

Trade and Transport Facilitation Audit India Country Report

2017



Trade and Transport Facilitation Audit

India Country Report

2017

This Research Report has been published as a part of the collaborative project 'Trade and Transport Facilitation in South Asia', implemented by South Asia Watch on Trade, Economics and Environment (SAWTEE), Kathmandu, Nepal. The project was undertaken in partnership with Centre for Policy Dialogue (CPD), Dhaka, for Bangladesh country study; Consumer Unity & Trust Society (CUTS), Jaipur, for India country study; Sustainable Development Policy Institute (SDPI), Islamabad, for Pakistan and Afghanistan country studies; and Institute of Policy Studies of Sri Lanka (IPS), Colombo, for Sri Lanka and Maldives country studies.

This report 'Trade and Transport Facilitation Audit: India Country Report' was prepared by a team of researchers at the CUTS International.

©South Asia Watch on Trade, Economics and Environment (SAWTEE)

26 Mamata Galli ♦ P.O. Box: 19366 ♦ Tukucha Marg

Baluwatar ♦ Kathmandu ♦ Nepal

Tel: 977-1-4444438 / 4424360

sawtee@sawtee.org

www.sawtee.org

Views expressed in this report are of the author(s) and do not necessarily reflect the official position of SAWTEE or its member institutions. This publication has been issued without formal editing.

Table of Contents

1. Introduction and Background.....	1
1.1 Organization of the paper and key insights.....	6
1.2 India and the Trade facilitation agenda.....	9
1.3 India's trade performance with South Asia and the World: Actual versus potential.....	9
1.4 Rationale for the study and its major objectives	15
1.5 Methodology	17
2. Major trade routes and state of trade logistics in India	19
2.1 India's main trade routes and corridors.....	19
2.2 Trade Logistics Performance	21
3. Export and import procedures and documentation requirements.....	27
4. Literature review	33
4.1 Insights from India-focused studies and policy documents	38
5. Institutional arrangements on trade and transport facilitation.....	42
6. Case Studies on trade and transport facilitation from within the region.....	46
7. Primary survey and its findings	53
7.1 Survey methodology	53
7.2 Survey Results.....	54
7.2.1 Publication of trade related rules and regulations	54
7.2.2 Rules and procedures for export and import	56
7.2.3 Trade-related infrastructure and services	60
7.2.4 Priority Areas regarding Improvement of trade facilitation in India.....	61
8. Policy Recommendations and Conclusions	63
References.....	64
Annexure -1	73
Annexure -2	90

1. Introduction and Background

Since the 1980s, the GATT and subsequently, the WTO-led multilateral trade negotiations along with the rapidly growing number of Regional Trade Agreements (RTAs) and Preferential Trade Arrangements (PTAs) have resulted in consistent and progressive decline in tariffs (Hoekman and Kostecki 2001). South Asia, where tariffs remain high for what are extensive Sensitive Lists, tariffs have nevertheless gone down with measures like SAFTA (Rahman 2015).

Progressive decline in tariffs and rapid improvements in logistics and information and communication technologies (ICT) have reduced trade costs and facilitated cross-border movements of goods which instead has driven fragmentation of production (Ravenhill 2014). Rapid formation and growth of global value chains (GVCs) means that trade in intermediate goods has been growing faster than the finished goods (Banga 2014). More crucially, over half the manufacturing exports (US\$4.5 trillion or 51 percent of the total) come from the GVCs (Banga 2014). Consequently, it is now widely recognized developing countries must become part of GVCs if they are to acquire export competitiveness, industrialize and register rapid and sustained economic growth (Gereffi 2014). In other words, entry and participation (as well as subsequent upgradation) in GVCs is critical to the development story of developing countries particularly the least developed countries' bloc (LDCs) which have been lagging in economic development attainments. A necessary condition for participation as well as formation of GVCs—or, for instance, regional value chains—is seamless flow of goods wherein the inputs and intermediate goods can be obtained at production locations at globally competitive costs (Serieux 2014). However, this is barely the case for most developing countries including those in South Asia as trade-related transaction costs, also termed trade costs, remain high (Basnett and Razzaque 2014; Banga 2014).

Tariffs, which stand significantly reduced, are only one part of the trade-related transaction costs. Non-tariff costs, in the form of Non-Tariff Barriers (NTBs) remain and are in fact, a significant component of overall trade costs (Kowalski et al 2015). NTBs, routinely discretionary, are aimed at intervening trade flows and can take forms like price control measures (administered prices and antidumping measures), financial measures (advance import deposit, cash margin requirements, advance duty payments), standards-related measures, licensing requirements (linked with local production, local content requirements) and seasonal restrictions. Somewhat less discretionary—and often emanating from structural factors—NTBs exist in the form of cumbersome and weakly harmonized trade procedures, poor and ineffective publication and dissemination of trade procedures, inability to meet standards and SPS-TBT requirements stipulated by the trading partner/s, weak trade logistics (like poor-quality roads, warehouses, railway or air transport services and testing facilities) and unpredictable transit regime (WTO 2015; Basnett and Razzaque 2014). These NTBs result in delays, uncertainty and unpredictability and escalate trade costs which instead undermines competitiveness and trade performance. Indicative of the significance of the non-tariff component of trade costs, Kowalski et al (2015) estimates that over 60 percent of trade costs are driven by non-tariff issues such as cumbersome trade procedures, transit access, weak deployment of ICT technologies in administering trade

procedures and currency fluctuations. While trade costs remain and impact developing countries and regions significantly, so does the scope for policy interventions to address the bottlenecks in the supply chain (WTO 2015). Unsurprisingly, trade costs among country pairs in South Asia—a region where out of the eight developing countries, four are LDCs and of which three are landlocked—are on average, are 20 percent greater than among country pairs within the ASEAN region and nearly 3 times that in the North American Free Trade Agreement (NAFTA) region (Basnett and Razzaque 2014). Such trade cost levels have meant that intraregional trade in South Asia is among the lowest among regions globally at about 5 percent of the region's total trade (Rahman 2015; De 2014). Serieux (2014) suggests that with such trade costs, formation of regional value chains will be significantly difficult. Existing studies focused on the South Asia region have documented the key drivers of trade costs in the region (Rahman 2015; Basnett and Razzaque 2014; De 2014; Hertel and Mirza 2009; Taneja et al 2014; Sattar 2014; Adhikari and Kharel 2014). Major ones of these are:

- Weak infrastructure (behind and beyond the border) that raise connectivity costs,
- Poor information flows (publication and dissemination of trade procedures),
- Onerous documentation requirements and weakly harmonized procedures,
- Difficulties in compliance to standards and SPS-TBT requirements,
- Opaque and discretionary application of para-tariffs and inconsistent and unpredictable application of customs and border procedures,
- Corrupt practices such as frequent soliciting informal payments and bribes,
- SPS-TBT measures, instead aimed at securing health, are deployed arbitrarily in the region creating significant unpredictability of trade procedures,
- On testing and certification, Taneja et al (2014) evidences that not only are testing facilities often not located at the respective customs point but the same are frequently poorly equipped which instead is a key factor in lack of mutual recognition of tests and certifications,
- Para-tariffs or special duties imposed upon imports and other discretionary NTBs further raise transaction costs in trade in South Asia transit-related delays emanating from poor port infrastructure makes the trade regime highly unpredictable and costly for landlocked countries in the region,
- Along with weakly harmonized and onerous procedures and documentation requirements, consignments are subjected to multiple inspections by several authorities at various points on both sides of the border including in transit (De 2014). Such practices mean significant delays and costs.

Given the above bottlenecks, South Asian economies, predictably rather, maintain better trade linkages with the other regions than their neighbourhood despite opportunities in the neighbourhood (Armstrong et al 2008; De, 2013). In terms of addressing the above obstacles and inefficient practices, several reforms have been suggested. De (2014), for instance, observes that inspections can be limited to being conducted at loading and unloading points. Furthermore, the same study suggests that effective reforms to address the above obstacles and lubricate supply chains will require an empowered national body that can coordinate with relevant bodies. On harmonization, Sattar (2014) suggests that while some differences will nevertheless persist, information on trade procedures has to be published regularly and effectively disseminated; that alterations in the rules be notified effectively (also in WTO 2015). Since poor infrastructure in trade corridors and routes is a key driver of trade costs, policy interventions are required in improving the same (De 2014). These trade and transport facilitation reforms are part of the Trade Facilitation Agreement (TFA) which came up in the 2013 Bali Ministerial Conference from the otherwise stalled Doha Development Agenda (WTO 2015). Studies have suggested that the region stands to benefit substantially from trade and transport facilitation reforms (Armstrong, Drysdale and Kalirajan 2008; Clark et al 2004; Sattar 2014).

Such reforms focus upon simplification and harmonization of customs procedures (valuation, inspection, testing, and documentation among others), effective publication and dissemination of trade procedures, enhancing border cooperation (coordination, information sharing, harmonization and simplification of procedures), developing and improving infrastructure (roads, warehouses, testing and certification labs, deployment of ICT and single window solutions) and predictable and efficient transit mechanisms (WTO 2015). Trade facilitation measures would include, for instance, mutual recognition of certifications and tests. A key mechanism in enabling mutual recognition and accreditation is upgrading of testing and certification facilities that remain weak. Initiatives like the South Asian Regional Standards Organisation (SARSO) Dhaka is a step in the right direction. The Trade Facilitation Agreement rightly emphasizes technical assistance to developing countries to implement the reforms; that the latter should be provided Special and Differential treatment (S&D) in adoption of the trade facilitation reforms. Bangladesh ratified the Trade Facilitation Agreement in 2016. Bangladesh became the 94th WTO member and 12th LDC to ratify the agreement.

Existing South Asia-focused studies have attempted to assess the major bottlenecks and quantify not only the benefits that the trade and transport facilitation reforms may bring about but also the costs imposed by the existing trade cost structure. Bottlenecks in trade evidenced have been congestion at ports, complex trade procedures, excessive documentation (number of documents and signatures required), insufficient use of ICT (Information, Communication Technologies) and poor infrastructure (roads, airports, warehouses and testing laboratories; Wilson, Mann and Otsuki, 2005; Wilson, Mann and Otsuki, 2003; Butt and Bandara, 2008). These constraints not only increase trade costs and reduce intraregional trade but also incentivize routing of trade via informal channels.

Banik and Gilbert (2008), for instance, observes that that lack of infrastructure (both physical and services related, measured by usage rate of digital services), cumbersome trade

regulations, inefficiencies at ports and corrupt practices such as soliciting bribes contribute to high trade costs in South Asia. Duval and Utoktham (2010) suggest that the region has almost a similar trade cost structure whether it is inter-regional trade or intra-regional trade and that trade costs in relation to ASEAN are significantly higher. In this backdrop,

Armstrong, Drysdale and Kalirajan, (2008) shows that exorbitant trade costs keep the regional trade in South Asia at under 50 percent of the potential (US\$16.17 billion against the potential of US\$37.55 billion). Clark et. al (2004) estimates that improving the ports' efficiency by the existing 25th percentile to 75th percentile will lower the overall shipping cost by over 12 percent. Studies observe that protectionist tendencies among South Asian countries are a major dampener when it comes to lubricating trade in which efforts like the South Asia Preferential Trade Agreement (SAPTA) and South Asia Free Trade Agreement (SAFTA) have nevertheless been made (Hertel and Mirza 2009). On the ways to enhance gains from SAFTA, Ahmad, Kalagama and Ghani (2010) argues that high non-tariff barriers require addressing via effective trade facilitation reforms. Within the NTBs, ADB (2017) suggests that major trade costs reductions can be achieved via simplification in trade procedures, their effective dissemination and reduced unpredictability; that improvements in trade logistics and infrastructure, emphasized by useful initiatives like the South Asia Sub-regional Economic Cooperation (SASEC), will not reduce exorbitant transaction costs in trade.

Several studies shed light on trade and transport facilitation in India whether it is assessing trade-related bottlenecks, estimating gains from trade facilitation or documenting the trade facilitation initiatives undertaken in the recent years. In a 2004 study, Wilson et al suggests that the South Asia region has gained the most (export gains of over 40 percent, the highest among all regions) via trade facilitation measures and within the region, India has had largest gain in dollar terms (\$10.4 billion). While benefits are to be had in the form of greater exports and enhanced competitiveness, studies such as CUTS (2004), Mukherji (2004), Baysan et al. (2006) and Weerakoon (2008) suggest that fragile relationships among countries within the region are a major dampener when it comes to effective trade facilitation reforms. Studies such as Sen (2004), Weerakoon et al (2005), Man Singh (2006), Ahmed (2006), George (2011) and Chatterjee and George (2012) study trading environment—logistics quality, clearance capacity and efficiency at Land Customs Stations (LCSs) in South Asia (including India), harmonization of border procedures and administrative capacity and transparency and argue that while there have been incremental improvements, the reforms are rather slow and which impede growth of intraregional trade. On improving regional connectivity which remains inefficient and cumbersome in the region, while the BBIN (Bangladesh, Bhutan, India and Nepal) agreement signed in 2015 signaled improvements, the agreement is yet to come into action (Rahman 2015). Relatedly, on trade-related inefficiencies concerning connectivity and trade procedures, Sattar (2014) observes how India-bound Bangladeshi consignments routinely face obstructions in Indian states due to inappropriate dissemination of SAFTA concessions among Indian states.

Roy and Banerjee (2010) identify several constraints faced by Indian traders:

- Lack of multi-modal transportation and inefficient use of the extensive rail network
- Congested, inefficiently run ports and lack of air-cargo ports in large parts of the country
- Near non-existent inland water transport system feeding into ports, despite potential and feasibility
- Inefficiently run state-level (provincial) border crossings; complaints of rent-seeking and harassment in the name of security
- Multiple and often overlapping jurisdictions and cumbersome regulations in implementing border-related procedures resulting in delay. This raises avoidable transaction costs. 'Discretionary powers' to officials has resulted in rent-seeking

On the infrastructure deficits, Kim and Nangia (2008) show that unlike China, India's infrastructure development programmes were not intended to address future demand, but poverty alleviation through rural connectivity (also in Ernst and Young 2010). Although Clara Brandi (2013) suggests that public private partnerships have somewhat alleviated the financing-related constraints in infrastructure development. D'Souza (2009) emphasizes importance of developing functional and efficient economic corridors and suggests that while the same is linked to region's competitiveness and trade prospects, much will depend on the efficiency of border corridors which, for instance, hinges on whether trade procedures are carried out efficiently by authorities. The paper adds that for any economic corridor to yield results, whether in landlocked or coastal countries, required physical infrastructure must be available.

Against this backdrop, this paper assesses the status of trade and transport facilitation in India with respect to its trade with the South Asian region. The paper attempts to analyse the major bottlenecks that drive up trade costs. Doing so enables outlining of priority trade and transportation facilitation reforms. Guided methodologically by the Trade and Transport Facilitation Toolkit 2010 of the World Bank, the study conducts such audit by assessing the key bottlenecks in trade and associated supply chains.

1.1 Organization of the paper and key insights

The opening section sets the context for the rest of the paper by briefly discussing the concept of trade costs and what drives trade costs, trade and transport facilitation reforms, their rationale and the key reforms that facilitate trade (Section 1). To do so, studies on the South Asia region as well as those specific to Pakistan are drawn upon. Key sources of exorbitant trade costs in the region as well as India, which has relatively better infrastructure and trade logistics in the region, are inefficient processing of trade, weaknesses in infrastructure—in India's case, poor warehousing and inefficient railway services; based on the primary survey—weak information flows on procedures and regulation among country pairs and unpredictable inconsistent application of customs and border procedures. Subsection 1.2 briefly presents some of the recent trade facilitation reforms undertaken by India. This is partly aimed at shedding light on some of the key aspects of the Trade Facilitation Agreement for developing countries.

Subsection 1.3 present India's trade performance, both global as well as pertaining to South Asia. While about a fifth of India's total merchandise exports went to SAARC in 2016-17, it imports under 3 percent of its total imports from the region (Subsection 1.3). Bangladesh, Sri Lanka and Nepal are the three major import sources in SAARC (Figure 2). These countries are also India's major export markets in the region (Figure 3). Fuel, fabrics and sugar are among the top exports while products like cement and jute and related fibers are the major imports (Table 1 and 2). India's trade with the region remains well below potential despite bilateral and regional initiatives SAFTA and in this, high trade costs have been considered a key factor (De 2013). Subsection 1.4 discusses why the study is important and timely followed by the study's major objectives such as assessing the status of trade and transport facilitation in India's trade with the region. The same is achieved via analysis of trade and transport facilitation bottlenecks. The study sheds light on the priority reforms via a comprehensive survey of 500 relevant private and public participant in trade. The methodology is guided by the Trade and Transport Facilitation Toolkit of the World Bank (World Bank 2010; Subsection 1.5).

Subsection 2.1 assesses major trade routes and corridors in India followed by a discussion on India's trade logistics quality and performance in relation to the rest of the region and the global benchmarks (Subsection 2.2). To do so, cross-country analyses like World Bank's Doing Business Analyses, Logistics Performance Index (LPI), UNCTAD's Liner Shipping Connectivity Index and World Economic Forum's Global Competitiveness Index are drawn from. These assessments focus on components like customs efficiency, quality and quality of infrastructure, the trading environment (number of documents and costs required in trading) and quality of shipping. Host to vastly superior infrastructure and economic capacity, India outperforms the region in much of these components. However, in global terms, India lags and which significantly dents its export competitiveness.

Section 3 presents trade procedures (related to transport, regulations and financial; Table 11) and documentation requirements in general and specifically in trade with other South Asian countries. Number and kind of documents required as well as the agencies that

prepare it are documented in this section (in general 7 documents are required in India to export; Table 15).

The literature review (Section 4) presents the existing analyses coming from published material (both academic research and policy documents). Subsection 4.1 specifically discusses the India-focused work. Weak multimodal transport, nearly non-existent inland water transportation, cumbersome trade procedures and their inconsistent and unpredictable application are documented as some of the major trade facilitation concerns (from Roy and Banerjee 2010). Others such as Kim and Nangia (2008) highlight India's weak infrastructure as the major impediment. The literature review is followed by a brief outline of the institutional arrangements concerning trade and transport facilitation (Section 5).

Section 6 presents case studies discussing bilateral trade facilitation bottlenecks in India's trade with Pakistan, Nepal and Bangladesh. These are based on the primary survey carried out for this study. The case studies shed important light on the trade facilitation concerns. For instance, in Pakistan-India trade, there is a need for integrating the railway line at Attari with this ICP in order to further speed up the clearance of consignments. This is particularly important for bulk items such as gypsum and cement. Furthermore, the Pakistan side lacks adequate facilities for a substantial enhancement of the trade volume. This asymmetry needs to be corrected on a priority basis.

Section 7 discusses the primary survey that trade and transport facilitation survey and its findings. The primary survey assesses the major obstacles and bottlenecks that drive up trade costs and in turn helps identifying the key trade facilitation reform areas. The survey assesses the quality of services provided and collects data on components broadly the publication of rules, quality of infrastructure, treatment of goods in transit and efficiency of processing of trade by customs and border authorities. A total of 500 respondents including mainly private (traders, freight forwarders, transporters) but also public participants (public officials overseeing trade at major customs points and trade routes) were surveyed. Some of the key findings from the survey are as follows:

- On the publication of trade-related regulations component, 84 percent respondents (out of the 500 respondents) show familiarity with the national customs website and suggest that it hosts significant information on procedures and fees (Subsection 7.2.1). Responses are not encouraging when it comes to information on average clearance or release time. To this view, customs officials suggest that it is not possible to predict exact clearance or release time since it depends on several factors such as congestion.
- On procedures, their efficiency and implementation and existence of relevant agencies, 99 percent respondents suggest that they were aware of revenue and customs offices. 76 percent respondents suggested that health authority was present on border customs (Subsection 7.2.2). Likewise, 56 percent said that quarantine inspection services are not available. Regarding food safety agencies, 53 percent of

the respondents reported that they were not operating at border points. On coordination among border agencies such as Revenue and Customs, Health Authority, Quarantine Inspection Services, Food Standards Agency, 65 percent respondent say it is good.

- About 58 percent suggested that customs declarations could be processed as well as submitted online. Indeed a large number suggest that they cannot do so electronically. Only 11 percent of the respondents suggested that advance ruling were issued (Subsection 7.2.2).
- Predictably, 94 percent respondents say Single Window system has not been implemented. Furthermore, over 70 percent respondents suggest that risk assessment techniques continue to be not applied.
- On trade-related infrastructure—port, rail, roads, warehouses and ICT—most suggest that ICT and road infrastructure is good. The warehousing/transloading facilities of railways were rated average by most respondents. It is not a preferred mode of transportation for them despite being one of the biggest rail networks in the world. One of the key reasons behind the low usage for trade is delays. (Subsection 7.2.3).
- Respondents were asked to suggest the top trade and transport facilitation reforms. Setting up the Single Window System, improving customs processing time and enhancing quality of roads have been identified as the top three interventions required to lubricate international trade with the region. This is followed by improvement in efficiency of warehousing and transloading facilities and reducing number of documents required (Subsection 7.2.4; Table 19).

The study concludes with a set of recommendations. Next, discussed briefly are India's commitments in the Trade Facilitation Agreement which it ratified in 2016. Some of the associated reforms are also presented. The section is partly aimed at shedding light on some of the key aspects of the Trade Facilitation Agreement for developing countries. This is followed by a discussion on India's trade performance focus being one with the South Asia region.

1.2 India and the Trade facilitation agenda

India ratified the Trade Facilitation Agreement (TFA) in 2016 suggesting its commitment and priorities towards reducing the cost of trading across borders. The country was the 76th member to do so. As a developing country, India is part of the core group calling for technical assistance and capacity building for developing countries to implement TFA (Singh, Mishra, and Sandha 2018). India has committed itself to 70 percent of the TFA obligations under Category A (immediate enforcement) while the rest are in Category B. Obligations into Category A include commitments such as publication and availability of information, opportunity to comment on information and be part of consultation exercises, advance rulings, appeal procedures, measures towards impartiality, non-discrimination and transparency, fees and charges with predictability and discipline, release and clearance of goods, cooperation among border agencies, freedom of transit and coordination and cooperation among customs (WTO 2015).

Initiatives like Niryat Bandhu, or an export assistant mandated to mentor small firms in export procedures, Citizens' Charter on the Directorate General of Foreign Trade (DGFT) website (provides information like fees), Online Complaint Monitoring System based on the Electronic Data Interchange (EDI) – are the more recent ones (Singh, Mishra, and Sandha 2018). Similarly, efforts are being made to reduce document requirements, further streamline Single Window by enabling parties to obtain clearance online (on trade documents submitted) and roll out the Authorised Economic Operator program that provides privileged services for select operators (such as round the clock clearance window). A major Category A commitment by India is building its capabilities towards automation, for example, electronic filling of shipping bills as well as automated warehouse facilities (MOCI-Gol, 2015). On the connectivity front, both regional and otherwise, India is recently a party to BBIN and the United Nations Transport International Conventions.

Some of the key Category B commitments, obligations that provide a transition period for implementation and enforcement, are web-based points of inquiry, integrated risk management system and creation of Central Repository for Document Submission (Utsav et al 2018)¹.

1.3 India's trade performance with South Asia and the World: Actual versus potential

Between 2004-05 and 2012-13, India's exports globally grew by over 3 times to reach US\$300 billion in 2012-2013 (Table 1). By 2016-17, India's global exports stood at slightly over US\$275 billion. On the other hand, India's exports to SAARC increased by over 4 times between 2004-05 and 2016-17 to reach US\$19.22 billion in 2016-2017. On the imports front, while the same rose from US\$111.51 billion in 2004-05 to US\$490.73 billion in 2012-13, the

¹ On the other hand, countries like Nepal in the region have around 2 percent obligations in Category A (See Utsav et al, 2018).

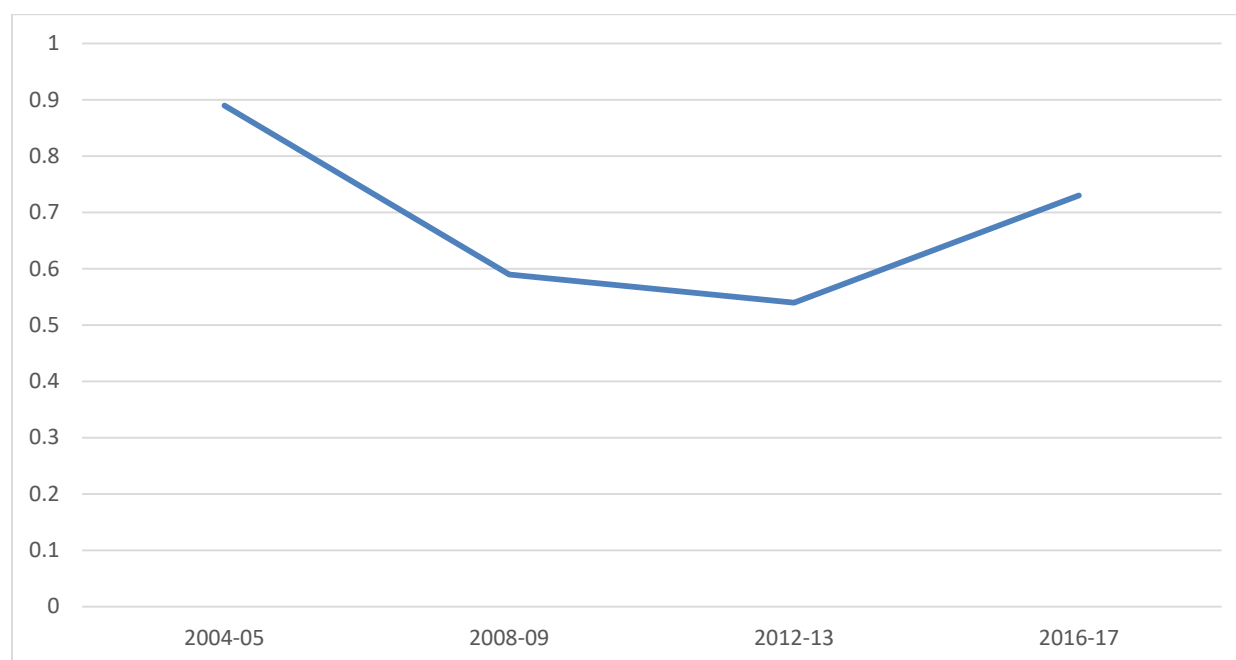
figure declined to US\$384.35 billion in 2016-17. Imports from SAARC rose by slightly over three times in the 2004-05 to 2016-17 period.

