholic beverages	0.018	0.069	0.042	0.022	0.024	0.019	0.019	0.022	0.016
12	Tobacco, Tobacco Manufactures	0.318	0.491	0.533	0.640	1.195	3.039	2.530	2.026	2.008
121	Tobacco unmanufactured, tobacco refuse	0.521	0.806	0.921	1.441	1.795	10.093	8.984	6.085	6.788
122	Tobacco, manufactured	0.125	0.320	0.337	0.332	0.937	0.322	0.317	0.451	0.134
2	Crude Materials, Excl. Fuels	1.816	1.749	1.528	1.487	1.062	1.048	0.847	0.842	0.598
21	Hides, Skins, Furskins, Raw	0.121	0.073	0.034	0.026	0.000	0.009	0.004	0.000	0.010
211	Hides & skins (except furskins), raw	0.167	0.101	0.043	0.030	0.000	0.011	0.005	0.000	0.014
212	Furskins, raw, other than group 211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	Oil Seed, Oleaginous Fruit	0.943	0.977	0.800	1.458	0.960	0.843	0.458	0.445	0.788
222	Oil-seeds etc. used for extraction of "soft" oils	0.869	1.014	0.041	0.938	0.186	0.206	0.002	0.002	0.001
223	Oil-seeds & oleaginous fruits, whole or broken etc.	2.071	0.387	12.313	10.719	16.039	13.152	8.482	7.718	13.136
23	Crude Rubber	19.477	18.861	17.491	15.861	13.282	12.048	9.762	8.807	4.620
232	Synthetic rubber, reclaimed rubber, waste, parings etc.	37.504	31.088	33.287	34.141	27.558	23.879	20.127	17.028	11.463

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
24	Cork And Wood	0.540	0.259	0.360	0.275	0.182	0.154	0.058	0.079	0.048
244	Cork, natural, raw and waste	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000
245	Fuel Wood (excluding wood waste) & wood charcoal	107.531	45.709	51.246	24.101	22.262	13.593	4.214	8.244	4.943
246	Wood in chips or particles and wood waste	0.022	0.002	0.000	0.003	0.000	0.001	0.040	0.000	0.011
247	Wood in the rough or roughly squared	0.049	0.032	0.003	0.015	0.012	0.017	0.000	0.002	0.001
248	Wood, simply worked, & railway sleepers of wood	0.070	0.073	0.035	0.164	0.051	0.075	0.036	0.030	0.012
25	Pulp And Waste Paper	0.000	0.005	0.003	0.008	0.018	0.045	0.026	0.037	0.189
251	Pulp and waste paper	0.000	0.005	0.003	0.008	0.018	0.045	0.026	0.037	0.189
26	Textile Fibers	1.637	1.278	1.663	1.462	1.226	1.227	1.049	1.124	2.118
261	Silk	0.562	0.191	0.023	0.084	0.045	0.061	0.014	0.000	0.009
263	Cotton	0.022	0.034	0.000	0.000	0.031	0.005	0.017	0.087	0.081
264	Jute and other textile bast fibers, N. E. S., raw etc.	0.000	0.000	0.108	0.245	0.058	0.035	0.374	0.417	0.016
265	Vegetable textile fibers, raw or processed; waste	65.901	61.408	83.397	90.834	73.591	82.925	48.191	39.416	78.192
266	Synthetic fibers suitable for spinning	0.001	0.015	0.006	0.008	0.007	0.004	0.005	0.056	0.024
267	Other man-made fibers suitable for spinning; waste thereof	0.013	0.000	0.000	0.002	1.596	0.656	0.494	0.399	0.038
268	Wool & other animal hair (excluding wool tops)	0.000	0.001	0.000	0.000	0.001	0.016	0.002	0.002	0.000
269	Worn clothing and other worn textile articles; rags	0.072	0.618	1.550	0.048	0.086	0.015	0.251	0.312	0.062
27	Crude Fertilizer, Mineral	0.949	0.950	0.825	1.174	0.833	1.249	0.906	0.501	0.367
273	Stone, sand & gravel	0.323	0.212	0.376	0.355	0.546	0.725	0.350	0.203	0.081
274	Sulphur and unroasted iron pyrites	0.000	0.000	0.000	0.000	0.001	0.000	0.068	0.000	0.000
277	Natural Abrasives, N.E.S. (Including Industrial Diamonds)	2.650	0.000	2.379	5.522	5.899	12.490	7.924	0.704	0.197
278	Other crude minerals	1.698	2.020	1.190	1.442	1.023	0.741	0.638	0.669	0.655
28	Metalliferous Ores, Scrap	0.278	0.412	0.454	0.593	0.141	0.167	0.227	0.246	0.077
281	Iron ore & concentrates	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
282	Ferrous waste & scrap, remelting scrap ingots of iron etc	0.424	0.894	1.520	3.260	1.059	1.096	1.168	1.446	0.832
287	Ores & concentrates of basic metals, N. E. S.	0.792	1.487	1.028	1.066	0.141	0.281	0.299	0.350	0.005
288	Non-ferrous base metal waste and scrap, NES	0.004	0.052	0.370	0.542	0.344	0.325	0.299	0.424	0.137
289	Ores & concentrates of precious metals; waste, scrap etc.	0.003	0.000	0.019	0.092	0.031	0.073	1.703	0.146	0.005
29	(Crude Animal, Veg. Material	1.212	1.562	1.642	1.494	1.421	1.292	1.301	1.180	0.986
291	(Crude animal vegetable materials, N. E. S.	1.083	0.777	0.864	0.561	0.729	0.507	0.633	0.693	0.558

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
292	Crude vegetable materials, N. E. S.	1.240	1.727	1.856	1.714	1.580	1.458	1.442	1.287	1.075
3	Mineral Fuels, Etc	0.672	0.177	0.098	0.171	0.135	0.063	0.071	0.093	0.129
32	Coal, Coke, Briquettes	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
322	Briquettes, lignite and peat	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	Petroleum, Petrol Product	0.791	0.213	0.118	0.205	0.168	0.076	0.085	0.110	0.212
334	Petroleum oils: preparations, N. E. S.	2.029	0.350	0.376	0.302	0.148	0.000	0.017	0.117	0.021
335	Residual petroleum products, N. E. S., etc	7.060	4.344	0.000	4.877	6.805	4.356	4.279	3.671	2.661
34	Gas, Natural, Manufactured	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
341	Gas, natural & manufactured	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
411	Animal Oils and Fats	0.046	0.018	0.027	0.023	0.021	0.031	0.032	0.011	0.002
42	Fixed Veg. Fats And Oils	32.573	8.087	33.157	11.970	1.569	3.056	2.702	3.314	3.028
424	Fixed vegetable oil, nonsoft	5.052	1.076	4.413	1.425	0.152	0.330	0.289	0.307	0.217
43	Processed Animal, Veg. Oil, Etc.	0.000	0.000	0.007	0.001	0.002	0.000	0.007	0.000	0.001
431	Animal or Vegetable Fats & Oils, Processed; Waxes; Inedible Mixtures or Prep. of Animal or Vegetable Fats or Oils, N.E.S.	0.000	0.000	0.010	0.003	0.003	0.001	0.008	0.000	0.001
5	Chemicals, Related Products, Nes	9.445	16.423	20.952	16.429	18.164	16.150	14.990	10.493	9.333
51	Organic Chemicals	2.566	1.442	3.098	1.636	1.291	1.147	3.394	1.359	1.009
511	Hydrocarbons, N.E.S. & their nitrated etc. derivatives	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
512	Alcohols, Phenols, Phenol - Alcohols, and Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.093	0.049	0.090	0.044	0.030	0.031	0.032	0.047	0.026
513	Carboxylic Acids and Their Anhydrides, etc.; Their Halogenated, Sulphonated, Nitrated or Nitrosated Derivatives	0.000	0.000	0.006	0.007	0.014	0.006	0.000	0.000	0.000
514	Nitrogen-function compounds	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.001
515	Organo - Inorganic Compounds, Heterocyclic Compounds, Nucleic Acids and Their Salts, and Sulphonamides	0.000	0.000	0.000	0.005	0.000	0.003	0.034	0.000	0.002
516	Other organic chemicals	0.023	0.001	0.011	0.005	0.004	0.005	0.305	0.004	0.014
52	Inorganic Chemicals	0.022	0.009	0.010	0.004	0.001	0.007	0.005	0.006	0.003
522	Inorganic Chemical Elements, Oxides and Halogen Salts	0.035	0.014	0.008	0.004	0.001	0.006	0.002	0.006	0.006
523	Metal Salts and Peroxysalts, or Inorganic Acids	0.000	0.000	0.002	0.001	0.000	0.002	0.003	0.001	0.001

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
524	Other Inorganic Chemicals; Organic and Inorganic Compounds of Precious Metals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
53	Dyes, Colouring Materials	0.012	0.011	0.021	0.048	0.041	0.112	0.090	0.120	0.107
531	Synthetic organic colouring matter etc.	0.000	0.003	0.001	0.001	0.003	0.003	0.053	0.139	0.072
532	Dyeing, tanning extracts & synthetic tanning materials	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000
533	Pigments, paints, varnishes & related materials	0.014	0.010	0.023	0.045	0.041	0.108	0.055	0.049	0.092
54	Medicinal, Pharm. Products	1.228	1.391	2.305	1.688	2.150	2.142	2.803	2.889	1.521
541	Medicinal & pharm. products (excl. group 542)	0.085	0.099	0.123	0.085	0.119	0.109	0.158	0.141	0.061
55	Essential Oils, Perfume Etc	0.164	0.259	0.202	0.157	0.144	0.126	0.120	0.109	0.053
551	Essential Oils, Perfume and Flavour Materials	0.136	0.233	0.173	0.138	0.119	0.086	0.070	0.075	0.043
553	Perfumery, cosmetic or toilet preparations (excl. soaps)	0.024	0.026	0.036	0.027	0.037	0.065	0.173	0.055	0.020
554	Soap, cleansing & cleaning preparations	0.145	0.124	0.102	0.048	0.063	0.091	0.050	0.082	0.028
56	Fertilizer Except Grp. 272	0.020	0.003	0.011	0.006	0.006	0.003	0.022	0.006	0.004
562	Fertilizers (other than those of group 272)	0.024	0.005	0.015	0.008	0.008	0.004	0.003	0.011	0.006
57	Plastics In Primary Form	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
572	Polymers of Styrene, In Primary Forms	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	Plastics, Non Primary Form	0.187	1.253	0.735	0.605	0.619	0.324	1.210	0.377	0.914
582	Plates, sheets, films etc. of plastic	0.010	0.003	0.036	0.238	0.020	0.104	0.904	0.172	0.176
583	Monofilament, rods, sticks etc. of plastic	0.005	0.019	0.007	0.007	0.009	0.003	0.005	0.005	0.004
59	Chemical Materials Nes	4.148	9.022	16.936	13.192	15.445	15.152	10.605	9.324	8.549
591	Insecticides, herbicides etc.	0.338	1.215	3.000	2.902	2.857	1.967	1.276	1.643	0.870
592	Starches, Inulin & Wheat Gluten; Albuminoidal Substances	0.000	0.014	0.002	0.001	0.002	0.005	0.003	0.006	0.003
598	Miscellaneous chemical products, N. E. S.	1.286	2.596	4.051	2.729	3.235	3.284	2.705	2.032	1.667
6	Basic Manufactures	50.339	109.737	116.495	93.272	93.780	92.423	91.523	97.649	74.312
61	Leather, Leather Goods	0.248	0.170	0.170	0.149	1.831	0.062	0.079	0.081	0.042
611	Leather	0.006	0.005	0.005	0.005	0.074	0.002	0.002	0.002	0.001
612	Manufactures of leather etc. N. E. S.; saddlery etc.	0.157	0.048	0.051	0.055	0.008	0.014	0.046	0.061	0.040
613	Furskins, tanned etc. other than those of 848.31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	Rubber Manufactures, Nes	3.809	16.527	17.883	14.215	10.740	13.166	12.940	13.635	20.070

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
621	Materials of Rubber (e.g. pastes, plates, sheets, Rods, Thread, Tubes of Rubber)	0.044	0.446	1.808	1.695	1.844	0.990	0.810	1.829	6.260
625	Rubber tyres, interchangeable tyre treads etc.	0.082	1.007	1.212	1.054	0.762	1.102	1.169	1.474	2.114
628	Rubber articles, N. E. S.	2.145	4.313	4.117	2.715	3.263	3.683	4.020	3.416	3.447
63	Cork, Wood Manufactures	0.336	0.716	1.073	1.036	2.153	1.178	1.341	1.415	0.408
633	Cork Manufactures	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.008	0.001
634	Veneers, plywood, particle board etc., N. E. S.	0.020	0.009	0.008	0.026	0.008	0.001	0.014	0.009	0.019
635	Wood manufactures, N. E. S.	8.880	16.442	22.622	21.374	44.020	24.550	48.403	32.244	8.034
64	Paper, Paperboard Etc	0.046	0.097	0.043	0.074	0.776	0.664	0.733	0.738	1.013
641	Paper & paperboard	0.020	0.040	0.010	0.018	0.044	0.007	0.009	0.377	0.251
642	Paper and Paperboard, Cut to Size or Shape, and Articles of Paper or Paperboard	0.005	0.013	0.005	0.009	0.108	0.104	0.142	0.077	0.111
65	Textile Yarn, Fabric Etc	1.039	1.535	1.408	0.877	1.383	2.386	2.715	2.933	3.325
651	Textile yarn	0.552	0.302	0.260	0.228	1.014	2.341	2.589	2.423	1.407
652	Cotton fabrics, woven	0.101	0.202	0.131	0.015	0.035	0.084	0.103	0.168	0.277
653	Fabrics, woven, of man-made textile materials	0.141	0.053	0.099	0.115	0.264	0.545	1.018	1.004	0.828
654	Other textile fabrics, woven	0.020	0.023	0.022	0.041	0.034	0.031	0.073	0.058	0.119
655	Knitted or crocheted fabrics, N. E. S.	0.067	0.116	0.076	0.136	0.043	0.053	0.178	0.126	0.675
656	Tulles, lace, Embroidery, Ribbons, Trimmings and Other Smallware	0.085	0.087	0.034	0.024	0.024	0.059	0.081	0.137	1.150
657	Special yarns, special textile fabrics etc.	0.934	1.268	1.569	1.027	0.817	0.784	0.744	0.622	0.666
658	Made-up articles, of textile materials, N. E. S.	9.061	19.020	14.933	8.864	12.217	15.046	12.045	15.819	19.901
659	Floor coverings, etc.	0.150	0.311	0.292	0.219	0.263	0.221	0.256	0.221	0.402
66	Non-Metal Mineral Manufactures	14.062	41.959	43.850	39.431	28.318	29.389	32.679	29.822	13.135
661	Lime, cement, fabricated construction materials	0.015	0.006	0.001	0.001	0.017	0.021	0.011	0.015	0.002
662	Clay & refractory construction materials	0.119	0.163	0.134	0.142	0.138	0.121	0.135	0.122	0.092
663	Mineral Manufactures, N.E.S.	0.088	0.006	0.009	0.033	0.049	0.013	0.039	0.035	0.035
664	Glass	0.006	0.004	0.002	0.001	0.002	0.002	0.010	0.022	0.025
665	Glassware	0.001	0.001	0.006	0.002	0.005	0.007	0.005	0.015	0.069
666	Pottery	1.325	1.420	1.964	1.648	3.094	3.458	3.313	2.939	2.627

