

# Trade Process Analysis Report for Subregional Cooperation in South Asia

June 2014



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## *ABBREVIATIONS*

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ACDD	ASEAN Customs Declaration Document
ADB	Asian Development Bank
AECB	ASEAN Economic Community Blueprint
AEO	Authorized Economic Operator
APEC	Asia-Pacific Economic Cooperation
APTF	Asia-Pacific Trade Facilitation Forum
ARTNeT	Asia-Pacific Research and Training Network on Trade
ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
BL	Bill of Lading
BPA	Business Process Analysis
CTD	Customs Transit Document
COO	Certificate of Origin
CSBO	Crude Soya Bean Oil
DBD	Doing Business Database
EDI	Electronic Data Interchange
EU	European Union
ICT	Information and Communication Technology
ISCM	Integrated Supply Chain Management
LAA	Lead Acid Accumulator
LDCs	Least Developed Countries
MRA	Mutual Recognition Arrangements
NAFTA	North American Free Trade Agreement
NTBs	Non-tariff Barriers
OECD	Organisation for Economic Co-operation and Development
PSC	Phyto-sanitary Certificate
PMS	Post Market Surveillance
RMS	Risk Management Systems
SAFTA	Agreement on South Asian Free Trade Area
SASEC	South Asia Subregional Economic Cooperation
SEZ	Special Economic Zones
SOP	Standard Operating Procedures
TCD	Time Cost Distance
TRS	Time Release Study
TTFMM	Trade and Transport Facilitation Monitoring Mechanism
UCR	Unique Consignment Reference
UML	Unified Modelling Language
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNNEXt	United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific
WCO	World Customs Organization
WTO	World Trade Organization



## *EXECUTIVE SUMMARY*

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Removal of non-tariff measures is found to be important in easing a region's economic isolation. During the past two decades, import tariffs have decreased significantly and the importance of non-tariff measures aimed at further reducing international transaction costs has gained more importance in promoting trade across countries. The costs associated with completing documentary and other import and export procedures for international trade can account a substantial part of the value of traded goods. Trade facilitation has therefore gained a new high profile in the South Asia region. Cutting additional costs through improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets—regionally or otherwise. Simplification of trade processes and procedures along with harmonisation of trade transaction data and documents are thus envisaged key to improving competitiveness of exports across most of the South Asian countries.

Countries in South Asia aim to increase intra-regional trade and to provide additional support, especially to those sectors that have been hit by sluggish and fluctuating demand(s) in the advanced economies. In order to bring down transaction costs, two important policy measures are found to be common in most of the countries in the region—trade procedures rationalisation and improvement in trade-related infrastructure, particularly at the border crossings. Three critical trade facilitation measures are being implemented at various phases in South Asia such as (i) harmonisation and simplification of international trade procedures, (ii) harmonisation of trade related data requirements with the international standard, and (iii) implementation of single window. At the same time, questions were asked about whether the gains from trade facilitation exceed the costs. Concerns regarding the distributional consequences of trade reforms were also been expressed.

SASEC is an initiative of the Asian Development Bank (ADB) to promote regional economic cooperation among four South Asian countries, namely, Bangladesh, Bhutan, India and Nepal, of which two are landlocked countries and three are LDCs. SASEC countries are relatively open economies where, with the exception of Nepal, trade openness has increased in the last two decades. In contrast, trade openness contracted in Nepal in recent years. The common feature of SASEC trade is that merchandise trade drives its trade openness. India being the largest economy in SASEC contributes to over 90 percent of the sub-regional trade in SASEC. Contrary to popular belief, SASEC countries have high trade potentials, but are largely unrealized. Trade facilitation along with improved infrastructure and connectivity can unlock the trade potential in SASEC. Barring India, the remaining SASEC countries are still to introduce a comprehensive electronic system for the trade transaction. Therefore, understanding international trade transactions in greater details will help SASEC countries, particularly LDCs, to improve trade facilitation. Undertaking a deeper analysis of the processes that small and large firms face when engaging in international trade in various industries through specific transport corridors may provide useful insights and more practical and specific policy recommendations. Conduct of such analysis by using comparable methodologies

across a set of countries and routes in SASEC can be expected to result in industry-level, corridor-level, national-level and sub-regional-level recommendations for a more inclusive participation of firms and countries in trade. The analysis can also be used for improvement of infrastructure on- and behind- borders. Ultimately, this would facilitate building hard infrastructure (such as, border infrastructure across corridors) and soft infrastructure (such as, reformed and simplified trade procedures, rules and regulations, knowledge and capacity, strategies), and institutions to support the development and operation of physical infrastructure along the SASEC corridors.

Under the overarching research theme of trade facilitation and research capacity building in SASEC sub-region, this study makes an attempt to identify the administrative, regulatory and procedural barriers that unnecessarily impede the trade flow in SASEC by raising the transaction cost and time in trade, and propose solutions to it. As the growing body of research and surveys of those engaging in trade have made it clear, the situation varies greatly across products traded, as well as trade routes, origin and destination of the products.

Trade facilitation and connectivity have been identified as key to regional integration. SASEC countries need to improve trade performance through enhanced trade facilitation measures. Development and implementation of trade facilitation measures to integrate and harmonise customs programmes and processes in support of the SASEC goals are immensely important for strengthening regional integration process. This will entail in particular further preparation for the implementation of the national Single Window, and eventually regional Single Window. In other words, this study is an attempt to identify the trade facilitation priorities and strategies in SASEC.

This regional study consists of four coordinated country studies, conducted on three regional corridors offering a detailed picture of the business processes associated with importing and/or exporting selected goods from or to other countries within SASEC. Relevant procedures were identified and mapped using a common methodology outlined in the *UNNExT Business Process Analysis Guide to Simplify Trade Procedures*. The corridors selected in this study are integral part of SASEC corridors and constitute some important border crossings and transit routes passing through India that are immensely important for economic exchange of goods and services across borders. Six important products are selected in this study, namely, lentil, carpet, lead acid accumulator (LAA), crude soya bean oil (CSBO), orange, and fruit juice. These are the products that are being transported along three SASEC corridors for sub-regional and international trade. The products selected for BPA analysis indicate not only the spatial importance of the corridors in carrying trade in the sub-region but also link with a growing supply chain across borders.

The scope of the trade process analysed in this study includes all procedures involving the exporter (seller) or its representatives directly, from signature of contract between the buyer and seller to loading the goods onto a sea vessel (or, if by land, to the border checkpoint of the importing country), and to receiving the payment. The scope of the import process analysed generally includes all procedures involving the importer (buyer), i.e., procedures related to the signature of the contract between the buyers and sellers, all procedures from arrival of goods at the border (or, seaport of the importing country) to delivery at the warehouse in the importing country. This study generally covers the entire BUY-SHIP-PAY process. Following the UNNExT's BPA methodology, information on import and export processes was collected essentially through repeated interviews

of a small number of key informants, for instance, buyers, sellers and intermediaries directly involved in the process being analysed. Interviews and consultations with relevant government agencies were also conducted whenever possible. All researchers used Unified Modelling Language (UML) to describe the various procedures and process analysed; facilitating comparison of procedures across countries and understanding among the researchers. Some of the major findings are as follows:

**(i) Procedures and parties involved in export and import:** This study shows imports involve relatively less number of procedures and parties, compared to exports, in all the three corridors. Among the three countries, owing to lowest numbers of procedures and parties, Bangladesh appears to be more trade friendly in both export and import in SASEC. Business process steps and corresponding parties in export are relatively less dispersed than that of imports. When compared, completion of trade procedures in Bangladesh takes more time than the other two SASEC countries. Interestingly, the import and export process analysis show that, while many steps involve both public and private parties across the three corridors, a significant number of procedures involve private parties only. Private sector is relatively more involved in both export and import in Bangladesh, compared to Bhutan and Nepal. This, in turn, suggests that efficiency of the international trade process crucially depend on the capacity of private individuals to exchange information with each other and provide effective transport, logistics, payment and other services.

**(ii) Documents and copies needed for export and import:** In case of documents needed for export and import, it has been observed that the requirement of documents in import exceeds that of export. The excessive documentation shows scope for simplification of trade processes. The entire trade process becomes very cumbersome. Between export and import, import process is highly dispersed, thereby indicating the need for simplification of documentary requirements. Bangladesh is relatively ahead of Bhutan and Nepal in terms of introducing electronic submission of documents. This suggests that there is enough scope for simplification of documentary requirements and bridging alignment with international standards. Many of the export and import documents along SASEC corridors are still not being submitted and/or processed electronically. Submission of documents is largely handled manually (over 80 percent of trade documents on average). Exporters and importers (or, their CHAs) can submit customs declaration online, although a hard copy also often needs to be submitted at some point during the process. This, for example, was the case in Bhutan, Bangladesh, and Nepal at the time the survey was conducted. Automation of trade documentation is relatively a new process in SASEC except India.

**(iii) Direct costs of the export and import processes:** This study has found that transport cost, customs inspection and clearance charges, insurance premium, charges for obtaining trade license and import declaration, bank service charges for receiving payments, service charges for opening L/C, etc. are the major costs incurred in the export and import processes in SASEC, whereas regulatory costs and documentation charges are found to be low. Import and export costs vary widely across products where import costs often (but not always) higher than export costs.

**(iv) Export and import process time:** The more time-consuming the export or import process, the less likely it is that a trader will be able to compete in international markets. Contrary to popular belief, transport is found to be a significant component, but often not the largest component of total

trade transaction time. Concluding trade terms, opening L/C account, obtaining cargo insurance, payment delays and the time required for various inspections often take up a larger share of total time.

While country-specific detailed recommendations can be found in individual studies summarised in the second part of this study, a number of policy implications may be drawn from this study here.

- Full and inclusive representation of the private sector in trade facilitation initiatives is essential.
- Implementation of basic trade facilitation measures should be consistently enforced and reinforced nation-wide.
- Paperless trade, including development of national and sub-regional single windows, needs to be prioritised for trade facilitation.
- Regulatory burden on exports and imports has to be removed.
- Physical inspections should be minimised whenever possible, in particular through adoption of risk management techniques by all organisations involved in the trade process.
- Healthy competition among transport, logistics and other trade-related service such as insurance providers should be encouraged.
- Reviewing payment systems in place and their efficiency may reveal new opportunities for improving trade facilitation performance.
- National and sub-regional trade facilitation performance monitoring mechanisms are required to identify the real and most important barriers to trade efficiency.
- Harmonisation of documentary requirements across countries should be actively pursued.
- Synchronisation of cross-border customs in SASEC should be the priority.
- All trade documents including customs should be submitted electronically.
- Trade will be much faster with minimum process reengineering.

The recommendations outlined here are to assist the policymakers and trade facilitation practitioners in improving trade facilitation performance. Development of border infrastructure at SASEC corridors is crucial since it will have a strong region-wide impact on trade flow. It is recommended to introduce a comprehensive trade facilitation programme for the SASEC. To pursue the trade facilitation programme, SASEC countries have to undertake implementable projects.

To conclude, the trade facilitation measures such as the simplification, harmonisation, and automation of procedures and documents involve inter-agency coordination and collaboration. Their successful implementation requires not only political and governmental support in terms of both policy directives and human and financial resources, but also an in-depth understanding about existing business processes, including their related information flows, laws, rules, and regulations. Analysis of business processes involved in moving goods across borders is, therefore, a necessary exercise that must be carried out prior to implementing any other trade facilitation measure. Trade facilitation measures, in other words, cannot be applied without locating the source of problem areas, bottlenecks and redundancies. Finally, convey the necessity of trade facilitation and business process analysis through awareness-raising programmes—starting at the top. Educate both relevant government officials and the trade and transport community on the necessity of business process analysis and its potential return on investment for all stakeholders in the long run.

The outcomes of the BPA study would certainly assist SASEC countries improve the country's trade facilitation system that is supportive of their export goals. These outcomes would also help to improve trade efficiency by identifying capacity gaps in trade related agencies and private sector actors as well addressing their capacity building requirements to build a sustainable foundation for the region's transition to the Single Window. Overall, while the study is useful in gaining an understanding of the trade facilitation situation and the need of improving regional trade processes and procedures in SASEC, it is clear that more corridor-wise studies should be undertaken.

## 1. Introduction

With more than 3.87 billion people and a GDP estimated at US\$ 21 trillion in 2012, Asia and the Pacific is an important and dynamic economic region<sup>1</sup>. Yet, the economic situation in this region is diverse as the levels of income differ substantially - ranging from Brunei and Singapore that have smaller populations and high per capita incomes through Malaysia and Thailand that are upper-middle income economies; to lower-middle income economies like the Philippines, China, India, Indonesia and Sri Lanka. According to the UN, Vietnam is a low income economy; and Bangladesh, Cambodia, Lao PDR, Myanmar and Nepal amongst the least developed countries (LDCs).

The regional integration process in Asia, as well as Asian integration into the global economy, can accelerate economic development in the less developed countries within the region. It will narrow the development gap among its member countries. For example, Vietnam experienced rapid economic growth as a result of integration into the world economy through the WTO and ASEAN. Intra-Asia trade of goods has increased from 55 percent (in 2000) to 59 percent (in 2011) of total Asian trade<sup>2</sup>, while average tariff inside Asia, more particularly in ASEAN, has come down to effectively zero tariff for ASEAN-6 over the same period. However, there are still significant barriers for achieving the single market and production base, particularly in the fields of customs integration (including transport arrangements) and standards/technical barriers to trade. In general, the rate of change of trade costs is largely unfavourable to the developing world; that is, trade costs are falling noticeably faster in developed countries than in developing ones. This serves to increase the relative economic isolation of the latter.<sup>3</sup>

Removal of non-tariff measures is found to be important in easing a country's economic isolation.<sup>4</sup> During the past two decades, import tariffs have decreased significantly and the importance of non-tariff measures aimed at further reducing international transaction costs has gained more importance in promoting trade across countries. Even if international shipping and other non-tariff costs are excluded, the costs associated with completing documentary and other import and export procedures for international trade can account for up to 15 percent of the value of traded goods<sup>5</sup>. With the growth potential shifting away from developed countries to economies within the Asian and the Pacific region, trade facilitation has therefore gained a new high profile in the region.

Cutting additional costs through improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets-regionally or otherwise.

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<sup>1</sup> Asia-Pacific region covers countries falling in East Asia and Pacific and South Asia by all income groups, sourced from the World Development Indicators Online Database, The World Bank in Washington, D.C.

