1. Introduction

"I dream of a day, when, while retaining our respective national identities, one can have breakfast in Amritsar, lunch in Lahore, and dinner in Kabul. That is how our forefathers lived. That is how I want our grandchildren to live".

Prime Minister Manmohan Singh

India, during the colonial period under British rule, was to a large extent a single market with well developed transport and marketing links in important regions that were subsequently divided. After British rule ended in 1947, Punjab was divided between India and Pakistan and Bengal was divided into West Bengal in India, and the remainder in East Pakistan which later became Bangladesh. In 1947, customs, posts and controls were set up along the new national boundaries, and soon after, new industries were promoted and others expanded to deliberately replace imports which had previously come from overseas countries and from across the new borders. For example, before independence, most of Bengal’s jute had been grown in East Pakistan and processed in Jute textile mills in Calcutta. After 1947, jute farming was promoted in India and protected by restricting the imports that had traditionally come from the east, while in East Pakistan Jute textile mills were established to process the jute that could no longer be exported to India and protected against competition from processed jute made in India. Similarly, import of raw rubber into India from Sri Lanka was restricted in order to protect the development of a rubber industry in Kerala. After independence, trade between the South Asian countries was also affected by the continuing conflict between India and Pakistan, concerns about their internal and external security, the spillover effects of ethnic and religious conflicts, a multitude of bilateral disputes and of a generally low level of mutual trust. On the economic front the South Asian countries followed a closed-economy approach where imports were restricted. In addition, the integrated transport infrastructure inherited from the British was fractured by the partition of India. For all these reasons, with the exception of trade of Nepal and Bhutan with India, and the trade of the Maldives with Sri Lanka, intra-regional trade in South Asia has been restricted even more than trade with the rest of the world. In 1948, immediately after independence trade of the newly independent countries with each other was about 19% of their total trade. By 1950, it
had fallen to about 4% and by 1967 it had fallen further to 2%. After recovering for a while in the early 1970's, it declined steadily again until the end of the 1980s, when it was just over 2% of total trade (Pursell and Pitigala 2001:6)

It was against this backdrop that the South Asian countries of Bhutan, Bangladesh, India, Maldives, Sri Lanka, Pakistan, Nepal formed the South Asian Association for Regional Co-operation (SAARC) in 1985. SAARC was established to bring about convergence in the region and reverse the conflicting tendencies that arose in the post independence period. Member countries also recognized that SAARC would play an important role in accelerating the process of economic and social development. However, trade as a mechanism to enhance economic-operation came on the SAARC agenda much later. It was only at the sixth SAARC Summit in 1991 held on 21st December, 1991 at Colombo, Sri Lanka that a major initiative for greater regional economic co-operation was undertaken. During the Summit, Sri Lanka mooted the idea of establishing a SAARC Preferential Trade Arrangement (SAPTA). This was also the time when the South Asian countries had undertaken reforms involving trade and exchange rate policy, industrial policy, fiscal policy, investment policy and financial liberalisation. Until December 2003, three Rounds of negotiations under SAPTA were concluded, the last one being in December 2003. The 12th SAARC Summit held in Islamabad, Pakistan from 4-6 January 2004 was a historic Summit when Member countries signed the South Asian Free Trade Agreement which envisaged that SAFTA agreement will enter into force on 1st January 2006. The SAFTA entered into force on 1 January 2006 but it became fully operational only from 1st July 2006, after Member countries submitted their customs notifications. SAFTA envisages elimination of tariffs for all Member countries by 2016.