Table 1: India's Exports and Imports to World and SAARC (in US\$billion)

Year	Exports		Imports	
	World	SAARC	World	SAARC
2004-05	83.53	4.60	111.51	0.99
2008-09	185.29	8.56	303.69	1.81
2012-13	300.40	15.11	490.73	2.67
2016-17	275.85	19.22	384.35	2.81

Source: Department of Commerce, Government of India (DoC-GoI) (at <http://commerce-app.gov.in/eidb/default.asp>)

Figure 1: SAARC's percent share in India's overall imports (2004-05 to 2016-17)



Source: Department of Commerce, Government of India (DoC-GoI) (at <http://commerce-app.gov.in/eidb/default.asp>)

While the share of SAARC region in India's exports has consistently risen—for instance in 2016-17, the share stood at over 7 percent compared to 5 in 2008-09 (Figure 4). However, SAARC's share in its imports remains miniscule at just over 0.7 percent (Figure 1). Bangladesh is the largest supplier for India from within SAARC accounting for about 25 percent of India's total SAARC imports (2016-17 figures; Figure 2). Bangladesh is followed by Sri Lanka. Pakistan, although the second largest economy in South Asia, supplies a volume roughly similar to Nepal's – predictable when India's trade relations with it are extremely strained.

Figure 2: India's imports from SAARC countries (percent of overall SAARC imports)

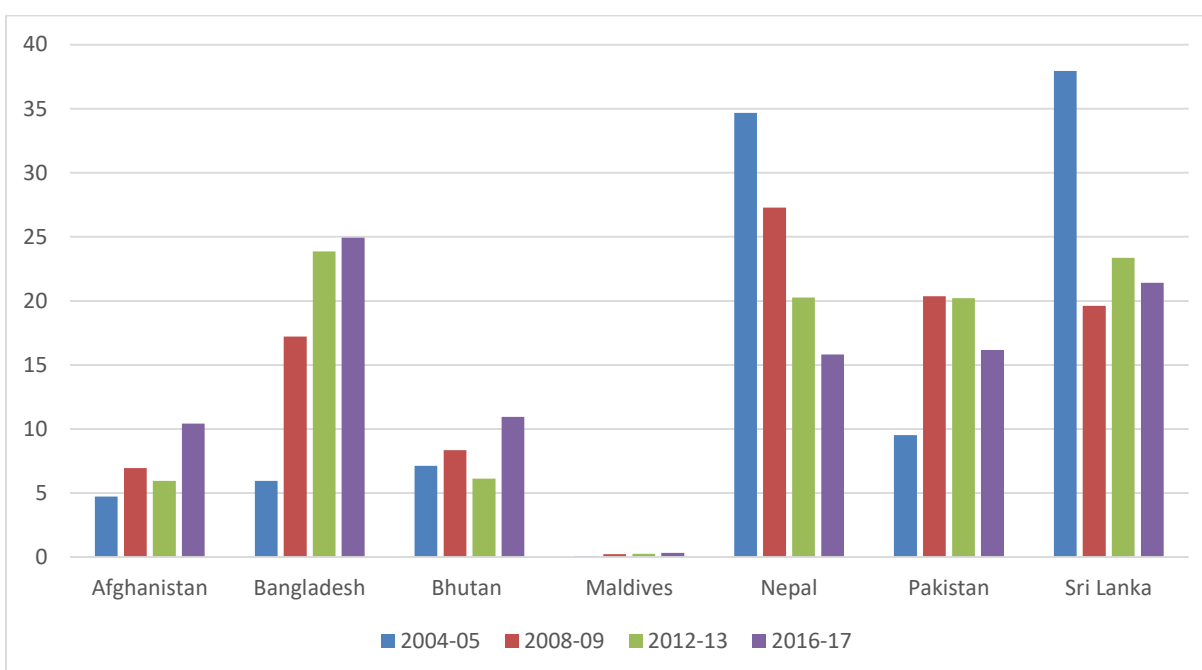
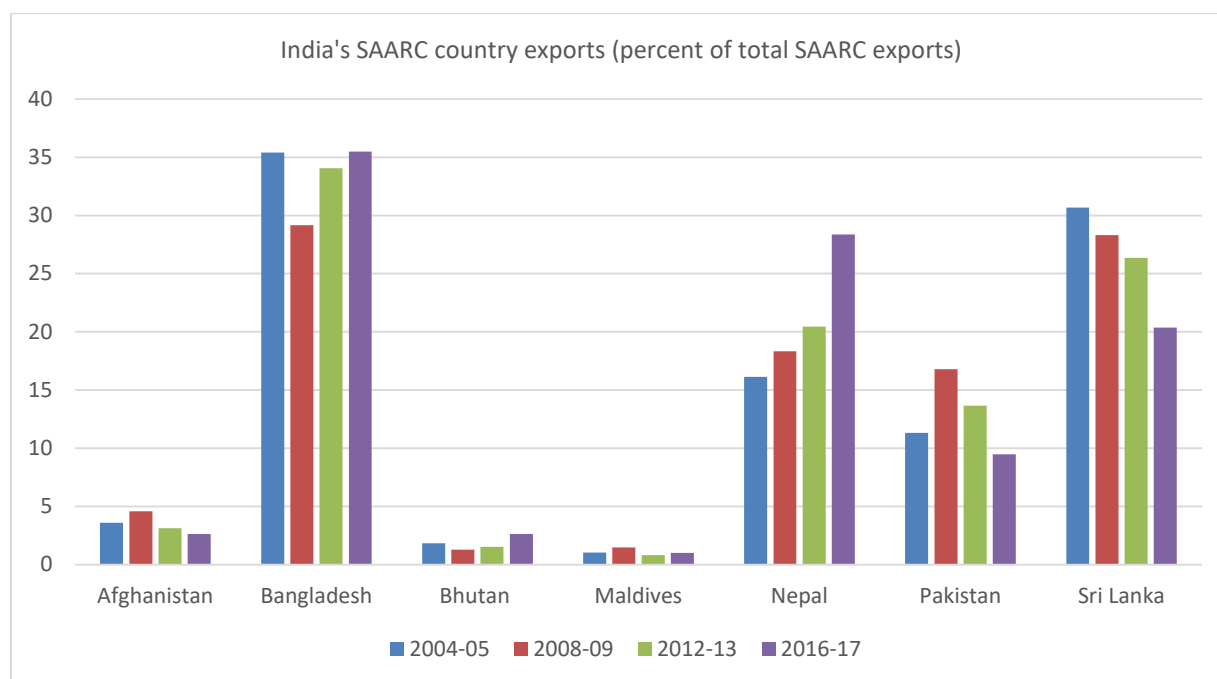
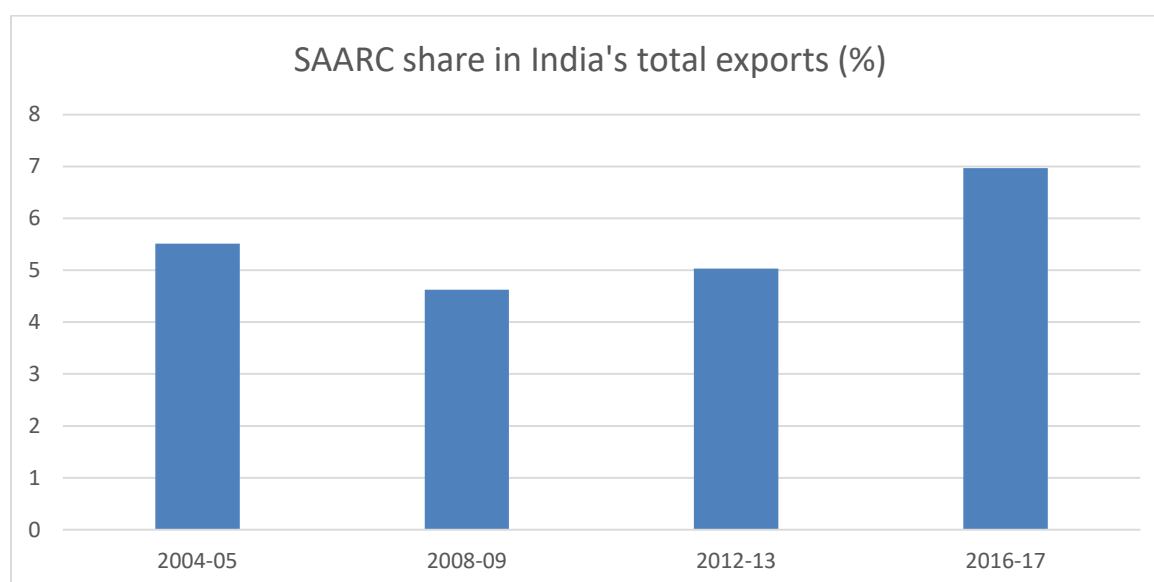


Figure 3: India's exports to SAARC countries (percent of total SAARC exports)



Source: Department of Commerce, Government of India (DoC-GoI) (at <http://commerce-app.gov.in/eidb/default.asp>)

Figure 4: SAARC share in India's total exports (percent)



Source: Department of Commerce, Government of India (DoC-GoI) (at <http://commerce-app.gov.in/eidb/default.asp>)

India's major exports and imports to and from SAARC are listed in Table 2 and 3 for the years 2008-09 and 2016-17. Petroleum and related products, raw cotton, motorcycles and motor vehicles and their spares are some of the country's major export items. While these items were the major export items also a decade ago, there have been new additions such as energy exports. Exports of items like motorcars have in fact gone up by over three times. The main imports are edible fruit, nuts, peel of citrus fruit, melons, iron and steel, coffee, tea, spices, vegetable textile fibres, nes, paper, yarn, woven fabric along with articles of apparel, accessories, knit or crochet and plastic and articles thereof. Much of the growth in imports from SAARC has been in these traditional categories with hardly any notable inclusion of new products.

Petroleum related products are predominantly destined for Nepal and Sri Lanka, while raw cotton and cotton yarn are almost entirely traded with Bangladesh which uses such inputs to produce garments. Countries like Nepal mostly import finished goods while countries with sizable manufacturing capabilities like Bangladesh import intermediate goods as well as primary products.

Table 2: India's major exports to SAARC (2008 and 2016, US\$Million)

Product code	Product label	2008-09	2016-17
2710	Petroleum oils, not crude	1418.53	1468.67
5407	Woven fabrics of synth. filam yarn (incl. HD no. 54.04)	370.01	145.33
1701	Cane/Beet sugar chemically pure	336.31	112.72
2902	Cyclic hydrocarbons	272.11	110.85
5205	Cotton yarn (not sewing thread) 85percent or more cotton, not retail	268.04	867.09
1006	Rice	252.17	329.5
2304	Soyabean oilcake and other solid residues	235.35	174.38
703	Onions, shallots, garlic, leeks and other alliaceous vegetables – fresh or chilled	230.94	222.93
3004	Medicaments (excluding Goods Of Heading 3002, 3005 Or 3006) Consisting Of Mixed Or Unmixed Products For Therapeutic Or Prophylactic Uses, Put Up In Measured Doses (including Those In The Form Of Transdermal Administration Systems) Or In Forms Or Packings	184.26	354.54

8704	Motor vehicles for transport of goods	34.16	435.92
2716	Electrical energy	-	438.64
5201	Cotton, not carded or combed	165.17	911.75
8711	Motorcycles, side-cars	142.29	589.21
8703	Motorcars and other motor vehicles for transport of persons (excluding 8702)	111.39	346.37
1001	Wheat and meslin	0.09	56.15
5209	Woven cotton fabrics, 85percent or more cotton, weight over 200 g/m2	94.19	231.39
7207	Semi-finished products of iron or non-alloy steel	119.56	417.49

Source: ITC Trademap

Table 3: India's major imports from SAARC (US\$Million)

Product code	Product label	2008-09	2016-17
2710	Petroleum oils, not crude	181.31	128.26
2523	Portland cement and other kinds of cements	66.22	99.71
0804	Date, fig, pineapple, mango, avocado, guava	65.49	191.44
2716	Electrical energy	-	176.72
2202	Non-alcoholic beverages (excl. water, fruit or vegetable juices and mi)	26.92	132.75
5303	Jute and related fibres	15.71	105.84
7202	Ferro-alloys	49.79	83.9
6305	Sacks and bags of a kind used for the packing of goods	63.19	34.21
7210	Flat-rolled products of iron/non-alloy steel width>=600	58.73	20.87
1301	Natural gums and resins	-	81.25
0802	Nut nes	55.25	78.93
5307	Yarn or jute based fibres	13.21	74.95
7202	Ferro-alloys	49.79	92.04
3102	Mineral or chemical fertilizers (Nitrogenous)	45.87	-
2814	Ammonia, anhydrous or anhydrous solution	41.31	3.05
5509	Yarn (of other than swing thread) of synthetic staple fibres	39.41	26.41

Source: ITC Trademap

Much of India's imports from SAARC are commodities or low-value added non-manufactures (Table 3). However, if we focus on the current static comparative advantage

of SAARC countries, there are a number of products the imports of which India can expand. A study shows that there are many high-potential SAARC items, which India is currently importing at a higher price from the rest of the world. They can be sourced from SAARC trading partners at a lower price (CUTS 2012). On the other hand, there are product lines that India can actually export to SAARC partners which they are importing at a higher price from other regions. The study finds that exorbitant trade costs partly explain why, despite potential, the intra-regional trade does not expand. The high trade costs nullify the gains from each other's markets in South Asia. A clear observation from current diversification trends and analysis of the potential is that the future growth of India's trade engagement with SAARC critically depends on how successfully trade facilitation reforms can be used to reduce regional trade costs.

With respect to the direction and volume of India's trade, India's trade with SAARC has increased but studies such as the one which present the estimates from below suggest that there is still sizable export potential for India in the SAARC region that remains to be exploited. De (2013) has attempted to compute the unrealized potential of India's export to SAARC (Table 5). De estimates that India's exports about 40 percent of its overall export potential to South Asia.

Table 4: Export Potential of India to other South Asian Countries (US\$Million)

Exporting country	Partner	Actual Export 2010	Potential Export 2010	Potential Export 2017	Actual Exports 2016 ²
India	Afghanistan	394.493	2,938.950	7,648.809	472.993
	Bangladesh	3,021.789	4,449.244	6,378.542	5668.793
	Bhutan	159.339	2,422.985	6,314.310	374.213
	Maldives	100.434	3,704.903	9,628.681	180.154
	Nepal	1,859.668	3,750.513	5,555.307	4526.221
	Pakistan	2,252.891	3,967.801	5,122.746	1592.581
	Sri Lanka	3,316.053	4,912.410	7,592.004	4118.524
	South Asia	11,104.667	26,146.806	48,240.398	16933.209

Source: De (2013)

1.4 Rationale for the study and its major objectives

By mid-1990s, South Asia's trade policy outlook had undergone significant transformation. Four of the largest South Asian economies became founder members of WTO in 1995. South Asian trade policies began to be increasingly aligned with multilateral rules and objectives. The focus of national trade policies, including in India, was on enhancing exports to

² See ITC Trademap data,

https://www.trademap.org/Bilateral_TS.aspx?nvpm=1|699||462||TOTAL||2|1|1|2|2|1|1|1|1

destinations such as the EU, North America and the Middle East countries, which were thought of as the natural markets. By the early-2000s, South Asian countries started increasingly following the global trend of deepening trade linkages through preferential and bilateral trade agreements within the region as well as select countries. Bangladesh and India in the region, for instance, took initiatives for closer trade relations with Association of South East Asian Nations (ASEAN) because of their sharply rising economic and strategic importance, not to mention geographical proximity.

Although growth of intra-regional trade and regional integration has remained an important part of the overall trade policies across all South Asian nations, until recently, the agenda remained sidelined. Indeed, national trade policy provisions primarily helped facilitate trade with partner countries outside the region by focusing on the related sectors, institutional and infrastructure arrangements, trade services, regulatory environment, support systems, etc.

Such somewhat discriminatory practices mean only marginal improvements were recorded in intraregional trading and associated systems. This has rendered the intraregional trading system more costly and burdensome for prospective traders to deal with. While tariff-related trade costs are low, countries in the region rely on extensive procedural NTBs that make trade costly. Furthermore and as we have seen in the opening section, there are major infrastructure deficits while trade procedures remain minimally harmonized and are extremely cumbersome. Consequently, India's exports to the region, for instance, remain significantly below potential (De 2013; Table 4 above). Effective trade facilitation does not solely benefit India and in fact, such initiatives bear significance for the region itself. Trade and transport facilitation reforms in India are key if the trade costs in the region are to go down – a major necessity if intraregional trade is to grow and trade competitiveness is to be enhanced. Along with the economic size, India's geography—the fact that it shares important land customs stations (LCSs) with most South Asian countries—is indicative of how India must play the central role in trade and transport facilitation in the region.

This trade and transport facilitation assessment bears significance for a host of reason. The existing studies focused on trade facilitation issues in India are limited in scope in that these either focus on probing the trade facilitation bottlenecks in India (Roy and Banerjee 2010, for instance) or how specific challenges such as connectivity issues require work to reduce trade costs and enhance export competitiveness (See Clara Brandi 2013). Furthermore, while these studies highlight that trade procedures are onerous resulting in delays and costs, these do not provided detailed information on the actual procedures and documentation requirements. In essence, the existing studies has drawn upon the available information in a limited way. On the methodological front, the existing studies interview a small number of stakeholders. Not only this audit interviews 500 relevant private and public participants in trade at 12 major Indian ports to understand the key trade and transportation bottlenecks as well as the required reforms to address the hurdles, but it also provides extensive information on trade procedures and status of logistics. Hence, the study bears policy relevance and is timely.

In order to achieve growth in regional trade, and at least bring it at par with the overall trade growth, all South Asian countries will have to undergo a reversal in their trade policy bias. They must direct their policy attention towards regional trading partners. This should start from the identification of trade facilitation issues and their solutions. The study attempts to assess the status of trade and transport facilitation in India in relation to its trade with the SAARC countries.

The analysis documents the bottlenecks in supply chains emanating from mainly onerous trade procedures, their poor dissemination and problematic infrastructure. The study aims to identify the critical reform areas in trade and transportation facilitation. The main objectives of this analysis are:

1. Assessing the current status of trade and transport facilitation in India in relation to its trade with the region. To do so, the study analyses the trade and transport bottlenecks in trading with the region,
2. Documenting the trade procedures and documentation requirements as well as the major trade and facilitation reforms,
3. Understanding the quality of trade logistics as well as trade-related services delivered to relevant stakeholders—the latter via a comprehensive survey—in relation to peers in the region and elsewhere,
4. Based on the above, understanding the priority interventions in trade and transport facilitation and on this basis, advocacy at the regional and national level for buy-in of the policy recommendations

1.5 Methodology

The paper surveys 500 mainly private but also public participants in India's trade with the South Asia region. 12 ports were covered to carry out the survey (Table 5). Of the 500 respondents, 432 were interviewed using a semi-structured questionnaire (see Annexure-1) and 68 were interviewed through an open-ended questionnaire. Furthermore, while we tried surveying a minimum of 30 stakeholders at each port for a representative picture, this was not possible at three ports namely Agartala, Panitanki and Phulbari where sample size is under 30.

Table 5: Respondents and ports

Sample Size	Ports covered	Products the traders dealt into
432 stakeholders including exporters, importers, customs officials, freight forwarders, road carriers and government officials	Attari , Agartala, Kolkata, Changrabandha, Chennai , Cochin Port Jaigaon, Mumbai Port, Panitanki, Petrapole, Phulbari and Raxaul	Pharmaceutical, agriculture, manufactured goods and household items

Broadly, this is aimed at documenting, extensively, not just the trade and transportation bottlenecks but also what these stakeholders consider the priority interventions required to address such obstacles. Furthermore, journal articles, reports, policy documents and official statistics (from the Department of Commerce, GoI, for instance among others) have been drawn upon to address the core objectives such as documenting the trade procedures, recent trade facilitation reforms, institutional frameworks as well as the critical bottlenecks in trade and transport.

The study draws from the published cross-country comparisons of quality of trade logistics and the trade documentation requirements mainly the *Logistics Performance Index* (LPI) and the *Doing Business* Indicators (both from the World Bank). The former compares trade logistics' quality among countries via components like customs procedures and timeliness of shipments. The Doing Business project of the World Bank examines and compares the overall business environment of countries. It also analyses the trading environment by looking at components like documents required in trade and the time incurred to prepare such documentation.

Guided by the Trade and Transport Facilitation Toolkit of the World Bank (World Bank 2010), the primary survey was designed by South Asia Watch on Trade, Economics and Environment (SAWTEE) in consultation with researchers involved in the country studies. While the Trade and Transport Facilitation Toolkit highlights five broad areas:

- (i) Publication of trade related rules and regulations;
- (ii) Rules and procedures for export and import;
- (iii) Trade-related infrastructure and services;
- (iv) Treatment of goods in transit and;
- (v) Priority areas of trade facilitation.

The study focuses significantly on two sets of trade facilitation issues. The first is publication of rules and regulations in export and import in India and key concerns and the second set relates to trade-related infrastructure and services and treatment of goods in transit. The motivation and objective to narrow the scope of the survey is to provide a comprehensive picture within what are the major overriding components in the trade facilitation agenda.

2. Major trade routes and state of trade logistics in India

2.1 India's main trade routes and corridors

Credible connectivity is critical to minimizing trade-related transaction costs. While all modes of transport—road, rail, maritime and aviation—require attention and need to be of a certain level, in the South Asian region, the condition of maritime and aviation transport is relatively better than road and rail transport (De 2013). India's vastly better maritime and aviation transport drives the same. This is reflected in the country's score on the UNCTAD's Liner Shipping Connectivity Index where India's performance is the best in the region (De, 2013; See Figure 5 in the next section on trade logistics).

Among the most comprehensive efforts to identify existing and potential trade corridors and gateways involving rail, road, inland waterway, maritime and air transport was done in the SAARC Regional Multimodal Transport Study (SRMTS) in 2006 (documented also in Rahmatullah 2004). The 14th SAARC summit decided to implement the project starting in 2007.

Table 3 shows all the major, existing as well as potential, regional trade corridors identified by SRMTS-2006 that serve India. A total of 18 existing and potential road corridors were identified by the SRMTS projects that could serve India for better trade and transport connectivity within the region. India was expected to play a crucial role in connectivity with all the countries of the region as the major parts of these corridors cover Indian territory.

Table 6: Existing as well as potential regional corridors across modes - road, rail and inland waterways: SRMTS 2006

Road	
<i>Corridors</i>	<i>Countries served</i>
Lahore–New Delhi–Kolkata–Petrapole/Benapole–Dhaka–Akhaura/Agartala	Pakistan, India and Bangladesh
Kathmandu – Birgunj/Raxaul–Kolkata/Haldia	Nepal and India
Thimphu–Phuentsholing–Jaigaon–Kolkata/Haldia	Bhutan and India
Kathmandu–Kakarvitta–Phulbari – Banglabandha–Mongla/Chittagong	Nepal, India and Bangladesh
Samdrup Jongkhar–Guwahati–Shillong–Sylhet–Dhaka–Kolkata	Bhutan, India and Bangladesh
Agartala–Akhaura–Chittagong	India and Bangladesh
Kathmandu–Nepalganj–New Delhi–Lahore–Karachi	Nepal, India and Pakistan
Thimphu–Phuentsholing–Jaigaon–Burimari–Mongla/Chittagong	Bhutan, India and Bangladesh
Malda–Shibganj–Jamuna Bridge(Bangladesh)	India and Bangladesh
Kathmandu–Bhairahawa–Sunauli–Lucknow	Nepal and India
Rail	
<i>Corridors</i>	<i>Countries served</i>
Lahore (Pakistan)–New Delhi/ Kolkata (India)–Dhaka (Bangladesh)–Mahishasan–Imphal (India)	Pakistan, India and Bangladesh
Karachi (Pakistan)–Hyderabad–Khokhrapar–Munabao–Barmer–Jodhpur (India)	Pakistan and India
Birgunj (Nepal)–Raxaul–Haldia/Kolkata (India)	Nepal and India
Birgunj (Nepal)–Raxaul–Katihar (India)–Rohanpur–Chittagong (Bangladesh) with links to Jogbani (Nepal) and Nepal, India and Bangladesh Agartala (India)	Nepal, India and Bangladesh
Colombo (Sri Lanka)–Chennai (India)	Sri Lanka and India
Inland Waterways	
<i>Corridors</i>	<i>Countries served</i>
Kolkata–Haldia–Raimongal–Mongla–Kaukhali–Barisal–Hizla–Chandpur–	India and Bangladesh

Narayanganj–Aricha–Sirajganj–Bahadurabad–Chilmari–Pandu	
Kolkota–Haldia–Raimongal–Mongla–Kaukhali–Barisal–Hizla–Chandpur–Narayanganj–Bhairabbazar–Ajmiriganj–Markuli–Sherpur–Fenchuganj–Zakiganj–Karimganj	India and Bangladesh

Source: SRMTS 2006

SRMTS (2006) identified 15 existing and potential rail corridors in the region. India has the bulk of the SAARC railway network. The five main rail corridors of South Asia serving India are given in Table 7.

In Table 6, identified are 15 existing as well as potential rail corridors in the region. India has the bulk of the SAARC railway network. The total route length was 67,368 kms in early 2017 of which nearly a third was double track (GoI 2016). Indian Railway lifted 1106.15 million tonnes of revenue-earning freight that generated US\$7 billion in 2016. An arm of Indian Railways has also been implementing railway projects in the region. Second Bhairab Railway in Bangladesh with approach rail lines has been completed, while a few others are being developed. Turnkey projects are underway in Bhutan as well (GoI 2016).

2.2 Trade Logistics Performance

Components within trade logistics such as efficiency of customs, quality and competence of logistics (such as quality and efficiency of carriers) as well as that of infrastructure significantly shape the level of trade costs and hence competitiveness. The *Global Competitiveness Report* which published the Global Competitiveness Index, engages in a cross-country comparative assessment of various dimensions of trade and transport facilitation. These include infrastructure and efficiency of customs procedures, quality of roads, prevalence of NTBs and tariffs-related trade costs (Table 7). When it comes to the infrastructure, India is positioned better than Pakistan and Sri Lanka in the region (values calculated on a scale of 7, score of 7 suggesting highest performance). Similarly, in the incidence of NTBs too, India outperforms the two peers in the region.