<sup>2</sup> Sourced from ARIC Database for Asia-Pacific region, comprising 48 member countries of the Asian Development Bank (ADB), Manila

<sup>3</sup> Refer, Arvis et al (2012)

<sup>4</sup> Refer, WTO (2012), Arvis et al (2012)

<sup>5</sup> Refer, ADB-UNESCAP (2009)

Behind-the-border measures have been comprehensively used throughout the crisis. These have continued to be an important trade policy tool in the post-crisis economic recovery phase.<sup>6</sup> For example, the Indian government taskforce report for reduction of transaction costs in exports suggests that cutting red tape at the point where goods enter India and providing easier access to the trade-related information are two ways of ‘facilitating’ trade.<sup>7</sup> To a great extent, simplification of trade processes and procedures along with harmonisation of trade transaction data and documents are thus envisaged key to improving competitiveness of exports across most of the South Asian countries.

Countries in South Asia aim to increase intra-regional trade and to provide additional support, especially to those sectors that have been hit by sluggish and fluctuating demand(s) in the advanced economies. In order to bring down transaction costs, two important policy measures are found to be common in most of the countries in the region—trade procedures rationalisation and improvement in trade-related infrastructure, particularly at the border crossings.<sup>8</sup> Three critical trade facilitation measures are being implemented at various phases in South Asia such as:

- Harmonisation and simplification of international trade procedures
- Harmonisation of trade related data requirements with the international standard
- Implementation of single window<sup>9</sup>

At the same time, questions were asked about whether the gains from trade facilitation exceed the costs. Concerns regarding the distributional consequences of trade reforms were also been expressed.

Under the overarching research theme of trade facilitation and research capacity building in SASEC region, this study makes an attempt to identify the administrative, regulatory and procedural barriers that unnecessarily impede the trade flow in SASEC by raising the transaction cost and time in trade, and propose solutions to it. As the growing body of research and surveys of those engaging in trade have made it clear, the situation varies greatly across products traded, as well as trade routes, origin and destination of the products. Undertaking a deeper analysis of the processes that small and large firms face when engaging in international trade in various industries through specific transport corridors may provide useful insights and more practical and specific policy recommendations. Conduct of such analysis by using comparable methodologies across a set of countries and routes in SASEC can be expected to result in industry-level, corridor-level, national level and sub-regional level recommendations for a more inclusive participation of firms and countries in trade. The

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<sup>6</sup> Refer, for example, UNESCAP (2011a)

<sup>7</sup> The report of the task force to reduce transaction costs in exports, released in February 2011 by the Government of India, has recommended certain measures that are expected to save Rs. 210 billion (about US\$ 450 million) for exporters every year. This amount represents about 0.02% of India’s exports, where exporters suffer transaction costs to the extent of 7-10% of exports. The task force report identified 44 issues, where closure has been achieved on 23. Refer, Government of India (2011), for further details.

<sup>8</sup> Refer, UNESCAP (2011b), ADB (2012)

<sup>9</sup> Refer, the theme address of the APTFF 2011 (UNESCAP, 2011c) and also APTFF 2012 (UNESCAP, 2012)

analysis can also be used for improvement of infrastructure on- and behind- borders. Ultimately, this would facilitate building hard infrastructure (such as, border infrastructure across corridors) and soft infrastructure (such as, reformed and simplified trade procedures, rules and regulations, knowledge and capacity, strategies), and institutions to support the development and operation of physical infrastructure along the SASEC corridors.

The study is organised as follows. Chapter 2 presents a brief overview of the literature. It also identifies the gap in trade facilitation policy measures. Stylised facts of trade in SASEC sub region is presented in Chapter 3. This chapter also discusses the products selected for BPA analysis and their relevance. Chapter 4 presents BPA methodology and scope of the study. Major findings of the analysis are narrated in Chapter 5. Recommendations are presented in two parts. While chapter 6 narrates broad or macro recommendations, Chapter 7 presents micro and corridor-specific recommendations. Conclusions, limitations of the study and future research agenda are presented in Chapter 8.



## 2. Overview of the Literature

Trade facilitation is recommended by many international and intergovernmental organisations as a strategy to eliminate bottlenecks and complexities of international trade. Research on trade facilitation and its impact is generally limited, particularly in developing countries. In the WTO context, ‘trade facilitation’ is usually defined as ‘the simplification and harmonisation of international trade procedures’, where trade procedures are the ‘activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade’.<sup>10</sup> However, the definitions used in the literature vary and many trade facilitation studies use broader concepts and definitions, such as, quality of logistics infrastructure and services.<sup>11</sup>

Trade liberalisation (for example, tariff reduction) has played an important role in reducing overall trade costs, yet progress on non-tariff trade costs has been much more limited (Shepherd, 2010; Arvis *et al.*, 2012). It still takes three times longer to complete trade procedures in developing economies than in developed economies of Asia and the Pacific (UNESCAP, 2011b). A group of literature indicates that the importance of tariff as barriers to trade has gradually declined in Asia and the Pacific region.<sup>12</sup> Several studies have estimated the effect of various trade facilitation indicators on bilateral trade flows using the extended gravity models. According to this group of studies, favourable trade facilitation environment holds the key to the regional trade prospects.<sup>13</sup>

Intra-regional trade facilitation performance varies greatly among the sub-regions of Asia and the Pacific. The non-tariff costs of trade by economies in the region with each other often exceed those faced when trading outside the region. According to Duval and Utoktham (2012), ASEAN has achieved high levels of international trade efficiency with tariff-equivalent non-tariff trade costs of only 49 percent in its largest middle income members (that is, Indonesia, Malaysia, the Philippines and Thailand), at par with the costs prevalent in developed country groupings; such as, the members of the NAFTA and the EU. In comparison, intra-regional trade costs in South, North and Central Asia are more than double of the ASEAN economies. Non-tariff trade costs in East and Northeast Asia are also high, but

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<sup>10</sup> Refer, WTO (1998); UNESCAP (2002)

<sup>11</sup> Various definitions that have been adopted reflect different trade facilitation measures. These include: (i) the simplification of trade procedures and, where possible, elimination of unnecessary and duplicate ones; (ii) the harmonisation of trade procedures with international recommendations, best practices, and standards; (iii) the simplification and standardisation of documents required for international trade transaction; (iv) the harmonisation and standardisation of information and information flows associated with the international trade transaction; (v) the effective and efficient sharing of trade and transport related information among relevant stakeholders of the international supply chain; (vi) the use, standardisation, and improvement of physical infrastructure and facilities; and (vii) the harmonisation of applicable laws and regulations with international standards.

<sup>12</sup> This is not to deny that high tariff still exists for certain sensitive products, and there is a strong presence of non-tariff barriers (NTBs) including high-border transaction costs in the region. High border transportation costs act as a serious constraint to enhancing trade flows in the region.

<sup>13</sup> For example, Wilson, Mann and Otsuki (2004)

this is mainly because of the high costs faced by Mongolia. Indeed, non-tariff trade costs between China, Korea and Japan are amongst the lowest in the world, averaging at only 39 percent, which is remarkable given the absence of free trade agreements between countries during the period reviewed.

Economic impact of bottlenecks in business processes of trade is huge. SASEC is no exception. Each additional day of delay (due to trade logistics procedures, for instance) reduces trade by at least 1 percent (Djankov et al, 2007), whereas the direct and indirect cost from import/export related procedures and required documents is about 1 to 15 percent of product cost (OECD, 2003). Most countries and sub-regions have made improvements in reducing trade costs over time. Trade costs amongst Asian countries often exceed the costs of trade of Asian countries with developed countries outside the region. Policy-related non-tariff trade costs account for 60-90 percent of comprehensive trade costs suggest that focusing trade facilitation efforts targeting trade processes and procedures may be particularly productive, especially given the importance of this sector for poverty reduction and more inclusive and sustainable development (Duval and Utoktham, 2011).

Although the overall economic performance of economies in South Asia in recent years has been impressive, there is a concern that an aging and increasingly inadequate infrastructure may limit the potential for further growth and economic development. A critical infrastructure component is the transportation network, and there are currently several transportation infrastructure projects in the SASEC region. Gilbert and Banik (2011) used computable general equilibrium (CGE) models to address how these infrastructure developments might affect the broader economy in SASEC, and in particular impact on income distribution and poverty. The same study has shown that all SASEC economies would benefit from the reductions in terms of aggregate welfare, with the largest gains accruing to India in absolute terms. But, the largest relative gains are to the economies of Nepal, followed by Bangladesh and Sri Lanka, when the margin reduction is prorated to intra-South Asian trade rather than just SASEC. In terms of household level distribution, the picture was mixed, with clearly pro-poor outcomes in some countries, such as Nepal, but more ambiguous impacts in others. In terms of potential adjustment costs, examination of the extent of predicted structural changes suggests that these would be minor, although somewhat more significant for the smaller economies in the region. Thus, infrastructure development through development of corridors would help transform challenges into opportunities in SASEC, one of the world's poorest and most densely populated areas.

The development and expansion of international production networks in Asia may create pressures for trade facilitation because fragmentation of the production process will be profitable if transporting parts and components across borders is cost effective and time efficient (Jones and Kierzkowski, 1990, 2005; Kimura and Obashi, 2011). Brooks and Stone (2010) argued that countries participating in production networks have an incentive to cooperate with each other, particularly on reducing the costs of trade between themselves. Their empirical analysis, based on a computable general equilibrium framework, indicates that even a relatively modest reduction in trade costs can yield significant gains in APEC

member countries; leading to an increase in the gross domestic product in the region, and countries move into a more diversified trading zone. More interestingly, the expansion of exports due to trade facilitation is predicted to be dominant in intra-APEC trade, compared to extra-regional trade. Trade regulation is equally responsible for trade promotion. Rigid regulations discourage firms to engage in trade. The extent of government regulations faced by logistics service providers varies among ASEAN+6 countries (Hollweg and Wong, 2009). Singapore and Australia, followed by Japan and New Zealand, are relatively open to trade in logistics services; whereas Malaysia, China, Indonesia, Lao PDR, the Philippines, and Vietnam are relatively restrictive.

Improving ‘at-the-border’ and ‘behind-the-border’ procedures is at the core of trade facilitation. The time it takes to complete all trade procedures involved in moving goods from factory to ship at the nearest seaport—or vice versa—in Asian and Pacific developing economies decreased on average by about 16 percent between 2005 and 2010.<sup>14</sup> *UNESCAP Trade Cost Database* indicates that Southeast Asia has made the most progress, cutting its average time for completing trade procedures to only 19 days. Cambodia and Thailand cut their time by more than 40 percent during the same period. India and Pakistan achieved improvements of a similar magnitude, although trade procedures in South and Southwest Asia still take 50 percent more time to complete than in Southeast Asia (30 days). No significant progress was made in the Pacific. The chiefly landlocked economies of North and Central Asia, made some improvements, but the time taken by most of the economies of that sub-region to clear procedures for moving goods to a seaport remains lengthy (52 days on average). The direct cost of completing procedures for moving goods from factory to seaport increased marginally in most Asia-Pacific economies between 2005 and 2010, ranging from US\$ 633 per container in Southeast Asia, to almost US\$ 2,200 in North and Central Asia. This may be partially attributable to an increase in the cost of labour, increased demand for logistics and transport services as trade volumes increase, and exchange rate fluctuations in some cases. During 2005-2010, average costs increased by 16.6 percent in most of the economies of South and Southwest Asia. While significant progress has been made, it still takes three times longer to complete trade procedures in Asia-Pacific developing economies than in Asia-Pacific developed economies (Australia, Japan and New Zealand), suggesting considerable room for improvement.

While dealing with non-tariff policy-related trade costs, improving seaport efficiency (liner shipping connectivity) and access to information and communication technology (ICT) is essential in reducing trade costs.<sup>15</sup> Policies aimed at liberalising logistics and information technology services and increasing competition among service providers should be readily considered, with a view to maximizing efficiency at any given level of hard infrastructure development. Shepherd and Wilson (2009) presented empirical evidence that trade flows in ASEAN are particularly sensitive to transport infrastructure and ICT networks. Their estimate suggests that the region could make significant economic gains from trade facilitation reform

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<sup>14</sup> Refer, UNESCAP (2011b)

<sup>15</sup> Refer, for example, Duval and Utoktham (2011)

that would be considerably larger than those from comparable tariff reforms. In particular, transport infrastructure can play in enhancing intra-regional trade in ASEAN. In context of South Asia, De (2011b) found that a 10 percent fall in transaction costs at borders has the effect of increasing a country's exports by about 2 percent, where the implementation of e-filling of trade documents has been a significant determining factor in trade laws, thereby indicating that electronic submission of trade documents has been helping the trade to grow in South Asia.

The fact that the Asia-Pacific region hosts both the most efficient as well as the least efficient economies in conducting international trade transactions is well known. However, information on the actual implementation of specific trade facilitation reforms in the Asia-Pacific developing economies is generally lacking. Based on a field survey, data on the progress made by 26 Asian countries in implementing various trade facilitation and paperless trade measures, Wang and Duval (2013) have shown us that all countries have implemented at least some trade facilitation measures as listed in the WTO consolidated negotiating text on trade facilitation. For example, according to the same study, many countries have established customs automation systems, and are developing a national single window. But a lot of work remains to be done in terms of implementing cross-border exchange and recognition of trade-related documents, as well as in facilitating transit arrangements.

In line with targets of the ASEAN Economic Community Blueprint (AECB), the modernisation and integration of customs systems in ASEAN countries has been moving along two main avenues: establishment of the ASEAN Single Window as well as integration of the ASEAN customs systems. ASEAN, having agreed on the concepts and guiding principles to facilitate the free movement of goods, has finalised most of the necessary regional agreements and related protocols. While further support to the regional processes is required, one of the overarching challenges in this field is to start the implementation of the ASEAN Customs Transit System (ACTS). To effectively use the integrated ASEAN customs system, it will also be necessary to harmonise transport regulations. For instance, trucks cannot cross most of the borders in the region due to incompatible national regulatory measures. ASEAN has adopted three regional agreements on transport facilitation. Support is required to ensure the effective implementation of such harmonised regulations. In the field of standards and technical barriers to trade, ASEAN countries have, in line with the targets of the AECB, adopted a wide range of mutual recognition arrangements (MRA) for priority sectors<sup>16</sup>. One of the most noticeable ongoing initiatives is the ASEAN Single Window pilot project, which aims to exchange preferential Certificates of Origin (ATIGA Form D) and the ASEAN Customs Declaration Document (ACDD), both of which are harmonised ASEAN documents. However, for the effective functioning of such mutual recognition, it is necessary to develop a consistent framework to establish a quality infrastructure system across the region, including conformity assessment and Post Market Surveillance (PMS). A key

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<sup>16</sup> ASEAN has identified 12 priority sectors: Health care products; automotives; rubber-based products; wood-based products; textiles; agro-based products; fisheries; electronics and electrical; healthcare; air-travel; tourism and logistics.

challenge will be then to foster the establishment of a cost-effective system through regional cooperation and coordination.