Trade and transport facilitation on the other hand did not get its due importance under SAARC. Trade facilitation was recognized as an issue only in the ninth SAARC Summit in 1997 after two Rounds of SAPTA had been completed. The Heads of State or Government noted that inadequate communications facilities amongst the Member States were a major hindrance to closer economic co-operation. They stressed the importance of developing infrastructure and adequate communication networks among Member States to reinforce the process of economic
co-operation. In this context, Members recognized the need for the simplification of complex documentation procedures and transactional software to facilitate economic interaction across the region. During the 11th SAARC Summit, held from 4-6 January 2002 in Kathmandu, Nepal, Members recognized that the treaty regime for creating free trade area must incorporate, *inter alia*, measures to facilitate trade. At the 12th SAARC Summit held from 4-6 January 2004 in Islamabad, Pakistan, Members recognized that for accelerated and balanced economic growth it is essential to strengthen transportation, transit and communication links across the region. The Summit emphasized that priority should be given to harmonization of standards and simplification of customs procedures. At the Summit, Member counties signed the SAFTA Agreement to promote trade and enhance mutual trade and economic co-operation among contracting States. Article 8 of the SAFTA Agreement provides for the Members to adopt trade facilitation and other measures to support and complement SAFTA for mutual benefit. At the 13th SAARC Summit held in Dhaka, Bangladesh on 12-13 November, 2005, the need to strengthen transportation, transit and communication links across the region was reiterated. The Summit also marked the signing of the Agreement on Mutual Administrative Assistance in Customs Matters. The delegates also called for quick action on conclusion of mutual recognition of standards, testing and measurements with a view to facilitating trade. At the 14th SAARC Summit held in New Delhi on 3-4 April 2007, Delegates recognized the importance of connectivity in fulfilling the objectives of the SAARC Charter. It was also recognized that it was important to first have connectivity within South Asia and then with the rest of the world. Members agreed to improve intra-regional connectivity particularly physical, economic and people to people connectivity so that there could be a smooth flow of goods, services, peoples, technologies, knowledge, capital, culture and ideas in the region. Further, Members acknowledged the full benefit of an integrated multimodal transport system in the region. They emphasized that this would be realized only if physical infrastructure including multimodal transport operations, matters relating to customs clearance and other facilitation measures were addressed comprehensively. The importance of implementing trade facilitation measures, especially standardization of basic customs nomenclature, documentation and clearing procedures was accepted by delegates. Members agreed that a comprehensive agreement on harmonizing customs procedures be finalised. They also noted that harmonization of technical and phyto-sanitary
standards and their implementation in a non-trade restrictive manner is important in enhancing intra-regional trade. They appreciated the establishment of the SAARC Standards Coordination Board that would function as a precursor to the SAARC Regional Standards Body.

An analysis of the SAARC Declarations made until 2007 indicates that trade facilitation is assuming far greater importance now. In fact the scope of trade facilitation had expanded to include simplification of complex procedures, transport integration and standards.

The recent emphasis on trade facilitation in the SAARC Declarations is also a result of the negotiations on trade facilitation in the WTO. Amongst the SAARC countries, India, Sri Lanka, Pakistan, Bangladesh, Nepal and Maldives are Members of WTO. In 1996, trade facilitation was first included in the WTO as one of the Singapore issues at the 1996 WTO Ministerial Conference following which the Council for Trade in Goods was directed to carry out exploratory and analytical work on the simplification of trade. After several years of exploratory work, WTO Members formally agreed to launch negotiations on trade facilitation in July 2004, on the basis of modalities contained in Table A D of the ‘July package’. However, the scope of the negotiations was limited to clarifications and improvements in GATT Article V (Freedom of Transit), Article VIII (Fees and Formalities connected with Importation and Exportation), and Article X (Publication and Administration of Trade Regulations). The recent SAARC Declarations on the other hand, include simplification of complex procedures, transport integration and standards having a larger scope as they follow a broader definition of trade and transport facilitation.

While efforts to enhance intra-SAARC trade were ongoing in the early 1990s, under the SAPTA Rounds, the South Asian countries had also undertaken major reform programs involving trade and exchange rate policy, industrial policy, fiscal policy, investment policy and financial liberalisation. Inward orientation and command and control regimes of the past were gradually being given up in favour of more liberal, market friendly policies. As a result trade flows as a proportion of GDP have increased from 18% for all South Asian countries in 1991 to 31% in 2005. In recent years the growth rates of these economies have improved significantly. During 2000-2005, growth rates of GDP ranged between 4% to 7% for India, Pakistan,
Bangladesh and Sri Lanka. Yet, the South Asian region is one of least integrated regions of the world, and the intra-regional trade is very low compared to other regions in the world. Rana (2006) indicates that in 2005 while intra-regional trade as a proportion of a grouping's world trade for Association for South East Asian nations (ASEAN), European Union (EU) and North America Free trade Agreement (NAFTA) was 24%, 66.2% and 45% respectively, for South Asia this ratio was only a meagre 4.4%. One of the key reasons for the low intra-regional trade is the high cost of moving goods across borders, which arises from restrictive trade policies, inadequate transportation, deficient regional transportation policies, cumbersome trade and customs procedures, difficulties in meeting standards and insufficient banking facilities. The large volume of informal trade, which exists in South Asia, is an indicator of the extent of trade facilitation inadequacies in the region. Trade facilitation has an added significance in the wake of SAFTA. Dubey (2007: 1238) argues that trade and transport facilitation is an essential precondition for reaping the benefits of SAFTA. As tariff levels are brought down in the coming years, trade transaction costs are going to play a key role in determining competitiveness. Constraints and impediments related to trade and transport might hinder the South Asian countries from realizing the potential benefits of reduced tariff levels in the region.