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
667	Pearls & precious stones etc., unworked or worked	14.641	44.877	53.784	42.262	30.001	32.215	37.174	34.511	15.682
67	Iron And Steel	0.217	0.034	0.375	0.468	0.626	0.533	0.455	0.558	0.187
671	Pig-iron etc., iron & steel granules, powders etc.	0.000	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.001
672	Ingots etc., of iron & steel, semi-finished products	0.000	0.000	0.002	0.002	0.001	0.001	0.000	0.001	0.000
673	Flat-rolled products; iron or non-alloy steel, not clad etc.	0.002	0.005	0.002	0.038	0.111	0.009	0.003	0.006	0.021
674	Flat-rolled products of iron or non-alloy steel, clad etc.	0.000	0.000	0.040	0.067	0.079	0.129	0.072	0.138	0.018
676	Iron and Steel Bars, Rods, Angles, Shapes & Sections	0.021	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
677	Rails or Railway Track Construction Material, of Iron or Steel	0.001	0.003	0.000	0.112	0.000	0.030	0.000	-	-
678	Wire of iron or steel	0.024	0.047	0.270	0.034	0.245	0.125	0.459	0.035	0.145
679	Tubes, Pipes & Hollow Profiles, Fittings Thereof, of Iron/Steel	0.000	0.000	0.000	0.045	0.002	0.002	0.007	0.002	0.034
68	Non Ferrous Metals	0.011	0.021	0.053	0.018	0.037	0.068	0.027	0.089	0.048
681	Silver, Platinum and Other Metals of the Platinum Group	0.003	0.000	0.200	0.000	0.000	0.241	0.002	0.103	0.000
682	Copper	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.000
683	Nickel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
684	Aluminum	0.015	0.016	0.018	0.012	0.030	0.024	0.014	0.018	0.037
685	Lead	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
686	Zinc	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.028	0.000
687	Tin	0.000	0.000	0.000	0.027	0.042	0.000	0.003	0.000	0.000
689	Miscellaneous Non-Ferrous Base Metals Employed in Metallurgy, and Cermets	0.001	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
69	Metal Manufactures Nes	2.071	18.598	18.100	24.020	26.658	22.993	8.432	9.222	9.756
692	Metal Containers for Storage or Transport	0.329	0.204	0.241	0.546	0.408	0.029	0.750	0.608	0.451
693	Wire Products (Excluding Insulated Electrical Wiring) and Fencing	0.003	0.000	0.002	0.000	0.000	0.005	0.001	0.001	0.001
	Grills									
694	Nails, screws, etc, of iron, steel, copper or aluminum	0.000	3.602	2.946	1.438	1.428	1.523	0.250	0.031	0.548
695	Tools for use in the hand or in machines	0.083	0.217	0.985	2.055	2.108	1.551	0.113	0.038	0.022
696	Cutlery	0.000	0.035	0.124	0.135	0.619	0.190	0.179	0.265	0.019
697	Household equipment of base metal, N. E. S.	0.015	0.019	0.050	0.025	0.114	0.033	0.047	0.189	0.057
699	Manufactures of base metals, N. E. S.	0.648	0.795	0.563	0.405	0.271	0.551	0.404	0.510	0.259
7	Machines, Transport Equipment	7.694	9.460	9.015	23.748	29.047	22.286	25.492	25.607	46.143

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
71	Power Generating Machines	0.189	0.082	0.320	0.104	0.104	0.031	0.027	0.238	0.022
711	Steam or Other Vapour Generating Boilers, Superheated Water Boilers, and Auxiliary Plant for Use Therewith; Parts Thereof	0.001	0.001	0.045	0.001	0.000	0.000	0.000	0.000	0.000
712	Steam Turbines & Other Vapour Turbines & Parts Thereof	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
713	Internal combustion piston engines & parts, N.E.S.	0.001	0.005	0.005	0.002	0.001	0.000	0.000	0.017	0.000
714	Engines and Motors, Non-electric (other than those of Groups 712, 713, 718); Parts, N.E.S., of these Engines and Motors	0.272	0.001	0.028	0.005	0.000	0.056	0.009	0.000	0.006
716	Rotating Electric Plant and Parts Thereof, N.E.S.	0.114	0.083	0.095	0.121	0.254	0.032	0.042	0.055	0.049
718	Power Generating Machinery and Parts Thereof, N.E.S.	0.000	0.000	0.000	0.002	0.001	0.000	0.001	0.000	0.000
72	Special Industrial Machinery	0.190	0.351	0.274	0.501	0.109	0.115	0.431	0.185	0.067
721	Agricultural Machinery (Excluding Tractors) and Parts Thereof	0.003	0.001	0.005	0.001	0.005	0.001	0.003	0.000	0.001
722	Tractors (Other Than Those of Headings 744.14 and 744.15)	0.006	0.032	0.005	0.005	0.031	0.008	0.005	0.006	0.012
723	Civil engineering etc. equipment, parts thereof	0.016	0.038	0.039	0.065	0.011	0.008	0.005	0.004	0.001
724	Textile & leather machinery & parts thereof, N. E. S.	0.007	0.073	0.008	0.023	0.027	0.082	0.088	0.079	0.057
725	Paper & Pulp Mill Machinery, Paper Cutting Machines & Other Mach. for Manufact. of Paper Articles; Parts Thereof	0.003	0.000	0.000	0.004	0.000	0.001	0.000	0.004	0.095
726	Printing and Bookbinding Machinery and Parts Thereof	0.002	0.002	0.006	0.005	0.002	0.002	0.003	0.004	0.037
727	Food Processing Machines (Excl. Domestic); Parts Thereof	0.000	0.002	0.014	0.014	0.014	0.017	0.013	0.009	0.006
728	Other machinery etc. for particular industries, N.E.S.	0.337	0.289	0.108	0.221	0.090	0.163	1.742	0.572	0.073
73	Metal Working Machinery	0.675	0.027	0.188	0.172	0.080	0.094	0.032	0.033	0.232
736	Metalworking machinery - tools	1.182	0.067	0.417	0.423	0.074	0.189	0.005	0.063	0.567
737	Metalworking Machinery (Other Than Machine Tools) and Parts Thereof, N.E.S.	0.001	0.000	0.000	0.000	0.012	0.001	0.008	0.001	0.000
74	General Industrial Machinery, Nes	0.143	0.100	0.083	0.085	0.680	0.127	0.130	0.129	0.328
741	Heating & cooling equipment, parts thereof, N. E. S.	0.007	0.008	0.012	0.007	0.011	0.049	0.028	0.007	0.003
742	Pumps for Liquids, Whether or Not Fitted With A Measuring Device; Liquid Elevators; Parts for Such Pumps and Liquid Elevators	0.296	0.006	0.016	0.005	0.054	0.004	0.013	0.028	0.004

(contd.)



**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
743	Pumps (Other Than Pumps for Liquids), Air or Other Gas Compressors and Fans; Ventilating or Recycling Hoods; Centrifuges; Filtering or Purifying Apparatus; Parts Thereof	0.011	0.002	0.005	0.002	0.008	0.001	0.001	0.000	0.001
744	Mechanical handling equipment, parts, N. E. S.	0.020	0.069	0.040	0.066	0.712	0.048	0.015	0.009	0.004
745	Non-electrical Machinery, Tools and Mechanical Apparatus and Parts Thereof, N.E.S.	0.001	0.065	0.029	0.024	0.030	0.052	0.144	0.180	0.589
749	Non-electric Parts and Accessories of Machinery, N.E.S.	0.015	0.007	0.018	0.020	0.021	0.018	0.009	0.012	0.012
75	Office Machines, Adp. Machines	0.029	0.080	0.034	0.146	0.393	0.970	1.058	0.847	2.943
751	Office Machines	0.007	0.005	0.003	0.002	0.002	0.002	0.002	0.003	0.001
752	Automatic data processing machines etc., N. E. S.	0.012	0.027	0.004	0.004	0.004	0.007	0.011	0.003	0.009
759	Parts etc, for use with groups 751 & 752	0.001	0.002	0.005	0.030	0.068	0.158	0.152	0.124	0.334
76	Telecomm, Sound Equip Etc	0.028	0.144	0.080	0.398	0.122	0.088	0.134	0.220	0.582
761	Television Receivers, Whether or Not Incorporating Radio-Broadcast Receivers or Sound- or Video Recording or Reproducing Apparatus	0.001	0.001	0.000	0.001	0.001	0.003	0.001	0.000	0.000
762	Radio Broadcast Receivers, Whether or Not Incorporating Sound-Recording or Reproducing Apparatus or A Clock	0.000	0.000	0.001	0.002	0.000	0.000	0.006	0.001	0.000
763	Sound Recorders or Reproducers; Television Image and Sound Recorders or Reproducers; Prepared Unrecorded Media	0.001	0.002	0.000	0.033	0.002	0.000	0.000	0.005	0.000
764	Telecommunication Equipment, N.E.S., and Parts, N.E.S., and Accessories of Apparatus Falling Within Divisin 76	0.019	0.125	0.068	0.075	0.068	0.055	0.070	0.108	0.356
77	Electrical Machinery Appar, Parts, Nes	0.215	0.467	3.085	1.217	2.089	2.078	1.968	2.508	4.030
771	Electric power machinery & parts thereof	0.045	0.023	0.007	0.123	0.081	0.148	0.285	0.555	1.382
772	Electrical apparatus for switching circuits, resistors etc	0.014	0.090	0.054	0.163	0.235	0.211	0.128	0.210	0.153
773	Equipment for distributing electricity, N. E. S.	0.000	0.001	0.001	0.000	0.004	0.001	0.001	0.002	0.002
774	Electrodiagnostic Apparatus for Medical, Surgical, Dental or Veterinary Sciences and Radiological Apparatus	0.004	0.000	0.002	0.006	0.002	0.001	0.001	0.007	0.001
775	Household-Type Electrical & Non-electrical Equipment, N.E.S.	0.001	0.003	0.006	0.001	0.001	0.001	0.006	0.027	0.001
78	Road Vehicles	0.064	0.146	0.093	0.317	0.167	0.080	0.064	0.052	0.287

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
782	Motor Vehicles for the Transport of Goods and Special Purpose Motor Vehicles	0.005	0.002	0.034	0.160	0.051	0.004	0.000	#DIV/0!	0.004
783	Road motor vehicles, N. E. S.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
784	Parts & accessories of groups 722, 781, 782 & 783	0.001	0.013	0.002	0.000	0.001	0.001	0.001	0.002	0.009
785	Motor cycles & cycles etc.	0.004	0.008	0.008	0.017	0.021	0.029	0.027	0.022	0.133
786	Trailers & Semi-Trailers; Other Vehicles, Not Mechanically Propelled; Specially Designed & Equip. Transp. Containers	0.002	0.012	0.000	0.000	0.002	0.004	0.003	0.000	0.005
79	Other Transport Equipment	0.018	0.028	0.035	0.209	0.146	0.028	0.016	0.012	0.061
791	Railway Vehicles (Including Hovertrains) and Associated Equipment	0.000	0.021	0.000	0.002	0.085	0.000	0.011	0.037	0.000
792	Aircraft & associated equipment; spacecraft etc.	0.101	0.058	0.087	2.548	1.551	0.144	0.135	0.034	0.212
793	Ships, boats (incl. hovercraft) & floating structures	0.008	0.033	0.025	0.008	0.007	0.012	0.005	0.004	0.037
8	Miscellaneous Manufactured Goods	200.637	323.824	237.600	259.988	297.659	330.367	338.569	262.631	338.646
81	Prefab Building, Fittings Etc	0.001	0.002	0.001	0.013	0.019	0.029	0.034	0.041	0.018
812	Sanitary, Plumbing and Heating Fixtures and Fittings, N.E.S.	0.001	0.007	0.002	0.031	0.060	0.078	0.078	0.087	0.049
82	Furniture, Parts Thereof	0.002	0.005	0.005	0.008	0.009	0.008	0.006	0.025	0.007
821	Furniture & parts thereof; bedding, mattresses etc.	0.089	0.310	0.220	0.366	0.389	0.345	0.278	1.054	0.268
83	Travel Goods, Handbags, Etc.	0.113	0.307	0.170	0.077	0.331	1.333	1.866	3.394	8.315
831	Trunks, suitcases etc, other traveling goods	0.034	0.090	0.052	0.023	0.103	0.439	0.615	1.118	2.487
84	Clothing And Accessories	36.319	39.501	39.754	38.753	46.416	55.115	51.608	47.752	46.302
842	Women's clothing (other than sub-group 842.2)	40.647	2.852	31.263	32.418	30.446	29.253	26.044	23.731	26.061
843	Men's clothing (other than those of sub-group 845.2)	69.505	5.895	59.957	59.340	62.732	70.677	60.993	54.885	61.825
844	Women's clothing, knitted or crocheted	1.482	1.067	0.958	1.333	1.273	1.578	1.598	1.393	1.472
845	Articles of apparel, of textile fabrics, N. E. S.	2.410	7.547	9.287	9.625	10.254	9.268	9.634	8.273	11.384
846	Clothing accessories of textile fabrics, etc.	1.042	2.222	1.560	4.673	6.009	6.550	6.237	6.319	10.988
847	Textile clothing accessories, N. E. S.	5.634	7.200	5.750	5.588	5.905	6.499	5.471	5.684	7.520
848	Articles of apparel etc. of other than textile fabrics, etc.	0.733	0.941	0.787	1.565	1.624	2.989	3.057	3.504	2.533
85	Footwear	1.498	1.365	1.313	1.497	1.199	1.502	1.853	2.336	2.474
851	Footwear	3.199	3.615	3.105	3.839	3.472	5.002	6.227	7.847	9.673
87	Scientific Equipment, Nes	0.169	0.050	0.086	0.095	0.077	0.034	0.082	0.065	0.104

(contd.)