ADB and UNESCAP can play a stronger role in trade facilitation, particularly in taking the plan to establishing national Single Windows, incorporating existing international standards to ensure cross-border inter-operability at the technical level. A full-fledged Single Window is likely to be a long-term and complex endeavour in some of the developing economies of the region.<sup>17</sup> However, setting it as a national goal may provide the necessary impetus for implementing a systematic action plan to cut red tape, starting with a detailed analysis of the trade processes and procedures to be streamlined and then automated. UNESCAP (2012) suggested full and inclusive representation of the private sector in trade facilitation initiatives is essential, and implementation of basic trade facilitation measures should be consistently enforced and reinforced nation-wide. Regional and regular sharing of experiences to facilitate planning and implementation should be considered. The foregoing discussion therefore suggests that countries in Asia and the Pacific in general and South Asia in particular should reinforce their trade facilitation efforts to concentrate on those that are very critical to trade flows such as improving regional trade processes and procedures.

The successful implementation of trade facilitation measures, however, requires not only political and governmental support in terms of policy directions as well as human and financial resources, but also an in-depth understanding of the existing business processes. How do we then analyse the trade processes and procedures? One option is to follow the Business Process Analysis (BPA) model. Noted in UN (2012), business processes are valuable organisational assets. They enable the creation and delivery of business values as defined by organisational goals. According to UN/CEFACT's step-by-step approach toward a Single Window paperless environment as shown in Figure 2.1, BPA is recommended as the first step before undertaking other trade facilitation measures related to the simplification, harmonisation, and automation of trade procedures and documents.<sup>18</sup> UNESCAP and UNECE have been using the BPA methodology to initiate trade facilitation reforms in member countries. The Cambodian and Thai governments have taken help of BPA in order to raise competitiveness of their exports through simplification of the trade processes.<sup>19</sup>

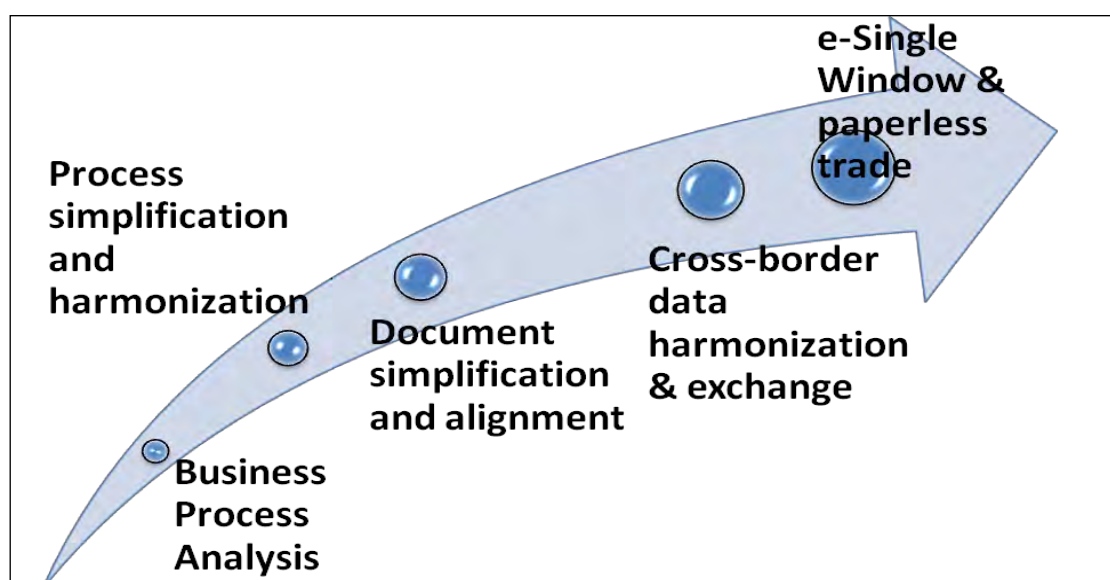
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<sup>17</sup> Refer, UNESCAP (2011b)

<sup>18</sup> Refer, UNECE (2006a)

<sup>19</sup> Refer, [http://www.unescap.org/tid/publication/tipub2558new\\_annex.pdf](http://www.unescap.org/tid/publication/tipub2558new_annex.pdf)

**Figure 2.1 Approach to Developing an Electronic Single Window and Paperless Trade Environment**



Source: UNESCAP (2012)

Business processes are often driven by information. In the area of international supply chain, for example, the movement of cargo has to be escorted by corresponding cargo documents. This involves an average of 40 documents, 200 data elements (30 of which are repeated at least 30 times) and the re-keying of 60 to 70 percent of data at least once.<sup>20</sup> Delay on document processing or lack of integrity in the information that flows across business processes has become a factor that holds back cargo movement. On the average, each additional day that a cargo is delayed prior to being shipped reduces trade volume by at least 1 percent and by approximately 7 percent if the products are time-sensitive agricultural goods.<sup>21</sup>

The expert survey conducted by UNESCAP shows that 42 percent of countries surveyed (10 countries) have been engaged in cross-border paperless trade documents or data exchange with other countries, essentially on a pilot basis.<sup>22</sup> These countries are: China, Indonesia, Japan, Republic of Korea, Russian Federation, Philippines, Singapore, Turkey, Thailand and Vietnam. The remaining 16 countries have not engaged in cross-border paperless trade or data exchange with other countries. A large percent of countries in the region are yet to implement a comprehensive electronic system for the trade transaction. Therefore, understanding international trade transactions in details will help countries (or region) to improve trade facilitation through effective policy interventions.

<sup>20</sup> Refer, APEC (1996)

<sup>21</sup> Refer, for example, Djankov et al (2010)

<sup>22</sup> Refer, Wang and Duval (2013)

### 3. SASEC Trade: Overall Trends

SASEC is an initiative of the Asian Development Bank (ADB) to promote regional economic cooperation between Bangladesh, Bhutan, India and Nepal. SASEC comprises four South Asian countries, namely, Bangladesh, Bhutan, India and Nepal, of which two are landlocked countries and three are LDCs.<sup>23</sup>

**Table 3.1 Trade Openness in SASEC**

Country	Indicator	1991	2000	2011
Bangladesh	<b>Trade (% of GDP)</b>	<b>18.89</b>	<b>33.21</b>	<b>53.91</b>
	Trade in services (% of GDP)	3.64	5.17	7.11
	Merchandise trade (% of GDP)	16.48	32.41	54.85
Bhutan	<b>Trade (% of GDP)</b>	<b>74.21</b>	<b>81.83</b>	<b>136.72</b>
	Trade in services (% of GDP)	*	*	*
	Merchandise trade (% of GDP)	59.94	65.03	92.96
India	<b>Trade (% of GDP)</b>	<b>16.69</b>	<b>26.54</b>	<b>54.49</b>
	Trade in services (% of GDP)	3.96	7.56	14.28
	Merchandise trade (% of GDP)	13.89	19.78	40.45
Nepal	<b>Trade (% of GDP)</b>	<b>34.68</b>	<b>55.71</b>	<b>41.70</b>
	Trade in services (% of GDP)	10.81	12.85	8.71
	Merchandise trade (% of GDP)	25.35	43.26	35.53

\*Data not available

Source: World Development Indicators (WDI), 2012

SASEC countries are relatively open economies where, with the exception of Nepal, trade openness has increased during 1991 to 2011 (Table 3.1). In contrast, trade openness contracted in Nepal in recent years. The common feature of SASEC trade is that merchandise trade drives its trade openness. India being the largest economy in SASEC contributes to over 90 percent of the sub-regional trade in SASEC. In 2011, India's total export to SASEC was US\$ 8 billion, of which US\$ 7 billion was export and remaining amount was India's import from SASEC.

<sup>23</sup> In 1996 four of the seven member countries of the South Asian Association for Regional Cooperation (SAARC), namely, Bangladesh, Bhutan, India and Nepal, formed the South Asian Growth Quadrangle (SAGQ), with the primary objective of accelerating sustainable economic development among these countries. This sub-regional initiative was endorsed at the SAARC summit in Malé, Maldives in 1997. Subsequently, these four countries requested ADB's assistance in facilitating their economic cooperation initiative. This request led to the implementation of the SASEC program. Since the inception of SASEC, ADB has informally functioned as its secretariat.

**Table 3.2(a) India's Trade with SASEC**

Year	Export	Import	Total Trade	Composition
	(US\$ million)			(Share in total, %)
1996	1012.03 (3.131)	141.09 (0.391)	1153.12	BGD: 77, NPL: 18 BTN: 5
2005	2585.98 (3.214)	570.23 (0.459)	3156.21	BGD: 56, NPL: 38 BTN: 6
2011	6628.02 (2.248)	1342.53 (0.301)	7970.55	BGD: 58, NPL: 37 BTN: 5
CAGR (%) (2000-2011)	18.71	13.32	17.56	

BGD – Bangladesh, NPL – Nepal, BTN – Bhutan

Data in parentheses are shares in global export or import.

Source: UN Comtrade

A considerably large part of SASEC's trade is India-centric. In 2011, India's trade with SASEC was US\$ 8 billion (Table 3.2(a)), of which 58 percent was conducted with Bangladesh, 37 percent with Nepal and remaining 5 percent with Bhutan. Given India's vast economic size, only 2.25 percent of India's total export is directed to SASEC, and a tiny 0.3 percent is sourced from the sub-region. While share of India's trade with Bangladesh reduced from 77 percent in 1996 to about 58 percent in 2011, India's trade share with Nepal increased from about 18 percent in 1996 to 37 percent in 2011. Contrary to common belief, SASEC countries have high trade potentials, but are largely unrealized.<sup>24</sup> Trade facilitation along with improved infrastructure and connectivity can unlock the trade potential in SASEC.<sup>25</sup> Barring India, the remaining SASEC countries are still to introduce a comprehensive electronic system for the trade transaction. Therefore, understanding international trade transactions in greater details will help SASEC countries, particularly LDCs, to improve trade facilitation.

<sup>24</sup> Refer, De (2012)

<sup>25</sup> Refer, for example, ADB (2010, 2012)



**Figure 3.1 Intra-SASEC Trade**



Source: Calculated based on DOTS, IMF

**Table 3.2(b) Bhutan's Trade with SASEC**

Year	Export	Import	Total	Composition
	(US\$ million)			(Share in total, %)
2000	95.18 (92.41)	102.28 (58.19)	197.46	BGD: 4, IND: 95 NPL: 1
2005	219.41 (84.92)	277.07 (71.58)	496.48	BGD: 4, IND: 96 NPL: *
2011	591.80 (95.45)	619.75 (62.71)	1211.55	BGD: 5, IND: 93 NPL: 2
CAGR (%) (2000-2011)	18.07	17.80	17.93	

BGD – Bangladesh, NPL – Nepal, IND- India

Data in parentheses are shares in global export or import.

Source: UN Comtrade

Intra sub-regional trade varies significantly across SASEC countries, presently less than 2.5 percent (Figure 3.1). India accounts for almost 95 percent sub-regional trade. Bangladesh, Bhutan and Nepal heavily depend on SASEC for their export and import (Table 3.2 (b),(c)). In 2011, 3 percent of Bangladesh's global exports were directed to SASEC, whereas 14 percent of imports were sourced from the sub-region, (Table 3.2(d)). However, this trend is changing fast with India's unilateral removal of tariff and sensitive list items to Bangladesh and other South Asian LDCs in recent years. Bangladesh's trade with the sub-region has increased from about US\$ 22 million in 1996 to about US\$ 544 million in 2011. In Nepal trade increased to US\$ 518 million in 2011 from about US\$ 74 million in 1996 (Figure 3.2). Owing to its fast growth (40 percent CAGR), Bangladesh belongs to 'high growth-high

volume' zone in SASEC, indicating high trade potential and scopes for balancing the distribution of trade (Figure 3.3).

**Table 3.2(c) Nepal's Trade with SASEC**

Year	Export	Import	Total	Composition
	(US\$ million)			(Share in total, %)
1996	73.70 (20.47)	454.10 (33.68)	527.80	BGD: 4, IND:96 BTN:*
2005	544.10 (66.96)	1233.50 (59.59)	1777.60	BGD: 4, IND:98 BTN:*
2011	518.33 (62.26)	2586.28 (54.74)	3104.61	BGD: 4, IND:98 BTN:*
CAGR (%) (2000-2011)	4.81	14.52	12.01	

BGD – Bangladesh, BTN – Bhutan, IND- India

Data in parentheses are shares in global export or import.

\*Not available but very minor share

Source: UN Comtrade

**Table 3.2(d) Bangladesh's Trade with SASEC**

Year	Export	Import	Total	Composition
	(US\$ million)			(Share in total,%)
1996	21.484 (0.65)	1024.369 (14.77)	1045.85	IND: 99, NPL:1 BTN:*
2005	122.362 (1.44)	1954.182 (14.11)	2076.54	IND: 100, NPL: * BTN: *
2011	555.127 (2.80)	4898.610 (13.54)	5453.74	IND: 99, NPL: 1 BTN: *
CAGR (%), (2000-2011)	24.140	16.087	40.23	

IND-India, NPL – Nepal, BTN – Bhutan

\*Not available but very minor share

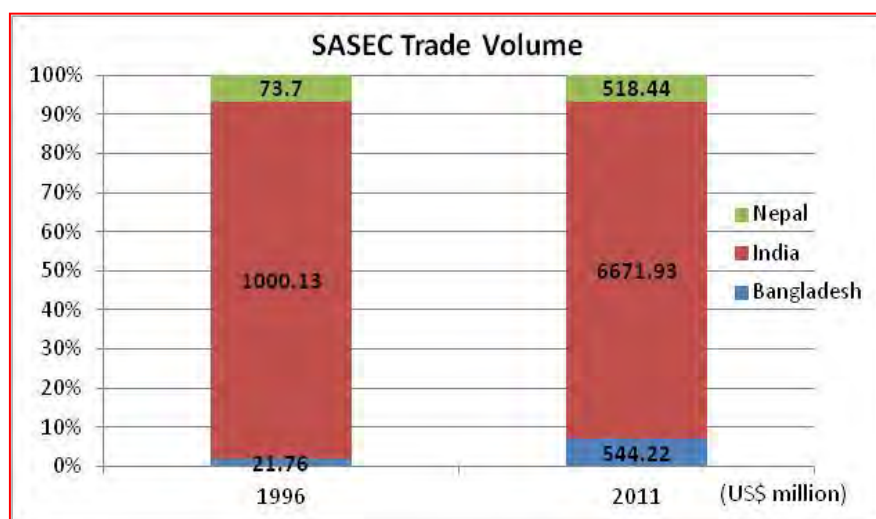
Data in parentheses are shares in global export or import.