1.1 Benefits of Trade Facilitation

The need for improving trade facilitation within the South Asian region also has to be viewed against the developments in the industrial countries where the environment for goods flow in recent years has been transformed through improved transport, logistical innovations and paperless trading. The continuity and future growth of trade in South Asia would depend on the efficiency and speed of cross border transportation of goods and on the harmonisation and simplification of the information processing accompanying those goods. The greater the gap between the state-of-the-art trade and transport facilitation system and the system available in the trading bloc, the greater the penalty that the regional trading bloc will pay in terms of forgone trade and economic growth.

With the development of global production networks and the slicing of the production value chain across national boundaries, developing countries are getting
greater opportunities to participate in the global production networks (Ng and Yeats 1999; Hummels et. al. 2001; Low et al. 1993; McKendrick et al. 2000; Batra 2007; Batra 2007a). Improved trade facilitation can enable the South Asian countries to participate in these networks more effectively. However, the realization of these opportunities depends crucially on the trade transaction cost as any inefficiency in the logistic chain could disrupt the entire production network. Also, in the South Asian economies countries, small and medium enterprises play an important role in trade and such enterprises tend to get affected more by inefficiencies in trade and transportation systems. Thus improvements in trade facilitation draw greater gains for small and medium enterprises. The textile sector is a case in point. Textile exports are the largest item of manufactured exports from South Asia. With the abolition of the Multi Fibre Arrangement in January 2005, countries are reorganising their supply chains to face increased competition. There is great potential for cross border integration of textile manufacturing and for exploiting the economies of scope and scale in the larger market. Thus India could supply fabric to Bangladesh and Nepal and import fabric from Pakistan. Currently, it takes an Indian exporter the same time to receive an import shipment of fabric from Pakistan as it does from Europe.

While countries take initiatives to promote exports, they can be hampered by the absence of effective trade facilitation system that does not allow timely delivery to markets. Similarly an efficient trading environment promotes competition, thus enhancing efficiency in the use of resources, encouraging technology transfer and the realisation of productivity gains. Several countries attract foreign direct investment (FDI) in sectors whose production is to be exported rather than marketed in the domestic market. Many of these production units also import inputs (Kleitz 2002; UNESCAP 2002; World Bank 2004). As a result, many foreign investors will take into account the ease with which they can export and import goods and services before they decide which country to invest in. Thus improved trade facilitation in South Asia could lead to greater investment flows within the South Asian region, which, are currently at very low levels.

The gainers of trade facilitation include governments, businesses and consumers. Governments benefit through more efficient implementation of customs and related regulations. This could involve, for example, a reduction in paperwork or
in numbers of customs officials in ports of entry. It could also reduce the cost of new procedures that may be felt necessary, e.g. to respond to security concerns. Governments gain because they are able to increase their revenues by improving efficiency at borders, which enables them to process more goods, and detect fraud more easily. Businesses gain because by delivering goods faster and cheaper they are more competitive. And consumers gain because they are not paying for border delays and other related transaction costs (OECD 2005: 2).

In the South Asian context, high growth rates may not translate into higher trade and investment unless trade facilitation is given due importance and transaction costs of trading are lowered significantly. Several regional blocks have taken appropriate trade facilitation measures to enhance trade within the region. The Asia Pacific Economic Cooperation (APEC) has already adopted trade facilitation as a major element of their trade and economic development policy. Similarly, this is also a key feature of the European Union (EU) trade development and the Greater Mekong Sub-region comprising of Cambodia, China, Laos, Myanmar, Thailand, and Vietnam. With regional blocks increasingly being perceived as building blocks in the overall process of globalization, trade facilitation will have to be given due importance.

1.2 Definition of Trade and Transport Facilitation

Trade and transport facilitation does not have a commonly accepted standard definition but its objective is to reduce transaction costs of international trade. At the same time, it seeks to optimize the effectiveness of regulatory controls to ensure the safety and well-being of citizens and the collection of appropriate taxes and fees while maintaining efficient and effective control.

Trade and transport facilitation measures can be adopted along the trade transaction chain, which can be viewed not as separate and isolated events, but as a natural chain of events performed by different actors/participants. Thus the trade chain starts with the buying process, continues via the transportation process and ends in the payment process.

There are several definitions of trade and transport facilitation (Wickramsinghe 2004; Wilson et. al. 2004). The WTO defines trade facilitation as
"the simplification and harmonisation of international trade procedures", where trade procedures are the "activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade". Trade procedures typically involve customs procedures, international transport, trade insurance, and payments and also the official procedures and formalities required during border crossing (OECD 2001; UNESCAP 2003). Trade facilitation has also been defined as the simplification and standardisation of trade procedures and information flows required to move goods internationally from seller to buyer and make payments in the other direction (UNECE 2002). Recognising the role of information technology in trade facilitation the Asia Pacific Economic Cooperation (APEC) defines trade facilitation as "the simplification, harmonisation, use of new technologies and other measures to address procedural and administrative impediments to trade". In fact APEC recognizes that modern technology can be used for the effective implementation of paper-less trading which in turn has the potential to revolutionize the conduct of trade within the Asia Pacific region. Thus, the rapid integration of networked information technology into trade implies that modern definitions of trade facilitation need to encompass a technological concept as well (APEC 2001; APEC 2001a). The United Nations Centre for the Facilitation of Procedures and Practices for Administration, Commerce and Transport defines a vision of trade and transport facilitation as "support activities dedicated to improving the ability of business, trade and administrative organizations, to exchange products and relevant services effectively." The focus is to facilitate international transactions, through the simplification and harmonization of processes, procedures and information flows, which would contribute to the growth of global commerce (UNESCAP 2003:1).