Table 7: Comparative insights from the Global Competitiveness Report 2017

Indicators		India	Pakistan	Sri Lanka	Netherlands
Quality of overall infrastructure	Value	4.6	3.8	3.9	6.4
	Rank	46	82	79	3
Quality of roads	Value	4.3	3.9	4.2	6.1

	<i>Rank</i>	55	76	49	5
Quality of railroad infrastructure	Value	4.4	3.3	3.2	5.8
	<i>Rank</i>	28	52	55	6
Quality of port infrastructure	Value	4.6	4.0	4.5	6.8
	<i>Rank</i>	47	72	57	1
Quality of air transport infrastructure	Value	4.6	4.0	4.2	6.6
	<i>Rank</i>	61	91	75	4
Prevalence of non-trade barriers	Value	4.5	3.9	4.3	5.2
	<i>Rank</i>	54	106	78	11
Trade tariff (in percent duty)	Value	12.9	17.2	12.3	1.11
	<i>Rank</i>	124	135	123	6
Burden of customs procedures	Value	4.6	3.7	3.9	5.8
	<i>Rank</i>	47	93	84	6
Transparency of government policymaking	Value	4.4	3.6	3.5	5.9
	<i>Rank</i>	50	97	109	5

Source: Global Competitiveness Report 2017

The Logistics Performance Index (LPI) of the World Bank is based on a large-scale survey of logistics professionals and related stakeholders and provides a cross-country comparative assessment of trade logistics based on the following components (Table 8):

- Efficiency and effectiveness of customs and other border control agencies in the clearance process
- Quality of transport and information technology infrastructure for logistics
- Ease and affordability of arranging shipments
- Competence of the domestic logistics industry
- Ability to track and trace shipments
- Domestic logistics costs (cost of local transportation, terminal handling and warehousing) and
- Timeliness of shipments reaching destinations.

The maximum score is 5 which depicts the best performance.

	Overall LPI rank		Customs rank		Infrastructure rank		International shipments rank		Logistics quality and competence rank		Tracking and racing rank		Timeliness rank	
Country	2014	2016	2014	2016	2014	2016	2014	2016	2014	2016	2014	2016	2014	2016
India	54	35	65	38	58	36	44	39	52	32	57	33	51	42
Pakistan	72	68	58	71	69	69	56	66	75	68	86	67	123	58

Sri Lanka	89	NA	84	NA	126	NA	115	NA	66	NA	85	NA	85	NA
Bangladesh	108	87	138	82	138	87	80	84	93	80	122	92	75	109
Bhutan	143	135	140	128	132	151	131	108	111	131	140	131	158	129
Afghanistan	158	150	137	138	158	154	156	125	152	139	159	155	149	137

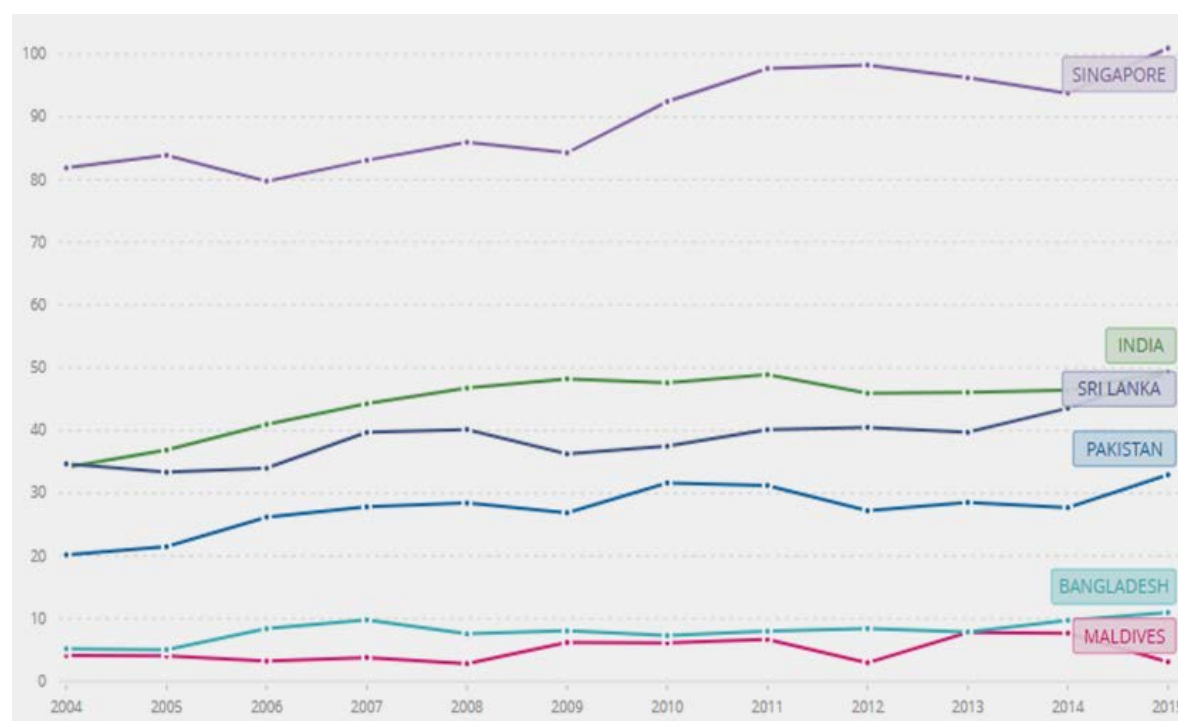
Table 8: Logistics Performance Index 2014 and 2016

Source: World Bank, NA= Not available

Overall, India outperforms the regional peers across all the components be it customs, infrastructure, logistics quality or timeliness. Broadly, its performance has improved from the 2014 level, both in terms of score as well as rank.

The Liner Shipping index, on the other hand, assesses shipping connectivity based on five components - the number of ships in the respective country, their total container carrying capacity, the maximum vessel size, the number of services and the number of companies that deploy ships to other country ports.

Figure 6: Liner shipping Connectivity Index (score in the y-axis)



Source: UNCTAD Liner Shipping Connectivity Index

Global Enabling Trade Index compares countries on 5 dimension of trade and transportation facilitation - market access, border administration, infrastructure and business environment. The market access metric has components like tariffs faced and the inherent complexities in the way tariffs are administered. The border administration performance is based on components like time and costs incurred, for example in getting trade processed (documentary and border compliance) and predictability of regulations and procedures among other things such as prevalence of bribes to get things done. The infrastructure subindex score is based on observations regarding the affordability of transport and logistics quality, among other things. The survey is based on both secondary data as well as primary survey (a preception survey of over 10,000 relevant international executives). The survey also uses secondary assessments published by, for instance, the World Bank.³ While India's overall rank in the index is 102 out of 136 countries (Table 9 below), the same is better than regional peers like Sri Lanka and Bangladesh.

Some of the most problematic factors in exports are corruption at border points, high cost of domestic transport and burdensome procedures at foreign border points. On the other hand, in imports, high domestic transport costs, crime and theft and corruption at the border are the three most serious impediments.

Table 9: India in the Global Enabling Trade Index between 2008 and 2016

Country	Year	OVERALL INDEX		Market Access		Border Administration		Transport and Communication Infrastructure		Business Environment	
		Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Bangladesh	2016	123	3.48	84	4.40	130	3.00	108	3.10	128	3.50
	2010	113	3.38	52	4.37	100	3.21	117	2.53	114	3.41
	2008	110	3.03	104	2.87	97	3.12	103	2.51	111	3.6
India	2016	102	3.91	135	2.80	75	4.40	60	4.20	76	4.2
	2010	84	3.81	115	3.42	68	3.98	81	3.34	58	4.48
	2008	71	3.74	105	2.82	55	4.08	52	3.54	58	4.53
Sri Lanka	2016	103	3.90	127	3.30	97	4.00	68	3.90	63	4.30
	2010	99	3.59	107	3.68	79	3.71	86	3.27	100	3.68
	2008	70	3.75	70	4.08	69	3.83	73	3.13	92	3.97
Vietnam	2016	73	4.30	74	4.50	86	4.2	64	4.10	77	4.20
	2010	71	3.96	50	4.41	88	3.46	68	3.62	64	4.34

³ Global Enabling Trade Report (<http://reports.weforum.org/global-enabling-trade-report-2016/economy-profiles/#economy=IND>) for details.

	2008	91	3.42	112	2.5	76	3.6	75	3.08	62	4.48
--	------	----	------	-----	-----	----	-----	----	------	----	------

Table 9(a): India's Enabling Trade Index performance on select metrics (2016)

Indicators	Rank out of 138	Value
<i>Pillar: Availability and quality of transport services (1-7) (from the Infrastructure subindex)</i>	44	4.6
Ease and affordability of shipment (1-5)	39	3.4
Logistics competence (1-5)	32	3.4
Tracking and tracing ability (1-5)	33	3.5
Timeliness of shipments in reaching destination (1-5)	42	3.7
Postal services efficiency (1-7)	87	4.0
Efficiency of transport mode change (1-7)	38	4.6
<i>Pillar: Efficiency and transparency of border administration (1-7) (within the Border administration subindex)</i>	75	4.4
Customs services index (0-1)	88	0.48
Efficiency of the clearance process (1-5)	38	3.2
Time to import: Documentary compliance (hours)	84	61.3
Time to import: Border compliance (hours)	131	283.3
Cost to import: Documentary compliance (US\$)	82	134.8
Cost to import: Border compliance (US\$)	99	574.0
Time to export: Documentary compliance (hours)	83	38.4
Time to export: Border compliance (hours)	119	106.1
Time to export: Documentary compliance (US\$)	73	91.9
Time to export: Border compliance (US\$)	96	413.1
Irregular payments and bribes: Imports and exports (1-7)	55	4.3
Time predictability of import procedures (1-7)	46	4.4
Customs transparency index (0-1)	66	0.80

Source: Global Enabling Trade Reports. The highest score, for example 5, indicates perfect, or benchmark.

The *Trading Across Borders* (TAB) component from the Doing Business assessment of the World Bank provide crucial insights into India's trade logistics performance. TAB captures the time and cost associated with exporting and importing a standardized cargo of goods by sea transport. While India's performance in the overall *Doing Business* is poor, it performs relatively better in the TAB (Table 10). According to TAB data, it takes 17.1 days to export from India, compared to 16 and over 28 days in Sri Lanka and Bangladesh, respectively.

Table 10: Sri Lanka compared with peers in Trading Across Borders (2015)

	Sri Lanka	Bangladesh	India	South Asia	World
Doing Business Rank	85	173	142	-	-
Trading Across Borders (Rank)	169	140	126	-	-
Documents to export (number)	7	6	7	8.1	6.2
Time to export (days)	16	28.3	17.1	33.4	21.1
Cost to export (US\$per container)	560	1,281.0	1,332	1,922.9	1,537.4
Documents to import (number)	7	9	10	9.4	7.3
Time to import (days)	13	33.6	21.1	34.4	24
Cost to import (US\$per container)	690	1,515.0	1,462	2,117.8	1,840.7

Table 10(a): Doing Business Rankings 2014 and 2015

Country	Ranking (2015)	Ranking (2014)
India	142	132
Bangladesh	173	130
Nepal	108	105
Sri Lanka	99	85
Malaysia	18	6
Thailand	26	18
Vietnam	78	99
Indonesia	114	120
Singapore	1	1

Source: Doing Business Report 2015 (World Bank)

3. Export and import procedures and documentation requirements

International trade entails three major processes: buying, shipping and paying. Trade procedures can be classified into four types- commercial procedures, transport procedures, regulatory procedures and financial procedures. According to an ADB report (2009), these four types of procedures involve further processes. They are revealed below in Table 11.

Table 11: Classification of Trade Procedures

<i>Commercial Procedures</i>	<i>Transport procedures</i>	<i>Regulatory procedures</i>	<i>Financial procedures</i>
<ul style="list-style-type: none"> • Establish contract • Order goods • Advice on delivery • Request payment • Packing • Certification • Accreditation • Warehousing 	<ul style="list-style-type: none"> • Establish transport contract • Collect, transport and deliver goods • Provide waybills, goods receipts, status reports, etc. 	<ul style="list-style-type: none"> • Obtain Import/export licenses, etc. • Provide custom declaration • Provide cargo declaration • Apply trade security procedures • Clear goods for export/imports 	<ul style="list-style-type: none"> • Provide credit ratings • Provide insurance • Provide finance • Execute payment • Issue statement

Existing literature shows that export and import procedures in South Asia are inefficient and time taking. Table 12 shows the number of documents required, countrywise, for exports and imports in South Asia's intra-regional trade. Table 12 provides the national average. In Table 11 are subnational observations, i.e capturing the performance within India in its major economic hubs. This makes sense simply because of India's continental size and widespread variations across states jurisdictions. Even for smaller countries such as Bangladesh, there are multiple economic hubs that are, for example, more efficient *Doing Business* enforcements.

Table 12: No. of Documents and associated costs in Exports/Imports

Component	Nepal (2015)	Bangladesh	India (2015)		World (2015)

		(2015)*		South Asia (2015)	
Doing Business Rank	108	173	142	-	-
Trading Across Borders (Rank)	171	140	126	-	-
Documents to export (number)	11	6	7	8.1	6.2
Time to export (days)	40	28.3	17.1	33.4	21.1
Cost to export (US\$per container)	2,545	1,281.0	1,332	1,922.9	1,537.4
Documents to import (number)	11	9	10	9.4	7.3
Time to import (days)	39	33.6	21.1	34.4	24
Cost to import (US\$per container)	2,650	1,515.0	1,462	2,117.8	1,840.7

Source: World Bank, Doing Business 2015

Table 13: Trading Across Borders Indicators (Subnational observations, 2009)

Ports	Ranks	Documents to export (number)	Time to export (days)	Cost to export (US\$per container)	Documents to import (number)	Time to import (days)	Cost to import (US\$per container)
Ahmedabad	3	8	17	946	9	18	978
Bengaluru	9	8	25	783	9	25	1,024
Bhubaneswar	1	8	17	834	9	16	833
Chennai	2	8	25	541	9	19	593
Gurgaon	17	8	25	1,077	9	28	1,184
Guwahati	7	8	22	713	9	28	794
Hyderabad	13	8	26	1,012	9	23	1,084
Indore	11	8	21	912	9	35	981
Jaipur	14	8	22	1,289	9	22	1,384
Kochi	5	8	28	432	9	21	480
Kolkata	6	8	20	644	9	31	710
Ludhiana	12	8	21	1,105	9	25	1,154
Mumbai	3	8	17	945	9	21	960
New Delhi	14	8	25	1,077	9	28	1,158
Noida	16	8	25	1,077	9	27	1,187
Patna	10	8	19	941	9	32	985
Ranchi	8	8	21	678	9	36	717

Source: (World Bank, Doing Business subnational report 2009)

The Trading Across Borders component in the Doing Business 2015 survey shows the number of documents required and the overall costs incurred in trading across the border. India does better than the regional average in almost all metrics, whether it is in the number of documents in exports or imports or the costs of trade. Some recent studies⁴ have reported that, on an average, India and other South Asian countries require 12 documents while exporting within the region (although the figures are much older than the 2015 Doing Business report).

To begin with the triangulation, based on other secondary literature, the documents required for exports are:

- Invoice
- Consignment note
- Proforma invoice
- Letter of Credit or evidence of advance payment
- Purchase bill
- Customs declaration form
- Bill of lading if goods are shipped, airway bill if goods are exported through an airline, truck receipts etc.
- Commercial invoice
- Packing list
- Certificate of origin
- Delivery order (export)
- Insurance

Apart from the above list of documents, traders get tariff concessions by providing SAFTA certificates. However, for several documents, there are country specific as well as product specific requirements. Mel (2011) has attempted to identify some country and product-specific document requirements. In India's case, he finds that there are no specific documents required for both export and import. ADB (2012), on the other hand, evidences that Indian exporters require country-specific documents, such as certificates (for exporting agricultural and processed food products) from Export Development Authority of India (EDA). There are product-specific requirements as well - Radioactive Test Certificate (poultry-grade maize), Pre shipment Inspection Certificate (onion), Phytosanitary Certificate (onion) and Pre-shipment Quality Inspection Certificate (rubber gloves) (ADB 2012).

⁴ ADB, 2012 and Mel, 2011

Trade costs swell up when traders and stakeholders need to visit multiple agencies to get clearance, prepare documents and make payments. ADB reported in 2012 that Indian exporters have to visit several agencies while exporting goods to other South Asian countries - customs, bank, insurance company, shipping line or airline, Department of Commerce or Chamber of Commerce and ports authority (for sea freight), among others. Apart from these agencies, below (Table 14) are some product specific agencies to be visited by exporters (ibid.).

Table 14: Product-specific Agencies to Visit

Country	Product	Agencies
India	All varieties of products as per the clients' requirements like vegetables, clothes, animal feed, rice, spices, etc.	Phytosanitary Certificate from Customs at the Border
	Exports of all components of batteries	Manufacturer, respective testing laboratories
	Onions	APPEDA, Bhava Atomic Research Centre at Salt Lake
	Tea leaf	Tea Board, Bhava Atomic Research Centre at Salt Lake

Source: ADB (2012)

Table 15 shows the number of days taken to acquire, prepare and submit export- related documents and the cost of acquiring these documents in India.

Table 15: Time and Cost Requirement for Export Procedure in India

Time taken to/Cost of	Time and Cost Range	
	Minimum	Maximum
Acquire documents necessary for export clearance	1 day	2 days
Prepare documents necessary for export clearance	1 day	21 days
Submit documents necessary for export clearance	1 day	1 day
Acquiring documents necessary for export clearance	US\$4.6	US\$576
Cost in India of acquiring some specific documents necessary for export clearance		

Documents	Cost (in US\$)
Phytosanitary Certificate costs	8.72
Radioactive Test Certificate	43.63
Total unofficial costs	20-50
Transport cost	196.36
Clearing agents	98.18
SGS Certificate	120
Tax invoice form	2.23
ARE - 1 cost	2.40
APEDA Certificate	54.54
Pre-shipment certificate from SGS	109.09

Source: ADB (2012)

Similarly, most of the documents required for import are the same for India and other South Asian countries. ADB (2012) finds that there are 10 documents that are generally required in importing a consignment of goods:

- Customs declaration form
- Proforma invoice
- Bill of lading if goods are shipped or an airway bill if imported through an airline, truck receipts, railway receipts and so on
- Packing list
- Letter of credit or evidence of advance payment
- Commercial invoice
- Purchase bill
- Insurance
- Consignment note
- Certificate of origin

Regarding the country-specific and product-specific documents needed for imports from within the region, a no-objection certificate is required (Mel, 2011).

There are a number of agencies that need to be visited for imports. Mel (2011) says that importers in Bangladesh, India, Nepal, Pakistan and Sri Lanka have to visit about six agencies for imports including the customs, bank, insurance company, shipping line/airline, Department of Commerce/Chambers and Port Authority (for sea freight). Additionally, country-specific and product-specific agencies to be visited in India are given in Table 16:

Table 16: Agencies to visit

Country	Country-specific Agencies	Product-specific Agencies
India	Sales Tax	Ministry of Environment, GoI

Source: ADB (2012)

The time taken to acquire, prepare and submit documents as part of the import process differs from country to country and product to product. Other factors such as the number of documents involved, the number of agencies that have to be visited and the importer's experience level also tell on the time required. Table 17 shows the time taken at various stages of importing to India.

Table 17: Time Taken in Various Stages of Import Procedure in India

Time taken to	Time and Cost Range	
	Time range	Average
Acquire documents necessary for import clearance	1 day	1 day
Prepare documents necessary for import clearance	1 day	1 day
Submit documents necessary for import clearance	1 day	1 day

Source: ADB (2012)

Table 17 shows port-wise indicators of India's trading across borders. The data was extracted from the World Bank report on doing business (sub-national projects) in India.

4. Literature review

South Asia remains one of the least integrated regions in the world with intraregional trade at around 5 percent of the region's total trade (Basnett and Razzaque 2014). This is comparable to the Maghreb region at 6 percent, but far below East Asia, where intraregional trade is over 35 percent of the region's total trade (World Bank 2016). SAARC Preferential Trading Arrangement or SAPTA came into force in 1995 and was followed by South Asian Free Trade Area (SAFTA), which came into force in 2006. SAFTA aims at enhancing market access and boosting exports by abolishing all customs duties on intraregional trade of goods (Rahman 2015). However, intraregional trade, despite some growth since the 2000s, remains minimal.

Banik and Gilbert (2008) find that lack of infrastructure (both physical and services related, measured by usage rate of digital services), government regulations (pertaining to documentation and investment in infrastructure), port inefficiency (higher shipping turnaround time) and corrupt practices among other - these have together contributed to high trade costs in South Asia. Duval and Utoktham (2010) suggest that the region has almost a similar trade cost structure whether it is inter-regional trade or intra-regional trade. They also show that in relation to ASEAN (which has low significantly low trade costs), SAARC's trade with EU5 and East and North-East Asia involve additional ad valorem trade costs of 28-91 percent.

Results in Wilson *et al* (2004) suggest that the South Asia region has gained the most (export gains of over 40 percent, the highest among all regions) via trade facilitation measures. In South Asia, India has had largest gain (US\$10.4 billion). in terms of gains accrued to exporters, South Asia gains the most (20 percent), with the largest export growth (in percentage terms) in Bangladesh (30.6 percent) while India gets the maximum gain in dollar terms (US\$5.4 billion of exports).

There have been attempts to quantify benefits from trade facilitation reforms. These studies generally predict a significant upward shift in trade volume even by initiating rather modest reforms.⁵ For instance, Otsuki *et al* (2007) estimates that were countries in South Asia to raise their capabilities to half the levels of East Asia, the trade rise would be an estimated US\$2.6 billion, approximately 60 percent of the total intra-regional trade in South Asia (including services trade). Further, if South Asia and the rest of the world raised their levels of trade facilitation halfway to the East Asian average, the gains to the region would be an estimated US\$36 billion. Out of these gains, about 87 percent of the total gains to South Asia would be generated from South Asia's own efforts (leaving the rest of the world unchanged).

⁵ADB and UNCTAD (2008) provide a detailed country-wise disaggregated quantitative assessment of gains to South Asia from Trade Facilitation reforms.

De (2011) strengthens the case for trade facilitation reforms. This study finds that a 10 percent fall in transaction costs at borders can increase South Asian exports by about 2 percent. The study shows implementation of e-filing of customs documents at the borders affects trade flows (and trade costs) favorably, An equally important area of reform is linking of landlocked countries through transit agreements.

While even incremental trade facilitation initiatives such as e-filing of documents has benefits, Chaturvedi (2007) stresses on the need for comprehensive reforms including reforms in transportation since much of the trade within the region occurs via Land Customs.

The UNCTAD (2011) report on the links between trade facilitation and Regional Trade Agreements (RTAs) points out a different problem. While trade facilitation is carried out to reduce trade costs and to reduce documentation procedure, the proliferation of bilateral and regional trade agreements have led, in some cases, to a 'spaghetti bowl' of customs procedures and trade facilitation measures. The study contends that this has counterproductive effects (in terms of administrative inefficiency, essentially myriad procedures applied to respective trading partners under different RTAs). It may also translate into discriminatory treatment towards non-members of RTAs and create potential conflicts with future WTO trade facilitation rules.

Developmental as the trade facilitation reforms will be, a major determinant in implementing trade facilitation at the regional level is political buy-in and that too at the national as well as regional level. Studies such as CUTS (2004), Mukherji (2004), Baysan *et al.* (2006) and Weerakoon (2008) rightly contend that fragile relationships among several countries within the region are a major reason for slow intraregional trade facilitation reforms.

A series of related studies have taken stock of subsequent improvements in South Asian trading systems and found gaps in many areas such as port logistics, digitisation and clearance capacities at LCSs, harmonisation of product codes and standards, customs notification and information sources, administrative transparency and so on.⁶ These have indicated that South Asia has failed to benefit from earlier reforms because of these missing links. They also pointed out slow progress in tariff reduction under SAFTA and maintenance of large sensitive lists containing products outside the tariff reduction measures till recently as the other major reasons for low levels of regional trade.

Trade volumes in Asia have risen in the last few years and the composition of trade has also changed. The region has shifted from a supplier of upstream material to a supplier of intermediate goods and finished products. This has increased the need for faster transportation infrastructure. The transportation costs in majority of sub-Saharan Africa, Latin America and Asia are five times higher than tariff costs (World Bank, 2001). This according to De (2006) has brought trade facilitation into prominence in any bilateral as well as regional agreements signed in these regions.

⁶See Sen (2004), Weerakoon *et al.* (2005), Man Singh (2006), Ahmed (2006), George (2011), Chatterjee and George (2012).

De (2014) finds that measures like SAFTA's liberalisation program has resulted in declining tariffs and, hence, trade costs. The extent of trade costs is a significant determinant of competitiveness and all the more so when production has shifted from traditional assembly lines to scattered and de-localised production networks. This fragmentation in production, largely a result of securing additional profits by firms (Ravenhill 2014), explains to an extent why trade in intermediate goods has risen faster than finished goods (Banga 2014). Despite opportunities for growth and development that global production networks offer today, it is only the high income or the most advanced developing countries, such as China and India, that dominate the global value chains (Banga 2014). The OECD Trade in Value Added (TiVA) statistics does not feature LDCs, given their miniscule share in global value chains (Kowalski et al, 2015). LDCs, hence, struggle to participate in production networks. Serieux (2014) shows how East Asia benefits hugely from scattered production networks, evidences that even in East Asia, LDCs like Lao People's Democratic Republic (PDR) and Cambodia are the least integrated in the regional production networks. Since production networks require an efficient, economical and predictable regime of cross-border flow of goods, transaction costs of moving goods from one jurisdiction to another, or even within the borders, significantly determines whether firms can competitively engage in production and, hence, create possibilities to participate in production networks (Serieux 2014).

Trade costs, as defined by Anderson and Wincoop (2004), include all costs incurred in getting a good to a final user other than the marginal cost of producing the good itself. They include transportation costs (both freight and time costs), policy barriers (tariffs and NTBs), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs and local distribution costs. Ultimately, these costs make goods more expensive for the consumer and compromise the competitiveness of the domestic economy. The NTBs have obviously emerged as the key intervention area when it comes to trade facilitation. Kowalski et al (2015) estimate that over 60 percent of the trade costs relate to non-tariff-based transaction costs. According to Duval and Utoktham (2010), tariffs contribute to less than 10 percent of the trade cost in the Asian sub-regions. The rest are NTBs. Key obstacles in this are inefficiencies on account of poor infrastructure – both physical and institutional – within the border, on it as well as beyond the border, poorly coordinated and minimally harmonised border and customs procedures such as inspection, documentation and transit regulation and currency fluctuations are some of the non-tariff obstacles (De 2014). Often distance and language related differences increase trade costs, but it seems that even the cultural and geographical proximity does not help in the case of South Asia.

Rahman (2015) posits that such non-tariff obstacles raise trade costs, result in deterioration of terms of trade and dent export competitiveness. Rahman (2015) notes that varying standards and safety requirements and lack of mutual recognition of such standards are a major hurdle in trade. Indeed, the most backward of developing countries, in dire need of export markets and hence foreign exchange, are the worst victims. Testing and certification facilities require equipment, institutional strength as well as technically qualified personnel.

Often, robust standards and testing facilities are a result of years of learning and handling complex activities. Initiatives like South Asian Regional Standards Organisation (SARSO), headquartered in Dhaka, is a step in the right direction for the region. While measures such as Sanitary and Phytosanitary measures (SPS) aim to secure health, such measures are often used to protect domestic output. Taneja et al (2014) finds that testing facilities are often either non-existent or poorly equipped in terms of tools, practices and human resources, particularly on the land border posts. In such instances, samples are sent to nearby urban centres for testing and certification. In any case, the testing and certification is not recognised by other countries (Taneja et al 2014).