Source: UN Comtrade

While sub-regional trade is limited to only 2.5 percent in SASEC, the trade potential is quite large. Trade facilitation and connectivity have been identified as key to regional integration. SASEC countries need to improve trade performance through enhanced trade facilitation measures. Development and implementation of trade facilitation measures to integrate and harmonise customs programmes and processes in support of the SASEC goals are immensely

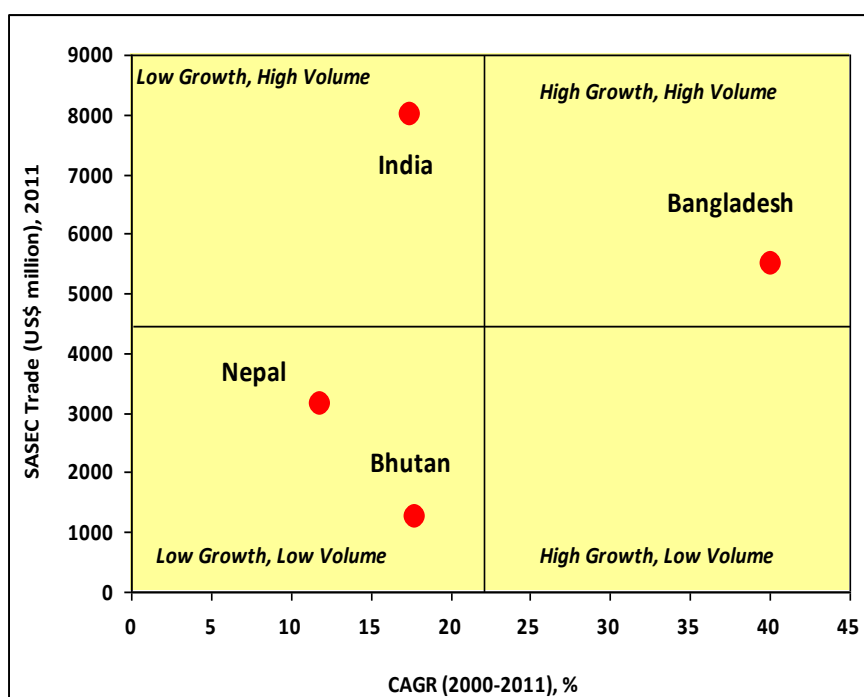
important for strengthening regional integration process. This will entail in particular further preparation for the implementation of the national Single Window, and eventually regional Single Window. In other words, this study is an attempt to identify the trade facilitation priorities and strategies in SASEC.

**Figure 3.2 Distribution of SASEC Trade**



Source: Calculated based on DOTS, IMF

**Figure 3.3 SASEC Trade Performance**



Data source: DOTS, IMF

## 4. BPA Methodology and Scope of the Study

This regional study consists of four coordinated country studies, conducted on three regional corridors offering a detailed picture of the business processes associated with importing and/or exporting selected goods from or to other countries within SASEC. Relevant procedures were identified and mapped using a common methodology outlined in the *UNNExT Business Process Analysis Guide to Simplify Trade Procedures*.<sup>26</sup> The cost and time of the procedures were calculated as part of the analysis, providing an opportunity to benchmark results against relevant indicators from the World Bank's *Doing Business Database*.<sup>27</sup>

**Table 4.1 Country and Product Coverage of the Study**

Import Processes	Export Processes				
		Bhutan	Bangladesh	Nepal	Third Country
	Bhutan		Fruit juice		
	Bangladesh	Orange		Lentil	
	Nepal		LAA		CSO**
	Third country			Carpet*	

\*Import processes excluded from analysis.

\*\* Export processes excluded from analysis.

LAA and CSO mean lead acid accumulator and crude soya bean oil, respectively.

**Table 4.2 Corridors Coverage of the Study**

Corridor	Countries Linked	Distance, Total	Distance, Transit	Products Traded	Transit Country
<b>Corridor 1 (Nepal corridor)</b> Kakarvitta-Panitanki-Phulbari-Banglabandha	Nepal – India - Bangladesh	1152 km <sup>#</sup>	54 km	<ul style="list-style-type: none"> <li>Lentil</li> <li>LAA*</li> </ul>	India
<b>Corridor 2 (Bhutan corridor)</b> Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari	Bhutan – India - Bangladesh	630 km <sup>^</sup>	115 km	<ul style="list-style-type: none"> <li>Orange</li> <li>Fruit juice</li> </ul>	India
<b>Corridor 3 (Nepal corridor)</b> Kathmandu-Birgunj-Raxaul - Kolkata	Nepal - India	1287 km <sup>\$</sup>	1047 km	<ul style="list-style-type: none"> <li>Carpet</li> <li>CSO**</li> </ul>	India

\*Lead acid accumulator

\*\*Crude soya bean oil <sup>#</sup>Kathmandu to Dhaka. <sup>^</sup>Thimpu to Dhaka <sup>\$</sup>Kathmandu to Kolkata

The country and product coverage of the study are summarised in Table 4.1, and the corridors are listed in Table 4.2. The mix of intermediate and final products selected for analysis was initially chosen based on the importance of the product in their countries overall import or export using the corridors as listed in Table 4.2 for export and import. The corridors selected in this study are integral part of SASEC corridors and constitute some important border crossings and transit routes passing through India that are immensely important for economic

<sup>26</sup> Refer, for example, UN (2012)

<sup>27</sup> Definition as outlined in World Bank's *Doing Business Database*.

exchange of goods and services across borders. Map 4.1 presents schematic overview of these three corridors.

**Map 4.1 Illustration of SASEC Corridors**

**Corridor 1: Kakarvitta-Panitanki-Phulbari-Banglabandha**



**Corridor 2: Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari**



**Corridor 3: Kathmandu-Birgunj-Kolkata**



Six important products are selected for this study, namely, lentil, carpet, lead acid accumulator (LAA), crude soya bean oil (CSBO), orange, and fruit juice. These are the products that are being transported along three SASEC corridors for sub-regional and international trade. About 7.76 percent of Nepal's export of carpet to third country (US\$ 60.61 million in 2011) uses corridor 3, whereas over 80 percent of Nepal's export of lentil to Bangladesh (US\$ 42.56 million) passes through corridor 1. About US\$ 82 million of crude soya-bean oil has been imported by Nepal from third country through port of Kolkata, whereas about US\$ 7.78 million annual import of LAA from Bangladesh (about 1.56 percent of Nepal's total import) is carried through corridor 1. Similarly, Bhutan exports US\$ 6.57 million worth of oranges to Bangladesh through corridor 2, whereas, in sharp contrast, it exports only US\$ 0.46 million worth of oranges to India. At the same time, about 63.39 percent of Bhutan's import of fruit juices is sourced from Bangladesh through corridor 2. Appendix 4.1 presents the detailed account of trade flows of the products selected. Therefore, the products selected for BPA analysis indicate not only the spatial importance of the corridors in carrying trade in the sub-region but also link with a growing supply chain across borders.

The scope of the trade process analysed in this study includes all procedures involving the exporter (seller) or its representatives directly, from signature of contract between the buyer and seller to loading the goods onto a sea vessel (or, if by land, to the border checkpoint of the importing country), and to receiving the payment. The scope of the import process analysed generally includes all procedures involving the importer (buyer), i.e., procedures related to the signature of the contract between the buyers and sellers, all procedures from arrival of goods at the border (or, seaport of the importing country) to delivery at the warehouse in the importing country.

Therefore, this study generally covers the entire BUY-SHIP-PAY process (see Box 4.1).<sup>28</sup> We have conducted our analysis based on a *truck load* and/or *payment by letter of credit* whenever these assumptions were consistent with actual practice, in order to facilitate comparison of the results across studies.<sup>29</sup>

Following the UNNExT's BPA methodology, information on import and export processes was collected essentially through repeated interviews of a small number of key informants, for instance, buyers, sellers and intermediaries directly involved in the process being analysed. Interviews and consultations with relevant government agencies were also conducted whenever possible. Information was collected through field survey, for the most part, during the third and fourth quarters of the year 2012. Details on the number of interviews and mechanisms used by the national researchers in gathering and verifying information is available in the individual country studies summarized in Part II of the report.

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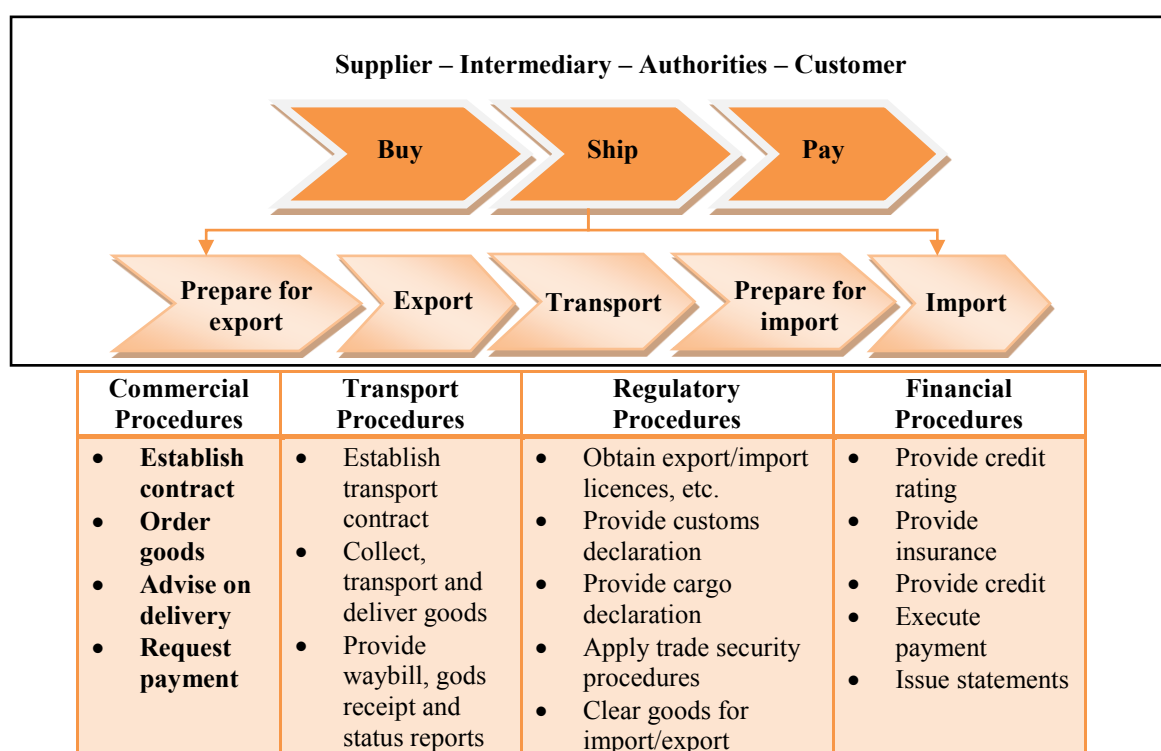
<sup>28</sup> This in contrast with the World Bank's Doing Business Report, which mostly excludes the BUY and PAY process (except for preparation of documents for L/C) when calculating export and import time.

<sup>29</sup> However, in some cases, these assumptions were inconsistent with reality (e.g., advance payment instead of payment through L/C) and were therefore relaxed.



### Box 4.1 An International Supply Chain Model

UN/CEFACT Recommendation No. 18 illustrates a simplified view of the international supply chain in the BUY-SHIP-PAY model (see the picture below).<sup>30</sup> The model not only suggests “a series of fragmented activities” that are carried out throughout the international trade transaction, but also defines different types of actors that are associated with them. Key actors in the international supply chain are authorities, intermediaries, suppliers, and customers.



UN (2009) suggests that an international trade transaction encompasses all activities related to the establishment of commercial contracts (commercial procedures), the arrangement of inland and cross-border transportation of goods (transport procedures), the export and import formalities to meet regulatory requirements (regulatory procedures), and the payment for purchased goods (financial procedures). It requires cooperation between many individuals, including traders, government agencies and service providers from different countries. Business Process Analysis of international trade transactions, of the kind conducted as part of the study presented in this monograph, is recommended as the first step to understand the changes that will need to be made as part of the simplification, harmonisation, and automation of trade procedures and documents.

All researchers used Unified Modelling Language (UML) to describe the various procedures and process analysed; facilitating comparison of procedures across countries and understanding among the researchers (see Box 4.2). The activity diagram is an elaboration of each business process displayed in the use case diagram. It portrays a sequence of activities and documentary flows from one responsible party to another. It provides information about

<sup>30</sup> [www.unece.org/fileadmin/DAM/cefact/recommendations/rec18/Rec18\\_pub\\_2002\\_ecetr271.pdf](http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec18/Rec18_pub_2002_ecetr271.pdf)

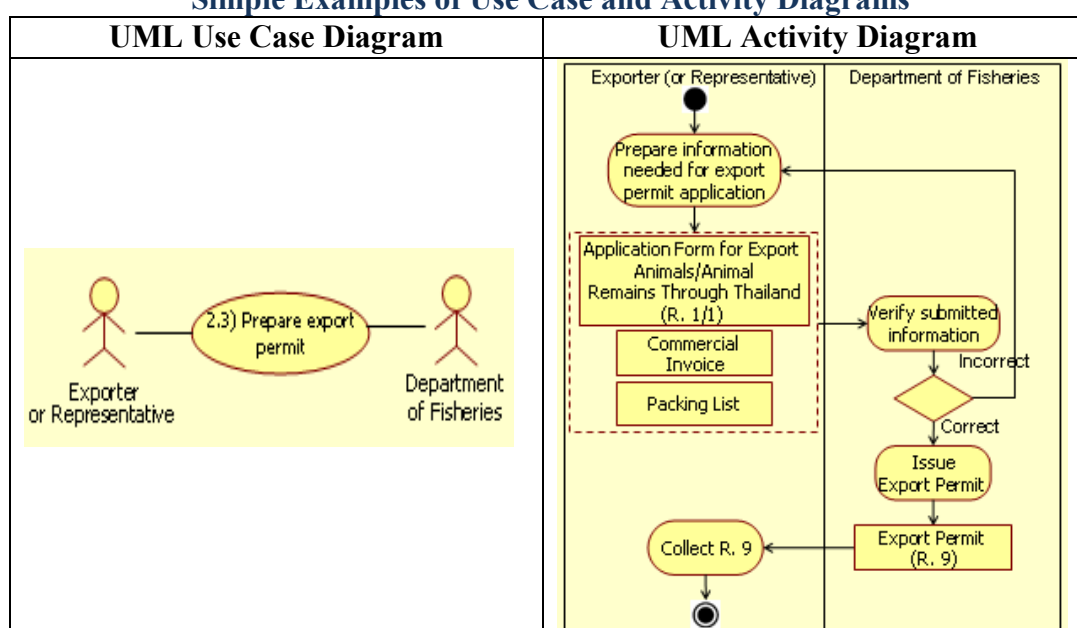
who is doing what in which order, also documentary inputs that serve as prerequisites to activities and documentary outputs that can be obtained after completing certain ones. Appendix 4.2 presents relevant notations of Use Case and activity diagrams.