While the conventional components of trade and transport facilitation include transportation, customs, insurance, and payments, in the past few years the definition of trade facilitation has broadened considerably, particularly in the context of regional and bilateral trade agreements. Issues related to technical regulations, conformity assessment and certification have become an important component of trade facilitation. In fact "Mutual Recognition Agreements" are sometimes referred to as trade facilitation agreements. Several regional and bilateral free trade agreements lay out the principles of trade facilitation in the region in which it includes technical
standards as an integral part of trade facilitation. Known and agreed standards benefit international trade through ensuring predictability by meeting the required standards for market access. Messerlin and Zarrouk (2000) state that examining customs regulations and technical standards and regulations together under the head of trade facilitation gives rise to the same challenge, viz., how to minimize the unnecessary burden for trading partners. The use of technical regulations and standards has increased to a large extent leading to a multiplication of duplicative requirements at the borders related to testing and certification. Very often such standards require large resources and sometimes cumbersome testing procedures particularly at the importing end.

Several regional and bilateral trade agreements include mobility of business people as part of the trade facilitation agenda. With advancements in information and communication technology, business communication has become much faster and increased manifold but business people continue to face obstacles particularly in obtaining visas. Several trade agreements such as the North American Free Trade Agreement (NAFTA), European Union (EU) and the Association of South East Asian Nations (ASEAN) have initiated measures that facilitate business mobility.

The new international security dimensions of trade have assumed great importance since 11 September 2001. Countries realize that weapons of mass destruction, explosives, radioactive materials and other life threatening products could enter their national territory hidden among legitimately traded goods. With increasing threats of terrorism, terrorists could use the mechanisms and processes of trade as a weapon against countries. Governments everywhere are enacting security measures to minimize risks associated with the international flow of goods. Such measures often drive up trade costs (UNESCAP 2006; World Bank 2004).

While the elements that constitute trade facilitation could vary and evolve, a common concern through the various definitions provided by various institutions and individuals is that trade facilitation is concerned with lowering transaction costs of trading. Thus, the removal or improvement in any measure, procedure, formality, regulation and policy related to trade and payments across borders that have the potential to constitute a barrier or impediment to trade (and contribute to transaction cost) would fall in the ambit of trade facilitation.
1.3 Rationale, Scope and Objectives of the Study

The implementation of SAFTA in July 2006 envisages elimination of tariffs by 2016. However, the potential gains through tariff liberalization may not be fully realized if issues relating to trade and transport facilitation are not adequately addressed. In the SAARC region, India shares a common land border with Nepal, Bhutan, Bangladesh, Nepal and Pakistan while Maldives and Sri Lanka are island countries. As Nepal and Bhutan are landlocked, trade takes place largely by rail/road across the common land border. Trade with Bangladesh takes place by land and sea and with Sri Lanka and Maldives it takes place largely by the sea route. Trading by air between India and the SAARC countries is limited to high value goods only. A common land border can facilitate trade at low costs. Yet, such costs are high in the region. Institutional constraints and bottlenecks add to costs and delays, thereby, making exports in the region uncompetitive.