**Table 4.5: Revealed Comparative Advantage for Sri Lanka: Selected Years**

SITC Code	Classification	1985	1988	1989	1990	1991	1992	1993	1994	1999
871	Optical Instruments and Apparatus, N.E.S.	0.002	0.000	0.000	0.001	0.001	0.000	0.001	0.000	0.000
872	Instruments etc., N.E.S. for medical etc. sciences	0.004	0.002	0.003	0.003	0.001	0.003	0.002	0.003	0.000
873	Meters and Counters, N.E.S.	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.001	0.000
874	Measuring, Checking, Analysing and Controlling Instruments and Apparatus, N.E.S.	0.349	0.161	0.204	0.120	0.168	0.056	0.158	0.099	0.068
88	Photo. Apparatus, N.E.S.	0.089	0.221	0.112	0.193	0.093	0.088	0.121	0.118	0.010
881	Photographic Equipment and Apparatus, N.E.S.	0.070	0.528	0.025	0.038	0.130	0.002	0.015	0.007	0.003
882	Photographic and Cinematographic Supplies	0.013	0.021	0.020	0.021	0.017	0.017	0.012	0.011	0.002
883	Cinematographic Film, Exposed & Developed, Whether or Not Incorp. Soundtrack or Consisting Only of Soundtrack	0.003	0.006	0.003	0.001	0.002	0.001	0.000	0.000	0.000
884	Optical Goods, N.E.S.	0.004	0.020	0.018	0.105	0.005	0.001	0.009	0.024	0.000
885	Watches and Clocks	0.002	0.002	0.001	0.028	0.008	0.026	0.072	0.058	0.005
89	Misc. Manufactured Goods, Nes	92.089	166.828	180.896	180.827	242.491	364.408	343.918	519.229	325.213
892	Printed Matter	0.945	0.219	0.280	0.749	0.351	0.908	1.349	1.808	0.640
893	Articles, N. E. S., of plastics	0.892	1.055	1.281	1.379	1.213	1.024	1.021	0.997	1.633
894	Baby carriages, toys, games & sporting goods	0.031	0.031	0.024	0.014	0.075	0.332	0.343	0.348	0.231
895	Office and Stationery Supplies, N.E.S.	0.045	0.032	0.023	0.008	0.005	0.004	0.020	0.025	0.005
896	Works of art, collectors pieces etc.	0.031	0.009	0.001	0.002	0.001	0.003	0.004	0.000	0.000
897	Jewellery etc., & other articles of precious etc. stones	0.201	0.403	0.474	0.330	0.597	0.578	0.524	0.921	0.284
898	Musical instruments, parts & accessories, records etc.	0.010	0.012	0.060	0.036	0.016	0.151	0.201	0.334	0.252
899	Miscellaneous Manufactured Articles, N. E. S.	2.432	2.856	1.978	1.609	3.207	5.518	4.683	6.157	5.187
9	Goods Not Classified By Kind	0.342	10.943	7.957	10.862	6.838	4.794	4.239	3.803	3.080
93	Special Transactions And Commodities Not Classified	0.050	1.183	0.926	1.419	0.922	0.752	0.837	0.701	0.381
931	Special transactions etc. not classed by kind	1.261	40.531	49.321	72.941	49.108	40.312	96.024	192.777	-
94	Zoo Animals, Pets Etc.	0.008	0.016	0.001	0.000	0.003	0.111	0.003	0.029	-
941	Zoo Animals, Pets Etc.	0.000	0.001	0.000	0.000	0.000	0.003	0.000	0.000	0.000
95	War Firearms, Ammunition	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000
951	War Firearms, Ammunition	0.072	0.219	0.000	0.000	0.000	0.060	0.000	0.353	0.118

Source: Computed from UNCOMTRADE Database

basic manufactures, and miscellaneous manufactured goods. Furthermore, 'crude materials except fuels' has been a common product category in the revealed comparative advantage profiles of India, Pakistan, and Sri Lanka. Second, with the exception of India and Sri Lanka, the South Asian countries enjoy comparative advantage in a relatively narrow range of products. For example, export structures of Bangladesh, Nepal and Pakistan show that, out of 71 commodity groups at the 2-digit SITC classification, these countries respectively have revealed comparative advantage in only 7, 5 and 12 commodity groups. The range of products in which India and Sri Lanka have comparative advantage is somewhat broad, as is evident from its comparative advantage in 26 and 21 product categories respectively at the 2-digit SITC commodity classification. Third, though not surprising, none of the countries has comparative advantage in capital intensive and high value-added products.

Despite the fact that the export interests of South Asian countries mostly lie in similar commodities, there is some potential for increasing intra-regional trade as shown in Table 4.6. The Table focuses on the last year of analysis (2000 for India, Nepal and Pakistan, 1998 for Bangladesh and 1999 for Sri Lanka) and pinpoints products in which at most four countries have revealed comparative advantage. The second and third columns of the Table indicate the potential exporters (countries with RCA) and importers (countries lacking RCA). For example, there are 4 items — veneers, plywood, particle boards etc., other textile fabrics woven — that can be imported from Bangladesh by the other South Asian

countries. On the other hand, a variety of products (total 43) can be exported by India to its trading partners in South Asia, ranging from various food items to machinery and transport equipment. Whereas Nepal can be an exporter of oilseeds and oleaginous fruits, Pakistan's potential exports to South Asian countries consist of sugar, molasses and honey, cotton, clothing, crude animal and vegetable materials, fabrics, cutlery, live animals, and surgical instruments. Sri Lanka's potential exports to the region include synthetic rubber, fuel wood, raw or processed textile fibers, residual petroleum products, tobacco, rubber articles, and electric power machinery and parts.

It needs to be emphasized that the potential for intra-regional trade in products in which revealed comparative advantage is indicated crucially depends on the importance of such products in total imports of the region. For example, the prospects for intra-regional trade are generally believed to be strong in situations where the regional countries have comparative advantage in products that figure prominently in the regional import structure. Table 4.7 sheds light on the share in regional imports of products (3-digit SITC) in which South Asian countries have revealed comparative advantage. In 1995, the share of such products in total regional imports was 20.89 percent for Bangladesh, 54.17 percent for India, 16.24 percent for Nepal, 38.01 percent for Pakistan, and 23.26 percent for Sri Lanka. It is evident that both India and Pakistan have a reasonable potential to meet the import needs of countries in the South Asian region. On the other hand, roughly

more than 75 percent of total regional imports consist of products in which both Bangladesh and Sri Lanka lack revealed comparative advantage. Nepal's revealed comparative advantage lies in products that constitute only about 17 percent of total regional imports.

**Table 4.6: Identification of Products for Potential (Bilateral/Multilateral) Trade in South Asia**

SITC Code	Classification	Potential Exporters	Potential Importers
025	Eggs, birds', & egg yolks, fresh etc., egg albumin	India	Bangladesh, Nepal, Pakistan, Sri Lanka
034	Fish, fresh (live or dead), chilled or frozen	India, Pakistan, Sri Lanka	Bangladesh, Nepal
035	Fish, dried etc.; smoked fish, flours, meals etc.	Bangladesh, Pakistan, Sri Lanka	India, Nepal
036	Crustaceans etc. chilled, frozen, dried, salted etc.	Bangladesh, India, Pakistan, Sri Lanka	Nepal
042	Rice	India, Pakistan	Bangladesh, Nepal, Sri Lanka
047	Other cereal meals & flours	Sri Lanka	Bangladesh, India, Nepal, Pakistan
054	Vegetables, fresh, chilled, etc.	Bangladesh, India, Pakistan	Nepal, Sri Lanka
056	Vegetable, roots & tubers, prepared or preserved, N.E.S.	India, Sri Lanka	Bangladesh, Nepal, Pakistan
057	Fruits and nuts (not including oil nuts), fresh or dried	India, Pakistan, Sri Lanka	Bangladesh, Nepal
061	Sugar, molasses & honey	Pakistan	Bangladesh, India, Nepal, Sri Lanka
062	Sugar confectionery	Pakistan	Bangladesh, India, Nepal, Sri Lanka
071	Coffee & coffee substitutes	India	Bangladesh, Nepal, Pakistan, Sri Lanka
074	Tea & mate	Bangladesh, India, Sri Lanka	Nepal, Pakistan
075	Spices	India, Pakistan, Sri Lanka	Bangladesh, Nepal
081	Feeding stuff for animals (not incl. unmilled cereals)	India	Bangladesh, Nepal, Pakistan, Sri Lanka
098	Edible products & preparations, N. E. S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
121	Tobacco unmanufactured, tobacco refuse	Sri Lanka	Bangladesh, India, Nepal, Pakistan
223	Oil-seeds & oleaginous fruits, whole or broken etc.	Pakistan, Sri Lanka	Bangladesh, India, Nepal
232	Synthetic rubber, reclaimed rubber, waste, parings etc.	Sri Lanka	Bangladesh, India, Nepal, Pakistan
244	Cork, natural, raw and waste	India	Bangladesh, Nepal, Pakistan, Sri Lanka
245	Fuel Wood (excluding wood waste) & wood charcoal	Sri Lanka	Bangladesh, India, Nepal, Pakistan
248	Wood, simply worked, & railway sleepers of wood	India	Bangladesh, Nepal, Pakistan, Sri Lanka
251	Pulp and waste paper	India	Bangladesh, Nepal, Pakistan, Sri Lanka
263	Cotton	Pakistan	Bangladesh, India, Nepal, Sri Lanka
264	Jute and other textile bast fibers, N. E. S., raw etc.	Bangladesh	Bangladesh, India, Nepal, Sri Lanka
265	Vegetable textile fibers, raw or processed, waste	Sri Lanka	Bangladesh, India, Nepal, Pakistan
269	Worn clothing and other worn textile articles; rags	Pakistan	Bangladesh, India, Nepal, Sri Lanka
271		India	Bangladesh, Nepal, Pakistan, Sri Lanka
273	Stone, sand & gravel	India, Pakistan	Bangladesh, Nepal, Sri Lanka
278	Other crude minerals	India	Bangladesh, Nepal, Pakistan, Sri Lanka

(contd.)

**Table 4.6: Identification of Products for Potential (Bilateral/Multilateral) Trade in South Asia**

SITC Code	Classification	Potential Exporters	Potential Importers
289	Ores & concentrates of precious metals; waste, scrap etc.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
291	Crude animal vegetable materials, N. E. S.	Pakistan	Bangladesh, India, Nepal, Sri Lanka
292	Crude vegetable materials, N. E. S.	India, Pakistan, Sri Lanka	Bangladesh, Nepal
323		India	Bangladesh, Nepal, Pakistan, Sri Lanka
335	Residual petroleum products, N. E. S., etc	Sri Lanka	Bangladesh, India, Nepal, Pakistan
423		India	Bangladesh, Nepal, Pakistan, Sri Lanka
424	Fixed vegetable oil, nonsoft	India	Bangladesh, Nepal, Pakistan, Sri Lanka
431	Animal or Vegetable Fats & Oils, Processed, Waxes; Etc.	Nepal, Pakistan	Bangladesh, India, Sri Lanka
531	Synthetic organic colouring matter etc.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
532	Dyeing, tanning extracts & synthetic tanning materials	India	Bangladesh, Nepal, Pakistan, Sri Lanka
551	Essential Oils, Perfume and Flavour Materials	India	Bangladesh, Nepal, Pakistan, Sri Lanka
562	Fertilizers (other than those of group 272)	Bangladesh	India, Nepal, Pakistan, Sri Lanka
572	Polymers of Styrene, In Primary Forms	India	Bangladesh, Nepal, Pakistan, Sri Lanka
582	Plates, sheets, films etc. of plastic	India	Bangladesh, Nepal, Pakistan, Sri Lanka
584		India	Bangladesh, Nepal, Pakistan, Sri Lanka
585		Bangladesh, India	Nepal, Pakistan, Sri Lanka
598	Miscellaneous chemical products, N. E. S.	Sri Lanka	Bangladesh, India, Nepal, Pakistan
611	Leather	Bangladesh, Pakistan	India, Nepal, Sri Lanka
621	Materials of Rubber (e.g. pastes, plates, sheets, Rods, Thread, Tubes of Rubber)	Sri Lanka	Bangladesh, India, Nepal, Pakistan
625	Rubber tyres, interchangeable tyre treads etc.	Sri Lanka	Bangladesh, India, Nepal, Pakistan
628	Rubber articles, N. E. S.	India, Sri Lanka	Bangladesh, Nepal, Pakistan
634	Veneers, plywood, particle board etc., N. E. S.	Bangladesh	India, Nepal, Pakistan, Sri Lanka
635	Wood manufactures, N. E. S.	India, Sri Lanka	Bangladesh, Nepal, Pakistan
641	Paper & paperboard	India	Bangladesh, Nepal, Pakistan, Sri Lanka
651	Textile yarn	Bangladesh, Pakistan, Sri Lanka	India, Nepal
652	Cotton fabrics, woven	Bangladesh, India, Pakistan	Nepal, Sri Lanka
653	Fabrics, woven, of man-made textile materials	Bangladesh, Pakistan	India, Nepal, Sri Lanka
654	Other textile fabrics, woven	Bangladesh	India, Nepal, Pakistan, Sri Lanka
655	Knitted or crocheted fabrics, N. E. S.	Pakistan	Bangladesh, India, Nepal, Sri Lanka

(contd.)



**Table 4.6: Identification of Products for Potential (Bilateral/Multilateral) Trade in South Asia**

SITC Code	Classification	Potential Exporters	Potential Importers
656	Tulles, lace, Embroidery, Ribbons, Trimmings and Other Smallware	Pakistan, Sri Lanka	Bangladesh, India, Nepal
657	Special yarns, special textile fabrics etc.	Bangladesh, Pakistan	India, Nepal, Sri Lanka
658	Made-up articles, of textile materials, N. E. S.	Bangladesh, Pakistan, Sri Lanka	India, Nepal
659	Floor coverings, etc.	India, Nepal, Pakistan	Bangladesh, Sri Lanka
661	Lime, cement, fabricated construction materials	India	Bangladesh, Nepal, Pakistan, Sri Lanka
662	Clay & refractory construction materials	India	Bangladesh, Nepal, Pakistan, Sri Lanka
663	Mineral Manufactures, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
665	Glassware	India	Bangladesh, Nepal, Pakistan, Sri Lanka
666	Pottery	Bangladesh, Sri Lanka	India, Nepal, Pakistan
667	Pearls & precious stones etc., unworked or worked	India, Sri Lanka	Bangladesh, Nepal, Pakistan
671	Pig-iron etc., iron & steel granules, powders etc.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
672	Ingots etc., of iron & steel; semi-finished products	India	Bangladesh, Nepal, Pakistan, Sri Lanka
679	Tubes, Pipes & Hollow Profiles, & Fittings, of Iron or Steel	India	Bangladesh, Nepal, Pakistan, Sri Lanka
681	Silver, Platinum and Other Metals of the Platinum Group	India	Bangladesh, Nepal, Pakistan, Sri Lanka
684	Aluminum	India	Bangladesh, Nepal, Pakistan, Sri Lanka
686	Zinc	India	Bangladesh, Nepal, Pakistan, Sri Lanka
689	Miscellaneous Non-Ferrous Base Metals Employed in Metallurgy, and Cermets	India	Bangladesh, Nepal, Pakistan, Sri Lanka
696	Cutlery	Pakistan	Bangladesh, India, Nepal, Sri Lanka
713	Internal combustion piston engines & parts, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
716	Rotating Electric Plant and Parts Thereof, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
718	Power Generating Machinery and Parts Thereof, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
721	Agricultural Machinery (Excluding Tractors) and Parts Thereof	India	Bangladesh, Nepal, Pakistan, Sri Lanka
771	Electric power machinery & parts thereof	Sri Lanka	Bangladesh, India, Nepal, Pakistan
831	Trunks, suitcases etc, other traveling goods	Sri Lanka	Bangladesh, India, Nepal, Pakistan
842	Women's clothing (other than sub-group 842.2)	Bangladesh, India, Pakistan, Sri Lanka	Nepal
843	Men's clothing (other than those of sub-group 845.2)	Bangladesh, Nepal, Pakistan, Sri Lanka	Nepal
844	Women's clothing, knitted or crocheted	Bangladesh, Nepal, Pakistan, Sri Lanka	Nepal

(contd.)