#### Box 4.2 Introduction to the Unified Modelling Language for BPA

One of the key features of the UNNExT Business Process Analysis Guide to Simplify Trade Procedures is that it introduces Unified Modelling Language as a standard way to graphically represent the various procedures involved in the trade process. Use of this common standard is essential to arrive at a systematic description of a procedure that can be understood by both domestic and foreign stakeholders involved in international trade transactions. If the ultimate goal of the business process modelling and analysis is to automate the international trade transaction and move to electronic trade documents exchangeable across borders, the use of common standard graphical notations in business process modelling is vital (UN, 2012).<sup>31</sup>

The Unified Modelling Language (UML)<sup>32</sup> provides a set of standard graphical notations for business process modelling. These notations were used by researchers to draw a use case diagram, as well as related activity diagrams, for each product-specific import or export process they analysed. The use case diagram serves as a frame of reference for the project. Its purpose is to present a graphical overview of core business processes that are subject to further examination at a greater depth. It indicates all stakeholders that are involved in these business processes and demonstrates all actual associations between these business processes and stakeholders.

#### Simple Examples of Use Case and Activity Diagrams



Source: UN (2012)

<sup>31</sup> This is mainly because the common standard graphical notations allow business domain experts to communicate procedural and documentary requirements with technical experts who are designated to put the systems in place.

<sup>32</sup> Refer, UML Resource Page, [www.uml.org](http://www.uml.org)



## **5. Analysis of SASEC Trade Processes and Procedures: Major Findings**

The information provided in this section is based on the four country / three corridor studies in SASEC region. Since four member countries of SASEC feature very different geographic and development characteristics, findings have potential implications for other countries in and outside of the SASEC region. All researchers have conducted their studies based on UNNExT's BPA guide to simplify trade procedures.

In brief, each business process model illustrates:

- activities that come in a specific order and decision points
- individuals who perform those activities
- defined inputs and outputs of each activity
- criteria for entering and exiting the business process
- how actors relate to one another
- how information flows throughout the business process
- associated rules and regulations, and
- quantitative indicators such as number of steps, as well as time and cost required to complete a particular business process

In conducting this assessment, researchers gathered information from both primary (i.e. exporters and importers) and secondary sources (i.e. government documents) and, whenever possible, through consultations with relevant government agencies. Most of the information was collected in the second half of 2012. A corridor-wise discussion is essential for a comparative analysis of the SASEC corridors.

We, therefore, present some major findings on each of the three corridors next.

### **5.1 Analysis of Corridor 1 (Kakarvitta-Panitanki-Phulbari-Banglabandha)**

Corridor 1 that links Nepal with Bangladesh overland with transit in India, is an important SASEC corridor pertaining to trade and connectivity. The transit distance of corridor 1 falling in India (Panitanki to Phulbari) is only 54 km, but carries almost 1 percent of Nepal-Bangladesh bilateral trade, besides Nepal's trade with India.<sup>33</sup>

In this study, we have selected export of lentils from Nepal to Bangladesh and export of LAA from Bangladesh to Nepal through this corridor. Tables 5.1 to 5.6 present essential data on trade processes and procedures related to corridor 1. The BPA data collected through this study indicates that it takes about 23.40 days to complete all 31 procedures in the trade of

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<sup>33</sup> Refer, Rajkarnikar (2013)

lentils, 18 of which fall into exporting country (Nepal) and 13 are related to importing country (Bangladesh), and costs US\$ 791.8 per container. However, trade of LAA in the reverse direction (that is, from Bangladesh to Nepal), takes more time and cost, when compared to trade in lentils. For example, it costs around US\$ 1402.05 per container for export of LAA from Bangladesh to Nepal through corridor 1 and takes about 29.26 days to complete the entire process. Another interesting observation is that trade in LAA involves less number of procedures, compared to the same witnessed in case of lentils.

**Table 5.1 Business Processes, Time and Cost in Corridor 1**

Exporter	Importer	Products	Procedures (No.)			Time (Days)	Cost (US\$/TEU)
			Exporter	Importer	Total		
Nepal	Bangladesh	Lentils	18	13	31	23.40	791.8
Bangladesh	Nepal	LAA	12	16	28	29.26	1402.05

**Table 5.2 Parties Engaged in Export and Import Processes in Corridor 1**

Exporter	Importer	Products	Parties (No.)						
			Exporter			Importer			Total
			Public	Private	Total	Public	Private	Total	
Nepal	Bangladesh	Lentils	7	7	14	4	5	9	23
Bangladesh	Nepal	LAA	3	4	7	7	5	12	19

**Table 5.3 Documents and Copies Required in Corridor 1**

Exporter	Importer	Products	Documents & Copies (No.)		
			Exporter	Importer	Total
Nepal	Bangladesh	Lentils	18 (44)	18 (71)	36 (115)
Bangladesh	Nepal	LAA	15 (50)	15 (33)	30 (83)

*Note:* Numbers in parentheses are copies needed for export and import.

Export and import in Nepal involves higher number of parties, compared to Bangladesh in corridor 1, where the private sector involvement has been equal or less than the involvement of government parties. Trade of lentils and LAA in corridor 1 also involve heavy documentations. This study shows that 36 documents and 115 copies are needed in case of lentil trade through corridor 1, whereas the trade of LAA needs 30 documents and 83 copies. Documents preparation thus takes longer time than any other procedures in both export and import of LAA (Table 5.4). With a 5-day duration, post-shipment procedure time (for instance, pay by importer to exporter) in Nepal comes next.

**Table 5.4 Export and Import Time in Corridor 1**

Process	Product	Exporter	Importer	Procedure	Time (Days)
Export	Lentils	Nepal	Bangladesh	Buy (pre-shipment procedure)	1.00
				<i>Export/Import procedures</i>	
				Documents preparation	8.00
				Inland transportation	1.00
				Time at customs	1.00
				Time at border	1.00
				Time at transit	1.00
				Pay (post-shipment procedure)	1.00
Export	LAA	Bangladesh	Nepal	Buy (pre-shipment procedure)	4.00
				<i>Export/Import procedures</i>	
				Documents preparation	12.50
				Inland transportation	1.00
				Time at customs	0.56
				Time at border	0.76
				Pay (post-shipment procedure)	5.00

Direct costs of trade in corridor 1 vary across procedures with freight (from Phulbari to Kathmandu) sharing 35.74 percent of total cost of trade in LAA and 43.06 percent for transportation from Nepal to Bangladesh border. Besides, customs inspection and clearance charges and C&F charge, all in Bangladesh, and customs clearing cost for NTWLC, customs service charge and other cost (including informal costs), all in Nepal, also add to the cost of trade in LAA in corridor 1 and critical to the direct costs involved in the trade of LAA between Bangladesh and Nepal (Table 5.5). However, between the two countries, import cost in Nepal is found to be higher than the export cost of Bangladesh in corridor 1.

**Table 5.5 Direct Costs involved in the Trade of LAA in Corridor 1**

<b>Sr. No.</b>	<b>Procedures</b>	<b>Cost (US\$)#</b>	<b>Share (%)</b>
1.	Fixing terms of trade with importer via local agent	6.00	0.37
2.	Cargo insurance	0.00	0.00
3.	Documents preparing for export	19.50	1.22
4.	Custom declaration	6.90	0.43
5.	VAT	0.00	0.00
6.	C&F charge	221.00	13.78
7.	Customs inspection and clearance	200.00	12.47
8.	Out pass from land port	1.10	0.07
9.	Unload to importers vehicle	8.75	0.55
10.	Transport cost	202.00	12.59
	<b>Sub-total (export process costs at Bangladesh)</b>	<b>665.25 (1,025)</b>	<b>41.47</b>
11.	Contact export agent	0.70	0.04
12.	Fix trade term	0.80	0.05
13.	Sign and exchange contract	7.40	0.46
14.	Service charge for opening L/C	47.00	2.93
15.	Obtain approval from AEPC	0.00	0.00
16.	Labor charge for loading/unloading at Phulbari/ Banglabandha custom	31.00	1.93
17.	Freight from Phulbari to Kathmandu	573.20	35.74
18.	Custom clearing charges of clearing agent	6.10	0.38
19.	Custom clearing charges of NTWLC	203.00	12.66
20.	ICD entry fee	1.80	0.11
21.	Custom service charge	6.90	0.43
22.	Other cost (including informal costs)	60.90	3.80
	<b>Sub-total (import process costs at Nepal)</b>	<b>938.80 (2,095)</b>	<b>58.53</b>
	<b>Total trade process cost</b>	<b>1604.05</b>	<b>100.00</b>

#Per TEU

Data in parentheses represents Doing Business Data of the World Bank for export (import) of a standard container in 2012.

**Table 5.6 Direct Costs involved in the Trade of Lentils in Corridor 1**

Sr. No.	Procedures	Costs (US\$)#	Share (%)
1.	Contact buyer and fix trade term	0.60	0.07
2.	Prepare, sign and exchange contract	6.00	0.71
3.	Obtain COO (from District Chamber of Commerce or FNCCI)	22.10	2.60
4.	Insurance premium	53.50	6.29
5.	Clearing agent's charge	3.60	0.42
6.	Clearing charges of NTWC	73.80	8.68
7.	Freight from industry to importer boarder (Bhairhawa, Nepal to Banglabandha, Bangladesh)	366.00	43.06
8.	ICD entry fee	1.80	0.21
9.	Custom service charge	8.20	0.96
10.	Banking service charge for payment settlement	15.00	1.76
11.	Quarantine certificate charge	1.20	0.14
12.	Other cost (including informal costs)	60.90	7.16
	<b>Sub-total (export process costs in Nepal)</b>	<b>612.70 (1,975)</b>	<b>72.08</b>
13.	Fixing terms of trade with exporter via local agent	0.00	0.00
14.	Preparing documents for opening import L/C	0.00	0.00
15.	L/C opening charges	12.00	1.41
16.	Courier charges for sending L/C copy to exporter	5.00	0.59
17.	Charges for documents preparing for customs declaration for the use by C&F agent	6.25	0.74
18.	Deposit challan fee by the C&F agent	1.65	0.19
19.	C&F charge	43.00	5.06
20.	Speed money paid to different stages (through the C&F agent) for receiving customs declaration	30.00	3.53
21.	Customs inspection and clearance charge	3.75	0.44
22.	Out pass from land port	0.65	0.08
23.	Inland transportation cost	135.00	15.88
	<b>Sub-total (import process costs in Bangladesh)</b>	<b>237.30 (1,430)</b>	<b>27.92</b>
	<b>Total trade process cost</b>	<b>850.00</b>	<b>100.00</b>

#Per TEU

Data in parentheses represents Doing Business Data of the World Bank for export (import) of a standard container in 2012.

## 5.2 Analysis of Corridor 2 (Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari)

Corridor 2, which links Bhutan with Bangladesh overland with transit from India, is another important SASEC corridor. The transit distance of corridor 2 falling in India (Jaigaon to Changrabandha) is 115 km. It carries most of the Bhutan-Bangladesh bilateral trade and is also used for Bhutan's trade with India.<sup>34</sup>

<sup>34</sup> Refer, Bhandari (2013)

In this study, we have selected export of oranges from Bhutan to Bangladesh and export of fruit juice from Bangladesh to Bhutan through this corridor. Tables 5.7 to 5.12 present some major data on trade processes and procedures relating to corridor 2. It takes about 20.13 days to complete all 25 major procedures in export of fruit juice, of which 9 procedures fall into exporting country (Bangladesh) and 16 are in importing country (Bhutan), and costs US\$ 527.61 per container. Export of oranges from Bhutan to Bangladesh takes less time, but cost slightly higher than that of trade in fruit juice. This study shows that it costs around US\$ 569.84 per container load of export of oranges from Bhutan to Bangladesh though corridor 2. In contrast, the trade of fruit juice involves less number of procedures, compared to the same witnessed in case of export of oranges.

**Table 5.7 Business Processes, Time and Cost in Corridor 2**

Exporter	Importer	Products	Procedures (No.)			Time (Days)	Cost (US\$/TEU)
			Exporter	Importer	Total		
Bhutan	Bangladesh	Oranges	18	14	32	18.60	569.84
Bangladesh	Bhutan	Fruit Juice	9	16	25	20.13	527.61

**Table 5.8 Parties Engaged in Export and Import Processes in Corridor 2**

Exporter	Importer	Products	Parties (No.)						
			Exporter			Importer			Total
			Public	Private	Total	Public	Private	Total	
Bhutan	Bangladesh	Oranges	10	4	14	3	4	7	21
Bangladesh	Bhutan	Fruit Juice	3	4	7	11	2	13	20

**Table 5.9 Documents and Copies Required in Corridor 2**

Exporter	Importer	Products	Documents & Copies (No.)		
			Exporter	Importer	Total
Bhutan	Bangladesh	Oranges	14 (26)	18 (69)	32 (95)
Bangladesh	Bhutan	Fruit Juice	9 (30)	16 (44)	25 (74)

*Note:* Numbers in parentheses are copies needed for export and import.

