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Trade Facilitation, Economic Development and Poverty Alleviation: South Asia at a Glance

Subashini Perera, Mahinda Siriwardana and
Stuart Mounter

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Abstract

South Asia faces enormous economic challenges unmitigated by generally poor economic growth. Increasing economic imbalance between countries hinders regional development. Recently, it has been confirmed that trade liberalisation aimed at expanding trade, has been insufficient in optimising the potential contribution of trade to economic development and reduce poverty. Thus, economists pay attention on Trade Facilitation (TF) which has the potential to contribute to economic development. This has motivated us to examine how TF can achieve this development in South Asia, where trade has yet to make its full contribution to economic growth. The aim of this chapter is to examine the economic impacts of TF on trade and economic growth in South Asia. Our analysis revealed that poor TF restricts trade between countries as it increases Trade Transaction Costs (TTCs). Trade delays are relatively high and affect the region's landlocked countries even more adversely. An efficiently facilitated trading system will enable these countries to participate more actively in global trade. There has been greater focus on TF policies in South Asia, however due to the complexity of TF measures and their investment needs, it is difficult to identify which TF measures have the most significance for the region.

Keywords: trade facilitation, trade transaction costs, economic growth, poverty, South Asia

1. Introduction

South Asia, as the world's second fastest growing region, demonstrates impressive economic growth and trade is escalating rapidly. The trade and economic growth of the emerging

economy of India has contributed immensely to overall regional growth. However, persisting poverty and widening socio-economic inequality presents a massive challenge to the region and the majority of South Asia's poor live in India, despite the nation's impressive economic growth. In effect, researchers have identified that South Asia comprises two economic regions, one leading and one lagging. India has the largest economy, significantly larger than its neighbours in terms of size and growth. By contrast, the landlocked countries in the region display the lowest per capita income and consequently face greater economic challenges. While economic development through expansion of trade is one of the major steps towards poverty alleviation, the trend of South Asia's external trade reflects weaker performance. The region remains one of the least integrated in the world and intra-regional trade is fairly limited, in comparison with trade with external trading partners, although exports are limited to a few commodities. Small and medium enterprises (SMEs) face challenges in competing in foreign markets. However, most tariff and non-tariff impediments to trade have been substantially reduced. Facilitating trade has been recognised as an important policy option for economic growth and poverty alleviation in developing countries and Trade Facilitation (TF) is now considered a second-generation trade issue in South Asia which limits trade growth. Trade economists now focus on addressing the TF, since its potential impacts on economic development are significant.

The main purpose of this chapter is to examine the economic impacts of TF on trade flows and economic growth in South Asia. A desk research comprising two analytical approaches was conducted to meet the objectives of the chapter. Based on current statistics collected from online databases, the relationships between TF and economic growth are analysed. Thereafter, a discussion follows on the impact of TF on economic development based on existing quantitative estimations and the implementation programmes applied in the South Asian region.

The chapter reveals that the major TF issues and bottlenecks in South Asia are insufficient custom procedures and port handling, massive documentation requirements, limited use of information technology, transit barriers in landlocked countries and poor logistics. These have led to massive trade delays and high transaction costs in South Asia. Hence, traders are facing challenges in competing in international markets, resulting in fragile trade growth. The study reveals that poor TF affects trade and economic development in South Asia. Consequently, the region is still home to a very large number of poor, and most of the benefits of economic growth favour the relatively fewer wealthy households, further increasing regional disparities. The chapter highlights that South Asia needs to stimulate further growth in trade in order to strengthen regional integration and economic development in regional economies. TF is one of the keys to improve regional trade.

The chapter consists of five main sections. In Section 2, the concept and principles of TF and its benefits are discussed. The impact of TF on economic growth is analysed using secondary data and existing literature in Section 3. Section 4 provides an overview of TF implementation programmes in South Asia followed by concluding remarks in Section 5.

2. The concept of Trade Facilitation: principles and benefits

2.1. What is Trade Facilitation?

There is no firm definition for the term TF. It includes a range of interrelated factors. Therefore, there are different definitions that have been used to approach TF. In the literature, the term tends to be used to refer to issues of trade at the border and/or procedures behind the border, that is, the term TF has been applied to issues that arise when goods and services are moving across borders (narrow focus) and/or within the entire supply chain (wider focus).

During the Singapore ministerial declaration in 1996, factors relating to TF were added to the World Trade Organization (WTO) mandate. According to the WTO, a basic definition of TF refers to the simplification and harmonisation of export and import processes. This includes simplifying documentation, modernising procedures and harmonising customs requirements to reduce the costs and time involved in exports and imports. The WTO further qualified TF as the means of expediting the movement, release and clearance of goods including goods in transit [1]. The International Chamber of Commerce (ICC) [2] emphasises that TF is a way of improving efficiency of the processes associated with the trading of goods across national borders. ICC highlighted that TF is not just a matter of improving customs procedures but should also target the efficiency of a growing range of controls implemented at national borders by other authorities. However, Arnold [3] argues that improvements in transport and communication services and the advanced use of technology to monitor product flows and supply chain integration constitute additional factors. Portugal and Wilson [4] considered TF as a two dimensional: a 'hard' dimension related to tangible infrastructure such as roads, ports, highways and telecommunications and a 'soft' dimension related to transparency, customs management, the business environment and other intangible institutional aspects. Focussing on a basic definition, Persson [5] states that TF makes it easier for traders to move goods across borders by making cumbersome cross-border trade procedures more efficient. According to this definition, cross-border activities should be undertaken within the shortest time at the minimum costs. This may include both indirect costs (trade delays) and direct monetary costs. Zaki [6] described TF as a process that encompasses various aspects and deals with a wide range of issues, which is summarised as follows:

- i. Simplification of trade procedures and documentation
- ii. Harmonisation of trade practices and rules
- iii. More transparent information and procedures of international flows
- iv. Recourse to new technologies promoting international trade
- v. More secure means of payment for international commerce (more reliable and quicker).

Whichever elements are used to define TF, the main focus of facilitating trade is to minimise Trade Transaction Costs (TTCs) in the movement of imports and exports. However, complexities of this type of non-tariff measures and the absence of a precise definition hinder proper quantification of their benefits and the identification of the related steps to lower TTCs [7].

2.1.1. Trade Transaction Costs

The broad definition of TTCs includes all costs incurred in obtaining a good to a final consumer, excluding production costs. These are transportation costs (both freight costs and time costs), policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs and local distribution costs (wholesale and retail). TTCs are generally reported in terms of their Ad-Valorem equivalents (AVEs) [8].

For a number of reasons, TTCs may increase at border crossings. TTCs related to border procedures vary depending on the efficiency and integrity of interacting businesses and administrations, type of goods and size and type of business [9]. Shepherd [10] indicates that TTCs arise from many sources. Some of these may be described as 'natural' in the sense that they reflect inherent factors such as geographical distance or linguistic and cultural differences. Thus, TTCs include both direct and indirect costs. **Figure 1** describes the elements of TTCs, including these direct and indirect costs.

Direct TTCs include charges that are directly applied to trade transactions (**Figure 1**), such as collecting information, costs of providing necessary documentation, charges for logistic services, charges for customs brokers and the customs clearance fees or charges for outsourcing to service providers. Direct TTCs include charges for trade-related services, such as supporting services (cross-border banking, international transportation, trade insurance, cargo handling and port management) [11]. These charges depend on the complexity of market access regulations such as licensing, pricing regulations, competition regulations and infrastructure access regulations. They are measurable in monetary terms and TF improvements can lower such costs.

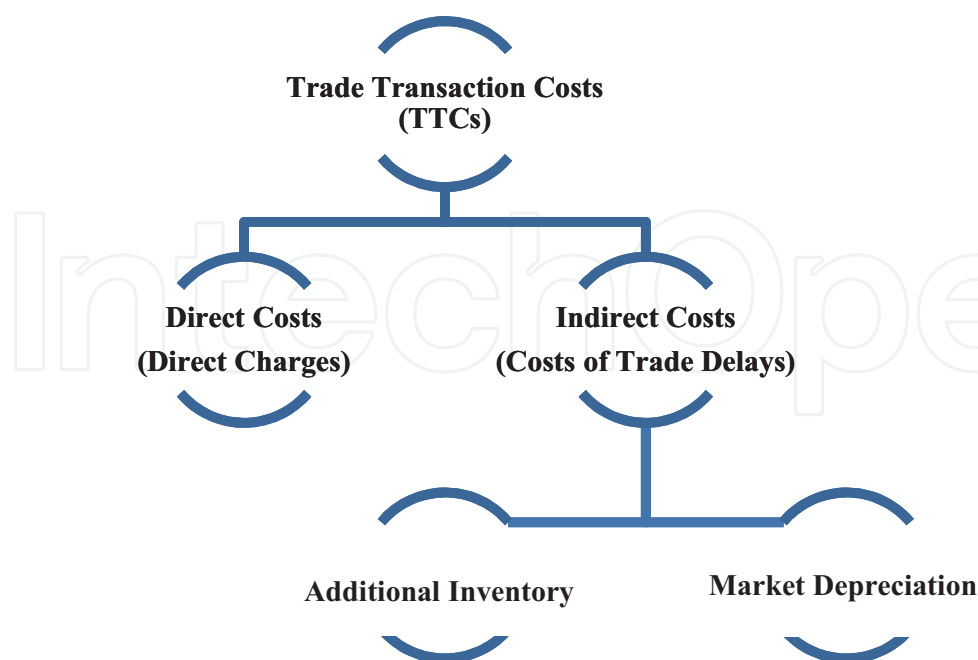


Figure 1. Elements of Trade Transaction Costs.

Indirect costs arise from procedural delays at borders and are difficult to estimate in monetary terms, since they involve transaction time and the unforeseen costs of such time. Hummels and Schaur [12] state that time costs include the cost of market depreciation due to delayed deliveries and additional inventories to traders, in order to maintain buffer stocks to avoid inconsistent border clearance time. They argue that excessive shipping time causes increased time costs, which may include spoilage in the case of fresh produce (agricultural products), and rapid technological obsolescence for goods such as consumer electronics (consumers place a high value on purchasing the latest innovations). Therefore, market depreciation, or deterioration of the value of the goods, occurs from delays in deliveries. Additional inventories may be necessary to avoid volatile demand or uncertain supply. This may lead to forgone cash flows and extra costs for storage.

The characteristics of direct and indirect cost components represent the 'iceberg' nature of TTCs. The direct costs are the tip of the iceberg. However, the larger part of the berg is under the waterline and unobservable, representing the indirect cost component. Thus, a large part of the value of traded goods melts away, when they are in transit for a long time as most of the researchers have found that the indirect costs component has a greater impact than direct costs. Zaki [6] defined iceberg costs as the costs of transporting goods that take up some fraction of the actual value of the goods. Thus, the iceberg tariff implies that a fraction of the goods melts when a tariff is imposed. These costs are passed on to the end consumers or taxpayers since the effective price of the imported goods is increased. Thus, some studies argue that increases in TTCs due to delays are comparable to taxes on trading. Further, TTCs in landlocked countries are very high because these countries have to bare the additional costs due to more complicated transit procedures.