**Table 4.6: Identification of Products for Potential (Bilateral/Multilateral) Trade in South Asia**

SITC Code	Classification	Potential Exporters	Potential Importers
845	Articles of apparel, of textile fabrics, N. E. S.	Bangladesh, Pakistan, Sri Lanka	India, Nepal
846	Clothing accessories of textile fabrics, etc.	Bangladesh, Pakistan, Sri Lanka	India, Nepal
847	Textile clothing accessories, N. E. S.	Pakistan, Sri Lanka	Bangladesh, India, Nepal
848	Articles of apparel etc. of other than textile fabrics, etc.	Pakistan, Sri Lanka	Bangladesh, India, Nepal
851	Footwear	India, Sri Lanka	Bangladesh, Nepal, Pakistan
871	Optical Instruments and Apparatus, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
872	Instruments etc., N.E.S. for medical etc. sciences	India, Pakistan	Bangladesh, Nepal, Sri Lanka
873	Meters and Counters, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
874	Measuring, Checking, Analysing and Controlling Instruments and Apparatus, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
881	Photographic Equipment and Apparatus, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
882	Photographic and Cinematographic Supplies	India	Bangladesh, Nepal, Pakistan, Sri Lanka
883	Cinematographic Film, Exposed and Developed, Whether or Not Incorporating Soundtrack or Consisting Only of Soundtrack	India	Bangladesh, Nepal, Pakistan, Sri Lanka
884	Optical Goods, N.E.S.	India	Bangladesh, Nepal, Pakistan, Sri Lanka
893	Articles, N. E. S., of plastics	Sri Lanka	Bangladesh, India, Nepal, Pakistan
894	Baby carriages, toys, games & sporting goods	Bangladesh, Pakistan	India, Nepal, Sri Lanka
897	Jewellery etc., & other articles of precious etc. stones	India	Bangladesh, Nepal, Pakistan, Sri Lanka
899	Miscellaneous Manufactured Articles, N. E. S.	Pakistan, Sri Lanka	Bangladesh, India, Nepal
941	Zoo Animals, Pets Etc.	Pakistan	Bangladesh, India, Nepal, Sri Lanka

(Table 4.7)

**Number of Commodities with RCA > 1**

**And their Import Shares: Selected Years**

	No. of Commodities				Share in Region Imports (%)			
	1985	1990	1995	2000	1985	1990	1995	2000
Bangladesh	18	20	24	22	20.98	20.37	21.66	20.89
India	55	69	59	74	46.19	52.39	45.64	54.17
Nepal	20	9	11	14	15.85	15.27	2.97	16.24
Pakistan	39	36	34	38	30.64	37.24	36.59	38.01
Sri Lanka	33	43	41	37	27.02	22.9	25.17	23.26

Source: Based on UNCOMTRADE Database

The above analysis provides an assessment of the extent to which exports of South Asian countries can match the regional import structure. But this analysis focuses only on commodities in which revealed comparative advantage is indicated, and ignores all other commodities that are exported by the individual countries.

## 4.2. TRADE COMPLEMENTARITY

The success of regional integration schemes depends largely on the extent of trade complementarity in a regional trading bloc. For example, regional trading arrangements are likely to succeed in strengthening intra-regional trade if the trade structures of member countries exhibit strong complementarities. This section explores the extent of trade complementarity in South Asia in terms of trade complementarity index<sup>1</sup>, which measures the compatibility of imports of country  $i$  with exports of country  $j$ , as defined below.

$$C_{ij} = 1 - \left( \sum |m_{hi} - x_{hj}| \right) \div 2$$

where

$C_{ij}$  = Trade Complementarity index for trade between countries  $i$  and  $j$ .

$m_{hi}$  = Share of good  $h$  in total imports of country  $i$ .

$x_{hj}$  = Share of good  $h$  in total exports of country  $j$ .

The trade complementarity index is zero when no good exported by one country is imported by the other, and equals one when the shares of one country's imports correspond exactly to those of the other's exports.<sup>2</sup>

Table 4.2.1 reports trade complementarity indices for Bangladesh's trade with India, Nepal, Pakistan and Sri Lanka. The low values of the indices highlight

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<sup>1</sup> Strictly speaking, the index reveals the extent of complementarity of  $i$ 's imports with  $j$ 's exports and not trade complementarity. However, the index is commonly referred to as "trade complementarity index". See Michaely (1994) for further details.

<sup>2</sup> It is worth emphasizing that the trade complementarity index can provide meaningful information only if the structure of bilateral trade is not heavily distorted.

the absence of strong complementarity in Bangladesh's trade with its trading partners in South Asia. It is noteworthy that the degree of trade complementarity between Bangladesh and India has increased over time, and is higher as compared to other countries in the region. The pattern of complementarity between India's imports and its trading partners' exports is shown in Table 4.2.2 according to which there is clearly a lack of trade complementarity in exports of South Asian countries to India. Except for Sri Lanka, the index is around 10 percent.

The structure of Nepal's imports exhibits some compatibility with the exports of Bangladesh, India, and Pakistan Table 4.2.3. While the degree of trade complementarity between Nepal and Bangladesh has improved over time, it has weakened in the case of Nepal's trade with India. On average, Nepal's import structure exhibits the lowest complementarity with exports of Sri Lanka and the degree of complementarity is higher for trade between Pakistan and India relative to other countries in the region Table 4.2.4. Exports of Bangladesh, Nepal and Sri Lanka depict weak compatibility with imports of Pakistan. Table 4.2.5 reports trade complementarity indices for Sri Lanka. Whereas a reasonable compatibility is indicated between trade structures of Sri Lanka and India, exports of Nepal and Bangladesh do not show a significant match with imports of Sri Lanka. The degree of trade complementarity between Sri Lanka and Pakistan, though not substantial, has strengthened during the period under consideration.

In summary, the foregoing discussion points out that the South Asian region is characterized by an almost identical pattern of comparative advantage in a relatively narrow range of products, and that there is a lack of strong complementarity in the bilateral trade structures of South Asian countries. Similarities in the trade structures, together with absence of comparative advantage in capital intensive and high value-added products — i.e. the products that are normally imported by countries in the region — may have played a role in constraining the growth of intra regional trade in South Asia.

Since commodity aggregation according to the SITC classification is not available or the value of trade is negligible, the Trade Complementarity Indices is not computed for Bhutan and Maldives.

**Table 4.2.1 : Trade Complementarity Indices: Bangladesh**

Years	India	Nepal	Pakistan	Sri Lanka
1985	0.349	0.254	0.326	0.252
1986	0.346	0.201	0.243	0.234
1987	0.378	0.181	0.279	0.097
1988	0.062	0.061	0.008	0.040
1989	0.412	0.201	0.291	0.194
1990	0.468	0.247	0.312	0.202
1991	0.490	0.236	0.349	0.209
1992	0.475	0.262	0.354	0.199
1993	0.503	0.258	0.357	0.209
1994	-	-	-	-
1995	0.531	0.356	0.467	-
1996	0.547	0.209	0.411	-
1997	0.511	0.233	0.284	-
1998	0.497	0.300	0.370	-
Average	0.428	0.231	0.312	0.182

Source: Based on UNCOMTRADE Database 2005

**Table 4.2.2 : Trade Complementarity Indices: India**

Years	Bangladesh	Nepal	Pakistan	Sri Lanka
1985	0.098	0.080	0.155	0.250
1986	0.082	0.096	0.122	0.257
1987	0.079	0.159	0.099	0.101
1988	0.075	0.138	0.121	0.249
1989	0.123	0.120	0.108	0.255
1990	0.071	0.072	0.099	0.264
1991	0.091	0.082	0.091	0.195
1992	0.098	0.072	0.107	0.198
1993	0.089	0.094	0.099	0.216
1994	-	0.123	0.111	0.196
1995	0.124	0.141	0.099	-
1996	0.072	0.091	0.086	-
1997	0.052	0.112	0.105	-
1998	0.075	0.138	0.109	-
1999	-	0.125	0.109	0.171
2000	-	0.106	0.138	0.188
Average	0.087	0.109	0.110	0.195

Source: Based on UNCOMTRADE Database 2005

**Table 4.2.3 : Trade Complementarity Indices: Nepal**

Years	Bangladesh	India	Pakistan	Sri Lanka
1985	0.241	0.472	0.323	0.268
1986	0.227	0.448	0.282	0.266
1987	0.153	0.350	0.172	0.110
1988	0.147	0.344	0.172	0.230
1989	0.233	0.416	0.214	0.240
1990	0.206	0.433	0.250	0.208
1991	0.186	0.363	0.182	0.200
1992	0.187	0.384	0.217	0.214
1993	0.161	0.377	0.180	0.216
1994	-	0.343	0.188	0.198
1995	0.179	0.340	0.145	-
1996	0.074	0.197	0.077	-
1997	0.084	0.331	0.160	-
1998	0.132	0.331	0.142	-
1999	-	0.458	0.222	0.228
2000	-	0.474	0.240	0.182
Average	0.170	0.379	0.198	0.197

Source: Based on UNCOMTRADE Database 2005

**Table 4.2.4 : Trade Complementarity Indices: Pakistan**

Years	Bangladesh	India	Nepal	Sri Lanka
1985	0.153	0.323	0.152	0.271
1986	0.134	0.309	0.175	0.242
1987	0.142	0.317	0.129	0.110
1988	0.122	0.324	0.122	0.177
1989	0.166	0.340	0.114	0.186
1990	0.113	0.351	0.112	0.172
1991	0.133	0.346	0.099	0.162
1992	0.127	0.340	0.085	0.142
1993	0.111	0.340	0.069	0.142
1994	-	0.343	0.073	0.148
1995	0.114	0.367	0.091	-
1996	0.102	0.393	0.081	-
1997	0.057	0.361	0.091	-
1998	0.084	0.319	0.112	-
1999	-	0.357	0.184	0.157
2000	-	0.400	0.108	0.161
Average	0.120	0.346	0.112	0.172

Source: Based on UNCOMTRADE Database 2005

**Table 4.2.5 : Trade Complementarity Indices: Sri Lanka**

Years	Bangladesh	India	Nepal	Sri Lanka
1985	0.212	0.426	0.271	0.358
1986	0.242	-0.070	0.295	0.346
1987	0.257	0.467	0.252	0.320
1988	0.238	0.449	0.237	0.343
1989	0.273	0.474	0.232	0.341
1990	0.240	0.486	0.242	0.321
1991	0.297	0.525	0.284	0.376
1992	0.288	0.538	0.291	0.392
1993	0.247	0.526	0.291	0.383
1994	-	0.531	0.301	0.406
1995	-	-	-	-
1996	-	-	-	-
1997	-	-	-	-
1998	-	-	-	-
1999	-	0.522	0.455	0.435
2000	-	0.578	0.390	0.439
Average	0.255	0.454	0.295	0.372

Source: Based on UNCOMTRADE Database 2005



## **CHAPTER – V**

### **INTRA-REGIONAL TRADE : AN ANALYSIS**

The last chapter has discussed the issue of Comparative Advantage, Complementarity and competitiveness among the SAARC countries. It is further necessary to examine the recent trends in Exports, Imports and the balance of merchandise trade of the SAARC countries. This chapter provides an insight into the Intra-regional Trade between SAARC countries, Services Trade and also Trade Balance issues.

The decade of 1990s proves to be a turning point for the South Asian countries with respect to trade. Most South Asian countries resorted to comprehensive economic reforms during the 1990s. Besides, number of bilateral and regional agreements were signed and implemented on a priority basis. The switching of policy regime in these countries has significantly contributed to outward orientation of these economies as well as regions trade under the regional process.

The present level of intra-regional trade is low, but it increased significantly in the 1990s. Trade within the region increased at a faster rate as compared to that of the world. Further intra-regional imports have been growing more rapidly than exports. However, the growth of regional trade is accompanied by high degree of instability (RIS 2002). The sectoral pattern of growth in the

region shows that the general increase in the growth of agriculture, industry and services sectors. The manufacturing and services sectors have been relatively dynamic in most of the SAARC countries during the 1990s. As the services represent around 40 percent or more of GDP, growth in this sector along with the better growth performance in the agricultural sector have significantly contributed to aggregate growth.

Intra-regional trade performance of individual countries indicates that both exports and imports grew significantly during the last decade as shown in Table 5.1. During the period 1990-2000, regional trade of most of South Asian countries have made four-fold increase. The results indicate that there was a down turn in the trade activities of the region in 1991 and 1999. Except for Maldives, other countries faced marginal set back either in their exports or imports or both during these years. However, in the latter half of the 1990s, regional trade has not only been increasing but also becoming highly volatile. The instability in regional trade has an adverse impact on the regional trade balance.

The region has witnessed perpetual intra-regional trade deficit during the period. The trade deficit of the region increased between four to ten times during the period 1999-2000. During the last decade, India continued to have favorable trade balance with the region. Pakistan also enjoyed the similar status except for a few years in the late 1990s as shown in Table 5.2. On the other hand,

Bangladesh, Maldives, Nepal and Sri Lanka have significant level of trade deficit with the region. The nature of trade deficit in these countries is quite different from each other. In case of Maldives and Nepal, trade deficit was very low. In 1994, the level of trade deficit of Bangladesh and Sri Lanka was almost similar. During the latter half of the 90s, Sri Lanka's trade balance continued to remain unfavorable, but showed a declining trend during 1996-99. In 2000, it again started rising but the magnitude of trade deficit was much lower than that of 1996 level.

#### **5.1 BANGLADESH :**

The regional trade deficit of Bangladesh more than doubled during the same period (1990 – 2000). Exports from Bangladesh to the region constitutes about 2-3 per cent of its global exports, and the corresponding figure for imports is between 7 to 17 percent in the 90s. The trade deficit of Bangladesh with the region constitutes between 10 to 33 percent of its total trade deficit with the world. The bilateral trade performances of regional partners indicate that Bangladesh has bilateral trade imbalances with most of the regional partners during the last decade. In the mid-90s, Bangladesh had favorable trade with Nepal, but the trend is reversed in the later years. As far as country's trade balance with Sri Lanka is concerned, it was either balanced or negative during the period 1990-2000.

## **5.2 INDIA :**

South Asia has become an important trade destination of India. Exports from the country to region constitutes between 3 to 6 percent of its global exports, whereas import from the region is relatively lower than exports. India has maintained favorable balance of trade with the whole of South Asia. The level of positive trade balance is quite significant in case of Bangladesh and Sri Lanka: and moderate with Nepal and Maldives. However, India's bilateral trade balance remained adverse with Bhutan. Up to 1994, India had positive trade balance with Bhutan, but the trend reversed in the subsequent years due to significant rise in Bhutanese exports to India. The trade surplus with Bangladesh is however subject to fluctuations and that with Nepal increased by four times between 1995 and 1996, largely due to its trade and transit treaty with India. In the subsequent years, the magnitude of trade imbalances with India started receding.

### **Commodity Composition of India's trade under SAPTA**

The imports of India under first three Rounds of SAPTA made a six-fold increase from 1994-95 to 2000-01 as shown in Table 5.3. Except for three sections (gems and jewellerys, vehicles and arms & ammunitions), India is importing sizable number of products covering all other broad product segments from the region. Agricultural imports constitute about one-third of India's total imports from the region under the SAPTA process in 2000-01. Traditionally import of vegetable products is the most important import, but currently import of

fats and oils are becoming important for India. Imports are quite substantive in case of chemical and textiles. Besides, it has sizable imports in broad product groups like animal products, prepared foodstuffs, plastic products, wood products, base metal and mechanical appliances.

The highly concentrated exporting areas are processed food products, chemicals, textile products and base metals. In some areas, India's exports are quite substantial such as vegetable products, mineral products, and vehicles. In other areas, the concession exports from India have been at a low-key level. They are animal products, plastic products, leather products, mechanical appliances, optical products and other manufactured items.

In certain important product segments, India is consistently improving its market presence in the region. They are processed food products, chemicals, textiles and base metals. In some other product segments, the export performance is quite alarming. Those areas are vegetable products and vehicles.

India's exports to the region have been subject to high degree of fluctuations, particularly in those products, which are falling within the purview of SAPTA. If we compare the growth rate of India's exports to the region in different product groups under the SAPTA process, only a few important product groups show relatively stability in growth during the period 1994-95/2000-01.

These are processed food products, chemicals, textiles products and base metals.

India's exports to the region in the first three rounds of SAPTA are growing.

### **5.3 PAKISTAN :**

Pakistan exported 3 to 5 percent of its total exports to the South Asia and imported between 2 to 4 percent of the total imports from the region in the last decade. The most important export destinations of Pakistan in the South Asian region are Bangladesh, Sri Lanka and India. These three countries absorb about more than 95 percent of country's exports to the region. India's share in the total imports of Pakistan from the region reached 72.4 percent in 1996, and started declining to touch the rock bottom of 42.8 percent in 2000. The declining share of Pakistan's imports from India has resulted in surge in Sri Lanka's exports to Pakistan in a significant manner. Pakistan continued to maintain favorable trade with the region, except for that in 1996-99. In 2000, country's adverse trade balance with the region increased to more than 7 percent of its total trade deficit with the world.