Export and import in Bhutan involves higher number of parties, compared to Bangladesh in corridor 2, where private sector engagement has been more than that of public sector in Bangladesh. However, trade procedures are mostly driven by government parties. Trade of both goods involves relatively higher documentations. This study shows that 32 documents and 95 copies are needed in case of trade of oranges through corridor 2, whereas the export of fruit juice needs to submit 25 documents and 74 copies. As usual, this preparation takes longer time than any other major procedure in case of export of orange, where pre-shipment procedures in case of export of fruit juice from Bangladesh to Bhutan take longest time. Preparation of documents in case of export of fruit juice takes 9 days (Table 5.10).

**Table 5.10 Export and Import Time in Corridor 1**

Process	Product	Exporter	Importer	Procedure	Time (Days)
Export	Oranges	Bhutan	Bangladesh	Buy (pre-shipment procedure)	2.00
				<i>Export/Import procedures</i>	
				Documents preparation	9.25
				Inland transportation	0.25
				Time at customs	0.25
				Time at border	0.25
				Time at transit	0.50
				Pay (post-shipment procedure)	7.00
Export	Fruit juice	Bangladesh	Bhutan	Buy (pre-shipment procedure)	11.50
				<i>Export/Import procedures</i>	
				Documents preparation	9.00
				Inland transportation	0.55
				Time at customs	1.13
				Time at border	1.20
				Pay (post-shipment procedure)	3.00

Director costs of trade in corridor 2 vary across procedures where transportation alone contributes to over 1/4<sup>th</sup> of total direct costs in the export of oranges. Although one time, obtaining the trade license, acquiring memberships in BCCI and MEA in Bhutan also add to the cost, but are critical to the direct costs of trade between the two countries. However, between the two countries, export cost in Bhutan is found to be higher than the import cost of Bangladesh in corridor 2 (Table 5.11).

**Table 5.11 Direct Costs involved in the Trade of Oranges in Corridor 2**

<b>Sr. No.</b>	<b>Procedure</b>	<b>Cost (US\$)#</b>	<b>Share (%)</b>
1.	Buy	0.00	0.00
2.	Obtain trade license	74.55	10.95
3.	Membership in BCCI	136.36	20.04
4.	Obtain token number	9.09	1.34
5.	Membership in BEA, Phuentsholing (one-time)	62.51	9.18
6.	Open L/C	0.00	0.00
7.	Apply for Phyto-sanitary Certificate (PSC)	5.18	0.76
8.	Apply for Certificate of Origin (COO)	0.27	0.04
9.	Apply for labor permit	0.00	0.00
10.	Obtain work permit	4.55	0.67
11.	Complete export documentation	8.75	1.29
12.	Obtain export declaration	1.82	0.27
13.	Transport to Changrabandha	138.18	20.30
14.	Transit to Burimari	0.00	0.00
15.	Receive payment	3.18	0.47
	<b>Sub-total (export process costs in Bhutan)</b>	<b>444.44 (2,230)</b>	<b>65.30</b>
16.	Representative of the importer visits Bhutan and fixes terms of trade with exporter	64.00	9.40
17.	Preparing documents for opening import L/C	8.00	1.18
18.	L/C opening in bank	3.75	0.55
19.	L/C copy sent to the exporter (via courier)	5.00	0.73
20.	Documents prepared for customs declaration (to be used by C&F agent)	2.50	0.37
21.	C&F charge	27.40	4.03
22.	Transport from port to trading place	113.00	16.60
23.	Customs inspection and clearance	12.50	1.84
24.	Collect out pass from land port	0.00	0.00
	<b>Sub-total (import process costs in Bangladesh)</b>	<b>236.15 (1,430)</b>	<b>34.70</b>
	<b>Total trade process cost</b>	<b>680.59</b>	<b>100.00</b>

#Per TEU

Data in parentheses represents Doing Business Data of the World Bank for export (import) of a standard container in 2012.



**Table 5.12 Costs involved in the Trade of Fruit Juice in Corridor 2**

<b>Sr. No.</b>	<b>Procedures</b>	<b>Cost (US\$)#</b>	<b>Share (%)</b>
1.	Receiving order from the buyer including trade terms and sales contract	0.00	0.00
2.	Producing according to buyer's order	0.00	0.00
3.	Contracting inland transport agency	0.00	0.00
4.	Preparing export documents	7.50	1.42
5.	Loading in factory premise	25.00	4.74
6.	Transport to port of departure	157.50	29.85
7.	Obtaining customs declaration	5.50	1.04
8.	VAT and source tax	8.35	1.58
9.	Customs inspection and clearance	12.00	2.27
10.	Loading / unloading at border points	8.75	1.66
	<b>Sub-total (export process costs in Bangladesh)</b>	<b>224.60 (1,025)</b>	<b>42.57</b>
11.	Obtain trade license	74.55	14.13
12.	Registration for import house	0.00	0.00
13.	Obtain import license/permit	0.00	0.00
14.	Open L/C account	0.00	0.00
15.	Obtain Letter of Guarantee	0.00	0.00
16.	Arrange transport	45.46	8.62
17.	Clear goods at Burimari	5.46	1.03
18.	Clear goods at Changrabanda	33.33	6.32
19.	Transport goods to Jaigaon/Phuentsholing	81.82	15.51
20.	Complete import documentation	11.25	2.13
21.	Obtain import declaration	40.91	7.75
22.	Payment	10.23	1.94
	<b>Sub-total (import process costs in Bhutan)</b>	<b>303.01 (2,330)</b>	<b>57.43</b>
	<b>Total trade process cost</b>	<b>527.61</b>	<b>100.00</b>

#Per TEU

Data in parentheses represents Doing Business Data of the World Bank for export (import) of a standard container in 2012.

### **5.3 Analysis of Corridor 3 (Kathmandu-Birgunj-Raxaul-Kolkata)**

Corridor 3 is the transit corridor to Nepal, which links Kathmandu with Kolkata port in India. The transit distance of corridor 3 from Raxaul to Kolkata port is 704 km (up to Kolkata port) and 832 km (up to Haldia port). Kolkata and Haldia ports handle most of Nepal's third country trade.

In this study, we have selected the export of carpets from Nepal to a third country and import of CSBO for Nepal through Kolkata port. Tables 5.13 to 5.18 present essential data on trade processes and procedures relating to corridor 3. It takes about 24 days to export carpets, with a cost of US\$ 2260.6 per container, involving 15 major export procedures in Nepal. However, import of CSBO through Kolkata port takes less time and cost, compared to export of carpet through Kolkata port. This study shows that it costs around US\$ 2260.6 per container for the

export of carpets through corridor 3, and US\$ 689.74 per container for import of CSBO. The import of CSBO involves less number of procedures and engages less number of parties, compared to that of export of carpet. The exporters of carpets and importers of CSBO have to meet 8 and 7 government agencies in Nepal, respectively. In general, trade procedures are mostly controlled by the Nepal government.

**Table 5.13 Business Processes, Time and Cost in Corridor 3**

Exporter	Importer	Products	Procedures (No.)			Time (Days)	Cost (US\$/TEU)
			Exporter	Importer	Total		
Nepal	Third country*	Carpets	24		24	26	2260.6
Third country**	Nepal	CSO		21	21	18	689.74

\*Excluding export processes

\*\*Excluding import processes

**Table 5.14 Parties Engaged in Export and Import Processes in Corridor 3**

Exporter	Importer	Products	Parties (No.)						
			Exporter			Importer			Total
			Public	Private	Total	Public	Private	Total	
Nepal	Third country*	Carpets	8	7	15				15
Third country**	Nepal	CSO				7	6	13	13

\*Excluding export processes

\*\*Excluding import processes

**Table 5.15 Documents and Copies Required in Corridor 3**

Exporter	Importer	Products	Documents & Copies (No.)		
			Exporter	Importer	Total
Nepal	Third country*	Carpets	19 (44)		19 (44)
Third country**	Nepal	CSO		22 (49)	22 (49)

\*Excluding export processes

\*\*Excluding import processes

Numbers in parentheses are copies needed for export and import.

Trade of both the goods involves relatively high documentations and procedures, most of which is yet to be automated. This study shows that 19 documents and 44 copies are needed in case of export of carpets through corridor 3, while the import of CSBO requires 22 documents and 49 copies. Documents preparation and transit take longer time than any other procedures in corridor 3, whereas the pre-shipment procedures along with documents preparation and transit in case of import of CSBO from third country to Nepal are critical components and consume longer time to complete.

**Table 5.16 Export and Import Time in Corridor 3**

Process	Product	Exporter	Importer	Procedure	Time (Days)
Export	Carpets	Nepal	Third country	Buys (pre-shipment procedure)	5.00
				<i>Export/Import procedures</i>	
				Documents preparation	8.00
				Inland transportation	2.00
				Time at customs	2.00
				Time at border	2.00
				Time at transit	9.00
				Pay	1.00
Import	CSO	Third country	Nepal	Buys (pre-shipment procedure)	4.00
				<i>Export/Import procedures</i>	
				Documents preparation	10.00
				Time at transit	11.00
				Time at customs	1.00
				Time at border	1.00
				Inland transportation	1.00
				Pays (post-shipment procedure)	1.00

**Table 5.17 Direct Costs involved in the Trade of Carpets in Corridor 3**

Sr. No.	Procedure	Cost (US\$)#	Share (%)
1.	Contact buyer agent	0.67	0.03
2.	Visit factory by importer agent (Local transportation, communication and other expenses)	7.31	0.32
3.	Prepare and collect export document	3.00	0.13
4.	Obtain COO from District Chamber of Commerce	108.00	4.78
5.	Obtain GSP Trade and Export Promotion Centre	91.50	4.05
6.	Custom service charge	8.30	0.37
7.	Insurance premium	234.00	10.35
8.	Loading at Kathmandu	35.00	1.55
9.	Freight from Kathmandu to Kolkata	1100.00	48.66
10.	Custom brokerage and labor charge at exporter border	45.00	1.99
11.	Custom clearing agent charges at border	40.00	1.77
12.	Raxaul Custom clearance charges	50.00	2.21
13.	Kolkata port terminal handling charges, brokerage, handling , and agent commission	200.00	8.85
14.	Preparation of bank documents	0.80	0.04
15.	Bank service charges for receiving payment	270.00	11.94
16.	Other cost	67.00	2.96
	<b>Total (export process cost in Nepal)</b>	<b>2260.60</b>	<b>100.00</b>

#Per TEU

**Table 5.18 Costs involved in the Trade of CSO in Corridor 3**

Sr. No.	Procedure	Cost (US\$)#	Share (%)
1.	Contact exporter/broker	0.67	0.097
2.	Fix trade term	0.67	0.097
3.	Sign and exchange contract	6.00	0.870
4.	L/C opening service charge	42.30	6.133
5.	Insurance cost	49.30	7.148
6.	Obtain approval from DFTQC	0.00	0.000
7.	Collect and prepare required document	4.30	0.623
8.	Handover document to clearing agent by courier	6.10	0.884
9.	Custom clearing cost at transit custom	10.30	1.493
10.	Shore tank charge at Kolkata	36.60	5.306
11.	Freight from Kolkata to factory in Nepal	458.00	66.402
12.	cargo transfer	3.60	0.522
13.	Custom service charge	6.90	1.000
14.	Clearing cost to CHA at importer's custom	4.10	0.594
15.	Other(including informal costs)	60.90	8.829
	<b>Total (import process costs in Nepal)</b>	<b>689.74 (2,095)</b>	<b>100.000</b>

#Per TEU

Data in parentheses represents Doing Business Data of the World Bank for export (import) of a standard container in 2012.

Direct costs of trade in corridor 3 also vary across procedures, where transportation alone contributes to almost half of the total direct costs of export of carpets. At the same time, bank charges for receiving payment, insurance premium and charges for obtaining COO from the District Chamber of Commerce in Nepal also substantially add to the cost of export of carpets in corridor 3.

## **5.4 Comparative Analysis of Corridors**

### **(i) Procedures and parties involved in export and import**

Tables 5.19 (a, b) and 5.20 present business procedures, parties involved, time and costs in export and import by SASEC corridors. It suggests that imports involve relatively less number of procedures and parties, compared to exports, in all the three corridors. Specifically, exports of oranges from Bhutan to Bangladesh face the highest number of procedures and second highest number of parties in corridor 2, whereas export of lentils from Nepal to Bangladesh witnesses the second highest number of procedures but highest number of parties in corridor 1. Among the three countries, owing to lowest numbers of procedures and parties, Bangladesh appears to be more trade friendly in both export and import in SASEC. Based on the number of procedures and parties involved, exports of lentils and carpets from Nepal to Bangladesh and third country, respectively, and oranges from Bhutan to Bangladesh, respectively – are most complex among the processes covered in this study. In contrast, trade in Nepal and Bhutan involves relatively higher number of procedures and parties along corridors 1 and 2. However, the involvement of parties and procedures goes up drastically in Nepal, when it comes to export or import through corridor 3, thereby making it

most expensive corridor, both in terms of cost and time. A container load of carpets exported from Kathmandu to a third country costs around US\$ 2260.6 per TEU and takes about 24 days to cover a distance of 1287 km to reach the port of Kolkata. Nevertheless, business process steps and corresponding parties in export are relatively less dispersed than that of imports.

**Table 5.19 (a) Business Processes, Time and Cost**

Corridor	Exporter	Importer	Products	Procedures (No.)			Time (Days)	Cost (US\$/TEU)
				Exporter	Importer	Total		
Corridor 1: Kakarvitta- Panitanki-Phulbari- Banglabandha	Nepal	Bangladesh	Lentils	18	13	31	23.40	791.8
	Bangladesh	Nepal	LAA	12	16	28	29.26	1402.05
Corridor 2: Phuentsholing- Jaigaon-Hasimara- Changrabandha- Burimari	Bhutan	Bangladesh	Oranges	18	14	32	18.60	569.84
	Bangladesh	Bhutan	Fruit Juice	9	16	25	20.13	527.61
Corridor 3: Kathmandu- Birgunj-Raxaul- Kolkata	Nepal	Third country*	Carpets	23		23	26.00	2260.60
	Third country**	Nepal	CSO		21	21	18.00	689.74

\*Excluding export processes

\*\*Excluding import processes

When compared, completion of trade procedures in Bangladesh takes more time than the other two SASEC countries. For example, the export procedure in Bangladesh takes 2.78 days to complete in case of export of fruit juice to Bhutan in corridor 3, involving a cost of US\$ 58.62 per container. On the other hand, completion of a single import procedure in case of import of CSBO by Nepal takes less than a day, thus making it fastest among the three corridors. With US\$ 116.84 per procedure, completion of export procedure in corridor 1 in Bangladesh outnumbers others. What follows is that trade of LAA along corridor 1 and oranges in corridor 2 appear to be most and least expensive, respectively, among the three corridors.