While the SAARC declarations have addressed the issue of trade and transport facilitation in recent years, academicians and multilateral agencies have been analyzing and examining trade and transport issues in the region for several years. However, there was a virtual absence of studies on India–Pakistan trade and transport issues. These issues related to India and Pakistan pose a unique challenge to the region. SAFTA remains an unfinished agenda due to the strained political, economic and trade relations between India and Pakistan. Ever since the two countries emerged as sovereign nation states after independence and partition in 1947, there has been a continuing tension between the two countries. Indo-Pakistan trade fell drastically after 1947 and came to a standstill following the war between the two countries in 1965. There was virtually no trade between the two countries for almost nine years till 1974 when the two countries signed a protocol on resumption of trade (GOI 1974). In the following year the two countries signed a trade agreement to develop, extend and strengthen commercial relations between the two countries (GOI 1975a). Subsequently, trade was resumed but only on a list of mutually agreed items. In 1996, India accorded Most Favoured nation status to Pakistan, whereby it allowed all items to be imported from Pakistan. Pakistan on the other hand continued to allow imports from India in a limited number of items even though the number of items being permitted increased gradually. This approach, officially termed as the “positive list”
approach is followed by Pakistan even today violating the very spirit of the South Asian Free Trade Agreement. Pakistan has held the view that it will not grant MFN status to India until the resolution of the Kashmir issue. Yet, trade between the two countries has been increasing since 1996. In fact in 2006-07 Pakistan became India’s third largest trading partner in the SAARC region. It is likely that trade in the coming years may increase substantially. In fact even though Pakistan follows a positive list approach, India’s trade surplus with Pakistan has been growing over the years. Pakistan has in recent years stated that this trade imbalance is due to the imposition of non-tariff barriers by India, particularly those related to implementation of standards to protect plant, human and animal life. The question then arises as to how trade facilitation measures have supported trade between the two countries in the past and what are the measures that the two countries should take to support the growing trade at low costs. In 1947 the two countries inherited a common physical infrastructure of roads, railways, and sea links but in the years when trade was resumed between the two countries in 1974, only a limited number of routes were opened up to trade between the two countries. In fact trade between the two countries by the road route was not allowed until 2005. This is unlike India’s trade with other SAARC Members with whom it shares common land borders where trade by the road route has always taken place (GOI 1975; GOI 2005).

Trade links between India and Pakistan thus for a long time have been inadequate in terms of number of routes and modes of transport. Also, trade links have often been erratic and unpredictable particularly during periods of conflict. For instance, following the attack on the Indian Parliament in 2001, India disconnected its rail and air links with Pakistan. Trade by the sea route has been the only continuous mode of transport for movement of goods between the two countries. But here too trade between the two countries was conducted under the guidelines laid down in the Maritime Protocol signed between the two countries in 1975, which was far more restrictive than maritime trading that the two countries had with the rest of the world. The maritime protocol was amended in 2005 to bring it on par with global maritime rules.

The role of Customs lies at the center of trade facilitation and other government controlling agencies. While India and Pakistan have taken major
initiatives to reform customs so that the trade process is simplified, it still remains to be examined whether such reforms have made a difference to trade facilitating trade between India and Pakistan.

A major concern India and Pakistan face is related to security issues related to cross border movement of goods, people and vehicles. Security is a major concern at all borders but due to the inherent tensions between India and Pakistan, there is a high perceived security threat which forces Members to resort to tight and often multiple security procedures which adds to the time and cost of cross border movements. Security concerns have often impeded free movement of bonafide business persons across borders.

A trade transaction is complete only when a buyer receives his goods and the seller receives payments, it is important to examine the difficulties faced by traders in the two countries in this regard. Since payments involves a financial interaction between business and state, measures adopted by the two governments can play an important role in ensuring safe financial transfers at low costs.

Another important characteristic of trade between the two countries has been the large informal trade that takes place between the two countries. While informal trade is a characteristic of the South Asian region, what is unique about informal trade between India and Pakistan is that a large part of such trade takes place due to the trade policy that governs bilateral trade between the two countries. The most well documented fact is that since Pakistan bans a number of items from India, such goods find their way into the Pakistani market through Dubai. It becomes important to examine the trade facilitation mechanism that has supported this historic trade. Since it is also well documented that informal trade takes place due to inadequacies in the formal channel, it is useful to examine whether informal traders have developed parallel mechanisms that are more efficient than formal trade. Also understanding informal trade can provide useful lessons for improving the trade and transport channels in formal trade.

The scope of the proposed study on India’s trade and transport facilitation with Pakistan can be defined in terms of the following objectives of the study:
(i) To examine trade and transport facilitation in South Asia.

(ii) To examine trade policies and trends in South Asia.

(iii) To quantify trade potential and trade possibilities between India and Pakistan.

(iv) To examine existing trade and transport facilitation systems in India and Pakistan supporting Indo-Pakistan trade.

(v) Identify key rail, road and sea transportation routes and routes involving intermodal transfers. Identify impediments along major routes related to transport, customs, standards, payments, visas, and security, which are likely to contribute to transaction costs.

(vi) To quantify transaction costs for exports and imports on direct and indirect routes.

(vii) To compare transaction costs on alternative routes of trading between India and Pakistan and for alternative modes of transport.

(viii) To examine trade and transport facilitation systems supporting informal trade between India and Pakistan in the larger context of informal trading in South Asia.

(ix) To suggest measures to improve trade and transport facilitation systems between India and Pakistan.