### **5.4 SRI LANKA :**

Sri Lanka has been depending on the South Asian region more on imports than exports. The regional exports of Sri Lanka are about 2 to 4 percent of its total exports. Though Sri Lanka's import from the region is very high as compared to other non-LDCs of the region, country's dependence on the region

has been gradually declining in recent years. Sri Lanka's largest trading partner is India in the region, and other important partners are Maldives, Pakistan, Bangladesh and Nepal. The magnitude of country's trade deficit with the region is much larger than that with global trade in the 1990s. With the reduction of imports from the region, the trade imbalances with the region have declined significantly. The bilateral trade balance of the country remains favorable with Maldives and Bangladesh: and continues to be adverse with other South Asian countries in the region.

#### **5.5 MALDIVES :**

The economy of Maldives is highly dependent on regional trade. Its exports depend on the region to the extent of 13 to 25 percent of its global exports whereas dependence for imports varies between 10 to 21 percent in the 90s. The trade imbalance of the country is almost proportionate to its regional trade.

The most important trading partner of Maldives is Sri Lanka, and the trade deficit with the country is increasing alarmingly in recent years. With high dependence on India for its domestic import requirements, trade deficit with India, is high in the late 1990s. Maldives trade with Pakistan shows no significant improvements in the 1990s.

## **5.6 NEPAL :**

Nepal's dependence on South Asia has increased substantially following the Indo-Nepal Trade and transit Treat in 1996. The share of Nepal's regional exports to total export increased from 9.3 percent in 1995 to 36.5 percent in 1998. Similarly the share of imports from the region jumped up from 17.5 percent in 1995 to 33.1 percent in 2000. India is the largest regional trading partner of Nepal, and other important trade partners are Bangladesh and Sri Lanka. The surge of economic ties with the region has widened its trade imbalances with the region. It has large adverse trade balance with India. With Bangladesh and Sri Lanka, the nature of trade balance varies from one year to another.

### **(A) SAPTA AND SERVICES TRADE**

World export of services currently around 25 percent of world export of goods reached a level of 1260 billion US dollars in 1996 and growing at a rate of over 13 percent. The SAARC member countries, together, account for about 0.8 percent of total global export of services as compared to the ASEAN countries, which account for about 4 percent of such exports.

It is found that one of the major drawbacks of SAPTA is exclusion of Services Trade from the agreement. Even though there are no published data on intra-region service trade flows amongst SAARC countries. One can derive a rough



estimate on a conservative basis taking 20% to 30% of merchandise trade within SAARC region; the trade of services would amount to US \$ 500 billions.

A range of reasons can be offered for extending SAPTA to trade in services.

The major ones are indicated below:

- There is a growing demand within SAARC member countries for a whole range of services due to new technological advancements, buyer needs for specialized services, opening of new markets, demand for service-based inputs, globalisation strategies and economic liberalization policies. Comparatively, goods exports, both within and from the SAARC region, are not that robust. It is essential to explore new avenues, new products and new dimensions for augmenting SAARC trade and in this context; services would not only add to the list of tradable commodities but also lend support for higher levels of goods trade.
- Although trade in services of SAARC member countries constitutes a small proportion of world trade in services, it appears feasible to have “trade creation” impact and mitigate “trade diversion” impact through extension of SAPTA to services.
- Strengthening of service trade through SAPTA would enable the SAARC countries gear up towards the enormous changes taking place in world trade in services. Such exports are expected to take a big leap forward essentially on account of three factors, (i) advancements in generic technology of computers and telecommunications; (ii) multilateral trading system of the World Trade Organisation in services; (iii) a growing world demand for a variety of services, it is important that all such changes are reckoned with for strengthening intra-flow of services taking place within the SAARC region.

SAPTA needs to include those services, which are expected to boom in world trade, for instance, telecom, and software services, professional services, consultancy services, financial and tourism services, insurance services, banking

services, communication services etc., Ways can be found for mutually enforcing standards and strengthening quality of such services.

A regional preferential trading arrangement in services is an important starting point for nurturing such trade and countering fierce competition from the multinationals. It will make space for service trade of developing south Asian countries to grow and create its niche. Regional trading arrangements of SAARC countries have their own advantage in today's world ridden with trade barriers and with proliferation of such trading arrangements in different parts of the globe. A preferential trading arrangement in services can provide a critical route to economies of scale and scope, up gradation of technology, infrastructure, product quality and rest of the world is moving in the sphere of trade in services.

## **(B) TRADE IMBALANCES OF INDIA AND OTHER REGIONAL COUNTRIES**

Trade Imbalances between India and some of the regional trade partners has been one of the most contentious issues in the regional process. It may be noted that India's export and import baskets are highly diversified as compared to smaller partners of the region. Moreover, India's scale of the production is high, partly due to its vast domestic market and partially to meet export requirements at the global level. Therefore, production and export bases of India, which are larger than other regional trade partners, are effectively used by the regional countries to

overcome their short-term problems concerning production inadequacies in their respective domestic economies. It may be noted that the Nepalese economy was entangled with steep inflation following temporary closure of some of the transit points after the expiry of the Indo-Nepal Trade and Transit Treaty in the 1990s. Similar situation occurred in other neighboring countries also. We bring home the point that the occurrence of trade imbalances is a natural phenomenon where the dependence on the larger countries is high. The situation is similar in case of South Africa as compared to other states in the SACU and SADC regions. In the era of interdependent world, the domestic demand cannot be contained due to lack of production, but basic and essential imports are to be made either from the neighboring country or from the rest of the world. In both the cases, the importing country is likely to have adverse trade balance. During a completely free trade regime, the production deficient countries are likely to face chronically trade imbalances. Attempts should be made to augment exports to trade-surplus country to reverse the trend of the trade balance. The trade surplus countries should also devise some suitable instruments to compensate the trade deficit countries and to support them in augmenting their export capabilities.

However, the large country like India has its own requirements. It is primarily a trade deficit country with respect to rest of the world. Considering the level and varieties of import requirements, the regional partners can take advantage from the large market in India particularly in commodity trade. Even the demand for certain type of specialized services is very much required in India.

The regional partners, particularly the trade deficit regional partners should tap such opportunities.

Indo-Bhutan trade relationship should be taken as a model example for the regional co-operation in South Asia. It may be noted that Bhutan was chronically a trade deficit country with India, where bilateral trade was taking place primarily in goods. The export basket of the country was not only small but also lacked supply capabilities. With the support of India, Bhutan developed its hydro-electricity project and exported energy to India. At present, the Indo-Bhutan trade imbalance problem is effectively addressed.

Very often, the trade imbalance problem at the regional level remains unresolved because of political interventions. For a long period, Bangladesh continued to have adverse bilateral trade balance with India. In the 1990s, the bilateral unfavorable balance of trade of Bangladesh had declined substantially due to surge of Urea export to India, which has a large demand for the product. However, the political decision to hike the gas tariff in Bangladesh had resulted in making the sector uncompetitive vis-à-vis other international supplies. India opted for switching off its source of supply of urea, and Bangladesh's bilateral trade deficit went up again with India. At present, a large gas reserve is found in the eastern coast of India, which can meet India's large demand for gas. In this changed situation, Bangladesh may have to look for new products to gain wider market access in India.

**Table 5.1**  
**Intra-Regional Trade of South Asian Countries in the 1990s**  
(in Million US\$)

Country	Export/ Import	1990	1995	1996	1997	1998	1999	2000	Average Growth 1991-2000
Bangladesh	Export	60	83	60	82	103	88	89	8.0
	Import	257	1151	1129	889	1278	1130	1056	19.5
	TB	-197	-1068	-1069	-807	-1175	-1042	-967	23.6
India	Export	487	1544	1650	1464	2030	1908	2019	16.7
	Import	97	198	198	184	484	375	381	27.2
	TB	390	1346	1452	1280	1546	1533	1638	17.0
Maldives	Export	7	11	11	11	13	12	30	21.4
	Import	18	47	60	74	77	85	148	24.6
	TB	-11	-36	-49	-63	-64	-73	-118	27.8
Nepal	Export	15	30	74	101	162	163	183	44.7
	Import	52	132	457	450	454	475	539	38.9
	TB	-37	-102	-383	-349	-292	-312	-356	46.5
Pakistan	Export	223	252	240	225	415	301	286	8.0
	Import	121	169	293	228	225	200	423	18.7
	TB	102	83	-53	-3	190	101	-137	
Sri Lanka	Export	69	101	109	120	113	144	190	11.6
	Import	184	545	647	620	647	630	707	16.0
	TB	-115	-444	-538	-500	-534	-486	-517	20.2

Data Source: Direction of Trade Statistics, various issues (1990-2000), IMF.

Note: TB refers to Trade Balance

**Table 5.2**  
**Profile of India's Imports from South Asian Countries under various rounds of SAPTA**  
(in Rupees Lakh)

Exporting Country	SAPTA Round	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Bangladesh	I					13.57	25.58	204.31
	II	9.08	6.56	8.49	35.9	26.91	25.34	65.47
	III	5959.2	6739.9	9203.6	12024	20869	22547	24086
	NCT	897.76	516.48	388.98	1520.5	1222.9	942.27	3155.9
Bhutan	I							1.2
	II				21.86		50.83	13.56
	III	1571.6	2651.2	3739.9	1454.6	1957.1	1043.5	1052.9
	NCT	424.26	1011.6	515.84	366.61	242.25	365.48	432.4
Maldives	III	4.93	2.24	6.23	24.65	7.75	61.94	17.52
	NCT	24	59.24	44.62	38.89	10.67	95.85	20.43
Nepal	I	462.48	302.05	612.16	541.44	612.35	644.71	1077.2
	II	129.54	460.03	102.86	206.76	891.67	1576.4	1232.4
	III	3457.1	7402.1	11601	23315	43606	54552	71834
	NCT	3497.2	3866.8	4212.3	5140.6	5919.5	7987.9	18814
Pakistan	I	60.24	70.28	211.26	116.23	267.68	279.1	208.43
	II	1961	2161.7	841.48	834.21	583.82	993.05	3857.6
	III	5932.6	4286.1	8403.9	7809.4	8315.4	9806.3	11189
	NCT	5679	1509	965.96	6325.8	78338	11020	11559
Sri Lanka	I	107.8	239.98	485.7	524.74	2353.3	2519.4	2119.5
	II	210.19	536.1	307.78	244.44	63.2	182.52	208.07
	III	12.37	38.76	18.7	118.99	150.83	142.88	63.96
	NCT	6711.1	7651.3	9324.2	7269	9536.1	10966	13709

Data Source: SAARC Secretariat, Kathmandu and India Trades, CMIE, India

Note: The actual implementation of different Rounds of SAPTA is indicated by the shaded region

NCT denotes bilateral trade outside SAPTA.

**Table 5.3**  
**Commodity Composition of India's Imports from South Asian Countries**  
**under SAPTA I, II, III**

(In Rupees Lakh)

Section	Description	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
I	Live animals and animal products	200	2720	1638	3926	6057	2997	2401
II	Vegetable products	8363	7105	10223	9423	11302	12857	17646
III	Animal or veg. Fats & oils	605	732	620	6493	19114	16156	23702
IV	Prepared food stuff, beverages etc.,	166	456	494	1056	950	2123	1488
V	Mineral products	282	300	355	61	12	180	190
VI	Products of the chemicals	891	3502	6662	10477	13140	24040	29835
VII	Plastics & articles thereof	14	49	13	117	165	610	1623
VIII	Raw hides & skins, leather	118	467	102	145	203	208	165
IX	Wood & articles of wood	1501	2323	3739	1482	2375	1621	1976
X	Pulp of wood or of other fibers	13	55	15	65	430	467	1198
XI	Textile & textile articles	7685	7174	11251	13217	24501	28723	30748
XII	Footwear, headgear, umbrellas	2	1		199	532	489	624
XIII	Articles of stone, plaster, cement	1	7	30	13	21	58	140
XV	Base metals & articles of base metal	12	2	390	293	740	2959	3970
XVI	Machinery & mechanical appliances	26	3	9	101	181	809	1093
XVIII	Optical, photograph, Cinematographic		1			7	36	17
XX	Misc. manufactured articles		1		3	10	19	44
	<b>Total</b>	<b>19879</b>	<b>24898</b>	<b>35541</b>	<b>47071</b>	<b>79740</b>	<b>94352</b>	<b>116860</b>

Data Source: India Trades - 2004, CMIE, India.

**Table 5.4**  
**Commodity Composition of India's Exports to South Asian Countries**  
**under SAPTA I, II, III**

(In Rupees Lakh)

Section	Description	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
I	Live animals and animal products	547	769	1797	1517	1052	919	1040
II	Vegetable products	1901	3520	5268	4660	3623	3346	3219
III	Animal or veg. Fats & oils							1
IV	Prepared food stuff, beverages etc.,	4781	8810	8622	12789	15409	14840	21936
V	Mineral products	1930	2384	2481	4075	3238	2651	3288
VI	Products of the chemicals	7459	11419	13853	15491	15991	18022	21825
VII	Plastics & articles thereof	1179	1343	1685	1754	822	292	569
VIII	Raw hides & skins, leather	8	16	66	54	38	162	246
IX	Wood & articles of wood		14	14	9	7	3	37
X	Pulp of wood or of other fibers		7	3				
XI	Textile & textile articles	2008	2422	4034	5760	3949	4350	6236
XII	Footwear, headgear, umbrellas			5	5	3		
XIII	Articles of stone, plaster, cement	208	98	163	97	88	27	102
XIV	Natural or cultured pearls, jewellery		5	34		8	2	44
XV	Base metals & articles of base metal	5617	3734	5510	5097	3315	4429	9838
XVI	Machinery & mechanical appliances	892	735	1341	1001	1103	1748	1349
XVII	Vehicles, Aircraft, Vessels	2663	5657	4081	3091	3847	2611	4833
XVIII	Optical, photograph, Cinematographic	197	216	194	269	269	322	389
XX	Misc. manufactured articles	33	23	10	64	48	27	43
XXI	Works of art collectors' pieces				1			
	<b>Total</b>	<b>29423</b>	<b>41172</b>	<b>49161</b>	<b>55734</b>	<b>52810</b>	<b>53751</b>	<b>74995</b>

Data Source: India Trades - 2004, CMIE, India.

## **CHAPTER - VI**

### **REGIONAL COOPERATION IN OTHER AREAS :**

- A. Investment Prospects in the Region**
- B. Joint Ventures and Technology Transfers**
- C. Physical Infrastructure**
- D. Regional Projects**
- E. Development of Tourism**
- F. Energy Cooperation**

## **CHAPTER - VI**

### **REGIONAL CO-OPERATION IN OTHER AREAS :**

The benefits of regional co-operation among SAARC countries can be enhanced if the member countries can cooperate in many other areas, which also impinge on the pace of economic growth in these countries. Although it is possible to envisage co-operation in a large number of areas, the discussion in this chapter is confined to five selected areas viz., (A) Investment Prospects in the Region (B) Joint Ventures and Technology Transfers (C) Physical Infrastructure (D) Regional Projects (E) Development of Tourism (F) Energy Co-operation, which can be considered as crucial for accelerating economic growth.

#### **6.1 INVESTMENT PROSPECTS IN THE REGION :**

A draft Regional Agreement on Promotion and Protection of Investment within the SAARC Region is under consideration of the Member States and is meant to create conditions favorable for promoting and protecting investments in Member States by investors from other Member States of the Region. The objective is to finalize the Regional Investment (Promotion and Protection) Agreement prior to the commencement of the implementation of SAFTA. Linked to the Regional Investment Agreement is the setting up of SAARC Arbitration Council for which proposals are under examination by Member States. Discussions have also commenced on harmonizing tax laws within the Region to



assess the possibility of having a Regional Agreement for the Avoidance of Double Taxation.