Transit time while passing through India is found to be relatively low in case of corridors 1 and 2, compared to corridor 3 (Table 5.19(b)).

**Table 5.19 -(b) Trade Time, Transit Time and Cost Corridor 1**

Exporter	Importer	Product	Time (days)	Time at Transit in India (days)	Cost (US\$/TEU)
Nepal	Bangladesh	Lentil	23.40	1	791.80
Bangladesh	Nepal	LAA	29.26	1	1402.05
<b>Corridor 2</b>					
Bhutan	Bangladesh	Orange	18.60	0.50	569.84
Bangladesh	Bhutan	Fruit Juice	20.13	0.25	527.61
<b>Corridor 3</b>					
Nepal	3 <sup>rd</sup> country	Carpet	26.00	9	2260.60*
3 <sup>rd</sup> country	Nepal	CSO	18.00	11	689.74**

\* - US\$ 50 for Customs clearance at Raxaul LCS \*\* - US\$ 10.30 for Customs clearing in transit

**Table 5.20 Parties Engaged in Export and Import Processes**

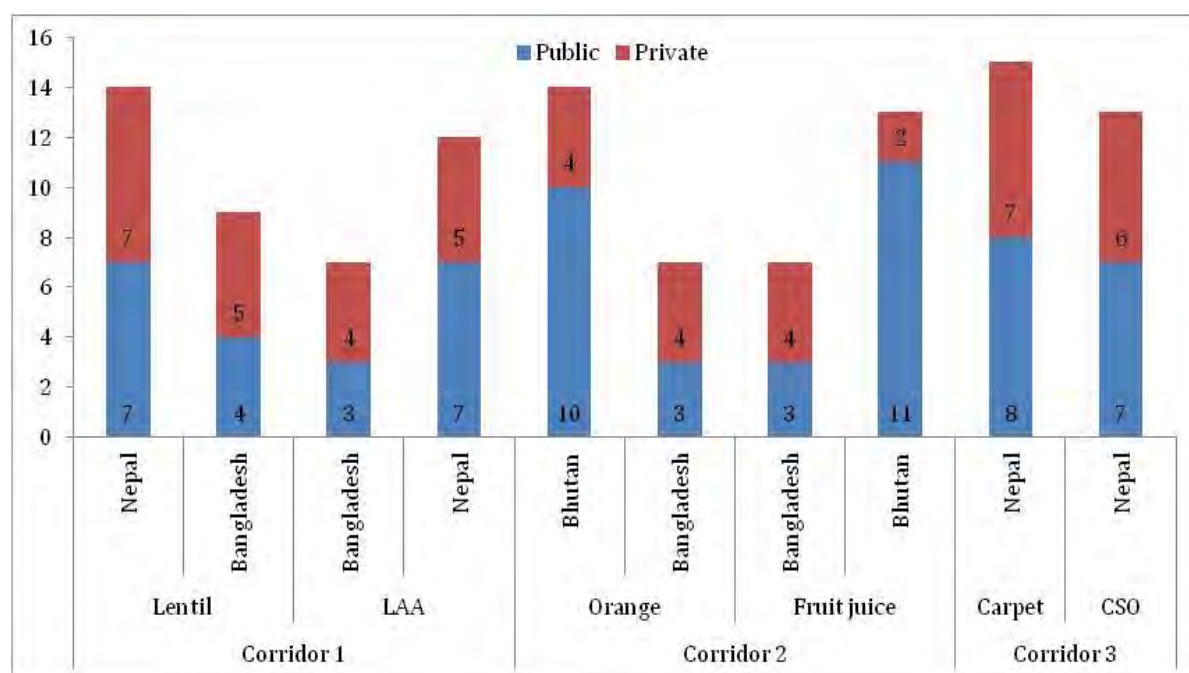
Corridor	Exporter	Importer	Products	Parties (No.)						
				Exporter			Importer			Total
				Public	Private	Total	Public	Private	Total	
Corridor 1: Kakarvitta- Panitanki- Phulbari- Banglabandha	Nepal	Bangladesh	Lentils	7	7	14	4	5	9	23
	Bangladesh	Nepal	LAA	3	4	7	7	5	12	19
Corridor 2: Phuentsholing- Jaigaon- Hasimara- Changrabandha- Burimari	Bhutan	Bangladesh	Oranges	10	4	14	3	4	7	21
	Bangladesh	Bhutan	Fruit Juice	3	4	7	11	2	13	20
Corridor 3: Kathmandu- Birgunj-Raxaul- Kolkata	Nepal	Third country*	Carpets	8	7	15				15
	Third country**	Nepal	CSO				7	6	13	13

\*Excluding export processes

\*\*Excluding import processes

### ***Involvement of private sector***

**Figure 5.1 Involvement of Parties**



Interestingly, the import and export process analysis show that, while many steps involve both public and private parties across the three corridors, a significant number of procedures involve private parties only. Private sector is relatively more involved in both export and import in Bangladesh, compared to Bhutan and Nepal (Figure 5.1). This is illustrated in Table 5.21, which shows that the majority of the business procedures involved in exporting LAA (or, fruit juice) from Bangladesh to Nepal and Bhutan, respectively, involve more private sector entities. This, in turn, suggests that efficiency of the international trade process

crucially depend on the capacity of private individuals to exchange information with each other and provide effective transport, logistics, payment and other services.

**Table 5.21 Parties Involved in the Export of LAA from Bangladesh to Nepal**

<b>Sr. No.</b>	<b>Procedures</b>	<b>Public or Private Procedure</b>
1.	Contacting importers	Private
2.	Fixing terms of trade with importer via local office	Private
3.	Sending draft contract and proforma invoice	Private
4.	Receiving acceptance letter and acknowledge L/C copy	Private
5.	Obtaining cargo insurance	Private
6.	Preparing documents for export	Private
7.	Loading in truck and delivering to land port	Private
8.	Depositing challan fee, VAT and customs declaration	Public and Private
9.	Customs inspection and clearance by C& F agent	Public
10.	Handing over out pass by C&F agent to importer's representative and unloading of the commodity to importer's carrier	Private
11.	Receive payment	Private

*Source:* Yunus (2013)

## **(ii) Documents and copies needed for export and import**

In case of documents needed for export and import, it has been observed that the requirement of documents in import exceeds that of export (Table 5.22). Nepal as an importer has to submit 22 documents and 49 copies, the highest in the series, in importing CSBO from the third country. Export of lentils along corridor 1 faces submission of a total number of 36 documents and 115 copies, of which exporter of lentils from Nepal to Bangladesh has to submit 18 documents and 44 copies, while an importer in Bangladesh (in case of import of lentils from Bangladesh) submits 18 documents and 71 copies. This is excessive documentation that shows scope for simplification of trade processes. At the same time, documentation requirement in export of oranges from Bhutan to Bangladesh is also very high, involving 32 documents and 95 copies. Import documents in Bangladesh outnumber those recorded in other SASEC countries. As a result, the entire trade process becomes very cumbersome. Between export and import, import process is highly dispersed, thereby indicating the need for simplification of documentary requirements. Appendix 5.1 shows a list of the 36 and 32 different types of documents to be filled for trade of lentils between Nepal and Bangladesh along corridor 1 and oranges between Bhutan and Bangladesh along corridor 2, respectively. In corridor 1, most of the documents needed for export of lentils are submitted manually; 31 documents, out of 36, are submitted manually, while in corridor 2, 25 documents, out of 33, are submitted manually. Bangladesh is relatively ahead of Bhutan and Nepal in terms of introducing electronic submission of documents. This suggests that there is enough scope for simplification of documentary requirements and bridging alignment with international standards.



**Table 5.22 Documents and Copies Required**

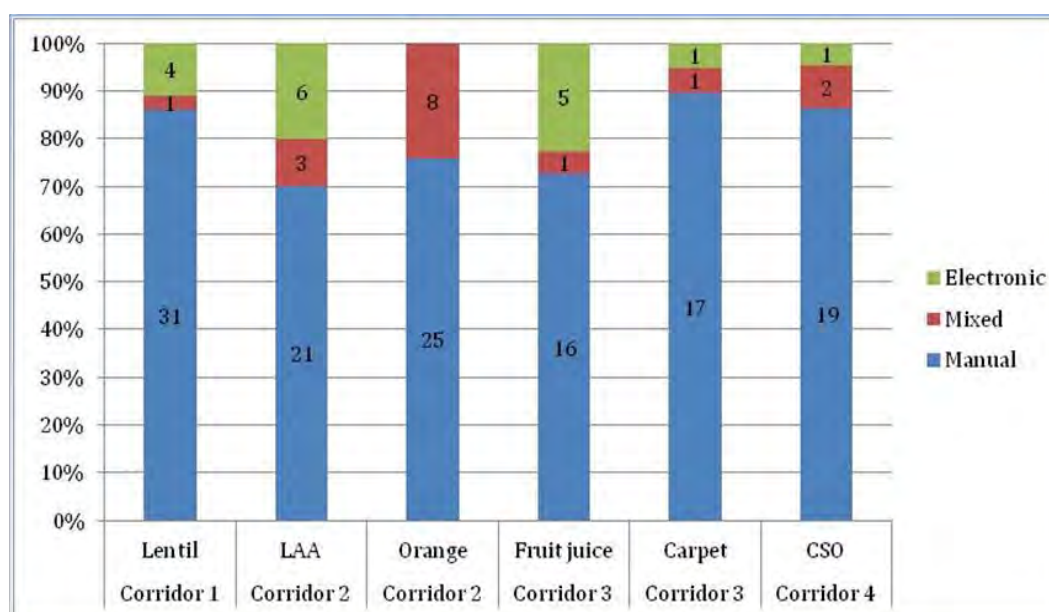
Corridor	Exporter	Importer	Products	Documents & Copies (No.)		
				Exporter	Importer	Total
Corridor 1: Kakarvitta-Panitanki-Phulbari-Banglabandha	Nepal	Bangladesh	Lentils	18 (44)	18 (71)	36 (115)
	Bangladesh	Nepal	LAA	15 (50)	15 (33)	30 (83)
Corridor 2: Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari	Bhutan	Bangladesh	Oranges	14 (26)	18 (69)	32 (95)
	Bangladesh	Bhutan	Fruit Juice	9 (30)	16 (44)	25 (74)
Corridor 3: Kathmandu-Birgunj-Raxaul-Kolkata	Nepal	Third country*	Carpets	19 (44)		19 (44)
	Third country**	Nepal	CSO		22 (49)	22 (49)

\*Excluding export processes

\*\*Excluding import processes. Numbers in parentheses are copies needed for export and import.

### *Electronic submission of documents*

**Figure 5.2 Submission of Documents**



Application of modern information and communication technology (ICT) to trade processes has been recognised as an important component of national and regional trade facilitation strategies (UNESCAP, 2010; ADB, 2012). As shown in Table 5.23 and Figure 5.2, many of the export and import documents along SASEC corridors are still not being submitted and/or processed electronically. Submission of documents is largely handled manually (over 80 percent of trade documents on average). Exporters and importers (or their CHAs) can submit customs declaration online, although a hard copy also often needs to be submitted at some point during the process. This, for example, was the case in Bhutan, Bangladesh, and Nepal at the time the survey was conducted. Automation of trade documentation is relatively a new



process in SASEC except India. India has been successful in introducing an EDI system, called ICEGATE, which, to a great extent, has facilitated the submission of trade documents electronically. ICEGATE handles all e-filing, e-payments, drawback disbursement and message exchange with stakeholders-almost 98 percent of India's international trade. During 2011-12, total number of documents filed reached 13.07 million.<sup>35</sup> ICEGATE web portal provides comprehensive real time tracking and information services, and all services are provided free of cost. Box 5.1 presents a brief overview of ICEGATE and some of its recent performance.

**Table 5.23 Submission of Documents**

Corridor	Exporter	Importer	Products	Exporter			Importer			Total
				Manual	Electronic	Mixed	Manual	Electronic	Mixed	
<b>Corridor 1:</b> Kakarvitta- Panitanki- Phulbari- Banglabandha	Nepal	Bangladesh	Lentils	17		1	14	4		36
	Bangladesh	Nepal	LAA	10	5		11	1	3	30
<b>Corridor 2:</b> Phuentsholing -Jaigaon- Hasimara- Changrabandha- Burimari	Bhutan	Bangladesh	Oranges	11		4	14	4		33
	Bangladesh	Bhutan	Fruit Juice	5	4		11	1	1	22
<b>Corridor 3:</b> Kathmandu- Birgunj- Kolkata	Nepal	Third country*	Carpets	17	1	1				19
	Third country*	Nepal	CSO				19	1	2	22

\*Excluding export processes

\*\*Excluding import processes

Some of the trade procedures are handled electronically in Bangladesh.<sup>36</sup> The scope for application of ICT in trade process management in SASEC countries, particularly in Bhutan, Bangladesh and Nepal is very large. Application of ICT in managing trade processes in India has gained popularity since the exporters and importers have found it increasingly beneficial. While the documents required for export and import used to be handled manually till only a few years back, today most of the export processes are dealt with electronically (see Table 5.24). Similar trends have been noticed in some South Asian countries like Maldives and Sri Lanka. Cargo insurance and payment are managed electronically in many of the SASEC countries, including India. Going a step further, Thai traders have been using specialised ICT applications not only for submission of customs and other regulatory documents but also for managing other vital components of the trade processes such as arrangement of transport or vessel berthing time and loading/unloading of cargoes from vessel (UNESCAP, 2011a). This suggests that the number of documents per se does not matter, but rather their nature (electronic vs. paper) and the procedures involved in their preparation and submission that

<sup>35</sup> Directorate General of System and Data Management, Central Board of Excise and Customs (CBEC), Government of India

<sup>36</sup> On contrary, Bangladesh government in collaboration with the private sector has taken steps towards automation of the Chittagong Customs House (CCH) and the Dhaka Customs House (DCH). In addition, the introduction of the ASYCUDA++ facilitates customs related transactions.

make a difference. By making e-filling of documents mandatory, documentary burden on trade of goods along the SASEC corridors will be reduced undoubtedly. India's EDI system is a case in point, which offers immense lessons to other SASEC countries to improve their system.