In economics analysis, TTCs are considered as AVEs, comprising a percentage of the total value of the traded commodity. Engman [13] states that there are two categories of effect of AVEs, price effects and efficiency effects. Price effects comprise both direct costs such as customs fees, port handling fees and indirect effects such as delays and unreliability of border transactions due to insufficient TF. The price effect increases the price of traded product and may affect domestic production. Efficiency effects occur due to distortions in the allocation of resources in the economy. Both price and efficiency effects diminish economic welfare in importing and exporting countries.

2.2. Trade Facilitation in international trade theory

The theory of TF has been developed gradually. Theories of the impact of TF in international trade are expressed in two structural frameworks: the partial equilibrium framework and the general equilibrium framework. The TF-related partial equilibrium models are based on the demand and supply theory. However, TF initiatives are highly correlated with economic movements between countries that are linked through international trade. This has led to the development of general equilibrium theoretical frameworks to illustrate the concept of TF in international trade.

2.2.1. The theory of 'iceberg'

Consideration of the effects of TF in trade theory began with the development of 'iceberg' method [14]. Samuelson used this concept to model explicitly transportation costs, in order to analyse the possible effects of transport impediments on trade. Later studies have used the iceberg method to analyse the impacts of trade costs which arise due to insufficient trade procedures (poor TF), using partial equilibrium models as well as general equilibrium models. The following theoretical explanation is based on the World Trade Report 2015 [1].

2.2.1.1. The iceberg approach in the partial equilibrium model

This section provides a graphical illustration of the iceberg method and the impact of trade costs on an imported good using the partial equilibrium framework.

Inefficient trade procedures lead to increased TTCs. This could generate a wedge between the producer price and the price paid by consumers, leading to a pure deadweight loss. Samuelson [14] described this, assuming an iceberg where only a fraction of ice exported reaches its destination as unmelted ice. **Figure 2** illustrates the demand and supply price of an imported good, assuming that the good is not produced domestically. If D is the import demand and S is the export supply, consumers pay the price P_d^* and exporters receive the price P_s^* , and the quantity imported is Q_0 due to high trade costs at the initial level. However, with TF improvements (assuming TTCs are reduced to zero), the price wedge ($P_d^* - P_s^*$) slowly reduces and the system adjusts to the equilibrium at the price P^* and the quantity imported rises from Q_0 to Q^* . As a result, terms of trade increase in both countries and increase consumer surpluses (a+b) and producer surpluses (c+d).

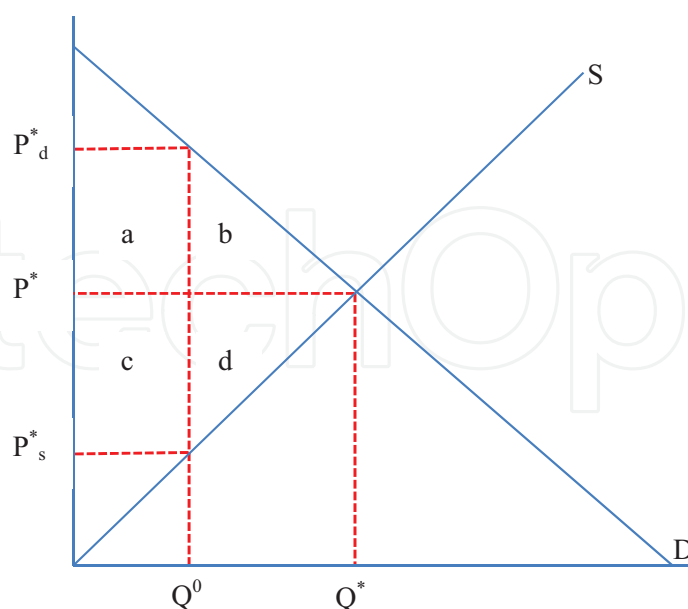


Figure 2. The 'iceberg' effects in the partial equilibrium framework. Source: The World Trade Report 2015.

2.2.1.2. *The iceberg approach in general equilibrium models*

The theoretical developments of the effects of TF in a general equilibrium framework can be discussed in terms of both classical trade and new trade theory. The classical trade theory consists of the Ricardian model and the Heckscher-Ohlin model. These two models explain that countries produce goods having comparative advantage due to relative productivity differences (comparative technological advances) or endowments of factors of production (use abundant factors of production more intensively), respectively. However, these two models provide similar explanations regarding the impact of TTCs, illustrating that insufficient TF reduces the price wedge between the domestic and the world market price when a country opens to trading.

In the Ricardian model, if countries do not trade with each other (in autarky), the relative price of one good expressed in terms of the other good differs between them. This motivates the enhancement of bilateral trade, as the world market price exceeds the domestic prices due to the specialised production of the good that has comparative advantage. However, TTCs due to insufficient TF lower the difference between the relative prices faced by both trading partners and the international price moves closer to the autarky price, leading to reduced trade and consumption, as well as economic welfare.

On the other hand, assuming similar productivity in both countries, the Heckscher-Ohlin model describes the differences in factor endowments. The model assumes that there are two factors in production, labour and capital. One country is labour abundant and the other capital abundant. The prices of two goods in two countries differ in autarky due to different factor endowments. The labour-abundant country produces a labour-intensive good with a domestic price lower than the foreign price. Conversely, the capital-abundant country is able to produce a capital-intensive good at a lower price compared to the foreign country. If the capital-abundant country and the labour-abundant country open to international trade, both can produce more of each good using the abundant factor and export. The labour-abundant country exports labour-intensive products and imports capital-intensive products from the capital-abundant country. The world market price is set between two autarky prices. With free bilateral trade, both countries gain due to comparative advantage. However, TTCs due to poor TF can reduce the gap between the autarky and world market price faced by two countries and this reduces the trade and consumption and economic welfare. The Heckscher-Ohlin model explains how TF improves the real income of the abundant factor of production. If a country is able to reduce TTCs, it can utilise the abundant factor more intensively, increasing the factor demand and thereby increasing the real return of that factor.

Classical trade theories explain inter-industry trade as described earlier. However, new trade theories examine why countries experience intra-industry trade. The new trade theory pioneered by Krugman [15, 16] is characterised by the nature of a firm's behaviour such as monopolistic competition, heterogeneous firms and global supply chain theories.

New trade theory explains that the trade costs can have a disproportionately adverse impact on developing countries. Developing countries produce more agricultural or natural resource-

related goods with constant returns to scale and a small manufacturing sector. In contrast, developed countries have a large manufacturing sector, which operates under increasing returns to scale. Trade costs can reduce trade in both developed and developing countries, leading to a disproportionate reallocation of manufacturing goods to developed countries and agricultural and natural resources to developing countries. This highlights the importance of reducing trade costs in order to diversify trade in both developed and developing countries.

However, recent trade studies concern the differences of firms with respect to productivity, size of firms and participation in international trade (heterogeneous theory) (see Refs. [17, 18]). According to this theory, only the most productive firms can enter into the export markets. There are two productivity thresholds: the minimum level required for a firm to survive and the level at which the firm can start exporting. The reduction of trade costs can lower the gap between these two threshold levels. This increases a range of firms that are excluded by the competition and range of firms entering into the export markets. As a result, resources are released from the less productive firms and reallocated to the most productive firms. The reduction of trade costs affects export markets positively in two ways. Exporters can expand their volume of exports (intensive margin) and increase the entry of new firms into the export market (extensive margin).

Classical trade theory assumes that the final good is produced completely within the country, while supply chain models are concerned with trading intermediate goods. The final production of a good comprises the different types of parts and components traded. Thus, trade costs may accumulate through different stages of the value chain, as intermediate goods cross borders. If trade costs are too high in the value chain, countries may be reluctant to trade intermediate goods and trade only final goods. This highlights the importance of improving TF in order to strengthen the global value chain, enabling countries to gain comparative advantage by specialising the stages of value chain.

2.3. Benefits of Trade Facilitation

Efficient TF measures can eliminate costs and reduce time needed for exporting and importing (TTCs). This is critical as trade costs can be as high as 134% ad valorem tariff on a product in high-income countries and a 219% tariff equivalent in developing countries [1]. The benefits of improved TF from reduction of TTCs following trade expansion lead to economic development, with gains accruing at various stages of development process (**Figure 3**).

TF can be improved by lowering TTCs. In practice, improving TF encompasses many interrelated factors which effect the reduction in associated trade costs. For example, improved infrastructure related to transport, ports and customs, and more advanced use of information and communication technology (hard infrastructure) strengthen physical connectivity among countries and also regions within the country, facilitating trade expansion.

Alternatively, trade procedures involve collecting, presenting, communicating and processing data required in cross-border transactions. If these processes are subject to excessive documentation, physical inspections and bureaucratic requirements (red tape) at borders, processing costs and clearance times will increase, leading to increases of both direct and indirect TTCs.

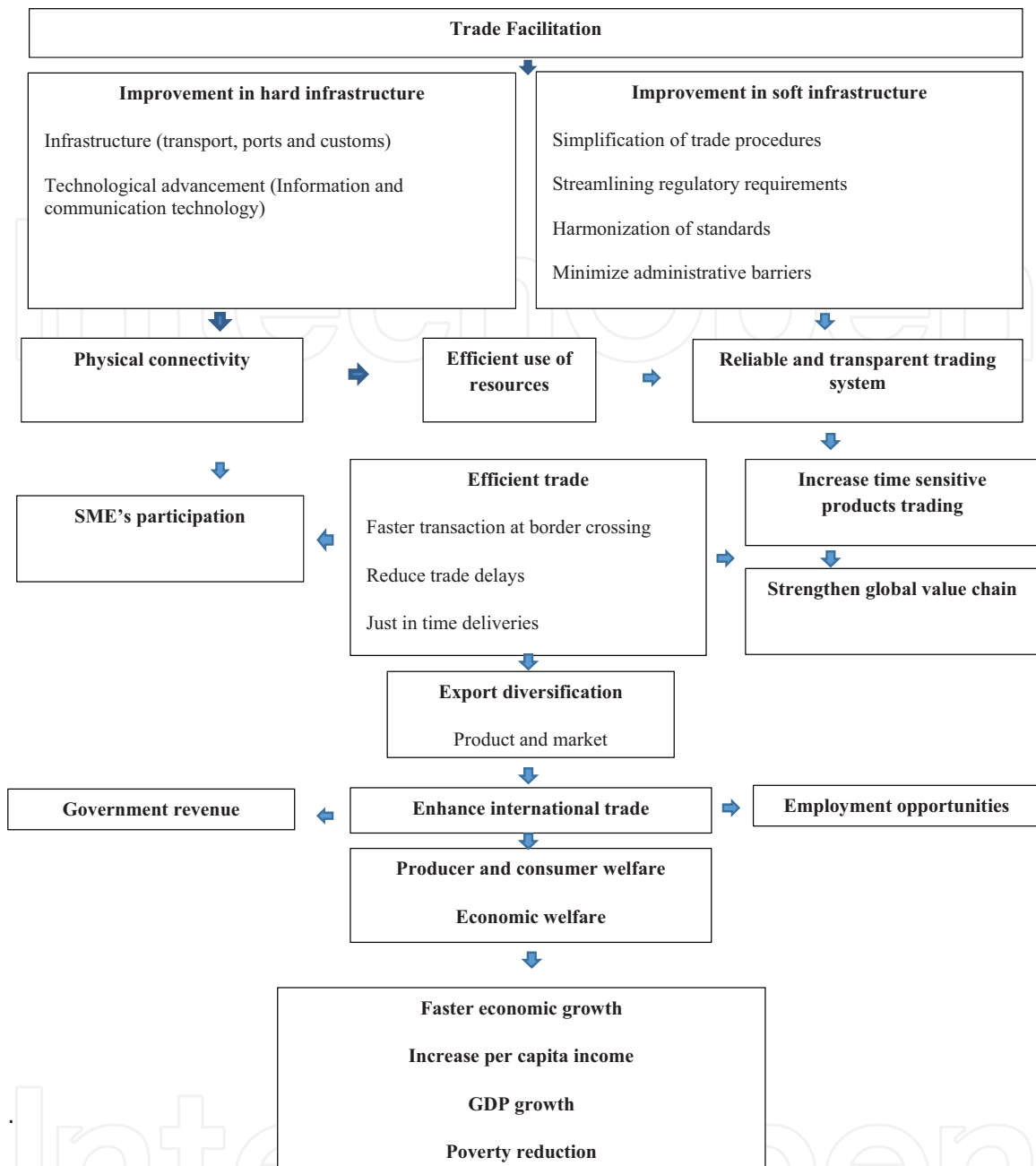


Figure 3. Benefits of Trade Facilitation.