While trade costs need to be curbed, it is also observed that the costs go down as societies develop and advance. In fact, the lowest trade costs are associated with countries with the highest per capita incomes (Arvis et al. 2013). Hence, trade costs are linked closely to the structure of the economy. A straightforward causal relationship may be difficult to find.

It has been argued that a reduction in trade costs can be made through reforms not just in tariff liberalisation but also by reducing NTBS, a much more significant dimension. This will lead to enhanced trade, efficient resource allocation and competitive exports. It happens through multiple mechanisms, e.g by being able to obtain inputs at global prices. A reduction in trade costs will lead to a host of developmental outcomes, such as enhancing the possibilities to enter the production networks. Trade facilitation measures, part of WTO 2013's Trade Facilitation Agreement in Bali, are being projected as a major policy tool for trade-led development. The Agreement's focus on issues like transit facilitation makes it especially relevant for countries like Bangladesh. What are trade facilitation measures and how do they cut trade costs and facilitate cross-border movement of goods?

The importance of trade facilitation reforms in enhancing trade flows has been intensively researched. UNCTAD (2006), McLinden (2006), Engman (2005), Arvis (2005) and Alburo (2005) are some of the notable contributions in this regard. These studies (also Wilson *et al.* 2005 and OECD, 2005) have particularly highlighted the reform bottlenecks not just in the national milieu, but also in the context of the WTO trade facilitation agenda. The studies report inherent inefficiencies - poor port, rail and road transport infrastructure, cumbersome and corrupt customs administration and lack of coordination between two national level customs bodies and non-transparent and restrictive trade rules. They also evidence resource issues as well as technical capabilities in implementing the agenda thus building the case for WTO assistance in capacity building. Indeed, global trade has increased manifold in the last 50 years and this has been attributed by economists to the decrease in trade costs (Hummels, 2007).

In a similar study by Walkenhorst and Yasui (2009), 1 percent reduction in trade transaction costs in the world results in raising the world income by US\$40 billion. Another interesting result from this study is regarding the distribution of income gains from reduction of trade transaction costs. The study shows that two-thirds of the gains from reduction of trade costs accrue to the non-OECD countries. This, according to the study, is because the developing world has at present the most inefficient border procedures. Improvements here bring substantial gains.

An important difference between trade policy reforms and tariff reduction has been identified by Ben Shepherd and John Wilson (2008). Unlike cutting tariffs or eliminating quotas, progress on trade facilitation requires substantial resource cost in improving trade-related infrastructure, or streamlining customs administration. This is a major hurdle in trade facilitation reform. The paper also emphasises the importance of identifying areas where improvements would have the highest possible positive outcome. The issue of trade facilitation in the developing world has gained prominence after WTO's Bali agreement on trade facilitation.

Trade is more sensitive to trade facilitation than to tariff reforms in certain regions, according to Shepherd and Wilson (2008). To show the effect of trade facilitation on trade costs, Wilson *et al.* (2004) show that the elasticity of trade facilitation measures in trade costs is greater than one. At the same time, the study also estimates that a one percent reduction in the cost of maritime and air transport services in developing countries could increase global GDP by about US\$7 billion. Similarly, Hummels (2001) concludes that each day saved in shipping time, in part due to faster customs clearance, is worth 0.5 percent reduction of ad valorem tariff.

Wilson (2009) shows that a decrease in time spent at the border has considerable gains for the trading country. The two parameters that the study has considered are the number of documents and the number of signatures required to export or import. In this measure, South Asia ranks second from last, above Sub-Saharan Africa, with 8.1 documents and 12.1 signatures on an average for exporting. Similarly, it requires 12.8 documents and 24 signatures, on an average, while importing. While the total time taken to export is 33.7 days, it takes 46.5 days to import, on an average. Considering that South Asia is under a free trade agreement, the border administration and documentation process is very cumbersome.

Engman (2009) gives us the link among trade facilitation, trade flows, government revenue and foreign direct investment (FDI). The paper shows how trade facilitation programmes can reduce trade transaction costs, increase customs productivity and improve the collection of trade taxes. It says that trade facilitation effects cannot be restricted to revenue and that global sourcing patterns also get impacted by a reduction in trade costs. Countries with better trade facilitation will have lower cost exports. This can be an attractive incentive for multinational companies to come in. Market access and lower trade costs can attract FDI, of course, depending on other macroeconomic conditions. The paper gives 12 examples of how trade facilitation has increased trade tax revenues.

Arnold (2007) says that problematic inbound logistics, greater distance to ports and, as a consequence, exorbitant transportation costs are a major trade barrier. These raise trade costs in the SAARC region, sizably. The region is home to two LLDCs. Even India's northeast lies at a considerable distance from the sea. This means that, often, firms have to grapple with longer turnaround time and greater inventory stocks. Citing the case of Bangladesh's garment sector, Arnold (2007) finds inefficient inland logistics and greater border clearance

times have forced firms to maintain large inventory stocks.⁷ This adds to production costs resulting in dented competitiveness. The same study notes that the firms without a large inventory will not remain in business if they have less than three-month order cycles. Trade facilitation reforms will require corridors that serve as gateways, not to mention strategic centres of production and multi-modal transportation among others.

There is a strand of literature that reports a high volume of informal trade in the region and links the phenomenon with highly restrictive NTBs.⁸ Estimates of the exact volume of informal trade differ widely. Some researchers put it as high as or more than the volume of formal trade.⁹ However, there appears to be some consensus that per unit trade costs, including transportation, warehousing, testing, and documentation, of longer circuitous trade routes are cheaper than those of short-distance direct formal routes. A high incidence of frictions in the formal channels of trade is one of the principal reasons of informal trade. In addition, non-transparent administration, often pertaining to documentation, creates space for corruption in the formal channel and very high non-official unreported charges, which subvert formal trade to a large extent (Ahmed and Ghani, 2008).

4.1 Insights from India-focused studies and policy documents

Roy and Banerjee (2010) identify several constraints faced by Indian stakeholders in trade logistics:

- Lack of multi-modal transportation and inefficient use of the extensive rail network
- Congested, inefficiently run ports
- Lack of air-cargo ports in large parts of the country
- Near non-existent inland water transport system feeding into ports, despite potential and feasibility
- Inefficiently run state-level (provincial) border crossings; complaints of rent-seeking and harassment in the name of security

⁷ Arnold (2007) reports that South Asian countries, except Sri Lanka, have increased their domestic transport cost owing to the distance between the production areas and the major ports. Bangladesh has the shortest distance, about 250 km, but its transport services are relatively costly owing to highly congested roads and more expensive port and feeder shipping. India, Nepal and Pakistan's travel distances exceed 1,000 km. Nepal also faces the challenge of trans-shipment at the Nepal-India border. There are also greater delays at the ports of Haldia and Kolkata and higher port and feeder costs for shipments.

⁸ For expositions in this direction, see Taneja (1999, 2004, 2005), Weerakoon *et al.* (2005), Khan (2010) and World Bank (2010).

⁹ Most of the informal exports from India to Pakistan, reportedly amounting to almost double the size of formal trade and constituting mostly of readymade garments (RMG), jewelry and spices, are routed through major ports like Dubai in the Middle East. See 'A Win-Win Trade for India and Pakistan' by Pradeep S Mehta and Abid Suleri, *Financial Express*, New Delhi, October 18, 2011.

- Multiple and often overlapping jurisdictions and cumbersome regulations in implementing border-related procedures resulting in delay. This raises avoidable transaction costs. 'Discretionary powers' to officials has resulted in rent-seeking
- Extremely poor feeder roads in large parts of the country combined with poor warehousing and logistics.

Logistics and transport issues are mostly related to land, sea and air ports. Roy and Banerjee (2010) suggest that recent improvements in Indian ports and airports have yet to see improvements in their performance when compared to ports in East Asia. They are below par compared to not only advanced ports like Dubai and Singapore but also in comparison to smaller ports like Laem Chabang in Thailand and Port Klang in Malaysia.

The last two plan periods have seen an increase in India in infrastructure investment. The Indian government introduced a trillion dollar national infrastructure plan for 2012-17 doubling the US\$500 billion goal of the past five years (Clara Brandi, 2013). India currently spends 4.7 percent of its GDP in infrastructure, compared to 8.5 percent in China and 2.6 percent in US. During the early 1990s, India had a better road network than China, but the situation has reversed today. China's investment in infrastructure has been growing ever since. Between 1991 and 2002, China's annual investment in its road network increased from about US\$1 billion to around 38 billion, while India's annual investment, starting at a comparable level in 1991, grew to just US\$3 billion over the same period (Kim and Nangia, 2008).

Kim and Nangia (2008) show that unlike China, India's infrastructure development programmes were not intended to address future demand, but poverty alleviation through rural connectivity. It is only recently that growth-oriented infrastructure development has been encouraged. Special Economic Zones (SEZs) were a major policy tool used to increase exports and address the infrastructure deficiency in the country. But due to the overall deficiency of complementary logistics development to connects these zones to the ports, they were not successful. The government has now changed its strategy towards infrastructure development and come up with industrial corridors, like the Delhi-Mumbai one, to have a focused approach to infrastructure.

The quality of logistics and associated infrastructure, has a major role to play in trade and transport facilitation. An efficient transportation system and streamlined trading regulations result in reduced transaction costs in trade. Nordas and Piermartini (2004) find a positive relationship between improvements in infrastructure and growth in trade. India has 12 major ports, 187 minor ports and many private notified ports. There are 155 Inland Container Depots (ICDs) and Container Freight Stations (CFSs) in the country to facilitate clearance of goods in India's hinterland. Another 89 facilities are at different stages of development. There are 36 functional international airports. In addition, there are 138 Land Customs Stations (LCSs) along India s international borders, of which 66 are functional.

Lack of funds for infrastructure development has been partially overcome by India through public-private partnership. According to Clara Brandi (2013), this model has been successful in the country. The 11th Plan included a larger programme of port capacity expansion based

on PPP. The country's Maritime Agenda proposes an investment of INR 1,280 billion in 424 projects at major ports and INR 1,680 billion at other ports by 2020. It has a highly ambitious expectation of more than 80 percent of the investment coming from the private sector. This is noteworthy, given the experience of PPP projects in the port sector and challenges such as environmental clearances, slow bureaucratic procedures and poor connectivity with the hinterland.

Involvement of the private sector was also planned in non-aeronautical activities at 35 non-metro airports. Their involvement was also solicited in the development of greenfield 'merchant' airports and about 300 airstrips. According to the annual report of the civil aviation ministry, 12 new airports are being built across the country with expansion and modernisation taking place in 18 existing airports.

The road network is 4.69 million kilometres long, or a road density of 1.43 km per square km. It consists of national highways, expressways, state highways, major district roads, other districts roads and village roads. The central as well as state governments have engaged the private sector in road development. Due to funding constraints, the government has encouraged private investments in roads through either the public-private partnership (PPP) or build, operate and transfer (BOT) modes. BOT has been successful in India. In 2009, the government announced an ambitious target of building 35,000 km of highways in five years, at the rate of 20 km per day. But in 2009-10, the average building per day was only 14.10 km, in 2010-11 it was 12.16 km, in 2011-12 it was 13.73 km, and in 2012-13 it was 15.69.

According to Maritime Agenda 2010-2020 (2011), ports play a vital role in the overall economic development of the country. About 90 percent of the country's international trade by volume, and 70 percent by value, is carried out through maritime transport. India is a major maritime nation with a coastline spanning 7,517 km. This coastline is bejeweled with 13 major and 176 non-major ports. It is strategically located on the world's shipping routes with a long tradition of seafaring and a large pool of trained maritime personnel. India has started encouraging investment in ports. Till now, the port sector has not been able to attract investment like other infrastructure projects.

The total volume of traffic handled by all Indian ports during 2009-10 was 849.9 million tonnes. Non-major ports accounted for around one-third of the total sea-borne trade. The growth rate in handled cargo at major and non-major ports was 5.8 percent and 35.4 percent in 2009-10, respectively. This compares with 2.2 percent and 3.3 percent of 2008-09. The financial crisis of 2008-09 severely reducing container traffic volumes in the ports by about 15 percent, or 30 percent year-on-year. Investment in the port sector remains low and this could hamper operations due to capacity constraints. Indian ports already have one of the highest turnaround times. This is a major hurdle that needs to be tackled immediately. Maritime Agenda estimates that the South Asian region will need 66 new berths by 2015 to handle the traffic.

In Chennai Customs House, the average time taken for out-of-charge grant, from the date of entry, is 251 hours. For February, 2009, Nhava Sheva Customs, on its website, said that the average time taken was 313 hours.

Checking goods for malpractices and concealment of goods was deemed to be a major time-consuming process. Now, Central Board of Excise and Customs has installed mobile gamma ray container-scanners and fixed X-ray scanners at some of the important customs stations. This has helped in curbing the malpractices like mis-declaration and concealment of goods. This has also ensured faster movement of goods and less congestion.

Dominic *et al* (2012) show that 80 percent of the ships were allotted berths in less than one day during 2008-09 and that only two percent of them had to wait for more than two days. Port authorities and terminal operators have taken a number of steps for streamlining the system of allotment of berths in Chennai and Nhava Sheva.

Inland water transport is a neglected area. This sector needs to be fully developed for commercial use. National highways and railways need to be developed to complement the inland water transport system. This need has been noted in Maritime Agenda.

Overall, infrastructure needs investments in India. The economy's competitiveness depends on fast-track clearance of projects and concentration on growth-oriented infrastructure. According to the Urban Land Institute and Ernst & Young (2010) report on infrastructure, India has a lot of catching up to do, despite spending about eight percent of its GDP on infrastructure.

5. Institutional arrangements on trade and transport facilitation

The speed of India's reforms in trade facilitation has been rather slow, considering its information-tech capabilities. The Electronic Data Interchange system was introduced in the 1990s, but still not all customs stations have it in place. As far as regulation related to infrastructure is concerned, land acquisition and transfer of land between government agencies is a major hurdle. Many projects get stuck in bureaucratic muddle. Recently, some land transfer regulations, between government agencies, have been relaxed to make commencement of projects easier.

Another regulatory reform that has had an impact on the trade scenario is the liberalisation of container transport through railways. Until 2006, container trains were a monopoly of the Container Corporation of India, a subsidiary of Indian Railways. In 2006, the government allowed the entry of private sector and public sector enterprises to operate container freight. This has had good effect on freight movement in the country, where container trains have become a common sight. This initiative was the first time private parties were allowed to make entry in railway operations involving direct customer interfacing (Gangwar and Raghuram 2010).

Since the liberalisation of the early 1990s, reforms have had a positive impact on trade volumes and the time taken for international trade. Some of them are broadly explained below:

(a) Risk Management

The risk management system was introduced in India in 2005 to help decide which container should be inspected and screened. RMS is operational at 48 customs offices for processing imports. Some 85 percent of India's imports are processed via this system. This has cut back the average time taken by customs to eight hours-- two hours for assessment and six hours for examination.

(b) E-commerce Portal

In 2002, India implemented the ICEGATE electronic platform (Indian Customs and Excise Gateway). ICEGATE facilitates the electronic filing of import and export documents and related electronic exchange between the customs and the trader. The platform offers a choice of communication means, including the internet, and a helpdesk on a 24x7 basis (Dominic et al 2012). There has been a steady increase in filing of customs documents through ICEGATE since its launch. Currently, about 8,000 import and export declarations are being filed daily by making use of the facility.

(c) Customs Electronic Data Interchange Systems

In the 1990s, India's Central Board of Excise and Customs (CBEC) introduced the Indian Customs EDI Systems (ICES), which automates the processes related to clearance of import

and export consignments. The platform allows remote filing of import and export documents (Dominic et al 2012).

In 1995, the customs department issued Bill of Entry (Electronic Declaration) Regulations to make it possible to submit import details through electronic declarations. About 97.5 percent of all import documents are processed electronically. EDI facilities are available at 92 customs offices. Round-the-clock electronic filing services for clearance is possible at an increasing number of centres. However, there have been delays in filing bills of entry. Only 47 percent are being filed within 24 hours and the rest, 53 percent, are filed after 24 hours, out of which 26 percent are filed after three days. The reasons for late filing are delays in obtaining documents, work pressure and lack of funds.

(d) National Import Database

The national import database of Director General of Valuation is in use for the valuation procedure since 2002. This system allows customs officers to take well-informed decisions on the valuation and classification of imported goods. This time-consuming procedure has been made efficient by the use of technology (Brandi 2013).

(e) Accredited Client Programme

The accredited client programme secures faster delivery for clients with good track records. Customs works with various ports/airports to ensure that their cargo is delivered quickly. As of early 2011, 250 ACP importers were allowed to self-assess their consignments with no need for customs' official examination. This is in line with India's commitments to simplify and harmonise customs procedures under revised Kyoto Convention.

(f) Trade Facilitation in Special Economic Zones

SEZs offer single window clearance, automation of procedures and trade facilitating on a self-certification basis. Many barriers that hinder normal production and trade have been reduced in these zones.

(g) Trade Facilitation in the Context of Regional Integration

India has initiated a number of measures for regional integration, including establishing integrated checkpoints on the border with Pakistan, Bangladesh, Nepal and Myanmar. A study by CUTS (2014) gives a clear picture of the ground reality regarding the trade facilitation environment on the India-Bangladesh border. The study points out inefficiencies in border administration procedures. It also makes a note of all the infrastructure deficiencies at the border LCSs.

(h) Training of Customs Staff

Central Board of Excise and Customs has launched a number of measures to train officers to deal well with reforms and streamlining of the various trade measures. This may eventually

contribute to faster clearance of goods. The Indian government has started inland container depots as well as container freight stations for a smooth movement of container freight from industrial region to ports.

(i) Shipping Arrival

Shipping agents initiate the process of intimating the consignees regarding cargo arrival well in advance. Over 91 percent of the importers are reported to receive Cargo Arrival Notice (CAN) about six days in advance. About seven percent of them get the intimation on the day of arrival. The importers can instruct their Customs House Agents (CHAs) to file the bills of entry sufficiently ahead of the shift of cargo to the CFSs for further processing. Seventy three percent of importers have regular CHAs, who have been authorised with standing instructions to handle import consignments.

(j) Inter-ministerial Groups

Recognising the urgency of reducing the dwell-time for cargo, Committee on Infrastructure, chaired by the prime minister, constituted an inter-ministerial group to make recommendations for streamlining customs procedures and functioning of container freight stations. The inter-ministerial group has submitted a report recommending the adaptation of international standards for risk management-based screening, EDI-based systems, transshipment, financial procedures and staffing (Gupta 2009).

Similarly, an inter-ministerial group (IMG) looks into air cargo matters. The group has examined clearance issues at air cargo complexes and suggested the necessary steps for simplification of customs procedures (Gupta 2009; Ministry of Civil Aviation 2012).

i) Single Window

India is mulling a single window project to fast-track the process of getting customs clearance. The proposal was made by the government through the 2014-15 Union budget. Once in operation, exporters and importers will be able to clear their goods from a single point. Permission of other regulatory agencies for consignment clearance can be obtained online. The single window would reduce the cost of doing business and, most importantly, save time. This would also reduce congestion of trucks at border points helping the trade of perishable goods and reducing delay-related damage of other goods. The government is also expected to set up Export Promotion Mission and extend 24x7 customs clearance facility to 13 more.

Another noteworthy initiative is a sub-regional Motor Vehicles Agreement between Bangladesh, Bhutan, India and Nepal (BBIN) countries. BBIN countries are expected to implement this pact in 2015 by providing seamless transit of passenger and cargo vehicles.

It is expected to reduce the costly and time-consuming unloading and loading at border crossing points. The transport corridors linking the four countries can then transform into economic corridors and enhance people-to-people contact. The agreement is awaiting approval from the respective local authorities. It has a provision to include the other four SAARC nations to join the framework.

6. Case Studies on trade and transport facilitation from within the region

Research specific to trade facilitation reforms in India indicates a host of issues that require credible interventions. Several of those issues relate to infrastructure and documentation efficiency. De (2010) states that while trade liberalisation has been helpful, for trade liberalisation to be beneficial, there has to be trade facilitation in order to maximise the welfare gain. In 2004, the Government of India constituted the working group on implementing trade facilitation reforms. Chaturvedi (2009) found that the government measures since 2004 have had significant positive impact on traders, albeit disproportionately. Large-scale traders who have the capabilities and resources to automate some of their own processes and activities were benefitting more. Small and medium enterprises (SMEs), which find it difficult to adapt to these measures, experienced only modest improvements.

Much of the trade within the region, except between India and Pakistan which is conducted via Dubai, is conducted through land customs points. The geographic proximity has not helped reduce the exorbitant trade costs. India lacks proper LCS infrastructure in its 138 LCSs- of which 66 are functional- to handle the traffic. Integrated Check Posts (ICPs) are needed to enable cross-border movement (CUTS, 2012). India has 12 major ports, 187 minor ports and many private notified ports. For efficient goods movement within (in India's hinterland) that instead enables decongestion at the port allowing rapid goods clearance, there are 155 Inland Container Depots (ICDs) and Container Freight Stations (CFSs) in the country. Another 89 are at different stages of development. For clearance of air cargo, there are 36 functional international airports. There are 138 LCSs along India's international borders, of which 66 are functional. A quantitative analysis focusing on the lower-middle income country bloc (LMIC) including India by OECD (2013), lists intervention areas that can have the greatest impact by way of increasing bilateral trade flows and lowering trade costs. They include formalities, documentation, procedures, automation, governance, impartiality and information availability.

Discussed next are case studies discussing bilateral trade facilitation bottlenecks in India's trade with Pakistan, Nepal and Bangladesh. These are based on the primary survey carried out for this study.

India-Pakistan Trade: A Case Study of Attari-Wagah ICP

The ICP at Attari is a crucial gateway for trade with Pakistan, Afghanistan and Central Asian countries. It became operational on April 13, 2012 and is located about 30 km from Amritsar. The ICP has an area of around 130 acres and has been set up with an overall cost of 1.2 billion rupees (INR). It houses state-of-the-art facilities to deal with security, customs and immigration requirements for passenger and cargo. The ICP capacity is about 600 trucks. On the Pakistan side, its ICP is on nine acres of land.

According to the data provided by the Indian Customs, the total value of imports (2012-13 data) through this ICP was 292 million dollars (54 percent of India's total imports from Pakistan in that year). Compare this to 161 million in 2011-12. Exports were around 509 million in 2012-13 (or 25 percent of India's total exports to Pakistan in that year) as compared to 229 million in 2011-12. This increase in trade has been attributed mainly to the establishment of this ICP. Traders say that the commencement of the ICP has significantly reduced their trade transaction costs and provided a speedy clearance of consignments across borders.

This ICP now handles over 10 times more trucks than the previous 100-150 trucks a day. Cargo movement between the two countries is allowed for 12 hours (from 7 am to 7 pm). Earlier, it was eight hours. A token system for traffic clearance has been introduced thus significantly reducing traffic congestion. In short, since the establishment of this ICP, the number of trucks, volume of export as well as import have increased substantially.

This survey found that this ICP has not only helped in reducing trade transaction costs through speedy clearance, but also changed the socio-economic condition of the locals. The improvement in trade-related infrastructure has facilitated greater commercial activity and created employment opportunities. Local people have started their own shops, hotels and restaurants, transport agencies and communication centres in surrounding areas. Private banks have also started setting up their branches. Trade-related services are thriving in the surrounding areas, which have a positive impact on the lifestyle of the local people.

Lessons Learnt

Attari-Wagah is the only land trade route between India and Pakistan. The local communities on both sides of the border have suggested that this development has created more business opportunities for both the countries, leading to job creation and skills development.

There is a need for integrating the railway line at Attari with this ICP in order to further speed up the clearance of consignments. This is particularly important for bulk items such as gypsum and cement. Furthermore, the Pakistan side lacks adequate facilities for a

substantial enhancement of the trade volume. This asymmetry needs to be corrected on a priority basis.

This ground-level evidence on the impacts of trade facilitation on inclusive development suggests that both countries should increase the number of goods traded through this border point. It also provides a strong case for opening other border points for enhancing cross-border trade between India and Pakistan.

Source: Primary Survey, CUTS International, 2014

A KPMG 2010 study compares logistics efficiency in India with that of other international peers. It sheds light on a host of inefficiencies and challenges. The average truck speed in India is around 30-40 kmph. The global average is 60-80 kmph. Airport waiting time in exports and imports is roughly 50 and 182 hours respectively. The global average stands at 12 and 24 hours. Turnaround time at ports is 84 hours on an average in India while it is seven hours in Hong Kong and Singapore.

The high turnaround time at the ports, according to Deloitte (2012), is due to traffic and congestion. This study highlights a number of issues regarding port efficiency. Evacuation of containers is slow and this causes congestion. Ports in India do not attract very large vessels, because the ports are not deep enough for large vessels. Dredging at the ports is not done periodically due to a lengthy tender process. Inadequate overall infrastructure has hampered the movement of large-scale freight. The report sheds light on the need for technical upgradation in areas like warehousing facilities, cold storage and multi-modal logistics parks.

Both KPMG (2010) and Deloitte (2012) reports show a number of potential areas for private as well as public investments. The build-operate-transfer mode of investment or public-private partnership can be considered in these areas.

Sundar (2010) states that most major ports were originally designed to handle specific categories of cargo. Trade in those cargoes has declined over time, while other types of cargo have gained importance. However, the ports have not been able to adjust to the new categories of cargo. As a result, several traditional cargo berths are under-utilised and the few for new cargo are over-utilised.

Atul Deshmuk (2002) compares India ports with others showing that large ports in India are inefficient and handle much less cargo than Singapore does. The study compares the two large ports of Mumbai with a single port in Singapore. The port of Singapore is in a position to handle 27,410 thousand tonnes of cargo while MPT (Mumbai Port Terminal) and Jawaharlal Nehru Port Trust (JNPT, Mumbai) together handle only 4,534 thousand tonnes. The Singapore port handled 1,54,540 thousand tonnes of container traffic in 2001 while MPT and JNPT, taken together, handled only 18,640 thousand tonnes during the same period.

India -Nepal Trade: A Case Study from the Raxaul-Birgunj Border

Raxaul is a sub-divisional town in East Champaran District of the Indian state of Bihar. It is situated on the India-Nepal border, opposite Birgunj (Nepal), a major trading hub in Nepal. Birgunj is among Nepal's major entry points. Raxaul has a major railway terminus, a junction on the Delhi – Gorakhpur - Raxaul - Muzaffarpur - Kolkata lines.