The South Asian region is one of the Capital scarce regions of the world<sup>12</sup>. Low capacity of the region to raise domestic resources and low inflow of FDI, have made the region a capital deficient region. In the 90s, the region economies have initiated aggressive reforms to correct domestic distortions as well as creating conditions for attracting FDI. Despite aggressive policy switching, South Asia continues to be a marginal host of global FDI flows. A few MNEs have chosen the region as a base to produce and export manufactured products to other parts of the world. In this regard. The East and Southeast countries have gone ahead of south-Asia in hosting MNEs. In order to attract FDI at a large scale, the region has to prepare itself to compete with other vibrant FTAs around the globe. To meet the investment requirements of the region, there is a need for promoting regional joint venture to expand economic activities in other partner countries. This would help in transferring resources and technology as a part of regional co-operation. The promotion of regional Joint Ventures has not only improved production capabilities of host countries but also their export capabilities. Very often it is observed that increase in exports from such source have improved trade imbalances of regional partners. It may be noted that south Asia has in fact benefited by promoting regional Joint Ventures, and it is the outcome of regional/bilateral trade liberalization between the SMCs.

During the last decade, there is surge in the number of Indian Joint Ventures in several South Asian countries like Bangladesh<sup>3</sup>, Nepal and Sri Lanka. It is difficult to say whether increase in the number of such Joint Ventures is due to trade liberalization at the regional level or bilateral Free Trade Agreements. These Joint Ventures are engaged with varieties of production activities in different parts of the region.

Sri Lanka is the first country to start countrywide economic liberalization in South Asia. The present investment regime in Sri Lanka is highly liberal than many countries in the region. Almost all sectors of the economy are opened for FDI, and foreign ownership is extended up to cent percent level. There has been no barrier on repatriation of earnings, fees, foreign exchange, etc., relating to the current account. The country has evolved a strong legal and regulatory procedure to resolve any dispute between contracting parties. Unlike many countries in the region, Sri Lanka has an Arbitration Center in Colombo. India and Sri Lanka have engaged in close economic relations since the second half of the 90s. In 1997, both the countries have signed an important Agreement, known as Investment Protection Agreement. The Bilateral Free Trade Agreement between those two countries was signed in 1998. The favorable economic climate between both the countries has promoted many Indian joint ventures to set up their production units in Sri Lanka. There are about 90 Indian joint ventures operating in Sri Lanka, and a total investment of US \$ 109 million is made by these Joint Ventures<sup>2</sup>. These Joint Ventures are operating in several sectors such as textiles,

cement steel mills, petroleum, light engineering, rubber and plastics, pharmaceuticals, agriculture, dairy, food processing, hotel, computer software etc.,

Many Indian companies have benefited by undertaking Joint Ventures in Sri Lanka. An Indian company Ceat India limited, engaged in the production of automotive tyres in Sri Lanka. The abundant and cheap rubber in the host country has provided a competitive base to the company over other competitors in the sector. The company is not only exporting to all the regional countries in South Asia but also many other countries in the world. Using its brand name, it is exporting tyres to countries like Bangladesh, India, Nepal, Mauritius and some parts of South America. It is very likely that the Indian Joint Ventures with buy-back provisions would help Sri Lanka in accessing large market in India.

Under the Indo-Nepal Trade and Transit Treaty 1996, Nepal can export manufactured products without any Customs duty. In order to serve the northern Indian market, several Indian companies have relocated their production bases to Nepal. For number of agro and herbal based manufacturing industries, Nepal is an attractive destination. The duty free provision of the Agreement has further induced Indian Joint Ventures to operate from Nepal. From a total of 214 foreign ventures in Nepal, there are 72 Indian Joint Ventures. The total investment of these Indian outfits constitutes about 53 percent of the total investment of foreign ventures.

The Colgate-Palmolive Indian Ltd., a subsidiary of Colgate-Palmolive, has initiated a joint venture in Nepal to capture North India market. It has an authorized capital of Rs. 540 million to produce 12,000 tones of toothpaste and tooth powder per annum. The export of toothpaste from Nepal to India shoots up from US \$ 11 million in 1997-98 to US \$ 61 million in 1998-99. According to the Federation of Nepalese Chambers of Commerce and Industry, the export of toothpaste is the most important Nepalese exports to India.

In recent years, there is a surge of investment and Joint Venture activities between India and Bangladesh. The latter country has a large reserve of natural gas and this source of energy has attracted many Joint Ventures to work on diversified production sectors, particularly in energy-intensive ventures. As a test case, one can review the experience of Shinepukur ceramics, which is engaged in the production of fine ceramics. This company came up as a result of collaboration between Abheesht Exports of New Delhi and Beximo of Bangladesh. The production of the Shinepukur Ceramics is exported to India in the brand name of DEOL<sup>1</sup>. More than 90 per cent of its production is exported to various countries of the world. The firm has absorbed about 1500 employers in the joint venture. The energy base of the plant is gas, and kilns of the plant are operated using such energy. The firm has not only helped Bangladesh in promoting its exports but also expanding its capabilities to export to the rest of the world. The export of the firm reaches countries in Europe and America. Exports to these countries alone constitute 70 percent of its total exports.

Bhutan has built hydro-electricity ventures by collaborating with India with buy-back facility. With this arrangement India is now a net deficit country with Bhutan. In Bhutan, the performance of the non-manufacturing infrastructure such as energy improved substantially during the 1990s. Electricity generation, which was accounted for 0.2 percent of GDP in 1980, increased its share to 12.6 percent by 2000. The installed electricity generation capacity reached 350.17 MW in 1997/98, which came mostly from the India-assisted Chukha Hydropower project 1972.18Gwh, Rangjung Hydropower project 2.2 MW, Three micro hydels of 200 KW. Construction of three major projects, viz., Kurichu (60 MW), Basochu (60.8 MW) and Tala (1020 MW) started towards the end of the decade.

In 1999, Chuka Hydro-power Project exported 75.7 (1472.20 MU) percent of its generated electricity to India, besides meeting domestic requirements. The domestic industrial sector was greatly benefited from power generation. The Manufacturing sector and the Construction sector in Bhutan have grown at a high average of 11 percent and 30 percent respectively a year through the 1990s.

The above trend indicates that bilateral FTA has picked up in the South Asia. The speedy trade liberalization at the bilateral level has spur trade, investments and technology flows within region. The bilateral FTAs initiated by

India have been working satisfactorily. Other regional partners are also initiated similar negotiation with regional countries. Such activities would ultimately end up with SAFTA. The experience of South Asia indicates that bilateral co-operation complements regionalism in a more effective manner.

## **6.2. JOINT VENTURES AND TECHNOLOGY TRANSFERS :**

The recent years have witnessed the emergence of joint ventures among developing countries in the area of manufacturing and services. These ventures represent a continuing form of co-operation between enterprises of two developing countries. They are considered important forms of South-South co-operation because they mobilize much needed capital, technology, entrepreneurship and organizational resources of relatively more industrialized developing countries for the lesser developed ones in their fraternity. Thus, these ventures enable optimum utilization of the capabilities and resources of developing countries for their maximum common benefit. Besides, they encourage South-South trade and contribute to their collective self-reliance. They have been considered to be more advantageous for the receiving countries than foreign direct investments associated with the industrialized countries' multinational corporations.

It has been empirically demonstrated that the transfer of resources and technology through South-South joint ventures is more appropriate and cost effective for the receiving country than similar transfers effected by MNCs based in the industrialized countries. For instance, the technology transferred to joint ventures has been found to have been appropriately scaled down to smaller size, made more appropriate to factor endowments of developing countries, and adapted to local raw materials and conditions. They have been found to depend less on

imported capital goods and raw materials and result in significantly lower foreign exchange outgo on account of servicing.

Joint ventures, especially with buy-back arrangements, have generally been considered as an effective means of promoting regional co-operation. Joint ventures are also regarded to play an important role in accelerating the pace of industrialization in the less developed countries since they usually involve transfer of technology as well.

The bilateral Joint Commissions as well as the Joint Business Councils set up in the SAARC region have identified a large number of economic activities in various sectors as suitable areas for establishing JVS. These areas range from agro-processing activities to tourism promotion and consultancy services. Many of these initiatives have, however, not been pursued vigorously in the past. Experience shows that very few of these proposals have been translated into concrete projects and implemented in the member countries. This situation may be attributable to the following;

- **Low level of Intra-SAARC Trade :** Joint ventures and technology transfers usually follow the trade relations. The low volume of intra-SAARC trade, therefore, constrains intra-SAARC technology transfers and formation of Joint Ventures.
- **Absence of treaties for avoiding double taxation :** There is not agreement between India –Pakistan and India-Bangladesh for avoiding double taxation on income. Double taxation of income obviously discourages Indian enterprises to invest in the SAARC countries.



- **Indian Income Tax Provisions** : While profits on exports are fully exempt from income tax, earnings from JVs, technology licensing, project exports, such royalties and technical fees are only partially exempt from income tax. This discourages exports of technology by Indian enterprises.
- **Investment Guarantees** : The Intra-SAARC investments are not covered by any bi-or multi-lateral investment guarantees. The Export Credit and Guarantee Corporation of India's (ECGC) cover is available for some projects for non-commercial risks. It does not cover the exposure of Indian investors to exchange rate fluctuations.
- **Lack of Credibility in Regional Capabilities** : Partly owing to the information gap and partly to the Western domination of the economic relations, and colonial history, there is a widespread lack of faith in the capabilities and expertise developed in the region.
- **Underdeveloped Infrastructure, Skilled Manpower, and Entrepreneurship** : In some of the SAARC countries, industrial infrastructure such as industrial estates, common prototype and tool room centers, testing facilities do not exist. Besides, the supply of skilled manpower and entrepreneurship is limited. These limitations constrain setting up of industrial ventures in these countries.

The industrial and trade policy environment in all the SAARC countries has, however, vastly changed in recent years. The governments have simplified the procedures for establishing joint ventures. Separate "Board of Investment" has been set up in many member countries to attract FDI along with provision of tax concessions and other facilities. The entrepreneurs in the member countries have to take advantage of these opportunities to establish joint ventures within the region.

In addition to joint ventures, Indian enterprises have transferred technology through licensing and technical collaborations, export of turnkey

projects, capital goods and machinery and consultancy services to many SAARC countries.

(a) **Technical Collaborations** : Indian enterprises have entered into technical collaboration agreements with firms in other countries of the region for transfer of technology for manufacture of a wide range of goods such reactive and sunfast dyes, assembly of two wheelers and commercial vehicles engines. Bangladesh has received know-how for manufacture of bicycle and parts, and diesel engines. Several Nepalese enterprises have entered into technical collaborations with Indian firms for manufacture of inter-alia, paints, furniture, dry cell batteries, and automotive components. The National Research Development Corporation of India has transferred technologies developed in national laboratories for high draught kiln, spice-oleoresin, anti-fungal tablets, and bleaching powder to Nepal and for buff colored green pepper to Sri Lanka.

(b) **Turnkey Plant Exports** : Turnkey projects are important means of transfer of technology for countries, which do not have indigenous base of capital goods manufacture, and engineering skills. In turnkey contracts, the contractor usually is responsible for supply and erection of plant and machinery and accompanying civil works, training of local personnel and sometimes operation for limited period. Indian firms have undertaken projects covering activities ranging widely from very simple technologies (textiles, transmission towers, small-scale industries) to intermediate level

technologies (paints, pharmaceuticals, rubber, conveyors) and to very complex capital intensive and/or skill intensive technologies (power generation, basic drugs, machine tools, telephone exchanges, steel mills, railway engineering and petro-chemicals).

Indian enterprises have under taken turnkey jobs for inter-alia power stations and transmission lines and equipment in Nepal, oil storage tanks in Sri Lanka, and power transmission network in Bangladesh.

It is thus possible to identify many more areas for technology transfer from India to other SAARC countries. The entrepreneurs and more importantly, the specific industry level associations in the various member countries should take the necessary initiatives to commercially exploit the largely untapped potential of setting up Joint Ventures and Technology transfer in the SAARC region.

### **6.3. PHYSICAL INFRASTRUCTURE :**

A major impediment to economic growth that is emerging or intensifying in the SAARC region is the inadequacy of physical infrastructure<sup>4</sup> such as power supply, telecommunications and transport, including roads, railways and ports. It needs to be stressed that it would be difficult to stimulate intra-regional trade and investment without improving infrastructural facilities. Regional co-operation in the development of infrastructural facilities in the member countries could play a significant role in enhancing the level of regional economic co-operation. The development of efficient transport infrastructure has a strong influence on location of industries and on associated investment decisions.

The need to improve the transport infrastructure and transit facilities in the Region was recognized and the 11<sup>th</sup> Session of the SAARC Council of Ministers in Colombo directed the CEC to take appropriate steps in this regard. Accordingly a study was commissioned to assess the existing transport infrastructure and transit facilities, including procedural and documental issues in the Region in relation to volume and composition of the existing trade in the Region and to make recommendations for their improvement, with a view to enhancing trade within and outside the SAARC region. The study was completed in 1994 and has made far-reaching recommendations.

### **6.3.1 Surface Transport**

Railways remain by far the most important, though not the most dynamic, mode of onland transport in the SAARC region. The performance of railways in Bangladesh, Pakistan and Sri Lanka has deteriorated very much during the 1980s as is evident from the sharp decline in the freight and passengers carried by the railways in these countries. In Bangladesh, the freight carried by the railways declined from 2984 tons in 1980-81 to 2350 tones in 1992-93. In Pakistan, the freight carried by the railways declined from 7918 million tone km in 1980-81 to 5939 million tone km in 1993-94, while in Sri Lanka the freight kilometrage declined from 281 million in 1978 to 168 million in 1993. The investment in rail transport in these countries has not been adequate enough to modernize its infrastructure to make it competitive with other modes of transport in terms of convenience and speed. Indian railways and also the private sector wagon building industry in India can help the railways in other SAARC countries in improving their performance. Serious attention has to be given to this aspect since railways provide a cheap mode of long-distance transport of freight and passengers. Moreover, in comparison to road transport, their energy consumption per tone/kilometer is about half that of road transport.

SAARC countries can be largely benefited by sharing their road/rail-links with neighboring countries. For example, The North-Eastern region of India will be immensely benefited if Bangladesh Government permits India to utilize the railway link of Bangladesh for carrying essential commodities to some of our

North-Eastern States (like, Tripura, Manipur, Meghalaya, Assam, etc.) from other parts of India. It will reduce the transport cost and hence the high cost of living in those States.

### **6.3.2 Ports and Shipping**

The development of seaports plays an important role not only in country's external trade but also in the provision of ship supplies and repairs, manufacturing, storage and warehousing activities. Such fixed facilities as break waters, berths, wharves, and cranes require large and often long-gestation investment. Leasing and concession contracts are being extensively used in many developing countries as effective methods for moving from government monopoly to competitive market provision of infrastructure services. The private sector in different SAARC countries has substantial scope to invest in different areas of port infrastructure.

Coastal shipping can play a very important role in expanding intra-regional trade in the SAARC region. At present, cargo traffic between India and Maldives originates from Tuticorin port. But Tuticorin often gets congested because of which the traffic is affected. There is also delay in the traffic. Because of the difficulties of imports from India, Maldives imports goods from Singapore the volume of which is estimated to be almost ten times that imported from India. If all the goods were imported from India, the consumers in Maldives would stand to gain as well as the shippers from India. Maldivian authorities feel

that if the new port at Thiruvananthapuram could be expanded it would save a lot of time in cargo movement between India and Maldives. The coastal shipping companies of Bangladesh, India and Sri Lanka have to cooperate and evolve a suitable strategy for expanding coastal shipping facilities.