Thus, improving soft infrastructure is vital to eliminate TTCs in the accrual of TF benefits, while simplification and harmonisation of trade procedures enable traders to deal more easily with cross-border transactions. Subsequently, international trading systems become more transparent and reliable, with more efficient use of resources, which reduces smuggling and informal trade.

TF allows countries to speed up trade transactions. This is more important as time is becoming increasingly a critical factor in determining the comparative advantage of trade. The contemporary business environment seeks faster global transactions made possible by globalisation of

information technology. In the modern trading environment, consumers are willing to pay more for faster deliveries of goods and services making it essential that firms deliver their products on time. Consequently, firms have the burden of additional costs of holding a buffer stock to avoid trade delays. These inventory costs include both capital costs of the goods while they are in transit and costs of holding larger quantities of stock to cover variations in arrival time [19]. Border transaction inconsistency may affect a firm's competitiveness negatively. Nordas et al. [20] explained that time taken for moving goods to the market affects trade flows in two ways. Firstly, it determines whether or not firms will enter a particular foreign market. Secondly, time affects the volume of trade once a market entry is made. This is more crucial for firms trading time-sensitive commodities. Such products include fresh produce such as agricultural products (fresh fruit and vegetables) and seasonal products such as textiles and clothing. However, minimising trade delays through efficient TF initiatives enables countries to increase volumes of time-sensitive product exports to meet consumer satisfaction.

A majority of TF-related studies have found that potential benefits of TF are greater in developing countries, and more gains are acquired by small and medium enterprises. Improved TF encourages more active participation of export-driven SMEs. Improvement in information and communication technology is one of the crucial factors that could prevent asymmetric effects on SMEs. If trade procedures and regulatory requirements are not transparent and reliable, SMEs have difficulty in accessing information, which then demands the use of additional resources and time acquiring information not readily available. Further, a lack of available information reduces the capacity to predict the market behaviour. As additional expenses do not normally vary according to the value of goods or the volume of sales, operational costs per product increase. These costs may also comprise significant indirect costs related to foregone business opportunities which place SMEs in a weaker position [21]. However, the development of the Internet and e-commerce and simplification of trade regulations can reduce informational and market access barriers faced by SMEs.

A more diversified export sector offers a wider range of products and destinations. A facilitated trading system can deliver positive benefits towards diversifying both export products and markets. Export diversification has two dimensions, product diversification and market diversification. TF generates significant benefits that create new trade flows [10]. This can be either by the introduction and supply of previously untraded products into the existing markets or by the expansion of trade in existing products to new markets which leads to trade expansion. Some studies have found that there is a significant positive relationship between TF and export diversification. Dennis and Shepherd [22] concluded that export costs, international transport costs and domestic market entry costs have a significant negative impact on export diversification. This underlines the importance of reducing TTCs to promote export diversification. Shepherd [10] also found that a 10% improvement in TF is associated with a 5–6% increase in the number of foreign markets served. Export volume increases as a result of export diversification which generates gains for both producers and consumers.

Improved TF enables governments to benefit from the increased tax revenue of the expansion of international trade. Most developing countries depend heavily on tax revenue to finance public expenditure. Thus, improved TF is likely to increase government revenue since the reduction in

TTCs increases the volume of exports and imports. This offsets the large investment necessary to improve TF in a country. Further, improvement in TF in one country can lead to increased exports or imports of partner countries linked through external trade. Thus, bilateral government cooperation, as in the case of tariff reforms, is unnecessary since partner countries can still benefit from unilateral TF reforms.

Several studies have attempted to estimate the potential welfare gains that can be realised from improved TF (Table 1). Table 1 illustrates recent estimations of the benefits of TF. Most of these studies have used Computable General Equilibrium (CGE) models and gravity models to estimate the effects of TF on trade flows and economic welfare. These estimates clearly indicate that there is a positive relationship between TF and trade flows. Even a slight improvement can generate considerable economic welfare and clearly benefits are much greater in developing countries.

It is clear that TF can strengthen the global value chain, encourage SME participation in external trade and improve export diversification. This stimulates trade, generating employment and increasing government revenue through taxation. Eventually, producers and consumers are better off, producing a positive welfare impact on the economy fostering economic growth and development. This process is also favourable to reduce poverty in two ways. Firstly, TF stimulates trade and expands entrepreneurial activities. Secondly, an increase of

Study	Key results	
	Effects on trade flows	Effects on welfare
Francois et al. [23] (CGE GTAP model) Simulation: A partial reduction of TTCs related to TF	2.7 (% of GDP) increase in world export volume	0.2 (% of GDP) increase in world income
Wilson and Otsuki [24] (Using indicator based measurements: Port efficiency, Customs, Regulations and Service sector infrastructure) Simulation: South Asia increase its capacity half away to East Asia with respect to above indicators	Trade expected to rise by USD 2.6 billion	
Decreux and Fontagne [25] (CGE model) 50% reduction in AVEs of time at the border	World trade increase by 1.9%	
Dennis and Shepherd [20] (Gravity model) 10% reduction in costs of exporting, international transport and market entry	Export increase 3% International transport increase 4% Market entry increase 1%	
Persson [5] (Gravity model) 1% reduction in number of days needed to export	Homogeneous goods increase by 0.3% Differentiated goods increased by 0.6%	
Zaki [6] (Gravity and CGE models) 25% reduction in AVEs of time to import and export	Increase EU: 10.6% US: 3.9 Japan: 2.1%	Increase Africa: 4.7% Asia: 5.2% Middle East 3.1% North Africa 2.9%

Table 1. Impacts of Trade Facilitation on trade flows and welfare.

tax revenues due to economic growth generates financial resources for the government to develop and implement specific measures to alleviate poverty and reduce social inequalities.

3. Analysis of the impact of Trade Facilitation on economic development in South Asia

3.1. Methodology

In this section, trade and economic development issues in South Asia are reviewed briefly and analysed the impact of TF on trade growth and economic development. A desk research was conducted to meet this objective and assess the relationship between TF, trade growth and economic development based on statistics collected from online databases and existing available quantitative estimations, confined to the South Asian region. The following TF and development indicators are used for this analysis.

3.1.1. Trade Facilitation measures

There are various TF indicators which have been used to measure the effects of TF. The most common of these are 'Doing Business' (DB) indicators related to trading across borders, the World Bank's Logistics Performance Index (LPI), the Organisation for Economic Co-Operation and Development's (OECD) TF indicators and the World economic forum's Enabling Trade Index (ETI) [1]. For the purpose of this analysis, the DB and the LPI were used to measure TF.

3.1.1.1. Doing Business indicators

According to the 'Doing Business' report, there are 11 DB indicators, comprising mainly indicators for ease of doing business, which rank countries according to their relative performance, and the 'Distance to Frontier' which scores the best performing economy [1]. For the purpose of this analysis, we used DB related to trading across borders. These include time and costs to exports and imports. Time and costs (excluding tariffs) include costs for documentary compliance, border compliance and domestic transport within the overall process of exporting or importing a shipment of goods [26].

3.1.1.2. The Logistics Performance Index

The LPI was developed by the World Bank, based on online surveys of operators in charge of moving and trading goods. The LPI measures the logistics friendliness of a country based on six dimensions. These are customs, infrastructure, ease of arranging shipments, quality of logistics services, tracking and tracing and timeliness [1]. If country shows low performance, the LPI index value is equal to 1 and for high performance, equal to 5.

3.1.1.3. Gross Domestic Product (GDP) per capita growth rate

GDP per capita is calculated using gross domestic product, which is divided by midyear population. GDP at purchaser prices is the sum of gross value added in the economy and product

taxes. Subsidies are not included in the value of the products. The GDP per capita growth rate is calculated as an annual percentage based on the constant local currency [27].

3.2. Economic growth and external trade in South Asia

3.2.1. Overview

South Asia is a region of rapid economic growth and transformation, composed of eight economies: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The larger economies are those of India, Pakistan and Bangladesh, with India rated second largest emerging economy in the world, representing the largest economy in the region. India differs significantly from its neighbours, due to the size of its economy, population, land area and diverse socio-economic characteristics. The landlocked countries of Afghanistan, Bhutan and Nepal record the lowest per capita income.

South Asia faces enormous development challenges and economic imbalances affect regional economic development adversely. The major development challenges facing South Asia are the need to accelerate overall regional economic development in relation to the past and the need for the smaller economies to match the level of the growth in larger economies [28].

3.2.2. Economic growth

There has been a notable economic growth in South Asia during the past 15 years, with the exception of the 2008 economic recession, producing the second fastest growing regional economy in the world. The Indian economy has largely contributed to this growth (Figure 4), with the economic contribution of other regional countries negligible. Thus, South Asian economic growth is generally a reflection of the Indian economy.

The rapid growth of external trade has contributed to this economic growth. Arnold [3] has indicated that a part of this growth can be associated with higher unit prices of basic commodities, but that the greater part is related to increased volumes of shipments. Panagariya [29] has illustrated that the steady rise of the Indian economy has largely contributed to this growth

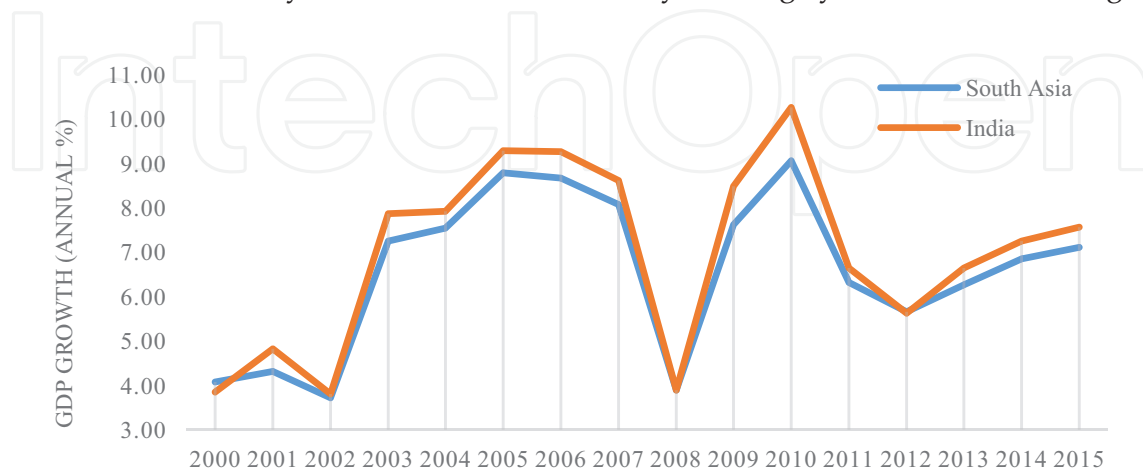


Figure 4. Annual percentage of GDP growth in South Asia and India. Source: World Development Indicators online database [27].

trend. South Asia attracts global attention because of this rapid growth, global outsourcing and skill-intensive service exports [30].