It is hoped that this research will be of significance to academicians, policymakers and traders in the areas of trade, transportation, transaction costs, and logistics because the study will identify factors contributing to transaction costs, compare efficiency of different routes and modes of transport and suggest measures that can reduce transaction costs of trading between India and Pakistan.
1.4 Research Hypotheses

To examine the objectives of the study the following research hypotheses are proposed:

1. There exist substantial trade possibilities between India and Pakistan.

2. Impediments to Indo-Pakistan trade are caused by restrictive trade policies, inefficiencies in transport systems and policies, cumbersome customs procedures and administration, problems related to payments, and implementation of standards, and a restrictive visa regime.

3. Transaction costs on the indirect routes are higher than the direct routes but the indirect routes are more efficient than the direct routes of trading between India and Pakistan.

4. The sea route for trading between India and Pakistan is more efficient than the land route while the road route is more efficient than the rail route.

5. Informal traders have developed alternative trade facilitation mechanisms to formal trade channels.

1.5 Theoretical Framework and Research Methods

This section lays down the theoretical underpinnings of the study and the research methods adopted to conduct the study.

1.5.1 Theoretical Framework

The concept of transaction costs is rooted in the literature on New Institutional Economics which questions two crucial assumptions of neo-classical economics namely cost-less transactions and perfect information and stresses on the role of institutions in facilitating market exchange by reducing transactions costs, providing a predictable framework for exchange and overcoming imperfect information (Assaad 1993; Bardhan 1989). Further, the rules and constraints arising from institutional arrangements can be formal or informal (Nabli and Nugent 1989; North 1993).
Transaction costs approach focuses on efficiency. This can be accomplished by making the transaction rather than the commodity the basic unit of analysis and by assessing governance structures, in terms of their capacity to economize on transaction costs (Williamson 1981:549). Applying the concept of transaction cost to international trade, McCallup (1995:622) finds that national borders matter and reduce trade between countries. Anderson and Wincoop (2003) point out that national borders mark differences in policies, institutions and regulations that can create inefficiencies and inhibit trade.

Facilitation of international trade and transport requires the involvement of many government agencies dealing with trade, transport, customs, immigration, security health, plant and animal quarantine and quality control. Inefficiencies in the operation of any or all of these agencies would contribute to transaction costs. Minimizing such costs would lead to greater trade competitiveness. Cost can be incurred in terms of money and time taken to complete a transaction.

1.5.2 Research Methods

The proposed study is based on existing literature, secondary data, and an extensive field research, which was conducted in several cities of India and Pakistan. To examine trade trends and patterns in South Asia and to identify trade possibilities and potential between India and Pakistan, the study uses secondary data published by the Ministry of Commerce and Industry, Government of India, International Monetary Fund, and the International Trade Centre. The potential trade between India and Pakistan is arrived at using the Potential Trade Approach. Unpublished data was obtained from the Directorate General of Commercial Intelligence and statistics (DGCI&S), Office of the Assistant Commissioner at Attari Road, and Amritsar and from the Office of the Station Superintendent Attari, to examine mode-wise trade between India and Pakistan and to examine monthly trends in movement of cargo by rail and road between India and Pakistan. Primary data was collected through a survey conducted in India and Pakistan. Three groups of respondents were selected which comprised of traders engaged in India-Pakistan trade, freight forwarders/custom agents and government officials. The study employs the method of triangulation to validate the nature of the true phenomenon (Jick 1979). Thus, to identify impediments
to trade, three response groups comprising of traders, freight forwarders and policymakers were interviewed to provide multiple confirmation of findings.

For the survey, semi-structured and unstructured questionnaires were used. Semi-structured questionnaires were framed keeping in mind the overall framework of the study to identify impediments to trade within the broad themes of transport, trade policy, customs, standards, financial impediments, visas and security. An open-ended question was provided for each of these aspects to allow the respondent to express his concerns about any factor that he considered was an important impediment to India-Pakistan trade. Information sought on impediments to trade was qualitative in nature while that on transaction costs was quantitative. To understand the regulatory regimes related to transport, customs, payments, standards, visas and security government officials were interviewed through unstructured questionnaires to allow for open and free discussions through an unstructured questionnaire, keeping in view the regulator's area of responsibility. In the course of the survey it was noticed that the less formal the interview, the more open was the response.