### **6.3.3 Containerisation and Multimodal Transport**

Containerisation and multimodal transport system have assumed crucial importance in the present global scenario for developing an efficient transport system. The introduction of the container has revolutionised the ways in which goods are moved in internal and external trade. Containerisation is a basic prerequisite for expanding the multimodal transport system. The major advantage of this system is that goods can be moved from one location to another through various modes of transport on surface and air under a single contract and single document and a through freight rate. Both the consignor and the consignee do not face any difficulties with respect to loading and unloading at various places during transshipment and the clearance formalities at ports. Thus, the major advantages of system are reduction in overall transportation cost and delays. Smoother and quicker movement of cargo and improvement in the quality of service. The consultancy firms of SAARC countries can play an important role in the expansion of infrastructural facilities in many areas like power, rail transport, shipping, port development and management in the SAARC countries.

#### **6.4. REGIONAL PROJECTS :**

There are immense possibilities for implementing regional projects through co-operation among SAARC countries, especially in the area of development of water and energy resources. These projects have the potential to confer various kinds of direct and indirect benefits to many SAARC countries in a sustained manner over a long period of time. Water resources play an important role in the agricultural and industrial development in many developing countries, and the SAARC countries are perhaps in greater need to develop water resources in order to create larger employment opportunities for the large population of these countries still dependent on agriculture. The SAARC countries share commonly the great Himalayan Rivers like the Ganges, Brahmaputra and the Meghna. It is essential that all the riparian countries of the Himalayan Rivers, viz., Bangladesh, Bhutan, India and Nepal, cooperate and formulate a general framework in the nature of "Water Resources Treaty" to develop the water resources of the Himalayan rivers. This framework would be useful for initiating work on specific projects and also in avoiding disputes on issues connected with the utilization of water resources. Similarly, the riparian countries can also envisage generating electricity from hydro resources. In fact, discussions have been going on between India and Nepal for several years for development of water resources, but these have not materialized into concrete projects so far mainly because of the absence of a general framework for sharing the benefits.



The public and private sector construction and consultancy companies in the SAARC countries can join together to establish consortiums for bidding and executing construction of projects in infrastructural areas like highways, airports, seaports, container terminals, improvement of rail network, inland water transport and expansion of telecommunication facilities, instead of entrusting such projects to firms from the industrialized countries. This would provide a lot of opportunities for the technically skilled manpower available within the SAARC countries to work together for the development of the region as a whole. The establishment of such consortiums among firms from two or more countries from the region would also facilitate easier flow of financial assistance from multilateral agencies and also from private foreign financial institutions.

## **6.5. DEVELOPMENT OF TOURISM :**

Yet another area where regional projects could be undertaken for the common benefit of all the SAARC countries is the development of tourism. It is significant to note in this context that, realizing the importance of tourism; the SAARC countries have appointed a SAARC Technical Committee on Tourism. This committee has also appointed an Expert Group consisting of representatives from Government and the private sector from the member countries. This Expert group had been asked to formulate strategies and common tourism products to promote SAARC region as a tourist destination and also prepare proposal for joint participation in international tourism fairs. The Group was also asked to formulate tour packages including pricing and identify the tour operators and ground handling agents and devise the implementation plan to sell these packages in identified markets.

The group has identified following areas where concrete action was needed on a long-term basis.

- Publicity in the potential targeted markets
- Joint participation by SAARC countries at international tourism trade fairs
- Use of diplomatic missions of SAARC countries for distribution of joint and national tourism packages
- Encourage air carriers of SAARC countries in the sale and promotion of SAARC region as tourist destination

- Use tourism offices of SAARC countries abroad for publicity
- Establishment of SAARC tourism information centers
- To bring out a SAARC travel guide and
- Familiarisation of tourist operators among SAARC countries on a reciprocal basis.

The member countries have agreed to provide training for persons from other SAARC countries in different areas. Thus, it is evident that, though a lot more to be done regional co-operation in the field of tourism is progressing fast.

Tourism is a major foreign exchange earner in the SAARC countries especially Nepal, Sri Lanka, also Bhutan and Maldives. Several Indian companies have got considerable expertise in building and managing world-class hotels and are managing hotels and restaurants in several countries. These companies could set up hotels and restaurants in different SAARC countries to contribute to the development of infrastructure for tourism promotion. Further, there is a scope for co-operation in the area of tour operations. The travel agents of these countries should form joint ventures for operating package tours within the region both for tourists from within as well as outside the region.

## **6.6. ENERGY CO-OPERATION :**

Energy is vital to the development process and is essential even at the subsistence level of the economy. The non-oil developing economies, particularly those in South Asia, were subjected to very severe foreign exchange constraints by the multiple increases in OPEC oil prices in 1973-74 and 1979-80. The deteriorating political conditions in the Gulf region worsened the supply positions further during the last three years.

There are equally severe, but less well-known, problems even in the sector of traditional fuels, where deforestation and soil erosion are the main indicators.

By examining the details of country wise energy resources available in South Asia and their consumption patterns, this paper attempts to bring out the similarity in the dimensions of the energy problems among the South Asian countries. It focuses on the supply-demand gaps that exist with regard to the fossil fuels in all the South Asian countries; it then suggests that in view of the similarities in the nature of energy problems in South Asian countries co-operation is possible in several areas, which would help optimize the utilization of the existing resources.

### 6.6.1 Energy Resources in South Asia :

Table 6.1 provides a summary of the resources endowments.

**Table 6.1**  
**Resource position of Energy in South Asia**

Resources	Bangladesh	Pakistan	Sri Lanka	India	Ne
Bituminous Coal (Million Tonnes)	1054	145		26331	
Crude Oil (Million Tonnes)	192	27		8500	
Natural Gas (Cubic Km)	192	450		420	
Hydro Power Capacity (MW)	230	20000	1180	100000	14
Forest area (Million Hectares)	2209	3	3	67	

Source: T.L. Sankar, Asian Energy Problems. Praeger, New York, 1992.

Two-thirds of Bangladesh's energy requirements are met by the traditional fuels, such as, firewood, jute stick, cow dung, vegetable wastes. Among the commercial energy sources, Bangladesh is well endowed with natural gas. It seen that the industrial sector consumes the most. Though until 1990 petroleum was the major sources of energy for Bangladesh, the focus will have to shift to the natural gas in view of her vast reserves.

Industry is the largest consumer of commercial energy in India, followed by transport sector, both the sectors together accounting for about three-quarters of the total consumption of commercial energy. The agriculture sector consumes about 11 percent of the total commercial energy. In all the sectors, the demand for commercial energy has been increasing considerably. In the household sector, a variety of fuels are used. Fuel for cooking is the most important use of energy. With the increasing scarcity of forest resources in rural areas and the increasing

costs of kerosene, the energy problem of the rural household has assumed greater importance.

The predominant source of energy in Nepal is firewood, extracted from the forests. The forest area has come down from 57% in 1947 to 23% in 1990<sup>14</sup>. The rural population depends entirely on firewood, accelerating the rate of deforestation. The commercial energy resources are meager in Nepal; but Nepal has abundant water resources, which can be utilized for production of hydro-electricity. The installed hydropower capacity at present is only 157 MW, which is about less than 1 % of the economically feasible potential. The transport sector accounts for more than 60 % of the oil, which is completely imported. The industrial sector use mainly coal, which is imported from India; in the absence of timely supplies of quality coal, the industry has been forced to use firewood. Electricity contributes little to the economic activity.

Firewood is the single largest source of energy in Pakistan also; however, the share of traditional energy has been declining over time. In the commercial energy sector, petroleum is being increasingly substituted by natural gas and hydro-electricity. The share of petroleum stood at 38 percent in 1989 in the total energy supply<sup>14</sup>. The absolute consumption of petroleum products has been growing at an annual rate of 5 percent. About 90 percent of Pakistan's petroleum is imported, and the transport sector is the major consumer.

The multiple increases in the prices of fossil fuels during the early seventies had severe impact on the oil importing developing nations as their import bills increased considerably. Since then, the concept of energy development has undergone changes, focusing its attention on non-conventional and renewable forms of energy. As a result of accelerated efforts towards energy exploration by all the countries, the following issues emerged;

- An increased awareness of problems and prospects of energy exploitation and use;
- A greater willingness than ever before to share the experiences in prospecting energy sources with other nations;
- Willingness to participate in co-operative efforts to explore and exploit energy resources.

These, of late, are becoming more popular among countries with similar socio-economic backgrounds and geographical proximity. However, these trends in awareness and willingness to cooperate have not so far been observed in South Asian countries. The South Asian countries have some common energy problems. They are:

- Dependence upon imported oil resources;
- Dwindling forest resources with threatening environmental implications;
- Inadequate availability of physical exploration data and capability to process this data;
- Limited design and engineering technology, particularly for exploration.

There is vast scope for co-operation among the South Asian countries to overcome some of these common energy problems. In view of the limited capacities of these countries, initially the co-operation may be mainly in exchanging information and in training personnel. However, there are other potential areas for co-operation also. Some of them are identified in the ensuing paras.

#### **6.6.2 Trade in Energy Resources**

Some of the countries in South Asia are rich in conventional energy resources, such as coal, natural gas, and hydropower. These can be traded among the South Asian countries which would benefit the buyer countries by way of reduction in transportation costs because of the geographical proximity of these nations and benefit the seller countries, in view of the extended market. For example, Nepal can sell hydro electricity to both India and Bangladesh and, in turn, buy coal from India, and natural gas from Bangladesh.

#### **6.6.3 Information Exchange**

All the South Asian countries are carrying on research into energy-related activities at some level or the other. But overcoming the energy problems is beyond the capability of individual countries due to the poor status of their economies. Information concerning research and operational experiences, therefore, should be exchanged freely among the South Asian countries, so as to



prevent duplication of efforts. This would result in more optimum utilization of capital and data resources.

#### **6.6.4 Joint Research and Development**

Co-operation is a long-term concept and joint R & D should help in building up regional scientific and technological capabilities. Collective self sufficiency in the long-term can be achieved through joint research and development and technical co-operation in the field of energy.

#### **6.6.5 Sharing of Technology**

Some of the Asian countries have achieved some amount of expertise in certain areas of energy technology. For instance, Nepal has successfully designed and managed mini and micro-hydel power stations. This technology can be transferred to other South Asian countries. In the field of new and renewable sources of energy, India has successfully installed and used solar photovoltaic cells, solar batteries, solar street-lighting systems, solar signal systems, solar cookers and water heaters, wind mill based water pumps, and biogas plants. Transfer of such technologies to other South Asian countries would not only make these products available to the other countries but would also help in sharing and disseminating technologies for wider and more efficient use of new energy systems.

#### **6.6.6 Training of Personnel**

One of the potential areas of co-operation is in the field of training. Some countries like Pakistan, Bangladesh, and India are relatively more advanced than the other South Asian countries in energy technologies. These countries can train the personnel of the other countries in designing, manufacturing, installing, and maintaining energy systems. Learning is a two-way process; even the other South Asian countries can contribute to training. For example, Nepal can train the personnel of the other countries in activities concerning mini and micro-hydel power stations. Similarly, the personnel can be trained in the management of energy systems.

Based on resources strength and the technological capability, we have identified some energy sectors in which India can help other South Asian countries. These are presented in tabular form in Table 6.2. Similar exercises can be done for other South Asian countries and also to identify the sectors in energy for multilateral co-operation.

Possibilities of co-operation among the South Asian countries exist in undertaking combined efforts in developing energy conservation methods, research and development, demonstration and in adaptation of relevant technologies. Co-operation would also be possible in creating a comprehensive data bank for disseminating information and preventing duplication of efforts.

The countries in the region also can cooperate for development of appropriate regional institutions for conducting applied research in the field of energy.

**Table 6.2**  
**Energy Sectors in which India can offer Co-operation to other South Asian Countries**

Country	Petroleum	Natural gas	Coal	Forestry	Bio-gas	Solar	Wind	Co
Bangladesh	Joint Exploration	Joint Manufacturing	Training	Training	Joint R&D Sharing Information	Joint R&D	Joint R & D	Sha Inf
Nepal				Extension Seeds supply for Afforestation	Technical Training	Joint R & D	Joint R & D	Des Agr Pun Inf Exc
Pakistan	Joint Exploration	Exploration for Domestic Energy needs		Information Exchange	Joint R &D Information Exchange	Joint R & D	Joint R & D	Joir
Sri Lanka	Technical Training	Technical Training		Technical Training & Joint R & D	Technical Training	Technical Training	Technical Training & Joint R & D	Tra Tec for Agr Wa

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**CHAPTER - VII**  
**FINDINGS, RECOMMENDATIONS**  
**AND CONCLUSIONS**

Regional Economic Co-operation is increasingly being viewed as a vehicle for expediting the process of economic development not because of the problems in global market access and the higher transaction costs of producing for the world market. It is widely believed that the expansion of trade on a regional level yields gains in production specialization, efficiency and improved quality of exports, all of which benefit the countries participating in the regional co-operation initiatives. In view of these considerations, there has been a growing interest in promoting intra-regional trade in South Asia as well. Against this backdrop, the objective of this study has been to examine the pattern of trade in the region with a view to ascertaining whether or not the regional trading arrangements such as SAPTA and SAFTA can be instrumental in promoting intra-regional trade.

**7.1 FINDINGS :**

The present study carried out to evaluate the impact of SAPTA on India's foreign trade relationship with SAARC countries is presented in VII chapters. The problem under investigation is introduced in Chapter – I. The objectives of the study and the framework are also stated in the first chapter. Chapter – II

covers a comprehensive survey of the existing literature on the subject. The chapter is presented in three parts viz., the first part consists of all those studies, which examines the association between trade and development/economic growth. It also deals with the studies those connected with the estimation of export and import functions in particular. In the Second and Third part some of the studies, which are connected with the intra-SAARC trade and SAPTA are reviewed respectively.

The Third Chapter is devoted for discussing different approaches and the institutional framework for mutual economic co-operation and the historical background of SAARC and SAPTA. Since the formation of SAARC in 1985, the South Asian economies have moved through various stages of regional co-operation. The First Round of SAPTA was implemented in December 1995 and the Fourth Round was concluded in 2002 November. Though implications of different Rounds of SAPTA on regional economies are different, the overall effects of SAPTA on the region have been significant. In the first three rounds of SAPTA, 4951 products were liberalized and LDCs of the region are given more concessions than the non-LDCs. India has offered maximum number of 2402 products in the first three rounds of SAPTA. The coverage and depth of tariff cuts vary across countries in the region. The regional process is likely to be strengthened with implementation of SAPTA IV and SAFTA.

Chapter IV provides a more detailed analysis of Revealed Comparative Advantage, Trade Complementarity and Competitiveness among the SAARC countries. The Revealed Comparative Advantage - analysis points out that the export structures of Bangladesh, India, Nepal, and Pakistan indicate that these countries have comparative advantage in food and live animals, basic manufactures, and miscellaneous manufactured goods. Except for basic manufactures, Sri Lanka too has comparative advantage in food and live animals, and miscellaneous products. Furthermore, 'crude materials except fuels' is a common product category in the revealed comparative advantage profiles of India, Pakistan, and Sri Lanka. On the other hand, the export structures of Bangladesh, Nepal, Pakistan and Sri Lanka show that, out of 71 commodity groups at the 2-digit SITC classification, these countries respectively have revealed comparative advantage in only 5, 7, and 8 commodity groups. The range of products in which India has comparative advantage is somewhat broad, as is evident from its comparative advantage in 17 product categories at the 2-digit SITC commodity classification.