Table 2 illustrates disparities of economic development across countries in South Asia based on a few economic development indicators. Regional per capita income gaps vary significantly. India almost contributes nearly 80% of total South Asian GDP, whereas Pakistan accounts for 10%. Other countries are relatively small in terms of GDP and population, showing only minor contributions to regional GDP.

Ahmed et al. [28] have noted that there are two regions within South Asia, one leading and one lagging. The leading region is characterised by faster economic growth, urbanisation and integration into the global economy. The lagging region remains rural, relying on low-value activities and lacks economic integration both regionally and globally.

3.2.2.1. Gross domestic product per capita growth rate

GDP per capita growth rates in South Asia vary widely. The leading economy, India has been growing rapidly followed by Bangladesh, Pakistan and Sri Lanka (**Figure 5**). India recorded the highest growth rate in 2010 after a rapid recovery from global economic recession in 2008. Conversely, landlocked countries have shown fragile economic growth during the last decade, with the Maldives showing a similar volatile pattern (**Figure 5**). Regional disparities further ensure these countries remain in poverty. Canut [31] pointed out that the majority of the world's poor do not live in low-income countries, but in countries with middle levels of per capita income, showing that the geography of poverty exhibits regional concentrations. Two-thirds of the poor live in India and the lagging regions of South Asia.

3.2.2.2. Income distribution

According to the World Bank, global poverty has reduced over the past few decades. There is an impressive reduction in poverty due to strong growth and resilience in South Asian

	Share of regional GDP (%)	Share of regional population (%)	Per capita GDP (current US\$)
Afghanistan	0.9	1.8	665
Bangladesh	6.3	9.4	958
Bhutan	0.1	0.05	2363
India	79.2	74.9	1498
Maldives	0.1	0.02	6666
Nepal	0.8	1.6	694
Pakistan	9.8	10.9	1275
Sri Lanka	2.8	1.2	3279

Source: World Development Indicators online database [27].

Table 2. South Asian Countries' contribution to the regional economic growth.

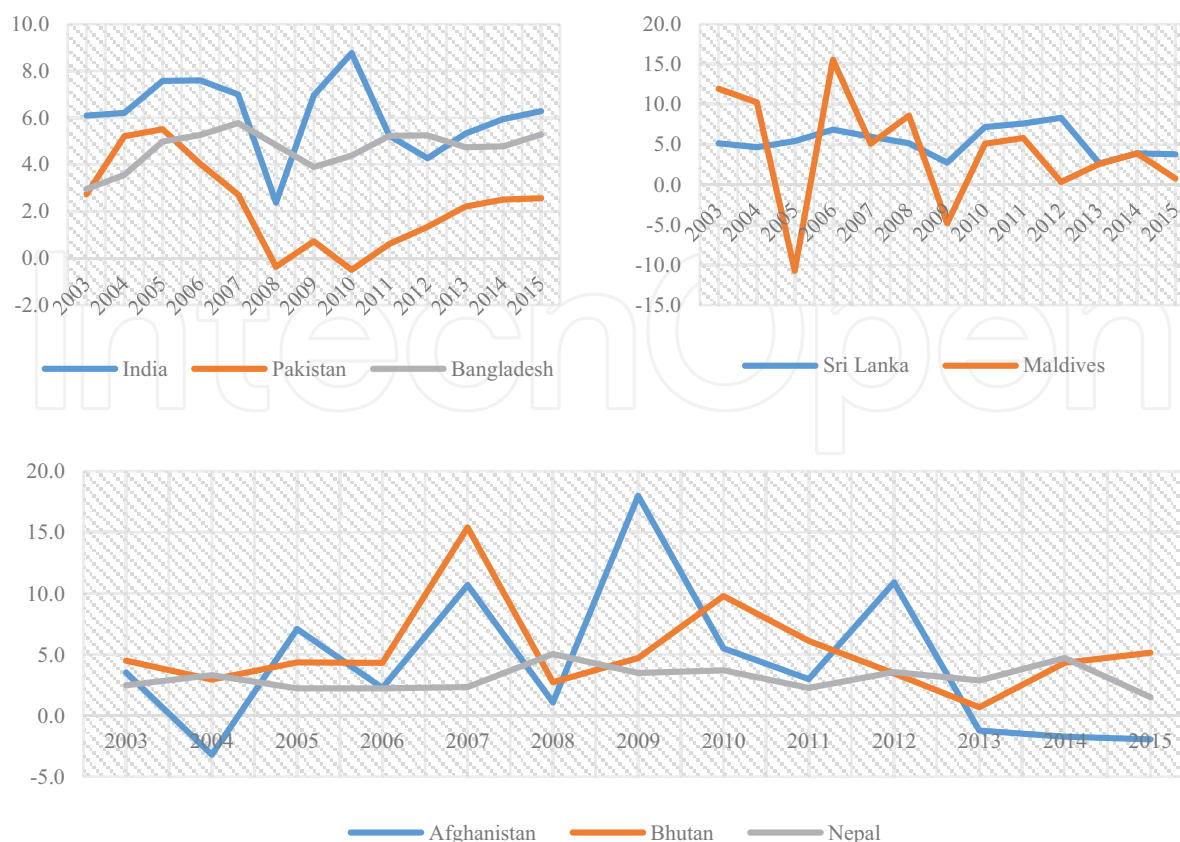


Figure 5. Gross domestic product (GDP) per capita growth rate in South Asia. Source: World Development Indicators online database [27].

countries. However, the region is still home to a very large number of the poor [32]. According to the poverty headcount index (Table 3), nearly fourth quarter of the Indian population lives on less than \$1.10 per day, whereas half of the population is below \$3.10 per day. This indicates that most of the South Asian poor are living in India, despite its significant economic growth. This situation is common to most of the South Asian countries, except Sri Lanka and the

Country	Headcount Index at \$1.9	Headcount Index at \$3.10	Gini index (2010)
Sri Lanka	1.92	14.59	36.39
Bhutan	2.17	13.33	38.37
Pakistan	6.07	36.88	39.8
Maldives	7.2	23.26	-
Nepal	14.99	48.44	33.84
Bangladesh	18.52	56.8	32.13
India	21.23	57.96	38.37

Source: World Development Indicators online database [27]¹.

¹The year of this index differ among countries; India – 2011, Bangladesh – 2010, Pakistan – 2013, Bhutan – 2012, Maldives – 2009 and Nepal - 2010.

Table 3. Income distribution in South Asia.

Maldives. Most of the benefits of economic development flow towards a relatively small group of wealthy households, maintaining the regional disparities. The Gini index also shows that South Asia indicates an increase in disparities in income distribution. As **Table 3** shows, this is a most serious phenomenon in South Asian countries, with income distribution worst in India and Pakistan.

Despite progress in economic growth in South Asia, the region continues to face the challenges of poverty and serious income disparities. As poverty indicators show, most of the poor live in India. This emphasises that India still faces serious poverty complications. Further, landlocked economies in South Asia are diverting from other economies which has formed a large economic lag in the region. However, external trade significantly contributes to economic growth in the region. The following section discusses recent trends in external trade in South Asia.

3.3. Trends in external trade

As **Figure 6** shows, external trade in South Asia has increased over the last decade. The pattern of this trend reflects how the growth of exports and imports has contributed to South Asia's GDP.

India has contributed most significantly to this trade growth, showing that it is the dominant country responsible for regional economic growth. India contributes 85% of the total value of regional exports as illustrated in **Figure 7**. India enjoys the largest share of the South Asian trade due to its size, comparative advantages and technological advancement, compared to rest of the region. The other seven countries have smaller economies than India and their contribution is relatively insignificant. The total export share of Bangladesh, Pakistan and Sri Lanka is around 15%.

3.3.1. Export diversification – commodities

South Asia exports mainly consumer and intermediate goods. The majority of imports are raw materials and intermediate goods (**Figure 8**). Export of capital goods contributes only 11% of

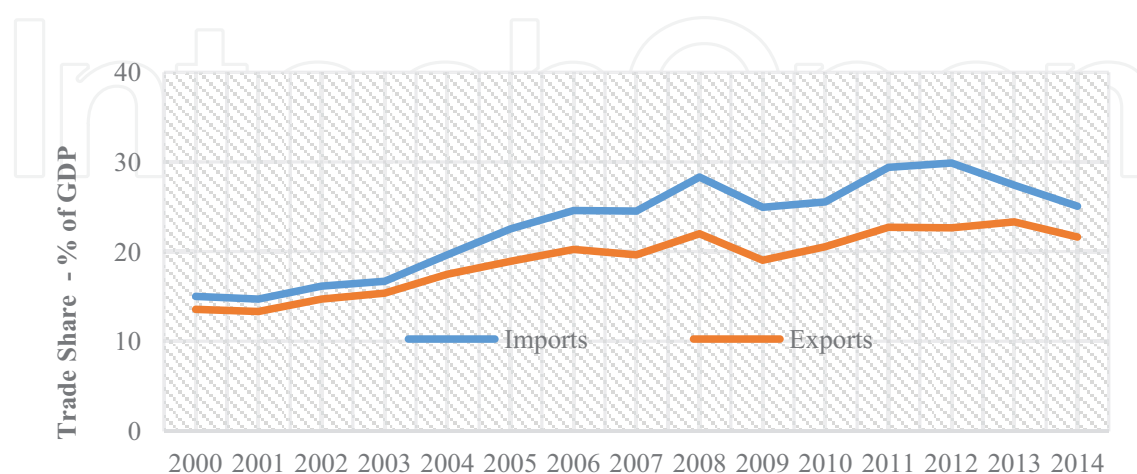


Figure 6. GDP share of goods and services trade in South Asia. Source: World integrated trade solution online database [33].

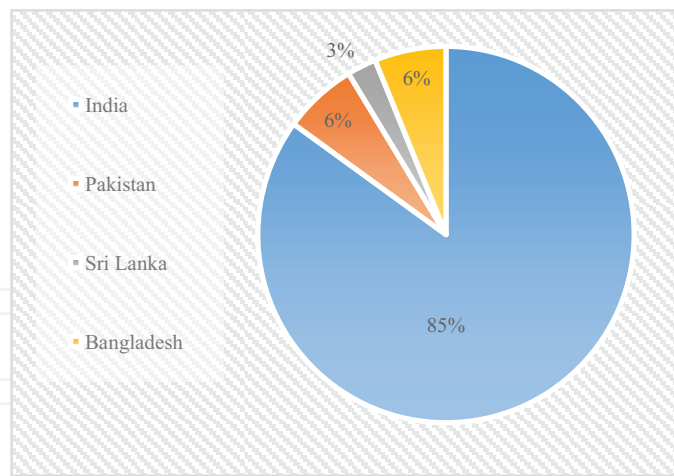


Figure 7. Export shares in South Asian countries. Source: World integrated trade solution online database [33].