The study employs the time cost methodology, which has been used in several studies including Beresford and Dubey (1990), Beresford (1999), Banomyong (2000) and UNESCAP (2004). The methodology is adopted for measuring transaction costs, which involves measuring costs and time associated with transporting goods by any mode and with transfers between modes and/or across custom borders as components. Points of transshipment at border crossings or between modes, are incorporated into the cost curves as vertical steps. Thus while movement along the cost curve reflects transportation costs incurred along a trade route, the vertical steps reflect costs incurred for intermodal transfers and any other activity that may be undertaken when the consignment is stationary on the trade route. Thus at the land/sea border ports and inland terminals, port handling charges and other charges are levied without any material progress being made along the supply chain; therefore, the costs incurred here are represented by a shift upwards in the cost curves at these points. The height of the step is proportionate to the amount of the charge. These vertical steps can be broken down to reflect different types of charges and costs (both formal and informal) or processes involving time. In this regard, bottlenecks at points of transshipment can be analysed in themselves as part of the overall route.
The study quantifies transaction costs of trading between India and Pakistan for selected commodities that are traded on alternative routes and modes of transport. A comparison of routes is undertaken on the basis of three indicators (i) costs per ton which allows cost comparisons in absolute terms as traders often do not have the option of transporting goods through the most desirable/direct route and (ii) cost per ton per kilometre (km), which is used as a performance/efficiency indicator for alternative routes and allows comparison of costs incurred on various routes (iii) transaction costs are also presented in terms of time taken for trade transaction on different routes and modes. The commodities for which such costs for quantified include soybean meal, ferro manganese, onions, live animals, cement and dry dates.

1.5.3 Sampling Frame

The primary survey was undertaken at two points in time. In January 2005 a total of 59 respondents were interviewed in India. The survey did not include any respondents in Pakistan. Subsequently another survey was conducted in India and Pakistan. A total of 146 respondents in India and 124 in Pakistan were interviewed during August 2006 to November 2007. The two surveys are referred to as Field Survey I and Field Survey II respectively throughout the study.

Field Survey I covered 34 trading firms, 13 freight forwarders and 12 government officials in Mumbai, Delhi and Amritsar (Table A 1.1). Of the trading firms, 30 were exporters, 4 were importers and 4 were exporters and importers (Table A 1.2). Twenty-six respondents were interviewed in Mumbai, 22 in Delhi and 11 in Amritsar (Table A 1.3). Exporting firms were found to be trading in food, chemical and pharmaceutical products while importing firms were found to be trading largely in food items.

In Field Survey II, of a total of 146 respondents covered in India, 38 were in Amritsar, 36 in Delhi, 21 in Kolkata, 46 in Mumbai and 5 in Indore (Table A 1.3). In India the survey covered 78 traders, 37 freight forwarders, and 31 government officials (Table A 1.4). Of the trading firms, 60 were exporters and 18 were importers while 5 were engaged in both exporting and importing (Table A 1.5).
In Pakistan of a total of 124 respondents, the survey covered 44 firms in Islamabad, 40 in Karachi and 40 in Lahore. In Pakistan the survey covered 43 traders, 32 freight forwarders, and 24 government officials. Of the 43 trading firms, 28 were importers in Pakistan and 15 were exporters to India. In addition, 25 firms which were not trading with India were also interviewed. The firms were interested in giving interviews, as they were keen to trade with India. Interviews with such firms were conducted to understand the kind of barriers they were facing in starting trade with India.

Exporting firms in India and importing firms in Pakistan were found to be trading in agriculture and food items, chemical products; pharmaceuticals, metals and engineering products; and textile and related products. Importing firms in India and exporting firms in Pakistan were found to be trading in agriculture and food items, engineering items, minerals and textiles products.

In Field Survey I firms trading with Pakistan were identified from websites that provide information on trading companies in India. The websites provide information on exporters and importers. Freight forwarders and customs clearing agents were identified through exporters and importers. Based on information collected through discussions with government officials and industry representatives, Mumbai, Delhi and Amritsar were selected for conducting interviews. Firms were then selected randomly from each city for interviews. Several firms, when contacted, denied trading with Pakistan. Sixty per cent of the firms contacted in Delhi, 29% in Mumbai and 40% in Amritsar denied trading with Pakistan. In fact two companies mentioned that they had faced police inquiries due to which they stopped trading with Pakistan.

In Field Survey II for the Indian survey the initial step was to generate a database of exporters and importers since Field Survey I had yielded a high denial rate. Firms trading with Pakistan were identified through relevant industry associations such as Confederation of Indian Industries (CII), Federation of Indian Chambers of Commerce and Industry (FICCI) and Punjab, Haryana, Delhi Chamber of Commerce and Industry (PHDCCI). In addition, the relevant export promotion bodies such as