The South Asian countries can import fish products, vegetables, jute, and fertilizers from Bangladesh. On the other hand, a variety of products (total 19) can be exported by India to its trading partners in South Asia, ranging from various food items to machinery and transport equipment. Whereas Nepal can be an exporter of oilseeds and oleaginous fruits, Pakistan's potential exports to South Asian countries consist of sugar, molasses and honey, cotton, and surgical



instruments. Sri Lanka's potential exports to the region include synthetic rubber, raw or processed textile fibers, residual petroleum products, rubber articles, wood manufactures, pottery, and electric power machinery and parts.

Chapter V examines the patterns of Intra-regional trade and also Trade balance issues of Saarc countries. It reveals that, Intra-regional trade has been growing during the last one decade, with high degree of instability at the regional as well as at bilateral level. The bilateral trade imbalance, particularly with India, has been a core issue of discontent between some regional partners. Some efforts are made by India in the last SAPTA round to address this issue.

In order to examine the efficacy of SAPTA, India's bilateral time series trade is used. The low volume of India's import trade under SAPTA I increased sharply in the subsequent two rounds. In case of small countries, India's volume of imports under SAPTA was much higher than other trade, which is falling outside the purview of SAPTA. Though India's preferential imports under SAPTA are rising very fast, the share of such imports in total imports of the region is declining steadily. This shows growth of India's normal imports with the regional partners. This may be partly due to bilateral Free Trade Agreements with some regional economies. The implementation of bilateral FTA has led to surge of bilateral investment activities in the region. This may be a reason for augmented trade activities of India with regional partners outside the SAPTA process.

India's preferential import basket under SAPTA is quite diversified. Some of the important import segments are vegetable products, chemical and textiles. It has been importing significant volume of other products such as prepared foodstuffs, plastic products, base metals and mechanical appliances from regional countries. Sizeable amount of such imports fall in the category of primary and resource based agro-manufactured products. Other important imports of India are in the broad product group of low technology (textile and footwear products) and medium technology products.

India's exports to the region is also very significant but a very small proportion of preferential exports fall under the SAPTA as compared to total exports to the region. Tariff preferences granted by regional partners to India in the Third Round is much lower than the earlier two rounds. India's exports comprise mostly of processed food, chemical, textiles and base metals. Other important product categories for exports are vegetable products, minerals and vehicles. A large proportion of India's exports under SAPTA are in the category of primary, resource-based agro-manufactures, medium technology manufactures and high technology manufactures (other than electronic and electrical products).

An appraisal of the benefits of regional co-operation in the areas of Investment Prospects in the Region, Joint Ventures and Technology Transfers,

Physical Infrastructure, Regional Projects, Development of Tourism, which also optimizes the economic growth of the SAARC countries are given in Chapter VI.

Chapter VII concludes the Thesis with Recommendations, also Policy perspectives for promoting Regional Economic Co-operation.

There is a need for deeper and strategic trade liberalization to foster intra-regional trade. The region should adopt sectoral approach as the basis for trade liberalization. The liberalization process can be made in phases. In the first phase broad product groups like textile, chemicals, vegetable products and machinery and mechanical appliances may be considered for trade liberalization. The other important product groups may be chosen in subsequent phases. The implementation of SAPTA IV and SAFTA would lead to significant growth in regional trade and hence, improve welfare of the South Asian countries.

It needs to be emphasized, first, that the impediments such as limited capacity, especially of small South Asian economies, to generate exportable surpluses, restrictive trade policies, and political problems have inhibited the growth of intra-regional trade in South Asia. Second, although various economic and political factors have contributed to a low level of intra-regional trade in South Asia, there exists potential for economic co-operation in some areas. For example,

Economic ties in the region could be strengthened through measures aimed at broadening the composition of intra-regional trade with a major focus on trade of intra-industry, achieving vertical specialization, joint export marketing of competing regional export products, deepening trade liberalization under SAPTA, promoting monetary co-operation, and encouraging joint industrial ventures. It must, however, be pointed out that efforts to promote regional economic co-operation are unlikely to succeed without political harmony and convergence in economic perceptions, which are essential pre-requisites for forging an economic and trade alliance in the South Asian region.

#### **7.1.1 HYPOTHESIS :**

The study has tested two Hypothesis viz.,

- The study reveals that the first Hypothesis ‘SAPTA has not led to the improvement of India’s trade with SAARC countries’ is true. The three rounds of SAPTA failed to fulfill the basic mandate of regional PTA in generating significant amount of additional trade in the region. In fact, trade grew at a faster rate in non-concessional product segments. In this perspective, trade liberalization with a framework of Free Trade Area could be more realistic in meeting the aspirations of chronically trade deficit countries in the region by widening the coverage of products within the region. The perpetually trade deficit countries of region are

likely to resist the proposal for wider close economic co-operation in trade at the regional level unless the trade deficit issue is addressed properly. The trade potential of the region is about US \$ 8.7 billion dollar per annum. In case the trade potential of the region is fully exploited, the intra regional trade can be increased by six times with a period of one year, comparing with the present level of trade within the region.

- The study rejects the second hypothesis that ‘South Asian countries competes among themselves to export similar kind of products to the world market and therefore, the level of regional trade is very low’. It is found that there is significant level of Trade Complementarity / trade potential in the region to promote intra-regional trade and investment. Complete harnessing of export potential of some important sectors may significantly improve the prospects of intra-regional trade. It is estimated that the trade potential of the region is six times more than the present level of intra-regional trade.

## **7.2 RECOMMENDATIONS :**

The South Asian countries have been bleeding themselves by buying from countries outside the South-Asian region numerous goods and services at an exorbitant cost merely because they wanted to turn their faces away from the neighbors. Now, they will not only buy many of those high-cost imports from the neighbors at low transport and other costs, but will also face lower tax in their trading exercises. This, no doubt, will reduce their costs of production at home as all the imported components that go into their own manufactures will be bought more cheaply from the neighbors. In that case, cheapness apart, the scales of production will get a boost and the economies of scale in domestic production will bring yet another significant improvement. It is obvious that when trade at low cost and larger scales begins to flow and greater confidence is built up, many other arrangements on the financial fronts on the credit availability, further expansion of the list of traded commodities, further tariff concessions and further give and take, will follow.

On the basis of the wide-ranging discussions held with the entrepreneurs, officials of the governments and academics during field visits, and the information gathered from the publications of the government and the chambers of commerce and industry, It is observed that significant opportunities exists for expanding intra-regional trade since many SAARC countries are importing goods from outside the region even while the same goods are available within the region and are in fact being exported by the member countries to those outside the region.

At present the level of intra-regional trade among SAARC countries continues to be low, although it showed a tendency to increase marginally during the 1990s. There exists substantial scope for expansion of intra-regional trade, but a number of factors seem to be acting as constraints. Important among these are the high level of trade barriers, and lack of information on supply and demand of various products. The specific measures required for this purpose are outlined in the subsequent paragraphs:

- 1) Export-oriented industrial development strategies help to increase cost consciousness and encourage efficient use of production and management resources. Economic policy reforms in the SAARC countries should, therefore, be directed towards improving the competitive abilities of industrial firms. The process of industrial restructuring in the region can be facilitated through reduction in trade barriers and the liberalization of import regimes. This would help in strengthening industrial production structures in the SAARC countries along internationally competitive lines.
  
- 2) The trade classification and the common export items under the same product code have lead to the wrong impression that SAARC countries are exporting similar products and competing in world markets. However, there exists possibilities for converting even such

competition into complementarities if the SAARC countries could take initiatives to evolve suitable mechanisms of joint marketing strategies for commodities like cotton, rice, tea and jute.

3) The possibilities for greater complementarities would emerge strongly if the SAARC countries jointly undertake programmes of industrial restructuring in processes and also in specific products. It is observed that there exists substantial scope for establishment of new industries and also for modernization of existing industries through regional co-operation. There is a vast potential for establishing joint ventures for expanding intra-industry trade in areas like textile and clothing, engineering industries and automobile industry. The SAARC countries could gain individually and collectively by specializing in particular products and processes within the same industry. This would promote new complementarities and expand intra-industry trade.

4) Trading relations amongst SAARC countries are affected to a great extent by high levels of tariffs and a variety of non-tariff barriers including quantitative restrictions and discriminatory practices. The presence of non-tariff barriers in different forms are acting as constraints to realize the potential for trade expansion. Apart from trade tariff concessions given under SAPTA, all types of non-tariff





barriers and discriminatory practices among partner countries should be eliminated with a view to provide real dynamism to regional trade.

- 5) It is also necessary to have two lists, one list for “fast-track” items wherein appreciable tariff reductions could be considered within a shorter period of time and the other where the tariff reductions could take place over a longer time period. The “fast-track” list should cover those items, which exhibit a greater degree of complementarity in trade among the partner countries. In other words, this list would facilitate the acceleration of the process of expansion of intra-regional trade. The “fast-track” list should essentially include industrial raw materials and intermediate products so that the process of industrialization could be accelerated in all the SAARC countries and especially in the less developed countries. On the other hand, the “normal” list could cover finished goods where the tariff reductions could be phased over a longer period of time (During our discussions, we have found that most of the Academics and Entrepreneurs either have expressed similar opinions or in agreement with the above scheme).
  
- 6) It is recommended that tariffs could be completely eliminated on primary commodities that are used as basic raw materials in the manufacturing industries such as cotton, jute, natural rubber, hides

and skins, forestry products and mineral products like coal, iron ore and other ores. Preferential tariffs could be levied on a large number of intermediate products such as iron and steel products, parts and components of electrical and non-electrical machinery as well as transport and communication equipment. Tariff concessions should also cover essential consumer goods such as cereals and cereal products, milk and milk products, fruits and vegetables, spices, and processed food products. Significant reductions in tariffs can be given on final products such as consumer durable goods, capital goods and parts of capital goods, as well as transport equipment and parts thereof.

- 7) India's bilateral trade relations with the neighboring SAARC countries are of great significance for promoting intra-SAARC trade. Issues such as border trade, unauthorized trade and transit facilities have their impact on normal trade. These issues have to be effectively tackled in order to facilitate the creation of a Free Trade Area in the SAARC region.
- 8) Trade concessions on bilateral basis would help in two ways. One is that it would lead to expansion of trade and the adverse trade balance could be brought down. Secondly, it would also contribute to

reduction in the volume of unauthorized trade between India and neighboring countries.

During our discussions and also in the questionnaires, we have found that, almost all of the entrepreneurs have expressed that the inadequate Transit facilities, complex Documentary procedures and lack of proper Trade financing facilities are the major constraints in the region for trade expansion. We give below the following for addressing the above problems:

- 9) Transit facilities play an important role in expanding intra-regional trade. Although transit facilities are recognized as basic prerequisites for conducting international trade as per international conventions transit facilities among the SAARC countries have for long been governed by short-term, bilateral trade and transit treaties or agreements. Such arrangements are not conducive for the expansion of intra-regional trade. It is recommended that initiative may be taken immediately for establishing a common regional transit treaty among the SAARC countries by designating selected ports, rail heads and also road-cum-rail routes for intra-regional and extra-regional trade. Such a treaty would prove a great impetus for realizing the potential for intra-regional trade apart from leading to substantial savings in time and resources in transporting goods across member countries.

- 10) The shipping companies in both the public and private sectors in the SAARC countries can cooperate and improve the performance of shipping services. It is suggested that a joint shipping council of SAARC countries could be set up to coordinate the shipping service activities of the different countries, Similarly, efforts have also to be taken to make greater use of coastal shipping facilities and inland water transport.
- 11) Containerisation and multimodal transport system have assumed crucial importance in global trade. The SAARC countries have to take a lot of complementary measures to expand the use of multimodal system. These measures include standardization of documentation procedures, enactment of necessary legislation and providing training to multimodal operators. India can provide assistance to other countries in all the above areas.
- 12) Standardisation of trade documentation procedures is very important for expansion of regional trade.
- 13) Trade financing facilities are very important for expansion of regional trade. It is recommended that the measures taken individually by the SAARC countries to provide export and trade finance may be strengthened by setting up a regional trade financing mechanism in

the form of joint Export-Import Bank or an apex body of the trade financing institutions in the different SAARC countries.

14) It is also recommended the SAARC countries explore the possibilities of using “cross-border” leasing as a method of financing imports, especially of machinery and transport equipment. India has fairly well developed lease-financing market, which can be usefully tapped by other SAARC countries.

15) Given the secular decline in the export prices in world commodity markets and the short-term price instability in export prices, it is recommended that the SAARC countries should seriously consider the establishment of a framework for joint marketing of primary commodities like tea, jute, rice, cotton etc. Indian and Sri Lankan tea industries have recently agreed to evolve a strategy for joint marketing as well as for collaborating in research activities. Similar arrangements could be explored for other commodities among the concerned SAARC countries. .

16) The SAARC countries should also explore the possibilities of implementing regional projects in the area of development of water and energy resources. It is recommended that a general framework in the nature of a Water Resources Treaty should be established among

the concerned member countries for sharing the benefits of regional projects. The Indus Treaty (1960) is a standing example where the establishment of a permanent Indus Commission has provided an effective mechanism for allocation of water and also for monitoring the operation of the Treaty. Similar institutional mechanisms could be set up for many other regional projects.

17) The discussions held with entrepreneurs, and industry as well as officials of the governments has revealed a keen desire on the part of all countries to establish joint ventures in different manufacturing industries like textiles and clothing, engineering industries and automobile industry. The SAARC countries could gain individually and collectively by specializing in particular products and processes with the same industry. This would promote new complementarities through expansion of intra-industry trade.

18) The SAARC countries can co-operate in the modernization of existing industrial units through technology transfer and joint ventures. This would help in reviving sick industrial units in many countries. Similarly, the countries can cooperate in the technological up gradation and modernization of small and medium enterprises, which make a very important contribution for employment generation.

19) It is recommended that necessary institutional mechanisms may be set up to support the efforts towards expansion of trade and establishment of industrial joint ventures. The supporting mechanisms include clearing and payments arrangements, arbitration center, and trade information network. The provisions of the existing Asian Clearing Union have to be suitably modified to take care of the needs of the SAARC countries. There is a need to establish a separate SAARC Arbitration Center. Similarly, a separate trade financing mechanism for the region has to be set up.

### **7.3 CONCLUSIONS :**

The present study reveals that there are enormous opportunities for forging closer economic relations among SAARC countries. These opportunities could be fully utilized through the twin processes of trade liberalization and industrial restructuring which are complementary to each other. The SAARC Preferential Trade Arrangement (SAPTA) is the first step in trade liberalization. However, the scope of SAPTA has to be sufficiently widened in order to derive substantial benefits from preferential trading arrangements. It is suggested that the SAARC countries adopt a combined approach for tariff elimination, tariff reduction and preferential or

concessional tariffs. This process will help in moving quickly towards the creation of a Free Trade Area in the SAARC region.

It is necessary to emphasise that, in any regional organization, smaller countries may feel that greater trade co-operation with their larger neighbors may result in larger countries taking over their economies. India occupies seventy percent of the SAARC region, both geographically and economically, and the remaining six nations of SAARC have borders only with India and not with each other. As the biggest, and the most industrialized trading partner among the SAARC countries, India has to recognize that a special responsibility devolves on her and take a lead in making the Regional Economic Co-operation a reality in South Asia. It is time that the member countries come still closer to achieve economic development through increased regional self-reliance. What is needed is the will and a powerful leadership to bring the countries together as partners in mutual progress. Here lies India's role... !!!



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