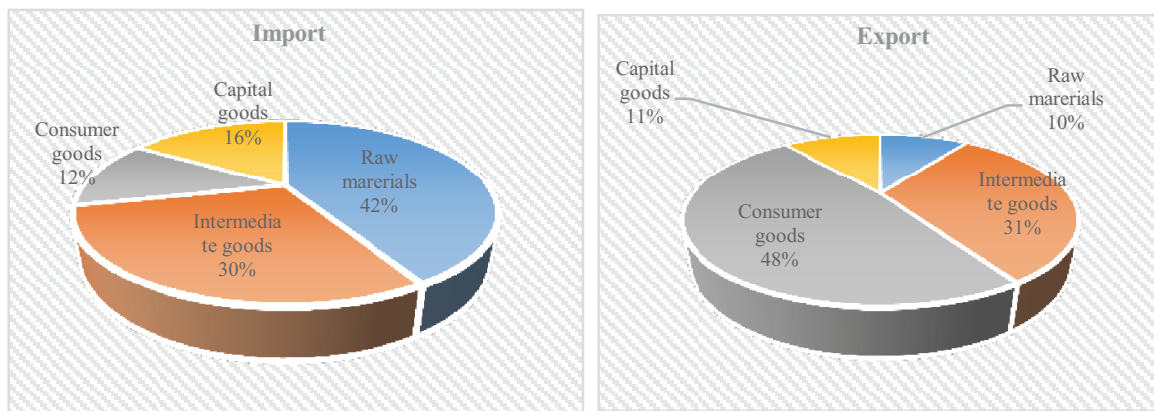


Figure 8. Trade composition in South Asia. Source: World integrated trade solution online database [33].

total regional exports and India is the major exporter in this category [34]. The manufacturing sector in South Asia is restricted by the limited capacity to generate exportable surpluses [36]. Thus, South Asia’s exports generally concentrate on labour-intensive products such as textile and garments, leather products and agricultural products, all highly dependent on imported raw materials and other intermediate goods.

Exports of South Asia comprise mainly consumer and intermediate goods, fuels, textile and clothing. This includes 1532 consumer products, 2049 intermediate goods, 584 raw materials and 90 capital goods [33]. **Table 4** shows that compared to other countries, India’s exports are diversified and their export basket consists of intermediate and consumer goods, as well as a considerable portion of capital goods. The other South Asian countries concentrate on the exporting of consumer goods such as labour-intensive textile and agricultural products. Bangladesh and Sri Lanka, in particular, mainly export textiles and clothing. The Maldives exports raw materials which represents nearly 83% total exports. Consumer goods comprise 11.5% and include mainly fish and related products. Bhutan is least diversified and exports consist of 84% intermediate products.

Country	Total number of products		Import and export product share by each product category							
			Consumer goods		Capital goods		Intermediate goods		Raw materials	
	Imported	Exported	Imported	Exported	Imported	Exported	Imported	Exported	Imported	Exported
India	4331	4434	10.04	47.84	15.95	13.03	28.80	29.53	42.50	9.08
Pakistan	4083	2877	33.23	55.12	17.15	3.06	29.06	31.49	20.26	10.19
Sri Lanka	4165	3001	12.01	76.46	4.50	4.71	4.91	10.69	5.52	7.07
Bangladesh	4148	1768	14	89.78	7.18	0.68	10.62	4.02	11.51	5.5
Nepal	4004	1175	33.93	44.31	14.13	1.31	42.05	41.86	8.04	7.59
Bhutan	3266	332	37.10	4.24	18.95	0.01	31.53	84.35	11.16	11.39
Maldives	2580	29	59.73	11.52	17.51	NA	11.74	5.09	10.15	83.29
Afghanistan	15	5	4.54	27.14	NA	NA	13.3	NA	19.34	2.13

Source: World integrated trade solution online database [33]².

²Data included in **Table 3**: related to the year 2014 except Bhutan 2012, Nepal 2013, and Bangladesh 2011.

Table 4. South Asia's exports by different product categories.

3.3.2. *Export diversification – markets*

South Asia exports to 226 destinations and imports from 231 sources [33]. The largest export trading partners of the region (excluding landlocked countries) are the USA, EU, China and UAE (**Figure 9**). The share of these countries is around 50% of total exports and this shows that South Asia's export earnings depend heavily on a few developed countries. Landlocked country exports are limited to their neighbours. India accounts for 70 and 94% of Nepal's and Bhutan's exports, respectively, whereas Pakistan and India are Afghanistan's export markets.

The largest import sources of the region (excluding landlocked countries) are East Asia and the Middle East. China, Singapore, Indonesia, Thailand, UAE and Saudi Arabia are the leading import sources of India, Pakistan, Bangladesh and Sri Lanka. Similar to exports, the landlocked countries import only from their neighbours, especially India [33].

South Asia's export and import markets are significantly concentrated. The five largest economies of the region account for nearly 50% of total trade, excluding landlocked countries. The trade of Nepal and Bhutan concentrates on India (more than 75%), whereas Afghanistan's trade primarily takes place with Pakistan and India (more than 50%). According to **Figure 10**, the highest Herfindahl-Hirschman index¹ value is recorded in landlocked countries. These countries share common borders and therefore experience difficulties in accessing markets, both within and outside the region, due to security checking and other formalities imposed by bordering governments, and poor trade transport which limits market access.

Perhaps, the most negative regional economic reality is that national incomes largely depend on the economic prosperity of developed countries and are vulnerable to global economic shocks. Regional labour-intensive exports, such as textile and garments, are directed to high-income markets, for example, the USA and EU. The USA is the leading export market for the four largest economies of South Asia: India, Pakistan, Bangladesh and Sri Lanka. As Wilson and Ostuki [35] have explained, the financial crisis of the late 1990s severely affected developing countries, including those of South Asia. Further negative impact on the South Asian economy was caused by the global financial crisis in 2008. According to the World Bank [36], the commodity price shocks led to major trade losses in South Asia which was nearly 9% of GDP until May 2008. In the light of this dependency, trade economists have stressed the importance of strengthening intra-regional trade to increase stability against external shocks. Further, the long distances of these major markets impose significantly higher costs for South Asian exporters [24].

3.3.3. *Intra-regional trade in South Asia*

South Asia remains one of the least integrated regions in the world. Intra-regional trade in South Asia has comprised merely approximately 5% of world trade over the last two decades. If India is excluded from the group, the contribution would be less than 2%. On the contrary, the contribution of the intra-regional trade of Southeast Asia accounts for around 25% of the

¹Which is commonly accepted measure for market concentration. The value ranges between 0 and 1 and if country's trade value concentrated to few markets will have an index closed to 1 (less diversifies).

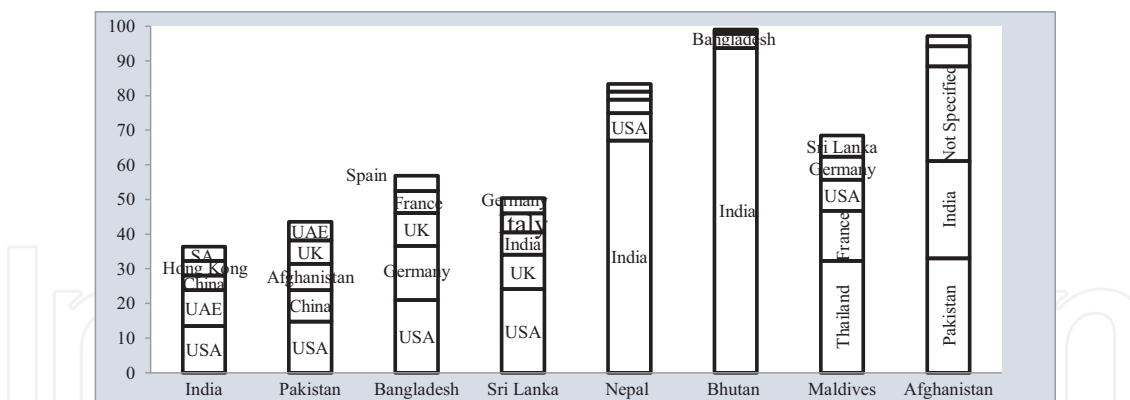


Figure 9. South Asia's trade direction—export destinations. Source: World Integrated Trade Solution Online Database [33].

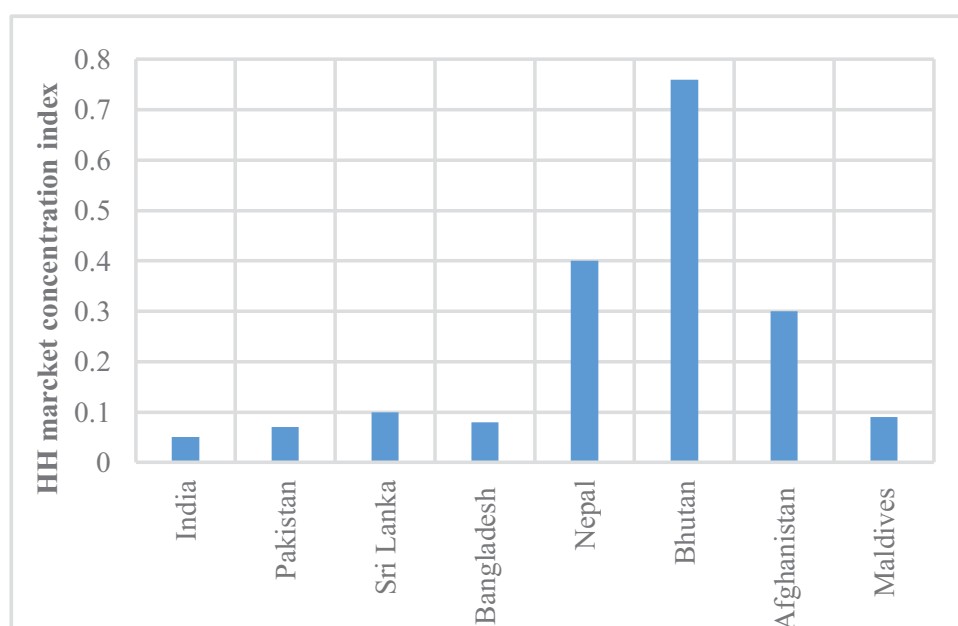


Figure 10. Market concentration in South Asia. Source: World Integrated Trade Solution Online Database [33].

world trade over the same period. The trade-oriented development strategies of Southeast Asian countries have rapidly transformed the economies of that region. Additionally, the Asia-Pacific regional trade share remains around 70%, signifying strong regional integration (Figure 11). Conversely, South Asia is the fastest growing region in terms of external trade. This regional trend indicates willingness to trade externally, limiting trade with neighbouring countries and confirming less regional integration.