The Raxaul- Birgunj route accounts for 50 percent of the total trade - around 4.4 billion US dollars of total trade (2016-17) - between India and Nepal. This is a decline from the 2013-14 figure when the border point accounted for roughly 70 percent of Nepal-India trade. India's major export items include petroleum products, automobiles, iron and steel products, motor vehicle parts, medicine, machinery parts, electrical goods and plastic goods. While India's major imports include juice and beverage, woven fabrics, black pipes, yarn, loop mat and *danta mukta*. Furthermore, the revenue realisation at Raxaul LCS totalled 875.3 million rupees (87.53 crores) in 2013-14 as compared to 975.3 million rupees (95.73 crores) in 2012-13.

Customs infrastructure is seemingly satisfactory at Raxaul-Birgunj as it is an Electronic Data Interchange (EDI) enabled port. However, inadequate road infrastructure hinders the movement of cargo-laden trucks. It usually takes 12 to 24 hours for trucks to cross the 1.5 kilometer Raxaul-Birgunj corridor, including the time taken for customs clearance. There is no specified time-frame to receive laboratory reports for food items and other sensitive products. Traders have to wait for more than six months, sometimes.

Lessons Learned

Raxaul-Birgunj Land Custom Station (LCS) has recently (mid-2018) been operational as an Integrated Check Post (ICP). ICP is expected to give a fillip to trade between the two countries, like on Attari-Wagah on the India-Pakistan border. It will help ensure better 'surveillance', 'efficiency', 'improved border trade', 'single administration window', 'appropriate support facilities', 'document submission', 'separate export and import terminals' and 'warehouses'. The ICP will provide better administration and a cohesive management of overland entry-exit points for bilateral and transit freight movement between India and Nepal.

Nepali peasantry from Parsa and Bara Districts often experience standoff with Indian security personnel due to entry restrictions of their sugarcane-loaded tractors headed to Indian sugar mills in East and West Champaran in Bihar. They say that Jankitula-Innarwa and Bhisawa-Sikta routes, which are not far from the Birgunj-Raxaul route, are not notified about the provisions of Indian Customs Act. As a result, they are forced to use the Birgunj-

Raxaul route thus raising their costs. A special arrangement to enable trade in primary agriculture commodities is required for them.

Furthermore, there is no direct air connectivity between the nearest Indian cities, such as Patna, Dehradun and Lucknow and Kathmandu, the capital of Nepal. Businesspersons from these places have to travel via Delhi or Kolkata to reach Kathmandu. In this context, the trading community stresses the reconstruction need of the Raxaul Airport in Bihar, which remains abandoned after the India-China war in 1962. They argue that it has the potential to cater to the needs of the emerging economic and financial capital of Nepal, Birgunj.

There is a need to carry out only 'Destination Specific Inspection' in order to reduce procedural barriers to trade and transit. Customs sealed cargoes should be allowed free and seamless movement through the designated corridors. This would improve the efficiency of clearance resulting in a substantial reduction in the overall trade transaction costs. Emphasis should be on frequent cross-border visits by business delegations, people, and parliamentary delegations, besides organising 'trade fairs', 'product shows', and 'investor summits' to improve 'business to business', 'people to people' and 'government to government' relations.

Given the immense importance of the Raxaul-Birgunj trade point, it is vital for both the countries to work proactively for the development of trade-related infrastructure. The ongoing Raxaul-Birgunj infrastructure development is a positive move to harness the potential trade opportunities between the two countries. Furthermore, this provides an important case for exploring trade avenues through other border points between India and Nepal

Source: Primary Survey, CUTS International, 2014

India-Bangladesh Trade : A Case Story Petrapole-Benapole Border

Trade between India and Bangladesh is carried out primarily via road through the Petrapole-Benapole border point. Petrapole is in North 24 Parganas District and is about 95 km from Kolkata on National Highway 35. The nearest town and passenger rail head is Bongaon. On the Indian side, the road infrastructure between Kolkata to Petrapole is made up of Jessore Road (NH-35) and NH-34 (linked through Chakdah Road). Most of the cargo-laden vehicles use the Chakdah Link Road.

The Petrapole customs handles truck and train cargo to and from Bangladesh. In fact, Petrapole LCS is practically the busiest and largest land customs in India. Around three-fourths of India's total export to Bangladesh take place through this corridor. The check-

post accounts for more than half of the four billion dollar trade volume. This is nearly double that with Pakistan.

Lessons Learned

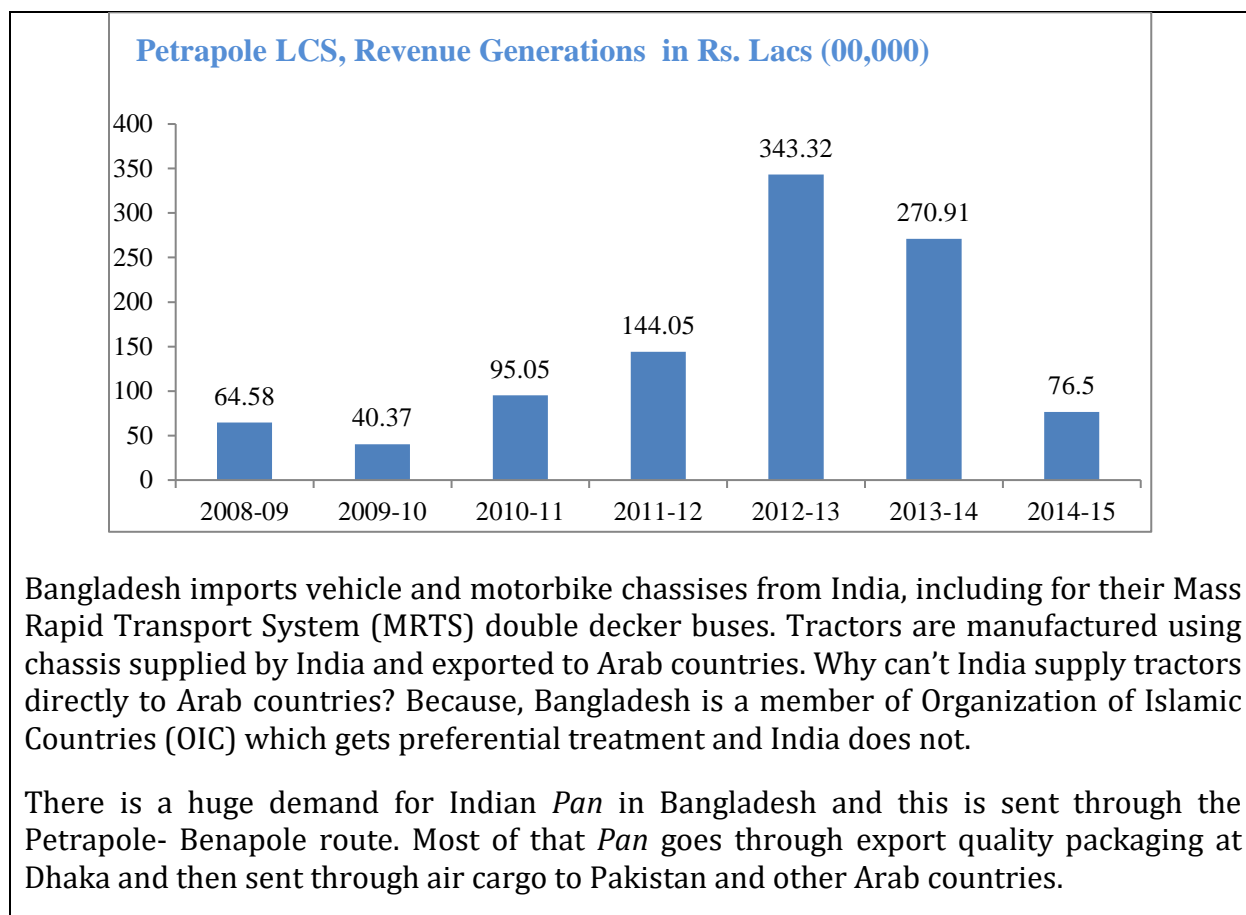
At present export through Petrapole takes one hour, on average, whereas the time for import is about eight hours. According to a study by RITES, an engineering consultancy company of the Government of India, by 2029-30, the goods traffic is slated to be approximately 2,938 trucks per day and the passenger traffic around 3,924.

Keeping in line with the demand estimation, a new Integrated Check Post (ICP) is coming up at Petrapole. This ushers in a new hope for optimum utilization of the Petrapole LCS and other allied activities. It is administered by Land Port Authority of India (LPAI) under Department of Border Management, Ministry of Home Affairs. The ICP project will have state-of-the-art facilities for cargo handling, automated secure entry-exit of vehicles, proper parking areas, a customs house, scanning facilities, labs /testing houses, a plant and animal quarantine, an ultra-modern passenger terminal, etc. The success of Attari, in India-Pakistan trade, led to the adoption of the ICP model between India and Bangladesh to reduce traffic congestion and ensure smooth flow of goods.

Bilateral Trade – A cross link of merchandizing items

In Bangladesh, there are no state taxes like in India for any foreign exchange earned by the trader. Both South Asian Free Trade Agreement (SAFTA) and South Asian Preferential Treaty Agreement (SAPTA) apply for goods exported by Bangladesh to India. For goods covered by SAFTA, Indian traders need to pay a special Countervailing Duty (CVD) as part of import duty. Most of the goods are covered by SAFTA, but there are some items like beetle nut, *hilsa* fish, etc. which are covered only by SAPTA.

It is worth mentioning that branded cotton fabrics, namely, Arvind Mills, Raymond's, Mafatlal, etc., are exported to Bangladesh in large volumes to be converted into readymade garments. As Bangladesh is competitive in producing readymade garments, about 10 percent of Bangladesh's readymade garments are imported to India. The remaining 90 percent are exported to the rest of the world. Azo dye tests are done by Dhaka University Textile College and eight other test centers under the approved list. The revenue generated by Petrapole is given below:-



Source: Primary Survey, CUTS International, 2014

7. Primary survey and its findings

7.1 Survey methodology

The paper surveys 500 mainly private but also public participants in India's trade with the South Asia region. 12 ports were covered to carry out the survey (Table 18). Of the 500 respondents, 432 were interviewed using a semi-structured questionnaire (see Annexure-1) and 68 were interviewed through an open-ended questionnaire. Furthermore, while we tried surveying a minimum of 30 stakeholders at each port for a representative picture, this was not possible at three ports namely Agartala, Panitanki and Phulbari where sample size is under 30.

Table 18: Respondents and ports

Sample Size	Ports covered	Products the traders dealt into
432 stakeholders including exporters, importers, customs officials, freight forwarders, road carriers and government officials	Attari , Agartala, Kolkata, Changrabandha, Chennai , Cochin Port Jaigaon, Mumbai Port, Panitanki, Petrapole, Phulbari and Raxaul	Pharmaceutical, agriculture, manufactured goods and household items

Broadly, this is aimed at documenting, extensively, not just the trade and transportation bottlenecks but also what these stakeholders consider the priority interventions required to address such obstacles. Furthermore, journal articles, reports, policy documents and official statistics (from the Department of Commerce, GoI, for instance among others) have been drawn upon to address the core objectives such as documenting the trade procedures, recent trade facilitation reforms, institutional frameworks as well as the critical bottlenecks in trade and transport.

The study draws from the published cross-country comparisons of quality of trade logistics and the trade documentation requirements mainly the *Logistics Performance Index* (LPI) and the *Doing Business* Indicators (both from the World Bank). The former compares trade logistics' quality among countries via components like customs procedures and timeliness of shipments. The Doing Business project of the World Bank examines and compares the overall business environment of countries. It also analyses the trading environment by looking at components like documents required in trade and the time incurred to prepare such documentation.

Guided by the Trade and Transport Facilitation Toolkit of the World Bank (World Bank 2010), the primary survey was designed by South Asia Watch on Trade, Economics and

Environment (SAWTEE) in consultation with researchers involved in the country studies. While the Trade and Transport Facilitation Toolkit highlights five broad areas:

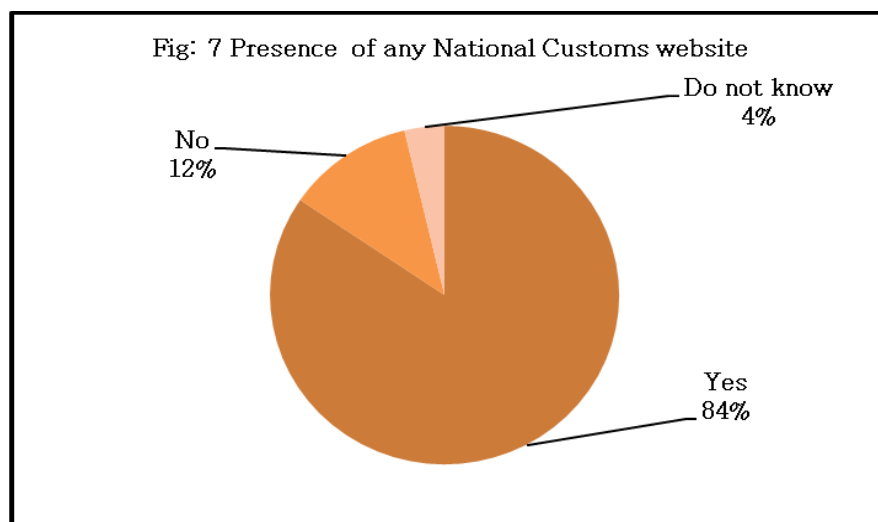
- (i) Publication of trade related rules and regulations;
- (ii) Rules and procedures for export and import;
- (iii) Trade-related infrastructure and services;
- (iv) Treatment of goods in transit and;
- (v) Priority areas of trade facilitation.

The study focuses significantly on two sets of trade facilitation issues. The first is publication of rules and regulations in export and import in India and key concerns and the second set relates to trade-related infrastructure and services and treatment of goods in transit. The motivation and objective to narrow the scope of the survey is to provide a comprehensive picture within what are the major overriding components in the trade facilitation agenda.

7.2 Survey Results

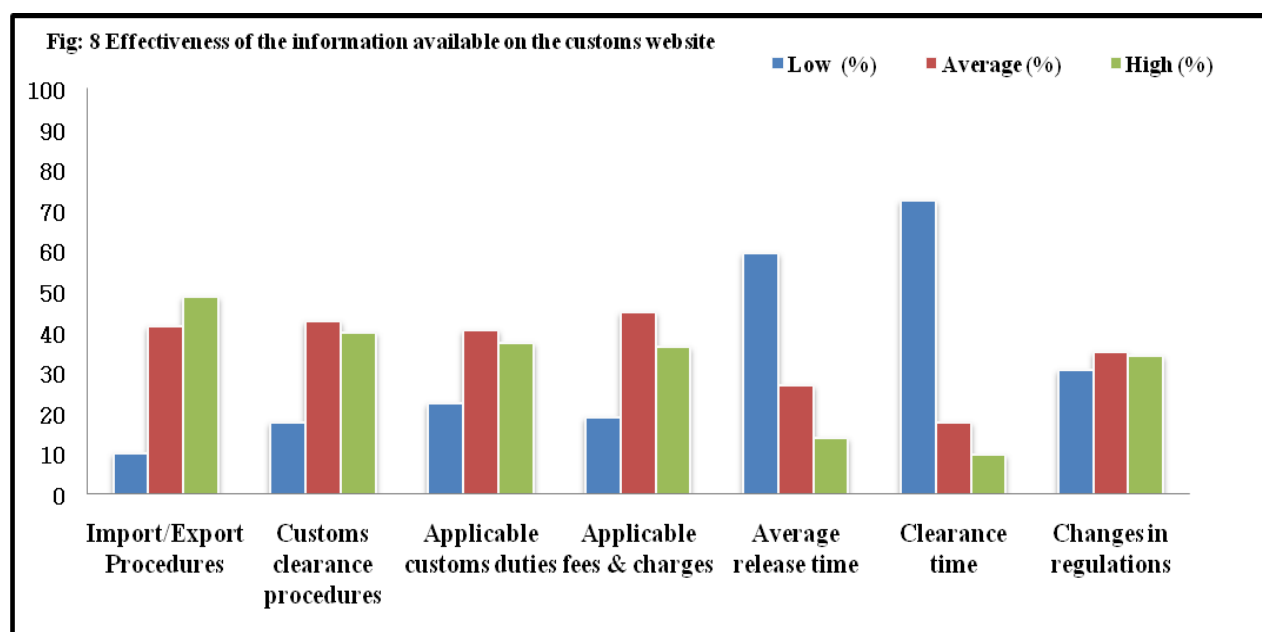
7.2.1 Publication of trade related rules and regulations

Respondents were asked if there were official customs websites and if information was available on import and export procedures. Around 84 percent of the 432 respondents gave positive answers saying that there was a national customs website. Most had adequate knowledge about its content and features. Among the respondents, customs officials and other chamber houses said that awareness among traders is increasing. Most of them outsource their customs clearance to clearing agents and freight forwarders. Customs authorities often organize sessions aimed at traders to enhance knowledge and understanding about customs procedures.



Source: Primary Survey, CUTS International, 2014

Traders also said that the national customs website hosts a substantial amount of information about procedures on import/export and customs clearance, applicable customs duties and applicable fees and charges. On other issues such as average release time, clearance time and changes in regulations, they said that the website does not give out much information and that the frequent changes in trade regulations are not updated on the website in a timely manner.



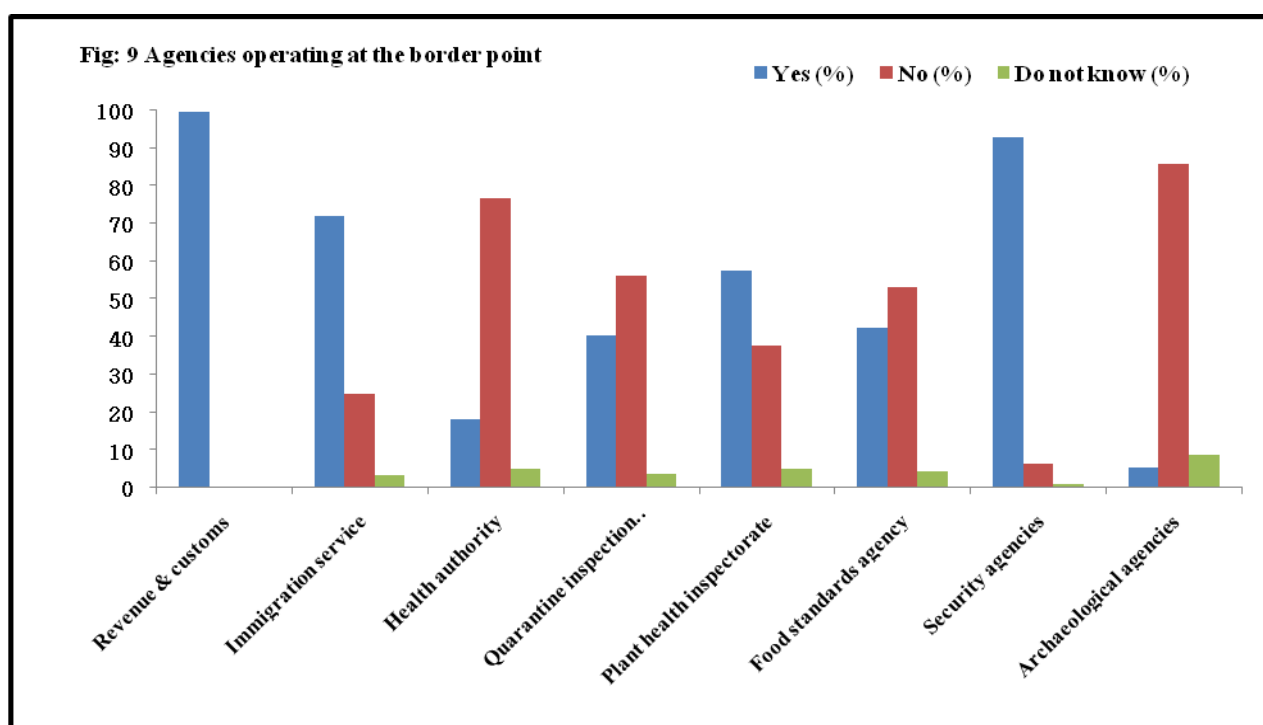
Source: Primary Survey, CUTS International, 2014

Regarding effective customs clearance, customs officials said that it was difficult to provide the exact information about average release time as it varied port-wise and depend on traffic and congestion. Furthermore, the government is in the process of setting up ICPs at major

trading points which would further improve the effectiveness of the entire supply chain at border points.

7.2.2 Rules and procedures for export and import

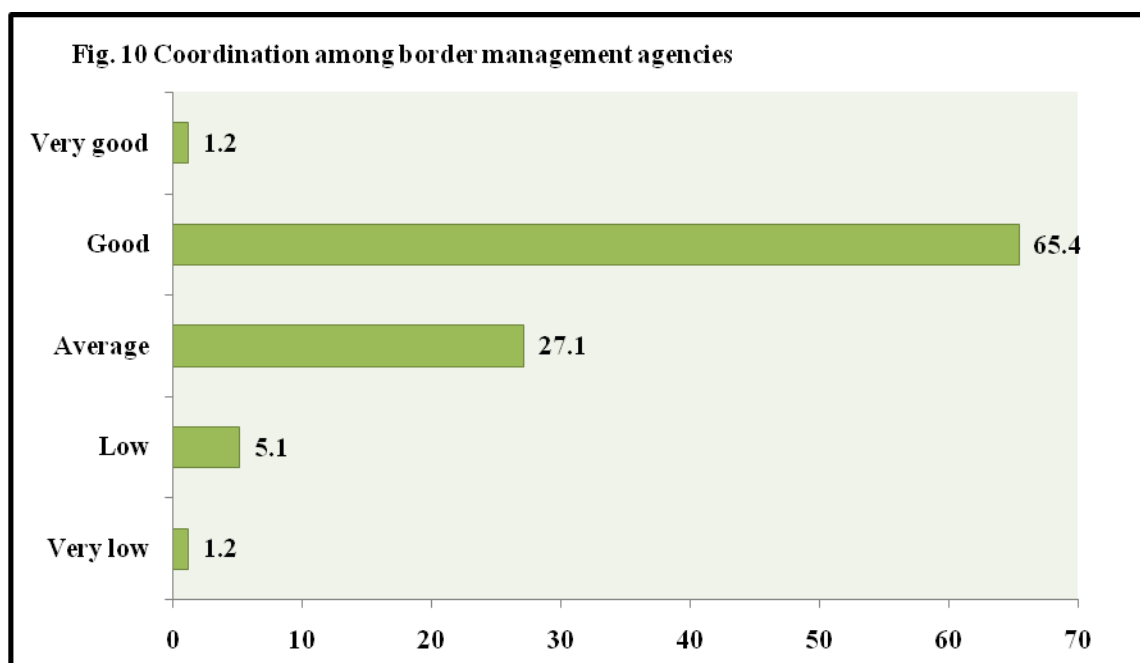
Respondents were asked about the presence of different border management agencies at border points. Most respondents (99 percent of 432) reported that they were aware about the presence of revenue and customs agencies at border points (Figure 9). Furthermore, 72 percent of the respondents reported that immigration services were also available at ports. Around 76 percent said that health authority does not have their offices at border points. Likewise, 56 percent said that quarantine inspection services are not available. Regarding food safety agencies, 53 percent of the respondents reported that they were not operating at border points.



Source: Primary Survey, CUTS International, 2014

It is relevant to note that there is not even a single agency giving out information through online portals, except customs, in some cases. ICPs at all border points is expected to solve these problems.

Figure 10 shows that nearly two-thirds, or 65 percent, of the respondents think coordination among agencies is good while 27.1 percent consider it as average. A small portion of the respondents was dissatisfied and reported low level of coordination.



Source: Primary Survey, CUTS International, 2014

Documents, Signatories and Days Required for Trade: Normally, India requires six to eight documents for exports to South Asian countries. Most respondents said that the number depends upon products and ports. For instance, in the case of agriculture products, more documents are used, compared to manufactured products. This is mainly due to the nature of those products. The maximum number of documents for exports to South Asian countries could possibly be as high as 21 (Annexure-2).

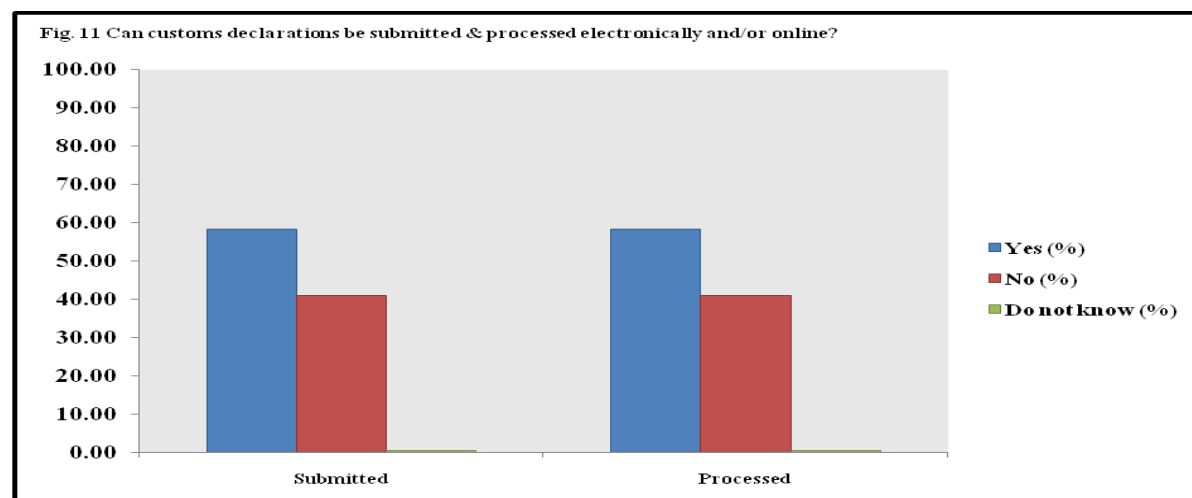
In the case of exports to developed countries, the minimum number of documents reported was two, while the maximum could be eight to nine (Annexure-2). The number of documents for developed countries was comparatively less because of better trade infrastructure (World Bank 2014). Road carriers/freight forwarders said that cumbersome document processes for clearance of goods reduces efficiency and causes unnecessary delays. They further indicated that the number of documents used for exports and imports needs to be reduced.

Customs officials and chamber houses said that the government is expected to reduce the number of documents required (from the interview). Under the new trade policy, three documents- i.e. bill of lading, commercial invoice-cum-packing list and shipping bill/ bill for export- are mandatory. For imports, bill of lading/ airway bill, commercial invoice-cum-packing list and bill of entry are the mandatory documents.

Eighty percent of 432 respondents reported that the minimum number of signatures for exports to South Asian countries for customs clearance ranged from 14 to 15 (Annexure-2). For export to developed countries, the minimum number was reported between four and five (Annexure-2). On the other hand, customs and other government officials highlighted the need to establish a single window system to reduce the documentation at border points.

There was no specific answer to the number of signatures required, because of differing nature of the products, rules and regulations across countries. In this respect, South Asian countries need to work on harmonisation of documents and a greater degree of cooperation among agencies.