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Federation of Indian Exporters' Organisation (FIEO), Indian Tea Association, Chemicals and Allied Products Export Promotion Council, Engineering Export Promotion Council, Agricultural and Processed Food Products Export Development Authority (APEDA), Soybean Processors Association (SOPA) and Rice Exporters Association. The Chamber of Commerce were also contacted in Delhi, Mumbai, Kolkata, Indore and Amritsar. Several firms, when contacted denied trading with Pakistan as they were reluctant to talk openly about trading with Pakistan. It was pointed out by several traders that due to heavy surveillance by government authorities on any dealings with Pakistan they preferred not to draw the attention of any government or non-government organization. Finally through an extensive search a response group of 60 trading firms was selected for interviews. The rest of the firms were identified through references given by the target group of 60 respondents. Freight forwarders and clearing agents were identified through the exporters and importers interviewed. In Pakistan trading firms were identified through the Federation of Pakistan Chambers of Commerce and Industry (FPCCI), Islamabad Chamber of Commerce and Industry, Rawalpindi Chamber of Commerce and Industry, Lahore Chamber of Commerce and Industry, Karachi Chamber of Commerce and Industry and the Indo-Pakistan Chief Executive Officer (CEO) Forum. The identification of trading firms was relatively simpler in the survey conducted in Pakistan than in India. Unlike the Indian survey, none of the traders denied trading with India and discussions were held in a free and open manner. In addition several members of the FPCCI and the Chambers of Commerce interested in trading with India volunteered to give interviews. Freight forwarders and clearing agents were identified through exporters and importers interviewed.

In order to understand the regulatory regimes related to transport, customs, standards, payments, visas, and security; interviews were held with various government departments in both countries. Government departments in India included Ministry of Surface Transport, Department of Shipping, Railway Board, Custom authorities, Directorate General of Foreign Trade, Ministry of External Affairs, Ministry of Home Affairs, Ministry of Commerce, Ministry of Consumer Affairs, Bureau of Indian Standards, National Accreditation Body for Calibration and Laboratories and Pakistan High Commission in Delhi. Similarly in Pakistan the government bodies in the survey included Customs, Railways, Ministry of Food
1.6 Limitations of the Study

While the study aims to fulfill the objectives of the study, there are certain limitations.

The study examines trade and transport facilitation in South Asia with a focus on the case of India’s trade with Pakistan. Since there was a virtual absence of any literature on trade and transport facilitation between India and Pakistan, a detailed survey of the trade and transport facilitation in South Asia was undertaken in order to get insights into possible issues that could be examined for the case of India and Pakistan. Thus, the study does not undertake a detailed analysis of trade and transport facilitation in the South Asian region, but limits the scope to the extent that it is relevant for examining trade and transport facilitation between India and Pakistan.

The study considers only seven Members of SAARC i.e. India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and Maldives. The study excludes Afghanistan. Since trade figures are available till 2006, when Afghanistan was not a member, the study does not include Afghanistan in the trade statistics. Afghanistan was a declared a full Member of SAARC only in April 2007.

While the primary survey conducted in the course of the study provides useful insights into issues related to trade and transport facilitation between India and Pakistan, the survey has its limitations. Since it was not possible to assess the size of the population of traders, freight forwarders/custom agents dealing with India and Pakistan, it is possible that the sample size may be small. Also the number of responses on which the quantification of transaction costs is based is limited as selecting a commodity limited the number of respondents dealing in that particular commodity. Hence the results from the survey are indicative only.

Another limitation of the study is that it does not consider trade and transport facilitation by air. Since air transportation of goods is undertaken under an open skies
policy, it was not included in the study. All airlines are allowed to airlift cargo between the two countries, as is the practice globally. Since air transport is the most expensive mode of transport it is used only for highly valuable goods.

In undertaking a transaction cost analysis, all possible elements of transaction cost have not been quantified. The qualitative survey provided insights into the factors that were likely to contribute to transaction costs. Based on the qualitative survey only those factors that were most important for India - Pakistan trade were considered.

Despite these limitations the study attempts to address a major gap in the literature on trade and transport facilitation in South Asia pertaining to India and Pakistan.

1.7 Chapterization of the Study

The study is organized in seven chapters. Chapter 1 lays out the introduction to the study. Chapter 2 surveys the literature on trade possibilities and potential in South Asia and also surveys the literature on trade and transport facilitation in the region. The area and focus of these studies is highlighted and the major routes and modes of transport that have been identified in various studies are listed. Impediments to trade identified on these transport routes and modes are also examined critically. Elements of transaction costs identified in various studies are examined. A critical evaluation of the literature on trade and transport facilitation is provided with a view to identify issues relevant for examining India's trade and transport facilitation with Pakistan. Chapter 3 examines trade trends and patterns in South Asia and also examines the trade policy governing trade in South Asia within the framework of SAARC. Trade policy governing India and Pakistan is examined in the South Asia and WTO context. Chapter 4 examines the systems and regulatory framework governing transport, customs, standards, payments, visas and security and identifies impediments along several routes and modes of transport. Chapter 5 quantifies transaction costs and compares the efficiency of different routes and modes of transport. Chapter 6 provides a summary of all estimates of informal trade in South Asia and discusses the factors that influence informal trade flows in the region. It provides an analysis of informal trade between India and Pakistan and examines its implications for formal trade and transport facilitation between the two countries.
Chapter 7 concludes the study by summarizing the key findings of the study and suggesting policy measures to improve trade and transport facilitation between India and Pakistan.