The poor regional integration impedes investment opportunities, diverts markets due to poor technology and information flow and restricts economies of scale. Clearly, closer integration is vital to the development of the economies in South Asia. Furthermore, strong regional integration is

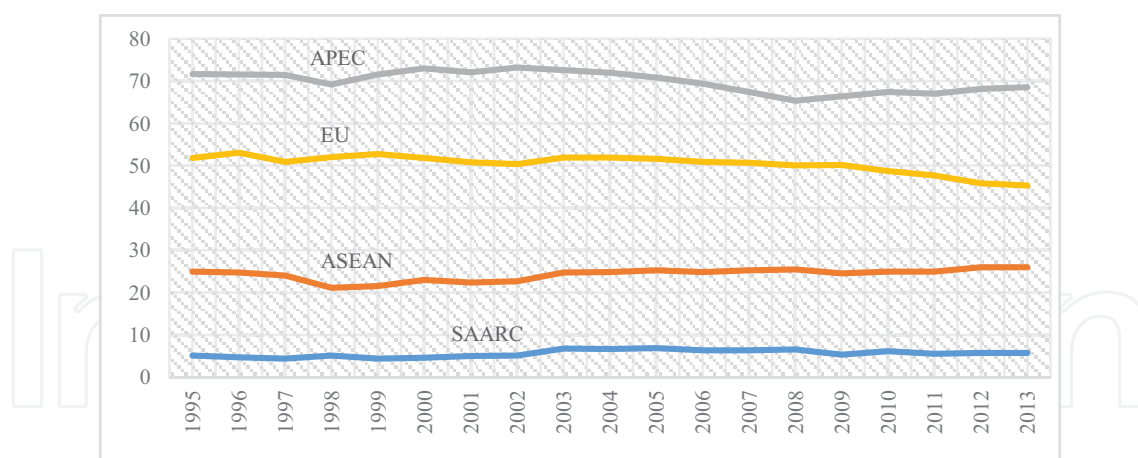


Figure 11. Intra-regional trade in goods and services (percentage share). Source: UNCTAD Stat online database [37].

essential to the reduction of poverty and inequality among the countries of South Asia, which comprises both economically lagging and leading countries. Intra-regional trade is the foremost tool with which to strengthen regional integration leading to a reduction in economic inequality. Similarly, improved trade leads to economic growth and thus significantly contributes to reduce the persistent poverty in the region.

Progressively tariff and non-tariff barriers to trade in South Asia have declined due to favourable trade negotiations. However, the region still faces enormous trade impediments. Ghani and Din [38] and Banik and Gilbert [39] have argued that tariff reforms alone, though important, are insufficient to optimising the potential contribution of trade on the development agenda. Regional welfare concern is uncertain and traders may be confronted by hidden non-tariff barriers which increase TTCs. Thus, TF is fast becoming a fundamental issue in the new global trade-driven economy and constitutes a major concern of the second-generation trade policy agenda.

There is consensus among trade economists that poorly facilitated trading systems form a major impediment to economic connectivity among South Asian countries. The World Bank [40] emphasised that South Asia's true growth potential has not been realised due to the lack of market integration within and between countries, as a result of excessive transportation costs and lack of connectivity between countries. Roy and Banerjee [21] highlighted the importance of increasing connectivity between South Asian countries. Poor connectivity that prevents economic exchange is a fundamental impediment to the regional development. Wilson and Ostuki [35] advocated the importance of measures to increase trade and reduce logistics costs in South Asia, since these are the most important steps to promoting intra-regional trade and economic integration. De [41] argued that improved TF not only promotes regional trade but also strengthens the trade capacity of the landlocked countries. This indicates that TF is the primary key to enhance connectivity among countries and reduce the gap between leading and lagging economies in South Asia. The subsequent sections discuss the major TF issues of South Asia and its impact on poverty.

3.4. Trade Facilitation and economic growth in South Asia

It is essential that South Asia can stimulate further growth in trade, in order to strengthen regional integration and enhance economic growth among economies in the region. TF is one of the keys to improve regional trade and enhance these economies.

3.4.1. Trade Transaction Costs and Trade Facilitation in South Asia

Poor TF leads to increased time and costs associated with trade transactions, as discussed in the theoretical section in this chapter. Generally, South Asian countries incur high TTCs when goods move across borders. According to the Doing Business report, trading in landlocked countries is more costly. Trade in Afghanistan is most costly, followed by Nepal and Bhutan (**Figure 12**). South Asia experiences insufficient TF which generates high TTCs, in terms of both direct (charges) and indirect costs (delays).

Furthermore, trade costs are positively correlated with the time associated with goods and services moving through borders in South Asia. Generally, South Asia undergoes unnecessary time delays at borders, as well as behind the borders. In comparison with other regions, time to trade is higher in South Asia (**Figure 13A**). TTCs associated with export and import procedures in South Asia are more than 50% higher than in the developing countries in East Asia and the Pacific. The disaggregated data related to time to trade in South Asia explain that Sri Lanka is the leading country which shows the shortest time involving exports and imports, followed by India and Pakistan. Time to trade in these countries is more or less comparable with time taken to trade in developed countries such as EU and OECD. However, Afghanistan recorded the

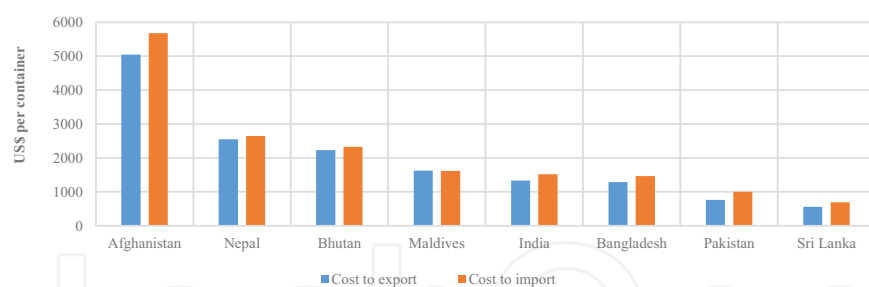


Figure 12. Costs of trading in South Asian countries. Source: Doing Business Report [42].

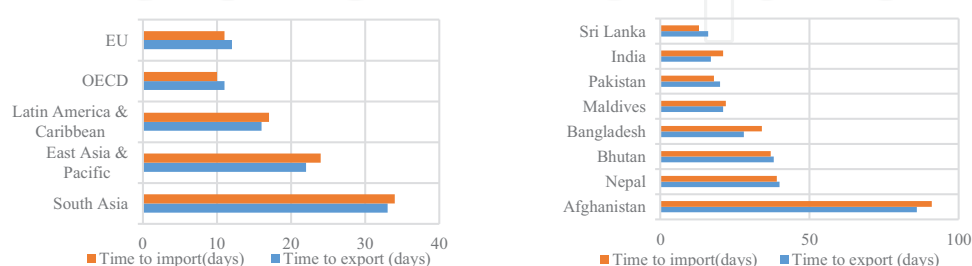


Figure 13. (A) A comparison of time to trade in South Asia with other regions. (B) Time to trade in South Asian countries. Source: Trade Costs Database [43]¹. ¹Note: Latin America and the Caribbean and East Asia pacific included only developing countries and data pertaining to 2014.

longest period taken for trade transactions, showing a substantial deviation from other countries in the region, and causing regional average time to trade to rise (Figure 13B).

Trade delays in South Asia lead to increased TTCs. For exporters, transaction time plays a major role in competing in international markets. According to Arnold [3], the textile industry in South Asia is a good example of the potential risk of not making timeous deliveries. For this reason, Bangladesh and India are willing to use expensive airfreight to prevent textile shipment delays and avoid the risk of losing clients. This confirms that time delays are more costly affairs in South Asia.

Several factors may increase TTCs at borders in the South Asian region. Requirements of several signatures for the same transaction, and the number of documents needed to be submitted increase TTCs. Time and costs involved with documentations and border clearances thus cause cost increases (Figure 14). Complicated documentation requirements and other outdated customs procedures frequently exceed tariff costs [13]. The greater the documentation, the longer it takes for clearance, generating higher TTCs. Figure 14 clearly reveals the positive correlation between time and costs during the process of documentary and border compliance.

Engman [13] has cited a survey conducted by World Bank [44] which indicated that South Asia is worse affected by customs and foreign trade regulations compared with other regions. The report highlighted that two-thirds of companies in South Asia faced major or moderate trade obstacles in their businesses. Time required for documentation is excess in Afghanistan and Pakistan followed by Bangladesh, indicating complicated customs procedures (Figure 14). Hertel and Mirza [45] state that while Thailand and Singapore authorities take a few hours to clear a vessel, a similar task in Bangladesh ports takes 2 or 3 days. Engman [13] cited a study by the Asian Development Bank (ADB) [46] that Bangladesh's garment exports could earn 30% more if port inefficiencies such as poor management, corruptions and restricted port capacity were removed. As Wilson and Ostuki [35] discussed, these delays of documentation preparation are due to a lack of standard documentation system. They cited a study Research and Information System for Developing Countries (RIS) [47] to demonstrate that India-Bangladesh border compliance needs at least 22 documents, more than 55 signatures and a minimum of 116 copies for final approval. This

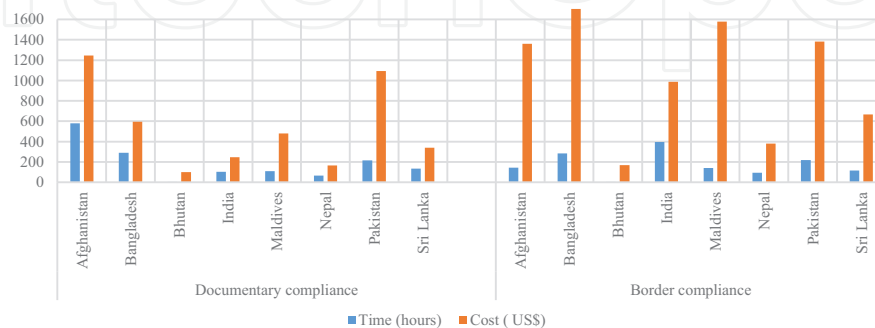


Figure 14. Time and costs involve in documentary compliance and border compliance for cross-border trading (exports + imports). Source: Doing Business Report [42].

contributes to the South Asian trend to trade with developed countries, due to the low documentary requirements and transaction times, compared with neighbouring countries.

Regional integration depends on connectivity, efficiency and speed with which goods and services move from production centres to consumer markets [48]. Thus, transportation time and costs play a vital role. In addition to the inefficient and drawn out customs practices and poor facilitation at borders, inadequate road and transport infrastructure increase TTCs in South Asia. According to **Figure 15**, domestic transport involved in exports and imports in India is very expensive compared to other countries in the region. Further, landlocked countries show more expensive domestic trade transport. This may be a result of an overabundance rules and regulations imposed by neighbouring countries during the transshipment. Wilson and Ostuki [35] discussed the fact that the lack of current integrated transport networks poses a critical problem for landlocked countries, as improvements will increase cargo shipping costs.