Electronic Filing and Advance Ruling Notification: Out of 432 respondents, 58.4 percent reported that customs declaration could be processed and submitted electronically, while 41.1 percent reported negatively. Traders said that there were cases when electronic submission was not working because of poor internet connectivity and other related issues.

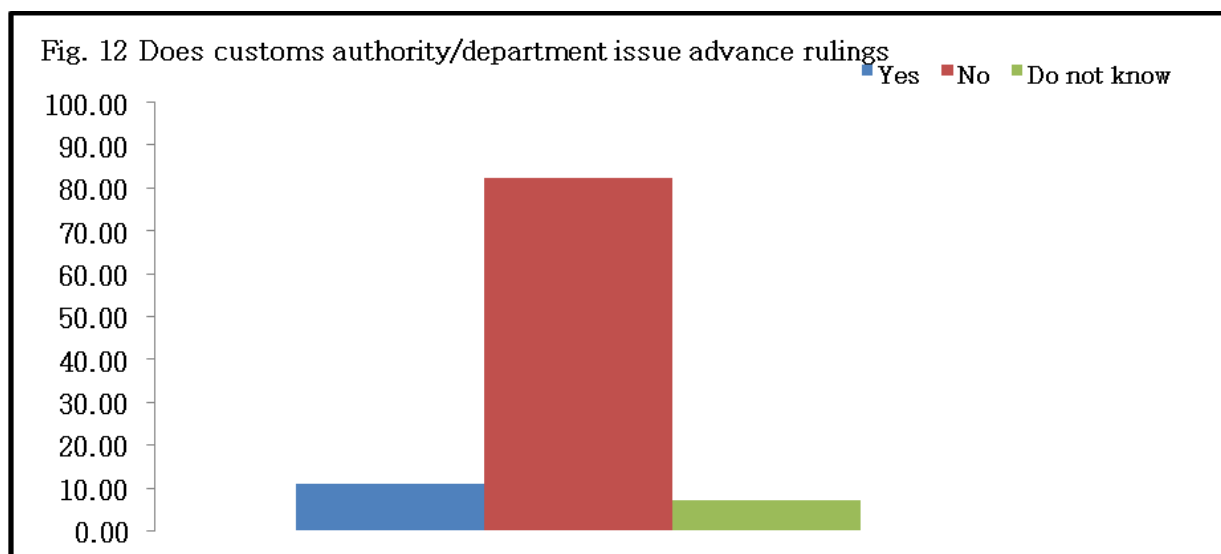


Source: Primary Survey, CUTS International, 2014

Customs officials and other related agencies said that 70 percent of India's international trade was happening through the EDI system. However, there were ports where the system was yet to be implemented. They also said that small traders were not well versed with the EDI mechanism and that there was a further need to train them on the electronic submission of documents.

Figure 12 shows that 82 percent of 432 respondents were not aware about the advance ruling¹⁰ form and 10.8 percent said that the customs authority issued advance rulings. It is evident that the lack of understanding about advance ruling remains a key concern among stakeholders and this may have far reaching implications to their trade transactions.

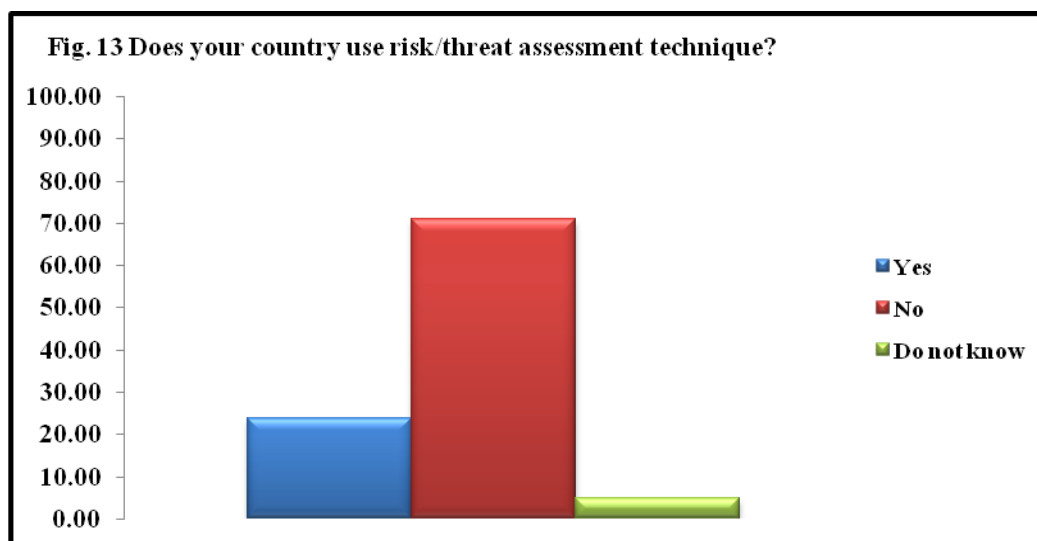
¹⁰ Handbook of Advance Ruling, Ministry of Finance, 2014 <http://www.aarrulings.in/book.pdf>



Source: Primary Survey, CUTS International, 2014

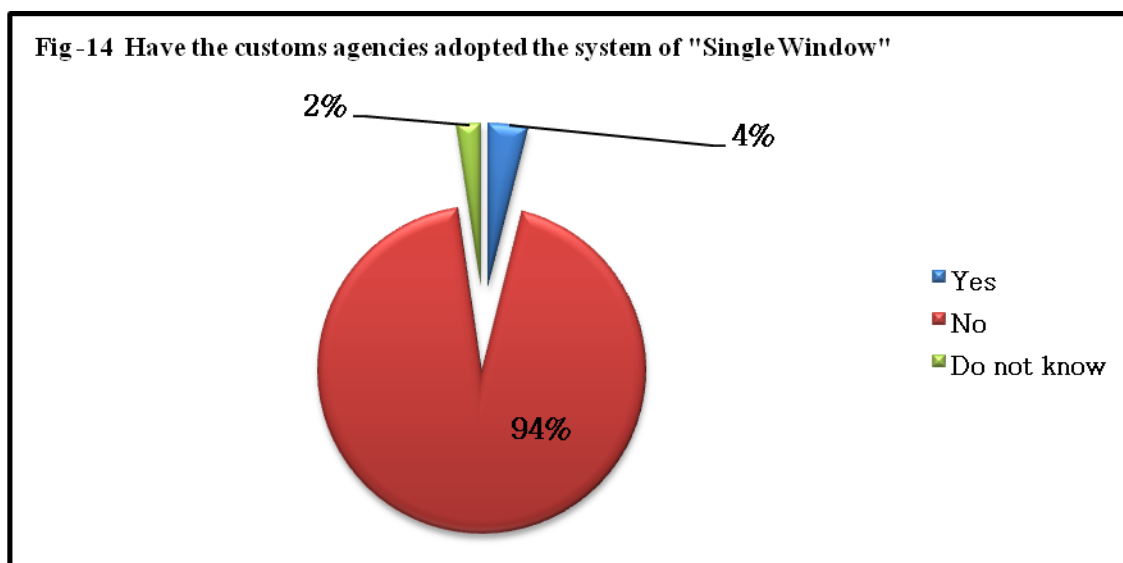
Customs officials said that there was a need to focus on organising more trainings on customs clearance and advance ruling. They thought that such programmes were particularly important for small and medium enterprises.

Risk Assessment, Inward Inspection and Customs Procedures: When the 432 respondents were asked about risk assessment techniques, 72 percent of them said that the country did not apply any risk assessment techniques, while 24 percent said that such techniques were being used. However, customs officials said that they used risk assessment techniques to curb illegal trade of narcotics and hazardous chemicals.



Source: Primary Survey, CUTS International, 2014

On the single window system, 94 percent of the 432 said customs agencies have not adopted the system (Figure 14). Customs officials themselves agreed that such a system needed to be established at all border points.



Source: Primary Survey, CUTS International, 2014

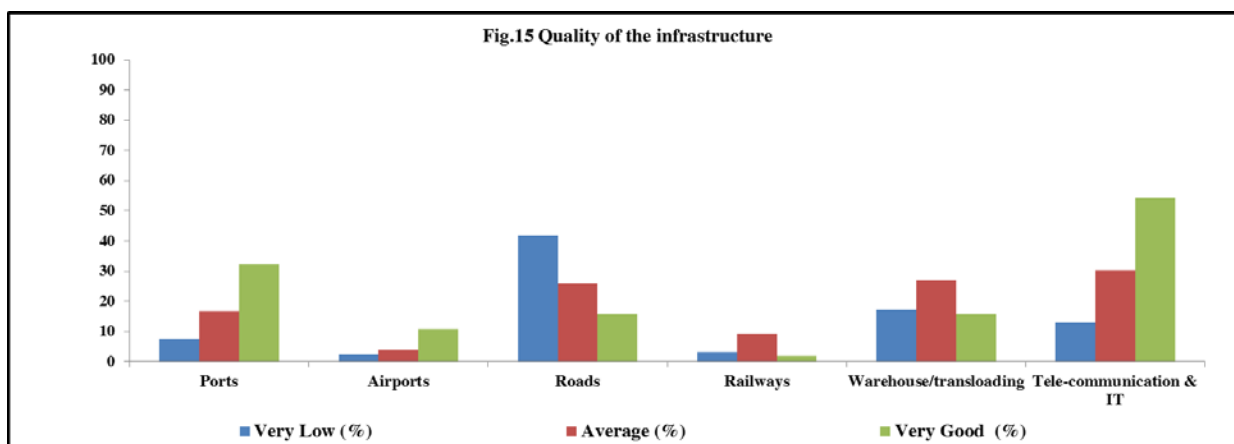
The government has initiated Indian Customs Single Window Project¹¹, which will include regulatory agencies, such as Animal Quarantine, Plant Quarantine, Drug Controller, Textile Committee, etc.¹² This kind of platform would provide an integrated solution for all trade-related queries.

7.2.3 Trade-related infrastructure and services

Respondents were asked to rate the quality of infrastructure of ports, airports, roads, railways, warehousing/transloading and telecommunication and IT. Most of them said that road and telecommunications and IT services were very good. The warehousing/transloading facilities of railways were rated average by most respondents. It is not a preferred mode of transportation for them despite being one of the biggest rail networks in the world. One of the key reasons behind the low usage for trade is delays. Traders rely more on road transportation and, hence, have deep concerns over the current state of road infrastructure. For ports and airways, most respondents rated the quality as good just as the graph shows.

¹¹ Initiatives to facilitate trade and encourage non adversarial tax administration, Ministry of Finance, 2014

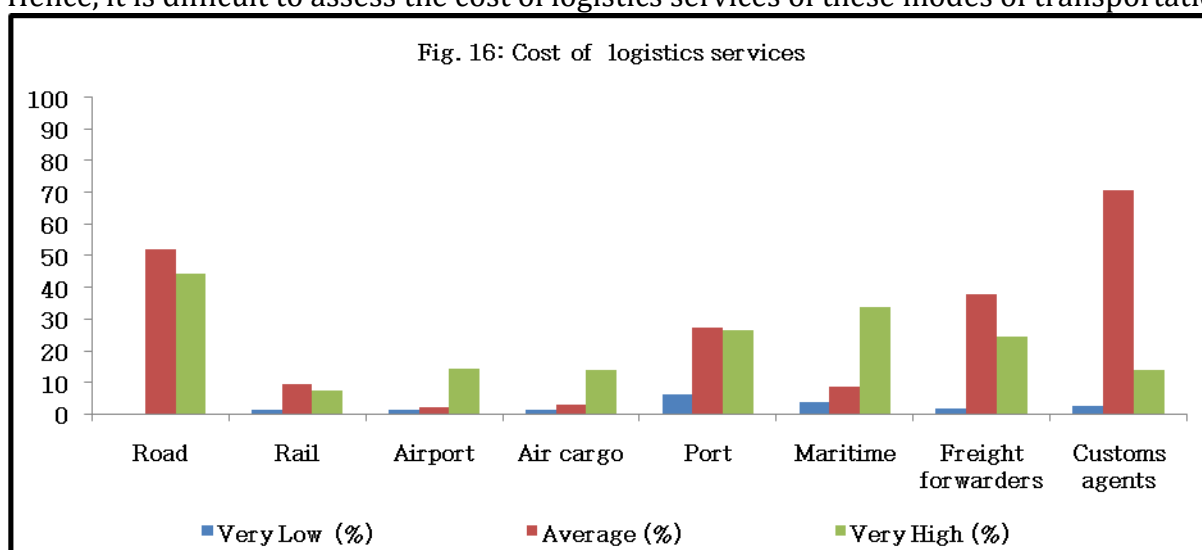
¹² Ibid.



Source: Primary Survey, CUTS International, 2014

Road carriers, freight forwarders and other stakeholders also shared similar views on infrastructure. They said that India has to improve its infrastructure capacity for all modes of transport to ensure a seamless flow of goods across borders.

Figure 11 shows the ratings given by respondents to the cost of logistics services provided by different service providers. The cost of logistics services for roads, ports and maritime transport is high, while the cost of the services for freight forwarders, customs agents is average. Furthermore, very few responses were given in the case of rail, airport and airways. Hence, it is difficult to assess the cost of logistics services of these modes of transportation.



Source: Primary Survey, CUTS International, 2014

7.2.4 Priority Areas regarding Improvement of trade facilitation in India

Finally, respondents were asked about their priority levels of different trade facilitation measures and how they categorised them. Table 19 exhibits their categorisation according to their responses. Here, 432 respondents said that the first step towards trade facilitation in the country should be to award a high level of priority to establish a single window system.

Table 19: Priority levels for specific areas in trade facilitation						
Areas	Lower Priority		Average Priority		Higher Priority	
	Frequ ency	Percen tage	Frequ ency	Percen tage	Frequ ency	Percen tage
Publication of trade related rules and regulations	51	11.10	109	25.30	269	62.50
Inquiry point regarding export/import procedures and formalities	37	8.30	119	27.50	264	61.10
Coordination between border management agencies	39	7.20	194	45.30	189	44.20
Decrease the number/time required of export/import documents	28	6.00	114	26.40	290	67.10
Electronic/Online submission of customs documents	6	1.40	45	10.40	234	54.30
Single window	7	1.60	25	5.80	382	89.10
Time taken to clear inward/outward goods	24	5.30	43	10.00	360	83.50
Quality/efficiency of ports	5	0.90	49	11.40	206	48.10
Quality/efficiency of Roads	12	2.10	52	12.00	324	75.00
Quality of warehouse/trans-loading facilities	15	3.50	68	15.80	302	70.20
Quality of telecommunication and IT services	22	4.40	161	37.50	238	55.50
Efficiency of quality/standard inspection agencies	14	2.30	219	50.90	158	36.70
Efficiency of health/SPS agencies/quarantine	9	1.40	63	14.70	139	32.40
Decrease the cost of using logistics services	16	3.50	39	9.00	317	73.60

Source: Primary Survey, CUTS International, 2014

As many as 83 percent of the respondents said that a high priority must be given to improve the processes as they have to spend a significant amount of time getting inward/outward bound goods cleared at the customs. Furthermore, 75 percent said that the efficiency of roads should be a priority area in trade facilitation reforms. Improvements in quality of warehousing and transloading facilities was mentioned by nearly 70 percent of the respondents as a high priority target. In the same vein, 63 percent of the respondents said that the number of documents used for export and import needs to be reduced and more emphasis should be given to online submission.

Publication of rules and regulations was reported by 67 percent respondents as a high priority area for an effective trade facilitation. Similarly, 61 percent suggested that inquiry points needed to be developed at each port in order to resolve their problems. Other priority areas of improvement are given in detail in Table -19.

8. Policy Recommendations and Conclusions

The following recommendations have been made to address the issues related to trade and transport facilitation at sea ports, land ports and customs points. The recommendations below are based on existing studies, field survey statistics, observations in the preceding analysis and inputs gathered from various stakeholders.

- Single window system needs to be established at all border points. This will ensure transparent, minimal, predictable, reliable procedures and processes for traders. Furthermore, it would be ideal to establish a single or principal contact point on both sides of border. This would ensure smooth functioning of cross-border movement of goods.
- More ICPs need to be established. It is important for India to explore the possibilities of having single or common ICPs at border points. They could be an enquiry point for traders on both sides to easily access information about trade procedures and other related matters.
- There is need to promote containerisation by developing more ICDs. Scanners must be installed at ports and customs stations.
- Harmonisation of trade standards and conformity assessment across the region are vital for promoting regional integration. Furthermore, national certification institutions need to be established. This would push governments to enter into regional agreement on these areas.
- Efforts should be made for coordination among border agencies and they should organise joint meetings to identify key areas of concern.
- A greater degree of coordination is also needed between central and state agencies for smooth implementation of regulation and policies. This would improve customs clearance at border points.
- Advanced ruling needs to be made much more effective in order to ensure that traders have access to all kinds of information related to trade rules and regulations.
- An interactive trade portal needs to be set up containing all information on rules, regulations, process and procedures in the public domain. This portal could be an enquiry platform for traders, freight forwarders, clearing agents and customs house agents.
- Testing laboratories, quarantines and other agencies need to be set up at border points to expedite the process of cross-border movement of goods.

References

- ADB and UNCTAD (2008), 'Qualification of Benefits from Economic Cooperation in South Asia', Asian Development Bank and United Nations Conference on Trade and Development, Macmillan India, New Delhi.
- ADB (2009), 'Designing and Implementing Trade Facilitation in Asia and the Pacific'.
- ADB (2017), "Trade and Transport Facilitation Monitoring Mechanism in Bangladesh." <https://www.adb.org/sites/default/files/publication/317486/trade-transport-facilitation-bangladesh.pdf>.
- Adhikari, R, and P Kharel (2014), "Nepal and SAFTA: Issues, Prospects and Challenges ." In Regional Integration in South Asia, edited by Y Basnett and M Razzaque, 362–90. Commonwealth Publishing. <https://doi.org/10.14217/9781848599147-en>.
- Ahmed, Manzur (2006), 'Trade Facilitation Needs Assessment-Private Sector's Perspective of Bangladesh', Regional Consultation on Trade Facilitation Needs Assessment in South Asia, CUTS International and UNDP Regional Centre, Colombo.
- Ahmed, S and E Ghani, (2008), 'Making Regional Cooperation Work for South Asia's Poor, Policy Research Paper 4736, South Asia Regional Program Unit, The World Bank, Washington, DC.
- Ahmed, S., Kelegama, S. and Ghani, E (2010), "Promoting Economic Cooperation in South Asia: Beyond SAFTA." Sage Publications, New Delhi.
- Alburo, Florian (2005), 'Implementation of Trade Facilitation Measures: Needs, Costs and other Issues for the WTO Negotiations', ARTNet Policy Brief No. 6, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.
- Anderson, James E and Eric van Wincoop, (2004), 'Trade Costs', Journal of Economic Literature, Vol. XLII pp. 691–751
- Arnold, John (2007), 'The Role of Trade Facilitation in Export Growth', in Sadiq Ahmed and Ejaz Ghani (eds.) South Asia: Growth and Regional Integration, 191-235, The World Bank, Washington, DC
- Arvis, JF (2005), 'Transit and the Special Case of Landlocked Countries', Custom Modernization Handbook, 243-264, The World Bank, Washington DC.

Arvis, Jean-François, Yann Duval, Ben Shepherd, and Chorthip Utoktham (2013, "Trade Costs in the Developing World (1995-2010)." World Bank Policy Research Working Paper Series. World Bank Policy Research Working Paper Series. Washington D.C. <http://hdl.handle.net/10419/103870>.

Banik, N and J Gilbert, (2008), 'Regional Integration and Trade Costs in South Asia', ADB Institute Working Paper No.127, Asian Development Bank, Manila.

Banga, Rashmi (2014) ,"Measuring Value in Global Value Chains." 8. Transnational Corporations. Vol. 21. https://unctad.org/en/PublicationsLibrary/diaeia2014d1_en.pdf.

Basnett, Y, and M.A Razzaque, eds. (2014), Regional Integration in South Asia. Regional Integration in South Asia. London: Commonwealth Publishing. <https://doi.org/10.14217/9781848599147-en>.

Baysan, T, A Panagariya, and N Pitigala, (2006), 'Preferential Trading in South Asia', World Bank Policy Research Working Paper 3813, The World Bank, Washington, DC.

Butt, M. S., and Bandara, J. S. (2008), Trade Liberalization and Regional Disparity in Pakistan: Routledge.

Centre for WTO Studies, Indian Institute of Foreign Trade, (2012), 'Trade facilitation gap analysis for border clearance procedures in India'.

Chatterjee, Bipul and Joseph George (2012), 'Consumers and Economic Cooperation: Cost of Economic Cooperation to Consumers in South Asia', CUTS International, Jaipur.

Chaturvedi, Sachin (2007), 'Trade Facilitation Measures in South Asian FTAs: An Overview of Initiatives and Policy Approaches', ARTNeT Trade Working Paper Series, No. 28, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.

Chaturvedi, Sachin (2009), 'Impact of IT related Trade Facilitation Measures on SMEs: An Overview of Indian Experience by, ARTNeT Working Paper Series, No. 66, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.

Clara, Brandi (2013), 'Successful Trade Promotion: Lessons from Emerging Economies', Overseas Development Institute, (London, UK. CUTS (2013), 'Reforming Non-Tariff Barriers: Case for a Participatory Approach in South Asia' CUTS International, Jaipur.

Clark, X., Dollar, D., and Micco, A (2004), Port efficiency, maritime transport costs, and bilateral trade. Journal of development economics, 75(2), 417-450.

CUTS (2014), 'Enhancing Trade and Regional Economic Integration between India and Bangladesh - Phase I, CUTS International, Jaipur.

De, Prabir (2011), 'Why is Trade at Borders a Costly Affair in South Asia? An Empirical Investigation', Research and Information System for Developing Countries (RIS), India Habitat Centre, New Delhi.

De, P (2014), "Connectivity and Regional Cooperation in South Asia." In Regional Integration in South Asia: Trends, Challenges and Prospects², edited by Basnett Y and Razzaque M., 185–212. London: OECD Publishing.

---- (2006), 'Impact of Trade Costs on Trade: Empirical Evidence from Asian Countries', Research and Information System for Developing Countries (RIS), New Delhi

---- (2009), Inclusive Growth and the Trade Facilitation: Insights from South Asia, Policy Brief No. 16, ARTNeT.

---- (2010), 'Barriers to Trade in Services in India', Research and Information System for Developing Countries (RIS), New Delhi

---- (2012), ADB – ESCAP BPA Study: SASEC Trade and Transit Corridors.

Deloitte (2012), 'Logistics Sector: Present situation and way forward', Deloitte Touche Tohmatsu India and Indian Chamber of Commerce.

Deshmuk, Atul (2002), 'Indian Ports the Current Scenario', Department of Economics, University of Mumbai.

Dominic, Joseph, Shashank Priya, Pankaj Agrawal (2012), Trade Facilitation Gap Analysis, Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi.

Duval, Yann and Chorthip Utoktham (2010), 'Intraregional Trade Costs in Asia: A Primer', Trade and Investment division, UNESCAP Staff Working paper01/10, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.

Engman M (2005), 'The Economic Impact of Trade Facilitation', OECD Trade Policy Working Paper No. 21, Organization for Economic Cooperation and Development, Paris.

Engman, Michael (2009), 'The Economic Impact of Trade Facilitation', OECD Trade Policy Studies, Organisation of Economic Cooperation and Development.

Gereffi, Gary (2014), "Global Value Chains in a Post-Washington Consensus World." Review of International Political Economy 21 (1): 9–37.
<https://doi.org/10.1080/09692290.2012.756414>.

Gangwar, Rachna and G Raghuram (2010), 'Container Train Operators in India: Problems and Prospects', Indian Institute of Management, Ahmedabad.

George, Joseph (2011), 'Doha Round Negotiations on Trade Facilitation: The Gradient of Trade Policy Reforms', in Bipul Chatterjee and Joseph George (eds.), *The Doha Round and South Asia: Need for Better Coordination*, CUTS International, Jaipur.

GOI (2014), *Custom Manual*, Central Board of Excise & Customs, Department of Revenue, Ministry of Finance.

GoI (2016), "Indian Railways: Facts and Figures 2016-17." http://indianrailways.gov.in/railwayboard/uploads/directorate/stat_econ/IRSP_2016-17/Facts_Figure/Fact_Figures_English_2016-17.pdf.

Gupta, Himanshu (2009), 'Trade Facilitation in India', *Regional Policy Forum on Trade Facilitation and SMEs in Times of Crisis*, Beijing.

Hertel, T.W, and T Mirza (2009), "The Role of Trade Facilitation in South Asian Economic Integration." Asian Development Bank (ADB).

Hummels, David (2001), 'Time as Trade Barrier' Purdue University, Indiana, US.

Hummels, David (2007), 'Transportation Costs and International Trade in the Second Era of Globalization', *Journal of Economic Perspectives*, Vol. 21, Number 3.

Khan, U (2010), 'Pakistan: South Asia Trade & Non-Tariff Barriers', Development Policy Research Centre (DPRC) Working Paper, Lahore University of Management Sciences, Lahore.

Kim, M Julie and Rita Nangia (2008), 'Infrastructure Development in India and China—A Comparative Analysis', Pacific Basin Research Centre, SOKA university of America

KPMG (2010), 'Logistics in India Part - 1', KPMG International

KPMG (2010), 'Logistics in India Part - 2', KPMG International

KPMG (2010), 'Logistics in India Part - 3', KPMG International

Kowalski, Przemyslaw, Javier Lopez Gonzalez, Alexandros Ragoussis, and Cristian Ugarte (2015), "Participation of Developing Countries in Global Value Chains." 179. OECD Trade Policy Papers. OECD Trade Policy Papers. <https://doi.org/10.1787/5js33lfw0xxn-en>.

Logistics Performance Index (2012), World Bank, Washington DC.

Man Singh, Shanker (2006), 'Trade Facilitation Needs Assessment - Private Sector's Perspective of Nepal', *Regional Consultation on Trade Facilitation Needs Assessment in South Asia*, CUTS International and UNDP Regional Centre, Colombo.

McLinden, Gerard (2006), 'Trade Facilitation: Progress and Prospects for the Doha Negotiations', The World Bank, Washington DC.

Mel, DD, (2011), Trade Facilitation Issues in South Asia, Paper No. 23, South Asia Centre for Policy Studies (SACEPS), Nepal.

Ministry of Civil Aviation (2012), 'Development of Airports Monitorable Targets & Milestones for 2010-11' Ministry of Civil Aviation, New Delhi

Ministry of Shipping (2011), 'Maritime Agenda: 2010–2020', Ministry of Shipping, New Delhi

MOCI, GoI (2011), "Foreign Trade Policy." Lo Spettatore Internazionale. New Delhi: Ministry of Commerce & Industry, Government of India .
<https://doi.org/10.1080/03932726908457780>.