South Asia demonstrates a low level of port infrastructure efficiency. Wilson and Ostuki [35] have stated that the region can expect significant gains from improving ports infrastructure and reducing TTCs. Further, a lack of human resources, government standing practices and poor applications of information technology generate inefficiencies that lead to unnecessary transaction delays. These may also become more costly than tariff barriers. **Figure 16** explains the LPI which compares South Asia with other developing countries, in terms of customs efficiency, infrastructure, ease of arranging shipments, quality of logistic service, tracking and tracing capabilities and timeliness. Better logistics performance is strongly correlated with trade of goods and services. Countries with a stronger logistics performance tend to be more

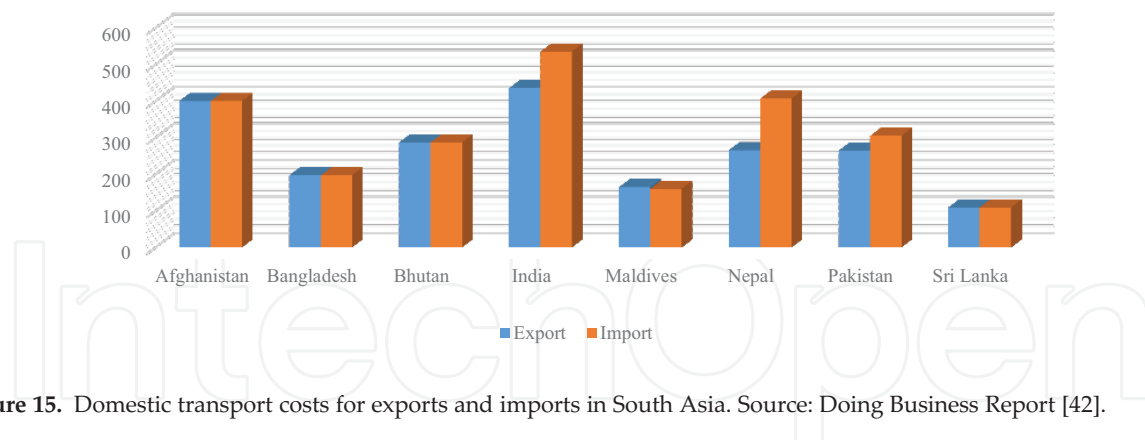


Figure 15. Domestic transport costs for exports and imports in South Asia. Source: Doing Business Report [42].

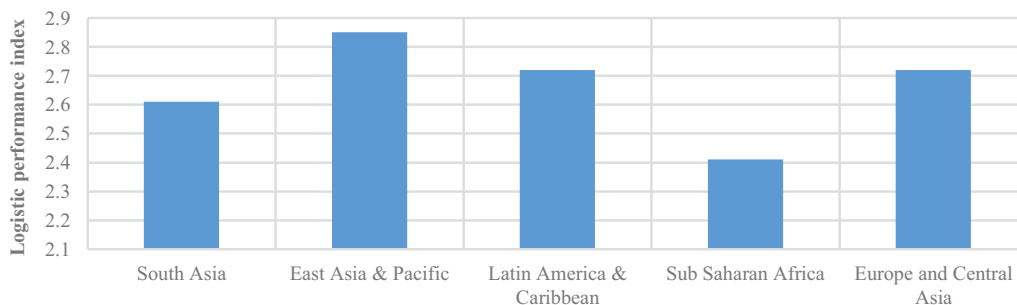


Figure 16. Logistic performance index in selected regions. Source: Trade Cost Database [43].

accessible to trade and experience faster economic growth [49]. According to this index, South Asia recorded the lowest values after Sub-Saharan Africa. The poor logistic performance in South Asia is due to poor infrastructure, high customs surcharges, congestions and excessive security checking due to political unrest (especially in India, Pakistan and Afghanistan border crossing).

3.4.2. The relationship between Trade Facilitation and economic growth in South Asia

There is a strong relationship between TF and trade in South Asia. Trade is directly linked with economic growth. Economic growth is one of the key factors which can reduce poverty in the long run. A number of studies have found that TF has now become a crucial factor impeding trade, as most other trade barriers (tariff and non-tariff) have been substantially removed.

There is an interrelationship between TF and trade volume and economic growth. Improved TF leads to increased trade volume and a larger trade volume motivates countries to introduce more efficient TF measures. The cost of TF implementation measures is very high and their real benefits are dependent on the volume of trade. Developed countries have more facilitated trade to cope with high volume of trade compared to developing countries. **Table 5** shows that upper middle-income countries perform more facilitated trade compared with low-income countries, such as those of South Asia. This shows that higher-income countries generally exhibit better TF, whereas low-income countries experience poor facilitation.

Empirical estimates revealed that the impact on economic development of improved TF in developing countries exceeds those of developed countries, as TF is positively correlated with per capita income. Further, higher income countries perform better than lower income countries, since they have better infrastructure, logistics and timeliness than developing countries [6, 9, 35, 50]. UN ESCAP [51] also found that improved TF is positively correlated with exports and per capita GDP.

Complicated trade procedures and strong regulatory requirements increase documentation processes required for trade transactions. However, in South Asia, insufficient customs and port-handling procedures, poor use of information technology and transit barriers feature as major aspects of TF, causing additional TTCs. Border transaction costs in South Asia can be as much as 50% higher than the developing countries of East Asia and the Pacific. This worsens in landlocked countries, which recorded the greatest time taken for trade transactions due to

	No of documents Exports	No of documents Imports	Time to Exports (days)	Time to Imports (days)	Logistics Performance Index
Low income	8.23	9.91	40.24	46.78	2.32
Lower middle income	7.42	8.18	27.47	31.42	2.5
Upper middle income	6.51	7.41	20.81	23.61	2.76
South Asia	8.34	9.47	33.05	34.73	2.46

Source: Based on UN ESCAP [51]

Table 5. Trade Facilitation by income levels and South Asia.

border transit restrictions. Landlocked countries thus exhibit less regional and global trade connectivity, due to limited physical connectivity. This encourages informal trade which takes place via routes of greater distance such as Dubai and Singapore. This incurs higher TTCs both directly and indirectly.

Export-oriented industries in South Asia thus must overcome inherent limitations, in order to compete in international markets. Resources are not always used efficiently in trade transactions. Due to a lack of transparency and reliability in regional trading systems, export products in South Asia are limited to a few commodities. More time-sensitive product exports are not directed to long-distance markets and/or not traded at all on international markets. Further, intra-regional trade in South Asia itself is very limited and as a result the region tends to do more trading with developed countries. This has two negative consequences. Firstly, trade outside the region increases transportation costs, and secondly, the region has greater vulnerability to global economic recessions.

Consequently, poor TF impacts negatively on trade volumes of both exports and imports. Reducing international trade would increase unemployment, by restricting the development of a complete supply chain. Further, poor TF systems reduce government revenue received from trade taxes. Consumers face higher prices and producers suffer from a reduced comparative advantage. Overall, the economy would experience a slower or negative growth, maintaining and even increasing the persistence of poverty. Improved TF would lessen these problems and produce higher returns through faster deliveries and lower costs. It is clearly evident that there exists a positive relationship between TF and economic growth in South Asia. Thus, TF must emerge as the dominant force for enhancing economic growth.

It is further evident that trade restrictiveness is mainly due to poor TF and this has become a major concern of the second-generation trade policy agenda. Recent trade research has shown the importance of eliminating TTCs through better TF, in that TF contributes effectively to overall economic development.

4. An overview of Trade Facilitation programmes in South Asia

Greater attention has been paid to TF policies in developing countries, which have mostly been unable to meet their trade expansion targets, despite trade liberalisation. Various TF initiatives have been implemented in South Asia under the umbrella of several institutions. Recently, WTO became the only multilateral institution to have implemented the Trade Facilitation Agreement (TFA). SAARC (South Asian Association for Regional Cooperation) is South Asia's major body for regional cooperation and focuses on the promotion of TF measures within the region. Apart from these two major global and regional initiatives, there are several sub-regional bodies which have implemented several TF programmes to promote regional trade.

4.1. WTO Trade Facilitation Agreement

The World Bank is the leading multilateral organisation actively involved in promoting TF in developing countries. WTO TFA has been implemented in member countries with effect from February 2017. There are three main objectives to the agreement:

1. Provisions for expediting the movement, release and clearance of goods
2. Measures for effective cooperation between customs and other authorities
3. Provisions for technical assistance and capacity building

TFA has three sections. Section I contains the provisions to clarify and improve the three articles of the General Agreement on Tariffs and Trade (GATT), that is, Articles V, VIII and X. Article V provides for the freedom of transit of members through fellow member territories. WTO members are permitted to use the most convenient routes through the territory of other members for transit. This shall not be subjected to traffic in transit and commitments, including no customs and transit duties or other charges imposed at the transit to ensure the elimination of unnecessary delays or restrictions. This provision also ensures that all essential charges are reasonable and Most Favoured Nation (MFN) treatment should be the governing principle for all charges imposed on traffic in transit. The provisions of Article VIII contain the fees and formalities applicable to importation and exportation. The implication here is to restrict members to levy fees and charges that represent solely the approximate costs of the service delivered. Fees and charges for importation and exportation should not incorporate indirect protections or fiscal benefits such as import taxation. Article VIII further ensures the imposing of reasonable penalties for breaching customs regulations or procedural requirements and a commitment to minimise import/export documentation. The major provisions of Article X relate to the publication and communication of trade regulations and demand the prompt publication of laws, regulations, judicial decisions and administrative rulings affecting imports and exports. This provision thus enables partner governments and traders to immediately access such rules and regulations. Members shall further commit to publish details of new or more burdensome requirements and restrictions or prohibitions on the transfer of payments, prior to enforcement of such changes. Laws and regulations should be impartial and reasonable.

Section II contains special and differential treatment (SDT) provisions, allowing developing and least developed countries (LDCs) to determine when they will begin implementation of specific provisions of the agreement and to identify which provisions will only be implemented after technical assistance and support for capacity building. Section II also highlights that in order to qualify for the benefits of SDT, a member must categorise each provision into one of three categories:

Category A: provisions that the member will implement by the time the agreement takes effect, or in the case of a least-developed country member, within 1 year of the effective date.

Category B: provisions that the member will implement after a transitional period.

Category C: provisions that the member will implement on a date after technical assistance and support for capacity building.

Section III includes provisions for an institutional framework to establish a permanent committee on TF at the WTO and requires members to establish a national committee to facilitate domestic coordination and implementation of the provisions of the TFA [52].

It is estimated that the TFA will reduce global trade costs by an average of 14.3%; African countries and least-developed countries are projected to enjoy the biggest average reduction in

trade costs. The full implementation has the potential to reduce the average time needed to import by 47%. Cuts in export time are predicted to achieve a 91% reduction from the current average [1]. Further, the WTO has reported that the TFA will increase exports of existing traders and encourage new firms to export for the first time. The TFA is expected to contribute to world annual export growth and GDP growth by 2.7 and 0.5%, respectively. Developing and least developed countries are expected to enjoy two-thirds of all benefits after full implementation of the TFA [1].

4.1.1. TFA commitments in South Asia

TF programmes undertaken by South Asian countries, with respect to WTO TFA, can be assessed on the basis of publicly distributed evidence. Due to the lack of available information on South Asian TF programmes, this section is based on the few reports published online. The following section discusses the TFA commitments of South Asian countries.

4.1.1.1. Commitments for the provisions of freedom of transit (Article V)

Article V is more crucial for the landlocked countries as they face higher TTCs in transit. According to Weerakoon et al. [53], India and Nepal have included several provisions regarding exceptions to non-discrimination of sensitive goods which require transshipment, regional transit agreements and the use of international standards. The two parties have agreed to provide new measures for simplifying the procedures of clearance of containerised traffic in transit. Chaturvedi [54] reported that Customs authorities in India have started to implement programmes on the further simplification of transit procedures. According to this report, there is no tax, duty or cash deposits for transit of goods in India. India also signed a formal treaty with Bhutan in 1995, in order to accommodate transit facilities and a similar treaty is expected to be signed with Afghanistan.