Mukherji, IN (2004), 'Towards a Free Trade Area in South Asia: Charting a Feasible Course for Trade Liberalization with Reference to India's Role', RIS, Discussion Paper No. 86, Research and Information System for Developing Countries, New Delhi.

Nordås, Hildegunn Kyvik and Roberta Piermartini (2004), Infrastructure and Trade, WTO, Geneva.

OECD (2005), 'Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade', OECD Trade Policy Studies, Organization for Economic Cooperation and Development, Paris.

OECD (2013), 'Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade', OECD Trade Policy Paper No. 144, 2013

Panagariya, Arvind (2007), 'Trading Choices of South Asia', in Sadiq Ahmed and Ejaz Ghani (eds.), South Asia: Growth and Regional Integration, The World Bank, Washington DC.

Rahmatullah, M. (2004), 'Transport Issues and Integration in South Asia, (.

Rahmatullah, M. (2009), 'Regional Connectivity: Opportunities for Bangladesh to be a Transport Hub', Journal of Bangladesh Institute of Planners, Vol. 2, ISSN 2075-9363.

Rahman, Mustafizur, ed (2015), Towards Regional Integration in South Asia : Promoting Trade Facilitation and Connectivity. Dhaka: Centre for Policy Dialogue.
<http://cpd.org.bd/wp-content/uploads/2017/01/Towards-Regional-Integration-in-South-Asia-Promoting-Trade-Facilitation-and-Connectivity-2015.pdf>.

Roy, J. and P. Banerjee, (2010), Connecting South Asia: The Centrality of Trade Facilitation for Regional Economic Integration.

Sattar, Z (2014), "Tariff and Non-Tariff Barriers in South Asia Trade: A Bangladesh Perspective." In Regional Integration in South Asia: Trends, Challenges and Prospects, edited by Razzaque M. Eds Basnett Y, 304–20. London: OECD Publishing.
https://read.thecommonwealth-ilibrary.org/commonwealth/trade/regional-integration-in-south-asia_9781848599147-en#page12.

Sen, Julius (2004), 'Trade Facilitation and South Asia: The Need for Some Serious Scenario Planning', CUTS Research Report, CUTS International, Jaipur.

Singh, S and RC Mishra, (2013), Trade Facilitation and Trading across Borders: A Case Study of India, *SIU Journal of Management*, Vol.3, No. 2

Serieux, J (2014), "Production Integration of LDCs into Regional Supply Chains: The Case of South Asia." In *Regional Integration in South Asia: Trends, Challenges and Prospects*, edited by Razzaque M. Eds Basnett Y, 214–35. London: Commonwealth Publishing.

Shahid, JB *et al.* (2006), Trade, Tariff and Customs in South Asia, Vol. 2, South Asian Policy Analysis Network, Pakistan.

Singh, Surendar, Utkarsh Kumar Mishra, and Harleen Singh Sandha (2018), "The Trade Facilitation Agenda of the WTO and India's Commitments." OECD. <https://doi.org/10.14217/498CBA5E-EN>.

Shepherd, Ben and John S Wilson (2008), 'Trade Facilitation in ASEAN Member Countries: Measuring Progress and Assessing Priorities', Policy Research Working Paper 4615, The World Bank, Washington DC.

Sundar, S (2010), 'Port restructuring in India' Teri, New Delhi

Taneja, N, S Prakash, and S Bimal (2014), "Tariff and Non-Tariff Barriers to Trade in South Asia: An Indian Perspective." In *Regional Integration in South Asia: Trends, Challenges and Prospects*, edited by M.A Razzaque and Y Basnett, 321–38. London: Commonwealth Publishing. <https://doi.org/10.14217/9781848599147-en>.

Taneja, Nisha (1999), "Informal Trade in the SAARC Region", Indian Council for Research on International Economic Relations (ICRIER), New Delhi.

Taneja, Nisha (2004), 'Informal and Free Trade Arrangements', *South Asian Journal*, Issue 4, April-June, Lahore.

Taneja, Nisha (2005), 'Informal Trade in South Asia: How to Channelize to a Formal Route?', CUTS Briefing Paper RECSA 5/2005, Centre for Consumer Action, Research & Training, Jaipur.

UNCTAD (2006), 'Technical Notes on Essential Trade Facilitation Measures', Trade Facilitation Handbook Part 2, United Nations Council for Trade and Development, Geneva.

UNCTAD (2011), 'Trade Facilitation in Regional Trade Agreements' United Nations Council for Trade and Development, Geneva

UNCTAD (2013), 'Global Value Chains and Development: Investment and Value added Trade in the global economy', United Nations Council for Trade and Development, Geneva.

Urban Land Institute and Ernst & Young (2010), 'Infrastructure 2012: Spotlight on Leadership', Urban Land Institute, Washington DC.

Utsav et al (2018), "Trade Facilitation and Innovation: Evidence from South Asia Subregional Economic Cooperation Countries." <https://www.adb.org/publications/trade-facilitation-innovation-evidence-sasec>.

Walkenhorst, Peter and Tadashi Yasui (2009), 'Quantitative Assessment of the Benefits of Trade Facilitation', in Overcoming Border Bottlenecks (eds.), OECD Trade Policy Studies, Organisation of Economic Cooperation and Development

Weerahewa, J (2009), Impact of Trade Facilitation Measures and Regional Trade Agreements on Food and Agricultural Trade in South Asia, Working Paper Series, No 69, ARTNeT.

Weerakoon, Dushni (2008), 'SAFTA: Current Status and Prospect', Institute for Policy Studies, Colombo.

Weerakoon, Dushni, Jayanthi Thennakoon and Bilesha Weerakoon (2005), 'Multilateral Agreement on Trade Facilitation: Important but Complex Agenda for South Asia', in South Asian Positions in the WTO Doha Round: In Search of a True Development Agenda, Vol. 1, CUTS International, Jaipur.

Wilson, J. S., Mann, C. L., and Otsuki, T (2003), Trade facilitation and economic development: A new approach to quantifying the impact. *The World Bank Economic Review*, 17(3), 367-389.

Wilson, John S and T Otsuki (2007), 'Regional Integration in South Asia: What Role for Trade Facilitation?', Policy Research Working Paper 4423, The World Bank, Washington DC.

Wilson, John S, CL Mann and T Otsuki (2005), 'Assessing the Benefits of Trade Facilitation: A Global Perspective', The World Bank Institute for International Economics, Washington DC and Osaka University, Japan.

Wilson, John S, Catherine L Mann and Tsunehiro Otsuki (2004), 'Assessing the Potential Benefit of Trade Facilitation: A Global Perspective', Policy Research Working Paper 3224, The World Bank, Washington DC.

Wilson, Norbert (2009), 'Examining the Effect of Certain Customs and Administrative Procedures on Trade', OECD Trade Policy Studies, Organisation of Economic Cooperation and Development.

World Bank (2010), 'Logistics Performance South Asia, Connecting to Compete: Trade Logistics in the Global Economy', The World Bank, Washington DC.

World Bank (2001), 'Global Economic Prospects and the Developing Countries 2002: Making Trade Work for the Poor. Washington, DC.

World Bank (2014), 'Doing Business Report: Understanding Regulations for Small and Medium-Size Enterprises', 11th edition.

World Bank (2014), 'The Logistics Performance Index and its Indicators: Connecting to Compete,' Trade Logistics in the Global Economy.

World Bank (2010), "Trade and Transport Facilitation Assessment : A Practical Toolkit for Country Implementation." Washington, D.C: World Bank Open Knowledge. <https://openknowledge.worldbank.org/handle/10986/2490>.

World Economic Forum (2012), 'The Global Enabling Trade Report 2012: Reducing Supply Chain Barriers'.

World Economic Forum, (2014), 'The Global Enabling Trade Report 2014'.

WTO (2015), "World Trade Report 2015 (Speeding up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement)." Geneva. https://www.wto.org/english/res_e/publications_e/wtr15_e.htm.

Annexure -1

Questionnaire for Trade Facilitation Audit

Product Name:			
Country of Study:			
Trade Route/Port	7. Attari	<input type="checkbox"/>	
	8. Agartala	<input type="checkbox"/>	
	9. Calcutta Port	<input type="checkbox"/>	
	10. Changrabandha	<input type="checkbox"/>	
	11. Chennai Port	<input type="checkbox"/>	
	12. Cochin Port	<input type="checkbox"/>	
	13. Jaigaon	<input type="checkbox"/>	
	14. Mumbai Port	<input type="checkbox"/>	
	15. Panitanki	<input type="checkbox"/>	
	16. Petrapole	<input type="checkbox"/>	
	17. Phulbari	<input type="checkbox"/>	
	18. Raxaul	<input type="checkbox"/>	

Note: The numbers assigned to each trade route is the unique code for that particular trade route.

Part I: Respondent details

(i) Title:	<input type="checkbox"/> <i>Mr.</i> <input type="checkbox"/> <i>Mrs.</i> <input type="checkbox"/> <i>Ms.</i> <input type="checkbox"/> <i>Dr.</i> <input type="checkbox"/> <i>Others</i> (precise):	
(ii) Full Name:		
(iii) Agency/organization:		
(iv) Contact address:		
(v) Department:		
(vi) Telephone:		
(vii) Email :		
(viii) Your work area(s): Please select the option that best describe your current area of work.	<input type="checkbox"/> Forwarder/Agent/ Multimodal Transport Operator <input type="checkbox"/> Exporter <input type="checkbox"/> Importer <input type="checkbox"/> Shipping line/ship's agent <input type="checkbox"/> Road Carrier <input type="checkbox"/> Airline Operator <input type="checkbox"/> Railway Operator <input type="checkbox"/> Port Authority <input type="checkbox"/> Airport Authority <input type="checkbox"/> Customs Authority <input type="checkbox"/> Chamber of Commerce <input type="checkbox"/> Ministry/Department of Commerce <input type="checkbox"/> Ministry/Department of Finance <input type="checkbox"/> Ministry/Department of Transport <input type="checkbox"/> Others	
(ix) Scale of operation	<input type="checkbox"/> Small <input type="checkbox"/> Medium <input type="checkbox"/> Large <input type="checkbox"/> Not applicable	
(x) Located in Special Economic Zone, including SEZ, BOI managed zone, industrial park etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Part II: Questionnaire

1. Publication of trade related rules and regulations

- 1.1. Is there any national customs website that provides minimum set of information related to customs duties, other applicable fees and export import and transit procedures?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

- 1.2. If yes, does it cover information in the following areas?

	Yes	No	Do not know	
1.2.1. Import/Export Procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.2. Customs clearance procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.3. Applicable customs duties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.4. Applicable fees and charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.5. Average release time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.6. Clearance time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2.7. Changes in regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- 1.3. If yes, please rate the effectiveness of the information.

	Very Low	Low	Average	High	Very High	
1.3.1. Import/Export Procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.2. Customs clearance procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.3. Applicable customs duties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.4. Applicable fees and charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.5. Average release time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.6. Clearance time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3.7. Changes in regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- 1.4. Is there any inquiry point to address queries regarding export/import procedures and formalities?

Yes	<input type="checkbox"/>	
-----	--------------------------	--

No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2. Rules and procedures for export and import

2.1. Which of the following border management agencies are operating at the border point?

	Yes	No	Do not know	
2.1.1. Revenue and customs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.2. Immigration service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.3. Health authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.4. Quarantine inspection service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.5. Plant health inspectorate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.6. Food standards agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.7. Security agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.8. Archaeological agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.1.9. Others (Please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.2. Please rate the coordination between border management agencies.

Very Low	Low	Average	Good	Very Good	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

If importer, skip to 2.6.

2.3. How many documents are required for customs clearance for **typical exports**? If a precise number is not possible, please provide range.

	Minimum	Maximum
2.3.1. Exports to South Asian Countries		
2.3.2. Exports to Developed Countries		
2.3.3. Not Applicable		

2.4. How many signatures are required for customs clearance for **typical exports**? If a precise number is not possible, please provide range.

	Minimum	Maximum
2.4.1. Exports to South Asian Countries		
2.4.2. Exports to Developed Countries		
2.4.3. Not Applicable		

- 2.5. How many days are required to prepare all the **export documents**? (Please specify in days) If a precise number is not possible, please provide range.

	Minimum	Maximum
2.5.1. Exports to South Asian Countries		
2.5.2. Exports to Developed Countries		
2.5.3. Not Applicable		

If exporter, skip to 2.9.

- 2.6. How many documents are required for customs clearance for **typical imports**? If a precise number is not possible, please provide range.

	Minimum	Maximum
2.6.1. Imports from South Asian Countries		
2.6.2. Imports from Developed Countries		
2.6.3. Not Applicable		

- 2.7. How many signatures are required for customs clearance for **typical imports**? If a precise number is not possible, please provide range.

	Minimum	Maximum
2.7.1. Imports from South Asian Countries		
2.7.2. Imports from Developed Countries		
2.7.3. Not Applicable		

- 2.8. How many days are required to prepare all the **import documents**? (Please specify in days) If a precise number is not possible, please provide range.

	Minimum	Maximum
2.8.1. Imports from South Asian Countries		
2.8.2. Imports from Developed Countries		
2.8.3. Not Applicable		

- 2.9. Do customs and other border agencies accept copies of documents not authenticated?

Yes	<input type="checkbox"/>	
-----	--------------------------	--

No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.10. Can customs declarations be submitted and processed electronically and/or online?

	Yes	No	Do not know	
2.10 (a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10 (b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.10.1. If yes, please rate the quality of the functioning of the system.

	Very Low	Bad	Average	Good	Very Good	
2.10.1(a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10.1(b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.11. Can supporting documents be submitted and processed electronically and/or online?

	Yes	No	Do not know	
2.11 (a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11 (b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.11.1. If yes,

Fully	<input type="checkbox"/>	
Partially	<input type="checkbox"/>	

2.11.2. If yes, please rate the quality of the functioning of the system.

	Very Low	Bad	Average	Good	Very Good	
2.11.2 (a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11.2 (b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.12. Does your customs authority/ department issue advance rulings?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.12.1. If yes, what is the length of time for which advance ruling is valid? (Please specify days)

.....

2.12.2. If yes, what proportion of the request gets positive response? (Please specify in percentage)

.....

2.13. Does Customs allow for pre-arrival processing of export/import consignments?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.13.1. If yes, please rate the effectiveness of pre-arrival processing.

Very Low	Low	Average	Good	Very Good	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.14. Does your country use risk/ threat assessment technique?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

[If exporter, skip to 2.20.](#)

2.15. What proportions of your **inward consignments** are subject to physical inspection by customs?

Less than 5 percent	<input type="checkbox"/>	
Between 5 and 15 percent	<input type="checkbox"/>	
Between 15 and 25 percent	<input type="checkbox"/>	
Between 25 and 50 percent	<input type="checkbox"/>	
Above 50 percent	<input type="checkbox"/>	

2.16. What is the basis for valuation of **customs duties**?

Transaction value	<input type="checkbox"/>	
Transaction value of identical goods	<input type="checkbox"/>	
Transaction value of similar goods	<input type="checkbox"/>	

Computed Value	<input type="checkbox"/>	
Reference Value	<input type="checkbox"/>	

2.17. If more than one system of **customs valuation** is applied, please provide what proportion of the value of consignment fall under the following valuation method.

Transaction value	
Transaction value of identical goods	
Transaction value of similar goods	
Computed Value	
Reference Value	

2.18. Can goods be released pending **final clearance** against accepted guarantee?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.19. Does your country implement **authorized traders scheme**?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.20. Have the customs agencies adopted the system of 'Single Window'?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.20.1. If yes, please rate the quality of the system.

Very Low	Low	Average	Good	Very Good	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.21. Does your country have any system of post clearance audit?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.21.1. If yes, what percentage of consignment is liable for post clearance audit?

Less than 5 percent	<input type="checkbox"/>	
Between 5 and 15 percent	<input type="checkbox"/>	
Between 15 and 25 percent	<input type="checkbox"/>	
Between 25 and 50 percent	<input type="checkbox"/>	
Above 50 percent	<input type="checkbox"/>	

2.21.2. If yes, please rate the effectiveness of post clearance audit.

Very Low	Low	Average	Good	Very Good	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.22. If you are not satisfied with the decision made by the customs or any other border management authority, is a non-judicial review/appeal procedure available?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.23. Do you have to pay irregular payments/ bribes to clear the consignments?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

2.23.1. If yes, please provide the frequency, i.e. percentage of the cases you have made such payments.

Less than 5 percent	<input type="checkbox"/>	
Between 5 and 15 percent	<input type="checkbox"/>	
Between 15 and 25 percent	<input type="checkbox"/>	
Between 25 and 50 percent	<input type="checkbox"/>	
Above 50 percent	<input type="checkbox"/>	

2.24. What is the average time taken to clear **outward goods**? If not applicable write NA.

Place	Time		Not Applicable
	Days	Hours	
2.24.1. Ports			
2.24.2. Airports			
2.24.3. Road frontiers			
2.24.4. Rail frontiers			

2.24.5. Inland container depots (ICDs)			
2.24.6. Customs points			

2.25. What is the average time taken to clear **inward goods**? If not applicable write NA.

Place	Time		Not Applicable
	Days	Hours	
2.25.1. Ports			
2.25.2. Airports			
2.25.3. Road frontiers			
2.25.4. Rail frontiers			
2.25.5. Inland container depots (ICDs)			
2.25.6. Customs points			
2.25.7. Quarantine check post			

2.26. What is your experience of customs operational efficiency at:

	Very Low	Low	Average	Good	Very Good	N/A	
2.26.1. Ports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.2. Airports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.3. Road frontiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.4. Rail frontiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.5. Inland container depots (ICDs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.6. Customs point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.26.7. Quarantine check post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3. Trade-related infrastructure and services

3.1. Please rate the quality of the following infrastructure.

	Very Low	Low	Average	Good	Very Good	N/A	
3.1.1. Ports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.1.2. Airports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.1.3. Roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.1.4. Railways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.1.5. Warehouse/ trans-loading facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.1.6. Tele-communication and IT services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.2 Please rate the efficiency of the following service providers.

	Very Low	Low	Average	High	Very High	N/A	
3.2.1. Road transport services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.2. Rail transport services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.3. Maritime transport service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.4. Freight forwarders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.5. Customs agent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.6. Quality/standard inspection agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.7. Health/ SPS agencies/ Quarantine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.8. Banking services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.9. Insurance services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.10. Visa services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.3. Based on your experience, how do you assess the cost of the following logistics services?

	Very Low	Low	Average	High	Very High	N/A	
3.3.1. Road transport rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.2. Rail transport rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.3. Airport charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.4. Air cargo charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.5. Port charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.3.6. Maritime transport charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.7. Freight forwarders' charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3.8. Customs agent's charges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.4. Have you ever incurred any loss/damage of cargo during the last five years?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	

3.4.1. If yes, what was the percentage of loss/damage incurred?

Less than 5 percent	<input type="checkbox"/>	
Between 5 and 15 percent	<input type="checkbox"/>	
Between 15 and 25 percent	<input type="checkbox"/>	
Between 25 and 50 percent	<input type="checkbox"/>	
Above 50 percent	<input type="checkbox"/>	

3.4.2. If yes, reasons for loss/damage?

--

4. Treatment of goods in transit

4.1. Do exporters/importers need to pay any fees for transit passage?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.1.1. If yes, is information on such fees freely available?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

- 4.2. How many additional documents are required to use transit passage? (Please specify the numbers)

.....

- 4.3. Are information on transit formalities and documentations available freely?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

- 4.4. Do customs allow pre-arrival processing of transit trade?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

- 4.5. Can transit documents be submitted and processed electronically and/or online?

	Yes	No	Do not know	
4.5 (a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.5 (b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- 4.5.1. If yes, does it apply to all transit documents?

All documents	<input type="checkbox"/>	
Only partial	<input type="checkbox"/>	

- 4.5.2. If yes, please rate the quality of the functioning of the system.

	Very Low	Bad	Average	Good	Very Good	
4.5.2 (a) Submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.5.2 (b) Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- 4.6. Are goods in transit subject to physical verification?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.6.1. If yes, what proportion of the consignment is liable for physical verification?

Less than 5 percent	<input type="checkbox"/>	
Between 5 and 15 percent	<input type="checkbox"/>	
Between 15 and 25 percent	<input type="checkbox"/>	
Between 25 and 50 percent	<input type="checkbox"/>	
Above 50 percent	<input type="checkbox"/>	

4.7. Do you need to provide guarantee/insurance for goods in transit?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.7.1. If yes, in which form?

Cash	<input type="checkbox"/>	
Bonds	<input type="checkbox"/>	
Bank Guarantee	<input type="checkbox"/>	
Insurance	<input type="checkbox"/>	
Any one of the above	<input type="checkbox"/>	

4.8. Is the transit guarantee limited to the values of duties and charges?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.9. How many days does it take to release the transit guarantee?

.....

4.10. Is it required to transport goods in transit with customs escorts?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Seldom for high risk goods	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.11. Does your country have any transit agreement with neighbouring countries?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.11.1. If yes, name countries:

--

4.12. Is your country signatory of any international convention(s) related to transit?

Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Do not know	<input type="checkbox"/>	

4.12.1. If yes, name the convention(s):

--

4.13. Based on your experience, please assess the difficulty in transit operations with respect to:

	Very Low	Low	Average	High	Very High	N/A	
4.13.1. Designated routes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13.2. Customs escorts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13.3. Guarantee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13.4. Documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5. Priority areas

5.1 What is the priority level of the following as per the need to bring about changes to improve trade facilitation?

	Very Low	Low	Average	High	Very High	N/A
5.1.1. Publication of trade related rules and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.2. Inquiry point regarding export/import procedures and formalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.3. Coordination between border management agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.4. Decrease the number/time required of export/import documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.5. Electronic/Online submission of customs documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.6. Issue and validity of advance ruling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.7. Pre-arrival processing of import documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.8. Physical inspection by customs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.9. Single window	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.10. Post clearance audit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.11. Irregular payments/bribes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.12. Time taken to clear inward/outward goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.13. Quality/efficiency of ports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.14. Quality/efficiency of airports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.15. Quality/efficiency of Roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.16. Quality/efficiency of railways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.17. Quality of warehouse/trans-loading facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.18. Quality of telecommunication and IT services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.1.19. Efficiency of quality/standard inspection agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.20. Efficiency of health/SPS agencies/quarantine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.21. Decrease loss and damage of cargo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.22. Decrease the cost of using logistics services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.23. Transit agreement with neighbouring countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.24. Fees, documents and formalities for transit passage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.25. Pre-arrival processing of transit goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1.26. Physical verification of transit goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Annexure -2

Primary Data Analysis Tables

Part 1: Respondent Details

Table 1: Product Name/Category	
Category	(percent)
Dry fruits & dates	3.90
Clothing	9.70
Fish/Sea food	2.80
Iron & steel	4.20
Tea/Coffee	6.00
Miscellaneous	7.20
Machinery	6.70
Chemicals	6.30
Metals	3.20
Vegetables and fruits	5.30
Food grains	5.30
Engineering goods	21.50
Food products	8.10
Pharmaceutical products	1.90
Spices	3.50
Stone chips	2.10
Wood products	2.30
Total	100.00 (432)

Table 2: Trade Route/Port	
Name of Route/Port	(percent)
Attari	6.90
Agartala	5.60
Calcutta Port	11.80
Changrabandha	6.50
Chennai Port	14.40
Cochin Port	10.90
Jaigaon	6.30
Mumbai Port	6.90
Panitanki	4.60
Petrapole	13.40
Phulbari	5.80
Raxaul	6.90
Total	100.00 (432)

Table 3: Department	
Department	(percent)
Export	67.40
Import	22.20
Export & Import	5.10
Other Services	5.30
Total	100.00 (432)

Table 4: Current area of work	
Area of work	(percent)
Forwarder/Agent/Multimodal Transport Operator	16.90
Exporter	57.50
Importer	24.60
Shipping line/ship's agent	0.90
Total	100.00 (431)

Table 5: Scale of Operation	
Scale	(percent)
Small	35.00
Medium	45.10
Large	17.80
Not applicable	2.10
Total	100.00 (428)

Table 6: Located in Special Economic Zone, including SEZ, BOI managed zone etc.	
Status	(percent)
Yes	7.5
No	92.5
Total	100.00 (427)

Part II

1. Publication of trade related rules and regulations

Table 1.1: Is there any national customs website that provides minimum set of information related to custom duties, other applicable fees and export and import and transit procedures?	
Status	(percent)
Yes	84.50
No	11.80
Do not know	3.70
Total	100.00 (431)

1.2 If yes, does it cover information in the following areas?				
Areas	Yes (percent)	No (percent)	Do not know (percent)	Total (percent)
1.2.1 Import/Export Procedures	86.00	3.40	10.60	100.00 (415)
1.2.2 Customs clearance procedures	85.50	2.70	11.80	100.00 (415)
1.2.3 Applicable customs duties	85.50	2.20	12.30	100.00 (415)
1.2.4 Applicable fees and charges	80.40	6.80	12.80	100.00 (414)
1.2.5 Average release time	15.20	68.70	16.10	100.00 (415)
1.2.6 Clearance time	17.60	67.20	15.20	100.00 (415)
1.2.7 Changes in regulations	73.30	9.20	17.50	100.00 (401)

1.3 If yes, please rate the effectiveness of the information						
Areas	Very low (percent)	Low (percent)	Average (percent)	High (percent)	Very high (percent)	Total (percent)

1.2.1 Import/Export Procedures	0.80	9.30	41.30	43.80	4.80	100.00 (356)
1.2.2 Customs clearance procedures	1.10	16.40	42.70	36.20	3.70	100.00 (354)
1.2.3 Applicable customs duties	1.70	20.80	40.30	33.00	4.20	100.00 (355)
1.2.4 Applicable fees and charges	1.20	17.70	44.90	31.90	4.30	100.00 (345)
1.2.5 Average release time	14.90	44.60	26.70	6.90	6.90	100.00 (101)
1.2.6 Clearance time	14.70	57.80	17.60	7.80	2.00	100.00 (102)
1.2.7 Changes in regulations	4.00	26.60	35.10	29.10	5.10	100.00 (350)

Table 1.4: Is there any inquiry point to address queries regarding export import procedures and formalities?