The relevance of provisions of transit measures established in Article V is very limited for Bangladesh which is geographically not proximate to any landlocked countries. However, Chaturvedi [54] highlighted that Nepal and Bhutan (landlocked countries in South Asia) are willing to use Chittagong and Mongla sea ports in Bangladesh. As reported by Weerakoon and Thennakoon [53] and Chaturvedi [54], there are no specific measures related to Article V that have been implemented by the Bangladesh government.

In accordance with Article V, Sri Lanka has made considerable efforts towards express clearance of goods in transit and the government has established a policy of non-discrimination for transit goods to simplify clearance. Sri Lanka is further considering the acceptance of guarantees on the clearance of goods in transit [54]. Pakistan has also committed to the rapid clearance of transit goods.

4.1.1.2. Provisions for fees and formalities connected with importation and exportation (Article VIII)

According to Chaturvedi [54], importation and exportation fees and charges are clearly defined and published on the Internet in Bangladesh. Additionally, an electronic data interchange (EDI) system has been introduced under the customs modernisation plan. There are

several programmes which have been introduced by the Bangladeshi government in committing to Article VIII. These programmes include (i) the introduction of a self-assessment and rapid clearance procedure, (ii) simplification of tariff structures, (iii) customs modernisation with the objective of increasing the efficiency of customs clearance and (iv) simplification of documentation procedures [53].

The system EDI was established in Sri Lanka in 2004 under a project titled Sri Lanka Automated Cargo Clearance System (SLACCS), fulfilling the major provisions for technological improvement in trade procedures [55]. According to the National Strategies for Regional Integration Report (NSRI), EDI facilities must provide for the electronic submission of import/export documents. Chaturvedi [54] reported that there is a growing demand for transparency and non-discrimination in fees and charges in Sri Lanka with the provisions of online payments procedures. This report also indicated that Sri Lanka has simplified documentation and declarations with single window clearance procedures.

Nepal has also made considerable efforts to comply with Article VIII, which does away with charges to traders for the provision of information and makes most trade-related information freely available [54]. They have introduced a new custom declaration form and a single administrative document to facilitate trade. Further, Nepal has introduced a system to reduce documentation requirements and is progressing in the use of information technology for cargo handling [53].

Pakistan has introduced an electronic assessment system (EASY) in 2000 to reduce the customs clearance time and provides online billing system for exports and imports. It is no longer required to present billing forms at Customs and an E-form number is sufficient. Chaturvedi [54] reports that Pakistan has introduced a single administrative document (good declaration form) for both exports and imports, as well as a customs computerised system (PACCS) under the customs administrative reforms. The report also indicates that India has substantially reduced the number of documents and number of copies needed for exports and imports; efforts have been made to avoid duplication information collections by Customs. In order to enhance coordination between border agencies, a broad institutional network has been introduced. The report further indicates that India operates a system for publishing release and clearance data quarterly. India has prioritised systematisation of customs codes (HS codes) at the eight-digit level for facilitating trade.

4.1.1.3. Publication and communications of trade regulations (Article X)

Sri Lanka has made a considerable progress in publication of trade regulations. Most trade regulations are available online and information related to penalties, customs appeals and judgements are accessible via the government gazette [54].

In Nepal, laws, regulations, administrative rulings, documentary requirements, standing practices and tariff classifications are available on the Department of Customs website. Weerakoon et al. [53] indicated that Nepal plans to appoint an institutional body responsible for ensuring transparency and has developed Inland Customs Depots at three border points (Birgung, Biratnagar and Bhairahawa) to reduce the time and cost of customs procedures. Nepal has

established a client help desk, call centres and trade counters to give assistance. In addition, a rulings and appeals system has been introduced [54].

India offers advance rulings for classification, valuation and application for duty exemption related to exports and imports of production and manufactured goods. India uses electronic media extensively for disseminating information [53] and a risk management system has been introduced at all customs points [54].

The Bangladeshi government supplies all the information related to trade but customs charge for providing information relating to rules and regulations at a flat rate. Details of such procedures and entry duties are available on the Internet [54]. The report indicates that the Bangladeshi port authority has initiated single-step service to reduce documentation and clearance time.

Pakistan has made laws, regulations and most administrative guidelines available on the Internet. The country has implemented a tracking system using an electronic seal and application numbers to facilitate paperless trade transactions and single window clearance [54].

4.2. Regional initiatives

According to the WTO [1], there is a rapid growth of number of regional trade agreements (RTAs) with TF provisions. This trend reflects the expansion of RTAs in both developing-developing (South-South) countries and developed-developing countries (North-South). The RTAs TF provisions cover most areas which have not been covered by TFA [1]. RTAs in South Asia are paying particular attention to regional TF issues. A regional integration agenda eliminating tariff and non-tariff barriers can never succeed without proper TF, because poor TF keeps entrepreneurs away from taking advantage of opportunities across borders in comparison with tariff barriers [21]. There are numerous RTAs in effect which cover the South Asian region, sub-regions and bilateral negotiations. Section 4.2.1 discusses few major RTAs and their provisions of TF.

4.2.1. South Asian Free Trade Area (SAFTA)

Recognising the importance of strengthening economic cooperation among South Asian countries, governments of the SAARC signed the South Asian Free Trade Area in 2004, as a transition to the South Asian Preferential Trade Agreement (SAPTA). Adoption of a standardised TF by member countries is one of the objectives of SAFTA [56].

Article 8 of this agreement establishes several additional recommendations for TF adoption which include

- a. Equalisation of standards, mutual recognition of testing and accreditation of testing laboratories of member countries and certification of products.
- b. Simplification and harmonisation of customs clearance procedure.
- c. Harmonisation of national customs classification based on HS coding system.
- d. Customs cooperation in resolving entry point disputes.

- e. Simplification and harmonisation of import licensing and registration procedures.
- f. Simplification of banking procedures for financing imports.
- g. Transit facilities for efficient intra-SAARC trade, especially for landlocked countries.
- h. Removal of barriers to intra-SAARC investments.
- i. Macroeconomic consultations.
- j. Rules for fair competition and the promotion of venture capital.
- k. Development of communication systems and transport infrastructure.
- l. Making exceptions to foreign exchange restrictions, if any, relating to payments for products under the SAFTA scheme, as well as repatriation of such payments without prejudice to rights under Article XVIII of the General Agreement on Tariffs and Trade and the relevant provisions of Articles of Treaty of the International Monetary Fund (IMF).
- m. Simplification of procedures for business visas.

4.2.2. The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

This sub-regional organisation came into force in June 1997 in terms of a declaration made in Bangkok. This organisation includes seven member states: five from South Asia (Bangladesh, Bhutan, India, Nepal and Sri Lanka) and two from Southeast Asia (Myanmar and Thailand). BIMSTEC has also implemented several TF promotional programmes in order to promote free trade among members. They have identified areas such as transport and communication sector development as priority commitments. However, this agreement does not provide any special provision for TF [21, 54]. International agencies such as the Asian Development Bank provide technical assistance to BIMSTEC in developing policies and strategies to enhance physical connectivity and to develop a regional TF [57].

4.2.3. The South Asia Sub-Regional Economic Cooperation (SASEC)

In addition to these two major intra-regional initiatives, there have been several sub-regional interactions between SAARC countries to strengthen intra-regional trade in South Asia. The South Asia Sub-regional Economic Cooperation focuses on the most significant TF improvements. SASEC was established in 2001 as a project-based partnership to improve cross-border connectivity, boost trade among member countries and strengthen regional economic cooperation. The member countries are Bangladesh, Bhutan, India, the Maldives, Nepal and Sri Lanka. Since 2001, this organisation has contributed to the implementation of 44 regional projects (\$9.05 billion) in energy, transport, TF, economic corridor development and the information and communications technology sectors (SASEC). ADB administers the SASEC Program. SASEC has established a TF Strategic Plan for 2014–2018, aiming to boost intra-regional trade through the reduction of time and costs. The TF strategic framework focuses on five priority areas:

1. **Customs modernisation and standardisation:** This includes simplifying and expediting border formalities to facilitate the movement of goods, vehicles and people; increase the application of information and communication technology processing and developing a national single window system that would link all border agencies with the trading community.
2. **Standards and conformity assessment strengthening:** This aims to identify sanitary and phytosanitary (SPS)-sensitive commodities and strengthen the National Conformity Assessment Board.
3. **Cross-border facilities improvement:** Establishing logistics facilities and services at major trade ports to facilitate trade.
4. **Through transport facilitation:** Develop a pilot bilateral transport facilitation arrangement.
5. **Institution and capacity building:** Enhance cooperation and coordination mechanisms among stakeholders to improve TF.²

SASEC has prioritised customs modernisation and harmonisation, as well as institution and capacity building during the first 2 years of the TF strategy.

In general, entire TF implementation programmes in South Asia proceed with similar objectives. However, the TFA implemented by WTO is focused only on simplification and harmonisation of trade procedures at borders to increase global trade, while other regional TF agendas target both border issues and behind the border issues including hard infrastructure developments, in order to stimulate intra-regional trade. However, it is very difficult to identify which TF measures are most efficient and have contributed to boost trade in the region. TF implementation programmes are no easy mission since the need for investment spending is immense. Bayley [57] also highlighted that the improvement of TF is a slow laborious process. Efforts to achieve regional implementation targets have greater complexity and thus are more difficult to meet than national goals. Similarly, regional initiatives take longer to meet targets.

5. Concluding remarks

A facilitated trading system is a key to expanding trade. Trade is a foremost factor in achieving economic growth. Thus, efficient TF measures have the potential to enhance economy. South Asian trade is impeded by serious TF issues. As discussed in this chapter, South Asian TTCs, both direct and indirect, are relatively high. Obviously, traders are distressed by border delays which add further costs above direct charges for acquiring information, documentation costs, charges for logistic services and customs brokers and the customs clearance fees which increase with outsourcing to service providers. Such charges increase when border facilitations are insufficient and complicated.

²SASEC Trade Facilitation Strategic Framework 2014–2018 (http://www.sasec.asia/uploads/news/sasec_tradefacilitation_strategic_framework.pdf)

Complex regional trade procedures and administrative barriers have led to laborious documentation to process trade transactions. Insufficient customs procedures and port handling, ineffective use of information technology and transit barriers are few of the major TF issues facing South Asia. Such barriers to trade affect landlocked countries more adversely, as trade by these countries faces additional red tape imposed by transit governments. The landlocked countries exhibit fragile economic growth leaving their poor among the poorest in the region. This has led to substantial regional disparities. Conversely, despite its position as regional leader in economic development, India is the home of the majority of the poor in the region. This chapter has ascertained that if the region could deliver trade goods and services across its borders on time and with minimum costs, it would increase export competitiveness and promote imports. Therefore, it is essential that South Asia can stimulate further growth in trade, in order to increase economic development and reduce poverty lags among the economies of the region. TF is one of the keys to improving regional trade and strengthening economies. There are several TF initiatives which have been implemented to bolster regional trade. WTO TFA is one of the mammoth implementation programmes currently being undertaken. In addition, there are several regional TF programmes active. However, further research is essential to identify which TF measures are more efficient for boosting trade across the region.

Author details

Subashini Perera, Mahinda Siriwardana* and Stuart Mounter

*Address all correspondence to: asiriwar@une.edu.au

UNE Business School, University of New England, Armidale, NSW, Australia

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