Status	Total (percent)
Yes	82.60
No	17.10
Do not know	0.20
Total	100.00 (432)

2. Rules and procedures for export and import

2.1 Which of the following border management agencies are operating at the border point?				
Agency	Yes (percent)	No (percent)	Do not know (percent)	Total (percent)
2.1.1. Revenue & customs	99.80	0.00	0.20	100.00 (431)
2.1.2. Immigration service	72.00	24.80	3.20	100.00 (432)
2.1.3. Health authority	18.10	76.90	5.10	100.00 (432)

2.1.4. Quarantine inspection service	40.30	56.30	3.50	100.00 (432)
2.1.5 Plant health inspectorate	57.60	37.50	4.90	100.00 (432)
2.1.6. Food standards agency	42.50	53.10	4.40	100.00 (431)
2.1.7. Security agencies	92.80	6.30	0.90	100.00 (430)
2.1.8. Archaeological agencies	5.40	86.00	8.60	100.00 (428)
2.1.9. Others (Please specify)				

2.2: Please rate the coordination between border management agencies.	
Status	Total (percent)
Very low	1.20
Low	5.10
Average	27.10
Good	65.40
Very good	1.20
Total	100.00 (428)

2.3. How many documents are required for customs clearance for typical exports? If a precise number is not possible, please provide range.					
Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum number of documents required for export to South Asian countries	299	2	20	6.48	5.344
Maximum number of documents required for export to South Asian countries	298	3	21	7.76	6.460
Minimum number of documents required for export to developed countries	46	2	8	3.74	0.864
Maximum number of documents required for export to developed countries	45	3	6	4.13	0.345
Not Applicable	1	3	3	3.00	

2.4. How many signatures are required for customs clearance for typical exports? If a precise number is not possible, please provide range.

Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum number of signatures required for export to South Asian countries	297	1	63	14.13	240.387
Maximum number of signatures required for export to South Asian countries	297	1	70	16.78	308.876
Minimum signatures required for export to developed countries	45	1	4	2.98	.568
Maximum signatures required for export to developed countries	44	2	12	3.52	2.069
Not Applicable	1	1	1	1.00	

2.5. How many days are required to prepare all the export documents? (Please specify in days) If a precise number is not possible, please provide range

Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum days required for export to South Asian countries	296	0	20	1.59	6.566
Maximum days required for export to South Asian countries	298	1	24	1.97	3.681
Minimum days required for export to developed countries	41	0	23	4.27	38.089
Maximum days required for export to developed countries	41	1	16	1.37	5.488
Not Applicable	1	6	6	6.00	

2.6. How many documents are required for customs clearance for typical imports? If a precise number is not possible, please provide range

Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum documents required for import to South Asian countries	146	1	15	6.80	6.936
Maximum documents required for import to South Asian countries	147	1	16	8.38	6.034
Minimum documents required for import to developed countries	22	2	10	4.20	2.182
Maximum documents required for import to developed countries	20	3	8	4.90	1.674

2.6. How many documents are required for customs clearance for typical imports? If a precise number is not possible, please provide range					
Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Not Applicable	0				

2.7. How many signatures are required for customs clearance for typical imports? If a precise number is not possible, please provide range					
Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum signatures required for import to South Asian countries	141	1	44	9.61	116.986
Maximum signatures required for import to South Asian countries	143	1	50	12.51	199.812
Minimum signatures required for import to developed countries	17	1	5	2.82	1.248
Maximum signatures required for import to developed countries	18	1	6	3.22	1.359
Not Applicable	0				

2.8. How many days are required to prepare all the import documents? (Please specify in days) If a precise number is not possible, please provide range					
Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
Minimum days required for import to South Asian countries	146	0	15	1.24	2.390
Maximum days required for import to South Asian countries	148	1	24	2.15	6.427
Minimum days required for import to developed countries	20	0	12	2.53	10.986
Maximum Days required for import to developed countries	20	1	14	2.60	10.568
Not Applicable	0				

2.9. Do customs and other border agencies accept copies of documents not authenticated?	
Status	Total (percent)
Yes	1.90
No	98.10
Total	100.00 (423)

2.10. Can customs declarations be submitted and processed electronically and/or online?				
Status	Yes (percent)	No (percent)	Do not know (percent)	Total (percent)
Submitted	58.40	41.10	0.50	100.00 (428)

Processed	51.50	47.80	0.70	100.00 (428)
-----------	-------	-------	------	--------------

2.10.1. If yes, please rate the quality of the functioning of the system							
Status	Very low (percent)	Bad (percent)	Average (percent)	Good (percent)	Very good (percent)	Not applicable (percent)	Total (percent)
Submitted	2.40	5.60	37.70	48.40	5.60	0.10	100.00 (252)
Processed	1.60	8.20	35.70	48.40	5.70	0.40	100.00 (254)

2.11. Can supporting documents be submitted and processed electronically and/or online?				
Status	Yes (percent)	No (percent)	Do not know (percent)	Total (percent)
Submitted	58.90	40.90	0.20	100.00 (423)
Processed	51.90	46.60	1.40	100.00 (416)

2.11.1. If yes,	
Status	(percent)
Fully	57.80
Partially	42.20
Total	100.00 (251)

2.11.2. If yes, please rate the quality of the functioning of the system						
Status	Very low (percent)	Bad (percent)	Average (percent)	Good (percent)	Very good (percent)	Total (percent)
Submitted	2.00	5.60	41.40	47.00	4.00	100.00 (249)
Processed	3.30	8.40	39.70	43.90	4.60	100.00 (239)

2.12. Does your customs authority/department issue advance rulings?	
Status	Total (percent)
Yes	10.80
No	82.20
Do not know	7.00
Total	100.00 (426)

Status	No. of respondents	Minimum Value	Maximum Value	Mean	Variance
--------	--------------------	---------------	---------------	------	----------

2.12.1. If yes, what is the length of time for which advance ruling is valid (in days)?	44	3	13	5.58	6.592
2.12.2. If yes, what proportion of the request gets positive response (in percent)?	45	2	80	52.34	256.225

2.13. Does customs allow for pre-arrival processing of import shipments?	
Status	Total (percent)
Yes	19.80
No	74.70
Do not know	5.60
Total	100.00 (430)

2.13.1. If yes, please rate the effectiveness of pre-arrival processing	
Status	Total (percent)
Very low	2.30
Low	2.30
Average	58.10
Good	36.00
Very good	1.20
Total	100.00 (86)

2.14. Does your country use risk/threat assessment technique?	
Status	Total (percent)
Yes	24.00
No	71.10

Do not know	4.90
Total	100.00 (429)

2.15. What proportion of your inward consignments are subject to physical inspection by customs?	
Status	(percent)
Less than 5 percent	19.20
Between 5 and 15 percent	39.00
Between 15 and 25 percent	20.50
Between 25 and 50 percent	8.90
Above 50 percent	12.30
Total	100.00 (146)

2.16. What is the basis for valuation of customs duties?	
Status	(percent)
Transaction value	58.1
Transaction value of identical goods	10.1
Transaction value of similar goods	5.4
Computed value	24.0
Reference value	2.3
Total	100.00 (129)

If multiple response in Q2.16	
Status	(percent)
Blank	97.5
1,2,3,5	0.2
1,2,4,5	0.5
1,2,5	0.5
2	0.5
4	0.7
5	0.2
Total	100.00 (432)

2.17. If more than one system of customs valuation is applied, please provide what proportion of the value of consignment fall under the following valuation method.					
Proportion	Transaction value (percent)	Transaction value of identical goods (percent)	Transaction value of similiar goods (percent)	Computed value (percent)	Reference value (percent)
1.00	1.6				
4.00	8.1				
10.00	1.6	9.10		33.30	37.50

2.17. If more than one system of customs valuation is applied, please provide what proportion of the value of consignment fall under the following valuation method.					
Proportion	Transaction value (percent)	Transaction value of identical goods (percent)	Transaction value of similar goods (percent)	Computed value (percent)	Reference value (percent)
15.00					12.50
20.00		27.30	50.00		12.50
25.00				33.30	
30.00	1.6	18.20			
40.00		9.10			
50.00	3.2				
70.00	1.6				
80.00	6.5				
90.00	1.6				
100.00	74.2	36.40	50.00	33.30	37.50
Total	100.00 (62)	100.00 (11)	100.00 (2)	100.00 (3)	100.00 (8)

2.18. Can goods be released pending final clearance against accepted guarantee?	
Status	(percent)
Yes	75.7
No	22.3
Do not know	2.0
Total	100.00 (148)

2.19. Does your country implement authorized traders scheme?	
Status	(percent)
Yes	62.2
No	25.0
Do not know	12.8
Total	100.00 (148)

2.20. Have the customs agencies adopted the system of 'Single Window'?	
Status	(percent)
Yes	3.9
No	93.7
Do not know	2.3
Total	100.00 (431)

2.20.1. If yes, please rate the quality of the system.	
Status	(percent)
Low	52.0
Average	24.0
Good	16.0

Not Applicable	8.0
Total	100.00 (25)

2.21. Does your country have any system of post clearance audit?	
Status	(percent)
Yes	15.5
No	70.7
Do not know	13.8
Total	100.00 (426)

2.21.1. If yes, what percentage of consignment is liable for post clearance audit?	
Status	(percent)
Less than 5 percent	26.5
Between 5 and 15 percent	64.7
Between 15 and 25 percent	2.9
Above 50 percent	5.9
Total	100.00 (68)

2.21.2. If yes, please rate the effectiveness of post clearance audit	
Status	(percent)
Low	1.4
Average	74.3
Good	20.0
Very good	2.9
Not Applicable	1.4
Total	100.00 (70)

2.22. If you are not satisfied with the decision made by the customs or any other border management authority, is a non-judicial review/appeal procedure available	
Status	(percent)
Yes	84.4
No	12.8
Do not know	2.8
Total	100.00 (429)

2.23. Do you have to pay irregular payments/bribes to clear the consignment?	
Status	(percent)
Yes	8.2
No	80.6
Do not know	11.3
Total	100.00 (391)

2.23.1. If yes, please provide the frequency i.e. percentage of the cases you have made such payments	
Status	(percent)
Less than 5 percent	33.3

Between 5 and 15 percent	45.8
Above 50 percent	20.8
Total	100.00 (24)

2.24 What is the average time taken to clear outward goods? If not applicable write NA.					
	No. of respondents	Mean	Variance	Minimum	Maximum
What is the average time taken to clear outward goods? Ports (days)	153	3.0196	92.924	1.00	120.00
What is the average time taken to clear outward goods? Ports (hours)	87	54.4259	1133.410	2.00	168.00
What is the average time taken to clear outward goods? Airports (days)	23	1.9783	0.375	1.00	4.00
What is the average time taken to clear outward goods? Airports (hours)	19	42.9474	85.053	24.00	48.00
What is the average time taken to clear outward goods? Road frontiers (days)	154	3.0357	4.834	0.00	15.00
What is the average time taken to clear outward goods? Road frontiers (hours)	67	11.3209	267.096	1.00	72.00
What is the average time taken to clear outward goods? Rail frontiers (days)	11	3.5455	6.273	1.00	10.00
What is the average time taken to clear outward goods? Rail frontiers (hours)	0	0	0	0	0

2.24 What is the average time taken to clear outward goods? If not applicable write NA.					
	No. of respondents	Mean	Variance	Minimum	Maximum
What is the average time taken to clear outward goods? Inland container depots (ICDs) (days)	78	2.2372	0.946	1.00	7.00
What is the average time taken to clear outward goods? Inland container depots (ICDs) (hours)	51	46.2941	306.492	1.00	72.00
What is the average time taken to clear outward goods? Customs points (days)	120	1.3875	0.573	0.00	4.00
What is the average time taken to clear outward goods? Customs points (hours)	200	10.4025	244.396	0.00	72.00

2.25 What is the average time taken to clear inward goods? If not applicable write NA.					
	No. of respondents	Mean	Variance	Minimum	Maximum
What is the average time taken to clear inward goods? Ports (days)	132	2.7992	1.881	1.00	8.00
What is the average time taken to clear inward goods? Ports (hours)	85	58.0129	1203.803	.00	172.00
What is the average time taken to clear inward goods? Airports (days)	23	1.8478	.374	1.00	4.00

2.25 What is the average time taken to clear inward goods? If not applicable write NA.					
	No. of respondents	Mean	Variance	Minimum	Maximum
What is the average time taken to clear inward goods? Airports (hours)	21	41.7143	152.914	12.00	48.00
What is the average time taken to clear inward goods? Road frontiers (days)	41	2.4878	1.481	1.00	4.50
What is the average time taken to clear inward goods? Road frontiers (hours)	33	29.0152	1397.258	1.00	130.00
What is the average time taken to clear inward goods? Rail frontiers (days)	3	4.3333	24.333	1.00	10.00
What is the average time taken to clear inward goods? Rail frontiers (hours)	2	1.5000	.500	1.00	2.00
What is the average time taken to clear inward goods? Inland container depots (ICD) (days)	54	2.4630	8.140	1.00	22.00
What is the average time taken to clear inward goods? Inland container depots (ICD) (hours)	44	44.6591	332.462	1.00	72.00
What is the average time taken to clear inward goods? Customs points (days)	90	1.6056	1.115	1.00	7.00
What is the average time taken to clear inward goods? Customs points (hours)	80	23.0688	421.024	1.50	72.00

2.25 What is the average time taken to clear inward goods? If not applicable write NA.					
	No. of respondents	Mean	Variance	Minimum	Maximum
What is the average time taken to clear inward goods? Quarantine check post (days)	56	1.6607	2.846	1.00	12.00
What is the average time taken to clear inward goods? Quarantine check post (hours)	50	25.0800	207.126	2.00	80.00

2.26 What is your experience of customs operational efficiency at:							
Place	Very low (percent)	Low (percent)	Average (percent)	Good (percent)	Very Good (percent)	Not applicable (percent)	Total (percent)
Ports	0.7	4.2	20.2	28.2	3.5	43.2	100.00 (426)
Airports	0.0	1.7	5.2	7.1	1.9	84.1	100.00 (422)
Road frontiers	14.0	19.8	21.6	15.6	0.7	28.4	100.00 (430)
Rail frontiers	0.0	2.3	8.5	2.3	0.0	86.9	100.00 (426)
ICDs	1.6	5.9	18.4	4.7	0.7	68.70	100.00 (425)
Customs point	1.2	11.7	20.8	61.9	2.8	1.6	100.00 (428)
Quarantine check post	0.5	6.3	10.6	16.2	1.4	65.00	100.00 (426)

3. Trade-related infrastructure and services

3.1 Please rate the quality of the following infrastructure.

Infrastructure	Very low (percent)	Low (percent)	Average (percent)	Good (percent)	Very Good (percent)	Not applicabl e (percent)	Total (percent)
Ports	2.1	5.4	16.7	27.5	4.7	43.5	100.00 (425)
Airports	0.0	2.4	4.0	8.7	2.1	82.7	100.00 (423)
Roads	15.6	26.3	25.8	15.1	0.7	16.5	100.00 (430)
Railways	0.0	3.1	9.4	1.9	0.0	85.6	100.00 (425)
Warehouse/trans s loading facilities	4.7	12.4	27.0	12.4	3.3	40.3	100.00 (429)
Tele- communication and IT services	3.5	9.6	30.4	49.8	4.4	2.3	100.00 (428)

3.2 Please rate the efficiency of the following service providers.							
Service provider	Very low (percent)	Low (percent)	Average (percent)	High (percent)	Very High (percent)	Not applicabl e (percent)	Total (percent)
Road transport services	1.2	3.5	21.9	64.9	3.0	5.6	100.00 (430)
Rail transport services	0.2	3.0	11.0	2.3	0.2	83.2	100.00 (428)
Maritime transport service	0.7	4.2	12.1	25.6	4.0	53.4	100.00 (429)
Freight forwarders	0.2	2.3	13.1	41.2	4.4	38.6	100.00 (427)
Customs agent	0.5	3.3	26.5	57.0	2.8	10.0	100.00 (430)

Quality/standard inspection agencies	0.2	6.5	45.5	34.3	1.9	11.6	100.00 (431)
Health/SPS agencies/quarantine	0.5	6.0	18.10	13.5	1.4	60.6	100.00 (431)
Banking services	1.4	4.7	15.1	50.2	3.5	25.1	100.00 (430)
Insurance services	0.7	5.6	21.4	32.6	1.9	37.8	100.00 (429)
Visa services	1.2	3.00	5.8	7.9	6.8	75.3	100.00 (429)

3.3 Based on your experience, how do you assess the cost of the following logistics services?							
Service provider	Very low (percent)	Low (percent)	Average (percent)	High (percent)	Very High (percent)	Not applicable (percent)	Total (percent)
Road transport rates	0.0	0.2	52.0	41.5	2.6	3.7	100.00 (429)
Rail transport rates	0.0	1.2	9.3	7.5	0.0	82.0	100.00 (428)
Airport charges	0.0	1.2	2.1	8.0	6.1	82.5	100.00 (423)
Air cargo charges	0.0	1.4	2.9	6.9	6.7	82.2	100.00 (421)
Port charges	0.0	5.9	27.0	22.5	3.8	40.8	100.00 (426)
Maritime transport charges	0.0	3.7	8.6	28.5	5.1	54.00	100.00 (428)
Freight forwarders charges	0.0	1.6	37.9	21.5	2.8	36.2	100.00 (428)
Customs agents charges	0.0	2.3	70.4	13.1	0.5	13.60	100.00 (426)

3.4 Have you ever incurred any loss/ damage of cargo during the last five years	
Status	(percent)
Yes	15.90
No	84.10
Total	100.00 (429)

3.4.1 If yes, what was the percentage of loss/damage incurred?	
Status	(percent)
Less than 5 percent	47.80
Between 5 and 15 percent	34.80
Between 15 and 25 percent	4.30
Between 25 and 50 percent	10.10
Above 50 percent	2.90
Total	100.00 (69)

3.4.2 If yes, reasons for loss or damage	
Status	(percent)
No response	87.7
1	0.5
2	0.2
Damage due to unloading of material	0.2
Delay in report from food standard agency and further delay on behalf of customs authorities (Chennai port) in terms of ruling valuation of customs duty on the preservative product	0.2
Detention due to irregular movement	0.2
Due to goods loaded onside and open and to heavy rain goods damaged	0.2
Due to lack of godown facility for non- insured goods.	0.2
Due to lack of godown facility. Not insurance goods	0.2
Due to lack of security in CWC, product was stolen	0.2

Due to local situation, parking problem, goods stolen etc.	0.2
Due to open shade, no arrangements for goods	0.2
Due to open shade, the product is not seal open and damage in rainy season	0.2
Due to open shade. not safety of the product	0.2
Due to open shades, the product is not safe and gradually it is being damaged	0.2
Due to open show. Not insurance of the product	0.2
Due to open space. Unsafe in rainy season	0.2
Due to rainy season open warehouses	0.2
Due to rainy season the goods are not safe in the radius of boarder. It is lyingt in open.	0.2
Due to rainy season the goods with truck are laying in open space in the area of border	0.2
Due to sinking the vessel in the barge area	0.2
Due to water merge of shiping the sea	0.2
Due to open shed	0.2
During the transit damages are occurred transit between ports	0.2
Extra transport cost incurred from one side, since wheat flour is not considered as a perishable good	0.2
From Kolkata to CWC theft loss is common	0.2
Having open shade in the radius of ICD. The product ar not to safe	0.2
In the time of rainy season, due to open shade	0.2
Lack of godown facility not insured the goods	0.2
Lack of security, negligence of security. No surveillance in the CWC.	0.2
Negligence of security guard at CWC	0.2
Not availability of shade. In the rainy season we are facing the problem	0.2
Not proper handling of the machine at hookpoint of Cargo, stolen belting from the sea port area. (Hookpoint=discharge point from ship)	0.2

Open space, damage in rainy season	0.2
Problem with safety of 90 days inside the CWC. It is lying in open	0.2
Quality of fruits gets deteriorated due to traffic jams.	0.2
Road accident, bad road condition	0.2
Seal was found in replaced condition, entire product was missing. Copper scrap was stolen.	0.2
Security problem is there.	0.2
Stolen for CWC	0.2
Stolen from CWC	0.2
Stolen from the roadside during transit, change of the goods.	0.2
Stolen from road side	0.2
Stolen, pillage of the product from the trucks	0.2
The ship had met with an accident just after leaving the port	0.2
Theft loss en route and in CWC	0.2
Theft loss, fire loss.	0.2
Transit damage due to poor road condition and nature of the goods exported	0.2
Transit damage due to water on roads as they become slippery	0.2
Transit damage only	0.2
Transit loss due to theft	0.2
Truck accident at the roadside	0.2
We are exporting green vegetables. In area of border, trucks with goods standing in open.	.2
Total	100.00 (432)

4. Treatment of goods in transit

4.1 Do exporters/importers need to pay any fees for transit passage?

Status	(percent)
Yes	72.5
No	13.2
Do not know	14.3
Total	100.00 (91)

4.1.1 If yes, is information on such fees freely available?	
Status	(percent)
Yes	69.9
No	15.1
Do not know	15.1
Total	100.00 (73)

4.2 How many additional documents are required to use transit passage? (Please specify the numbers)					
	No of responses	Mean	Variance	Minimum	Maximum
How many additional documents are required to use transit passage? (Please specify the numbers)	66	1.96	0.225	1	3

4.3 Are information on transit formalities and documentations available freely?	
Status	(percent)
Yes	58.3
No	19.0
Do not know	22.6
Total	100.00 (84)

4.4 Do customs allow pre-arrival processing of transit trade?	
Status	(percent)
Yes	54.2
No	26.5
Do not know	19.3
Total	100.00 (83)

4.5 Can transit documents be submitted and processed electronically and/or online?				
Status	Yes (percent)	No (percent)	Do not know (percent)	Total (percent)
Submitted	66.7	16.7	16.7	100.00 (78)
Processed	60.9	23.2	15.9	100.00 (69)

4.5.1 If yes, does it apply to all transit documents?	
Status	(percent)
All documents	22.0
Only partial	78.0

Total	100.00 (50)
--------------	--------------------

4.5.2 If yes, please rate the quality of the functioning of the system.						
Status	Very low (percent)	bad (percent)	average (percent)	good (percent)	Very good (percent)	Total (percent)
Submitted	1.9	17.0	73.6	5.7	1.9	100.00 (53)
Processed	4.2	37.5	56.3	0.00	2.1	100.00 (48)

4.6 Are goods in transit subject to physical verification?	
Status	(percent)
Yes	74.7
No	9.6
Do not know	15.7
Total	100.00 (83)

4.6..1. If yes, what proportions of the consignment are liable for physical verification?	
Status	(percent)
Less than 5 percent	36.4
Between 5 and 15 percent	50.0
Between 15 and 25 percent	12.1
Above 50 percent	1.5
Total	100.00 (66)

4.7 Do you need to provide guarantee/insurance for goods in transit?	
Status	(percent)
Yes	89.2
No	6.0
Do not know	4.8
Total	100.00 (83)

4.7.1 If yes, in which form?	
Status	(percent)
Cash	1.4
Bond	52.7
Anyone of the above	44.6
Not Applicable	1.4
Total	100.00 (74)

4.8 Is the transit guarantee limited to the values of duties and charges?	
Status	(percent)
Yes	86.4
No	4.9
Do not know	8.6
Total	100.00 (81)

4.9. How many days does it take to release the transit guarantee?
--

	No of responses	Mean	Variance	Minimum	Maximum
How many days does it take to release the transit guarantee?	74	2.84	1.787	2	10

4.10. Is it required to transport goods in transit with customs escorts?	
Status	(percent)
Yes	86.9
No	6.0
Seldom for high risk goods	2.4
Do not know	4.8
Total	100.00 (84)

4.11 Does your country have any transit agreement with neighbouring countries?	
Status	(percent)
Yes	91.3
No	1.3
Do not know	7.5
Total	100.00 (80)

4.11.1 If yes, name countries:	
Status	(percent)
No response	87.0
Afghanistan	1.9
Bhutan	.2
Only for SAARC Countries and SAFTA	.2
Pakistan	4.4
Sri Lanka	6.0
Sri Lanka via Colombo	.2
Total	100.00 (432)

4.12 Is your country signatory of any international convention(s) related to transit?	
Status	(percent)
Yes	74.2
No	1.5
Do not know	24.2
Total	100.0

4.12.1 If yes, name the convention(s):	
Status	(percent)
No response	97.5
Pakistan	2.3
Trade facilitation is organised by commercial chamber of commerce FIEO	.2
Total	100.00 (432)

4.13. Based on your experience, please assess the difficulty in transit operations with respect to:							
Status	Very low (percent)	Low (percent)	Average (percent)	High (percent)	Very high (percent)	Not applicable (percent)	Total (percent)
Designated routes	0.00	11.00	75.60	8.50	0.00	4.90	100.00 (350)
Customs escorts	0.00	27.5	36.30	30.00	1.30	5.00	100.00 (80)
Guarantee	2.50	23.80	40.00	28.80	0.00	5.00	100.00 (352)
Documentation	0.00	6.30	38.80	48.80	1.30	5.00	100.00 (80)

5. Priority areas

5.1 What is the priority level of the following as per the need to bring about changes to improve trade facilitation?							
	Very low (percent)	Low (percent)	Average (percent)	High (percent)	Very high (percent)	Not applicable (percent)	Total (percent)
1.	0.70	11.10	25.30	54.80	7.70	0.50	100.00 (431)
2.	0.20	8.30	27.50	52.30	8.80	2.80	100.00 (432)
3.	1.90	7.20	45.30	37.90	6.30	1.40	100.00 (428)
4.	0.50	6.00	26.40	51.40	15.70	0.00	100.00 (432)
5.	0.00	1.40	10.40	21.10	33.20	33.90	100.00 (431)
6.	0.20	5.60	13.70	9.50	3.70	67.30	100.00 (431)
7.	0.20	4.40	11.40	28.00	7.00	49.00	100.00 (429)
8.	2.50	11.10	63.40	16.70	3.70	2.50	100.00 (432)
9.	0.00	1.60	5.80	14.00	75.10	3.50	100.00 (429)

10	2.10	7.20	11.60	7.40	3.90	67.70	100.00 (431)
11	4.40	3.70	4.40	4.20	1.20	82.10	100.00 (430)
12	0.20	5.30	10.00	65.90	17.60	0.90	100.00 (431)
13	0.20	5.30	10.00	65.90	17.60	0.90	100.00 (431)
14	0.00	0.50	4.00	9.10	6.50	80.00	100.00 (429)
15	0.70	2.10	12.00	41.40	33.60	10.20	100.00 (432)
16	0.00	0.70	5.10	9.00	7.90	77.30	100.00 (432)
17	0.00	3.50	15.80	44.90	25.30	10.50	100.00 (430)
18	0.70	4.40	37.50	40.10	15.40	1.90	100.00 (429)
19	0.90	2.30	50.90	28.60	8.10	9.10	100.00 (430)
20	0.70	1.40	14.70	23.10	9.30	50.80	100.00 (429)
21	0.50	5.10	11.10	44.50	9.50	29.20	100.00 (431)
22	0.20	3.50	9.00	35.30	38.30	13.70	100.00 (431)
23	0.00	3.50	7.00	11.80	6.30	71.50	100.00 (431)
24	0.00	5.10	7.60	6.30	3.70	77.30	100.00 (432)
25	0.00	4.20	7.40	7.60	2.80	78.00	100.00 (432)
26	0.20	5.60	7.40	8.10	2.30	76.30	100.00 (431)