**Table 5.24 Managing Export Processes: Indian Export of Fabrics to Bangladesh**

<b>Sr. No.</b>	<b>Process</b>	<b>Submission of Documents</b>
1.	Buy	Electronic and manual
2.	Obtain export permit	Electronic
3.	Contract registration and inspection	Electronic and manual
4.	Excise inspection	Electronic and manual
5.	Obtain cargo insurance	Electronic
6.	Arrange pre-shipment inspection	Electronic and manual
7.	Obtain certificate of origin	Electronic and manual
8.	Obtain SAFTA certificate	Electronic and manual
9.	Submit customs declaration	Electronic
10.	Arrange transport for loading	Electronic and manual
11.	Transfer to LCS	Manual
12.	Parking of goods at LCS	Manual
13.	Customs clearance at LCS	Electronic and manual
14.	Send the goods to importer's warehouse	Manual
15.	Pay	Electronic

*Source:* Updated from ARTNeT Working Paper 95, UNESCAP (De, 2011a)

### Box 5.1 Performance of ICEGATE

ICEGATE stands for the Indian Customs Electronic Commerce/Electronic Data Interchange (EC/EDI) Gateway. ICEGATE is a portal that provides e-filing services to the trade and cargo carriers and other clients of Indian Customs Department (collectively called Trading Partner). At present, over 10,000 users are registered with ICEGATE who are serving over 1 million importers and exporters. ICEGATE links about 15 broad-types partners with customs EDI through message exchanges enabling faster Customs clearance and in turn facilitating international trade. It serves 111 customs locations across India.

ICEGATE is an infrastructure project that fulfils the department's EC/EDI and data communication requirements. Through this facility, customs offer a host of services, including electronic filing of the Bill of Entry (import goods declaration), Shipping Bills (export goods declaration) and related electronic messages between customs and the trading partners using communication facilities (e-mail, web-upload and FTP) using the communication protocols commonly used on the internet. The airlines and shipping agents can file manifests through the internet using this facility, while the custodians and cargo logistics operators interact with customs EDI through ICEGATE for cargo and logistics and related information. Besides, data is also exchanged between Customs and the various regulatory and licensing agencies such as DGFT, RBI, DGCIS, etc. through ICEGATE. The National Import Database (NIDB) and Export Commodity Database (ECDB) for Directorate of Valuation are also being serviced through ICEGATE. All electronic documents/ messages being handled by the ICEGATE are processed at the customs' end by the Indian Customs EDI System (ICES) that is running at 1210 locations. In addition to e-filing, ICEGATE also provides host of other services like e-payment, on-line registration for IPR, document tracking status at Customs EDI, online verification of DEPB/DES/EPCG licences, IE code status, PAN-based CHA data and links to various other important websites/information pertaining to the Customs business. The ICEGATE also provides 24X7 helpdesk facility.

As on 2011-12, about 9.2 million export/import documents and about 3.9 million other documents such as IGMs, EGMs, Consol Manifests, Query Replies, etc. were transacted per annum. About Rs. 5.5 billion was made electronically through EDI system every day, and about Rs. 139.60 billion was disbursed as export incentive in 2011-12. The ICEGATE web portal received about 2.6 billion hits in 2011-12 with a peak of 5.27 million hits per day in October 2012. Its 24x7 Helpdesk received 132,000 telephone calls and 141,000 e-mails in 2011-12. ICEGATE has saved about Rs. 3.39 billion transaction costs in 2011-12.<sup>37</sup> Its Risk Management System has already received Indian Prime Minister's Award.

*Source:* Central Board of Excise and Customs (CBEC), Ministry of Finance, Government of India

### (iii) Direct costs of the export and import processes

Direct costs involved in the export of lentils, LAA, oranges, fruit juice, carpets and CSBO are presented in previous sections. These tables present a detailed break-up of costs incurred throughout the export-import process of the each product along corridors 1, 2 and 3 starting

<sup>37</sup> Author is grateful to Mr. Bashistha Prasad, Additional Director, Directorate General of System and Data Management, Central Board of Excise and Customs (CBEC), Government of India for the latest performance data reported in this box.

from the seller's warehouse to the buyer's warehouse. The costs shown do not, however, include international shipping costs, particularly for export of carpets and import of CSBO, and tariffs (customs duties), nor do they include costs associated with loss of opportunities (such as waiting time). The export and import costs of the World Bank's Doing Business Database (DBD) are also shown in the table for reference, since they also exclude the above mentioned cost components.

This study found that transport cost, customs inspection and clearance charges, insurance premium, charges for obtaining trade license and import declaration, bank service charges for receiving payments, service charges for opening L/C, etc. are the major costs incurred in the export and import processes in SASEC, whereas regulatory costs and documentation charges are found to be low. Import and export costs vary widely across products and import costs often (but not always) higher than export costs. For example, the costs of importing LAA (into Nepal) in corridor 1 and fruit juice (into Bhutan) in corridor 2 exceed those of exports, but the cost of exporting lentils (from Nepal) in corridor 1 and oranges (from Bhutan) in corridor 2 are found to be higher than the cost of import. Interestingly, costs reported in this study were found to be significantly lower than those reported in the World Bank's *Doing Business Database* (DBD), except for export of carpet, for which we found an opposite scenario.<sup>38</sup>

#### **(iv) Export and import process time**

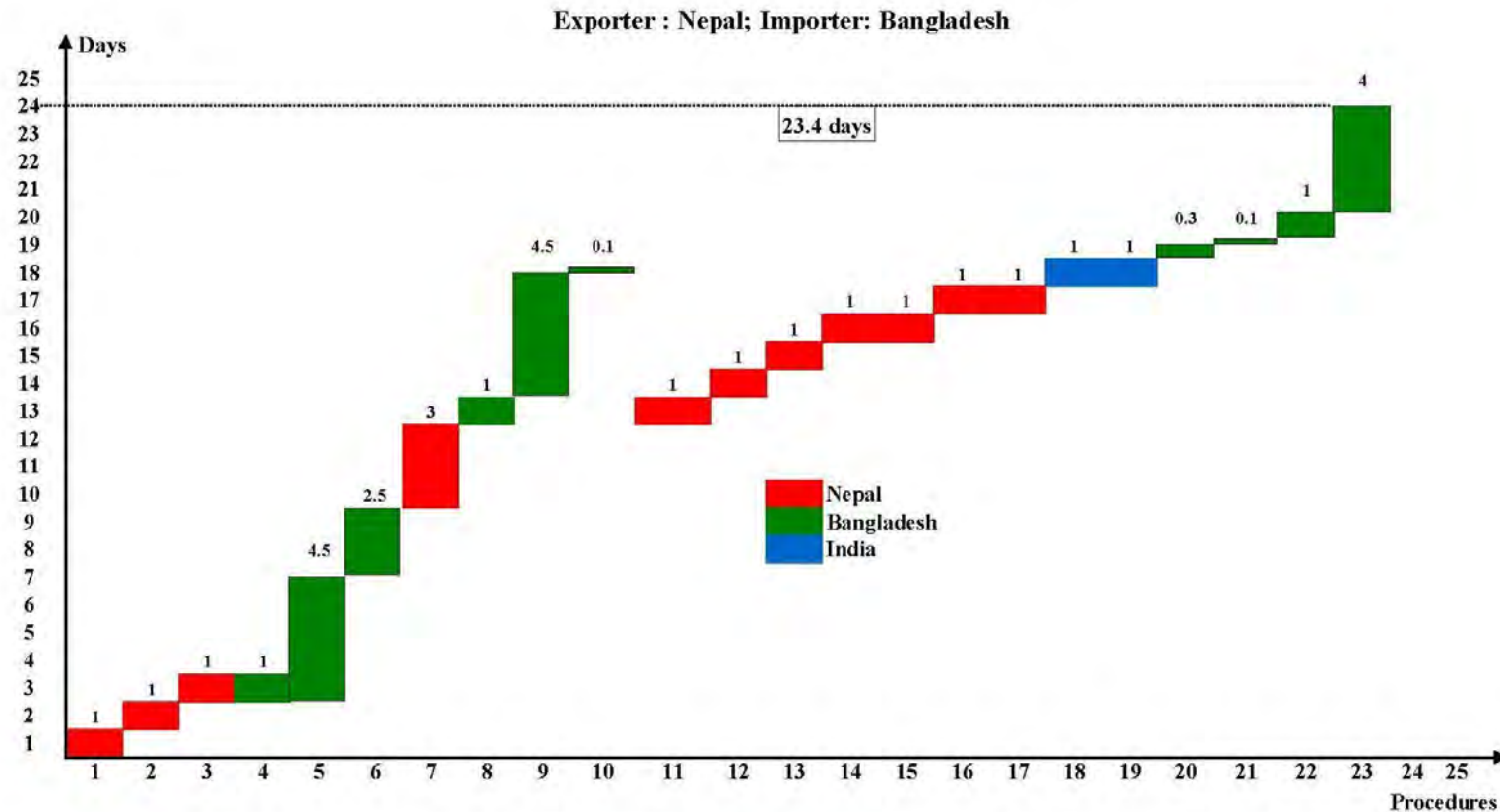
The more time-consuming the export or import process, the less likely it is that a trader will be able to compete in international markets. The time it takes to complete export and import procedures, and the delays associated with these procedures, has been identified as a highly significant barrier to trade (e.g., Djankov et al., 2010). Lengthy procedures bare significant indirect costs that often far exceed the direct costs of trade transactions; these include, in extreme cases, the complete loss of a shipment value when that shipment contains perishable or time-sensitive goods. Lengthy procedures are also usually associated with increased uncertainties regarding time of delivery, reducing opportunities for firms to take part in international production networks, where just-in-time deliveries are essential.

One of the key outputs of business process analysis are time-procedure charts that provide a graphic summary of the steps involved in a process, the time relationships between the steps (for instance; whether they take place in parallel or sequentially), and the time it takes to complete them as well as the overall process. Based on the case studies that were completed, we were able to assemble six time-procedure charts each showing both the export process (in the country of origin) and the import process (in the country of destination) for a given product (see Figures 5.3 to 5.8).

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<sup>38</sup> The usual disclaimer is that export and import time and cost in World Bank's DBD are based on trade in general manufactures, whereas it is product specific in our case. So, there would be obvious differences in trade cost calculations even though both calculations follow same definition.

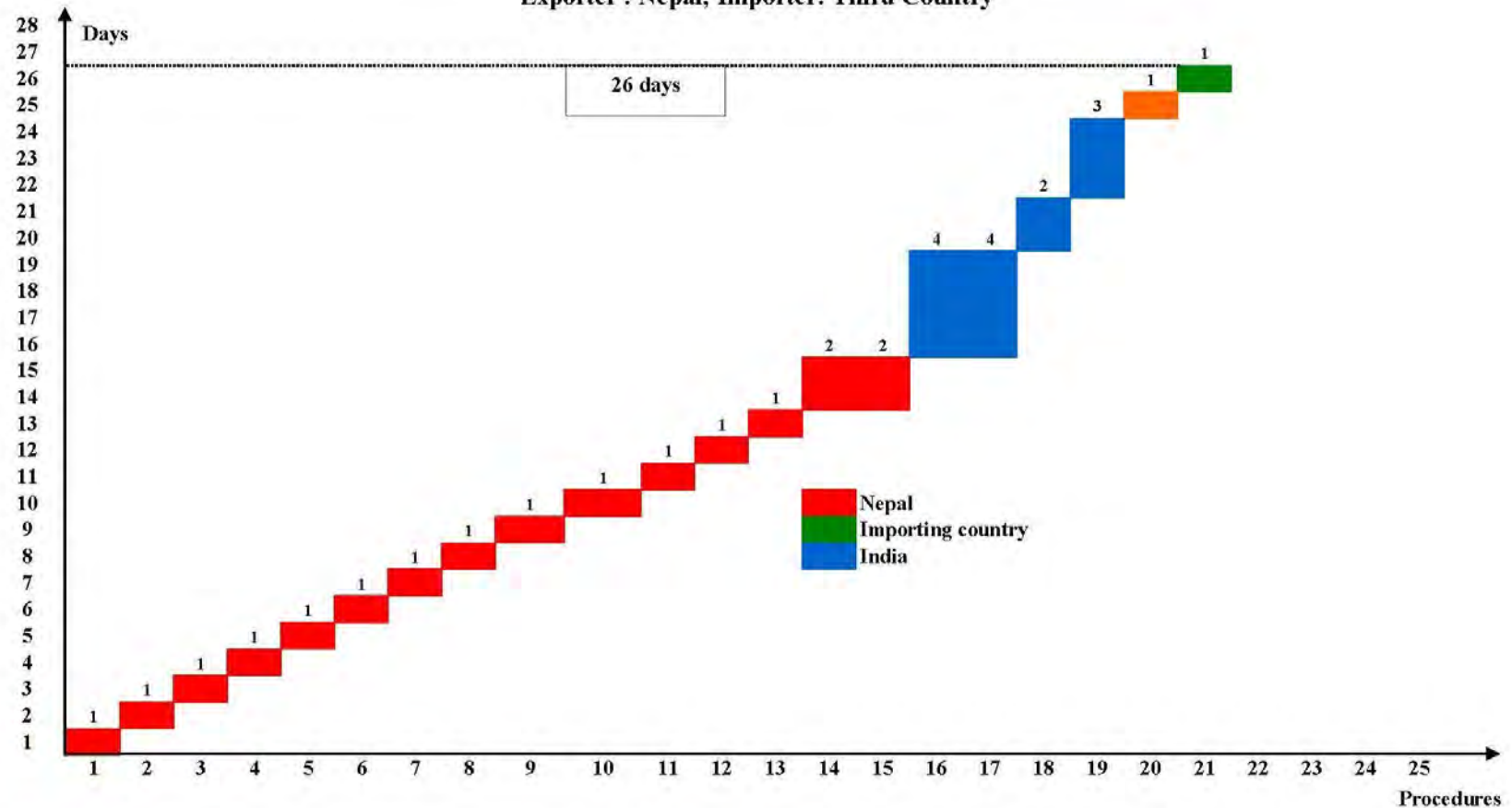
Figure 5.3 Time Procedure Chart of Corridor 1: Trade in Lentil



Sr. No	Procedures	Days	Sr. No	Procedures	Days
1	Buy	1.00	13	Appoint clearing agent	1.00
2	Send Proforma Invoice	1.00	14	Arrange transportation	1.00
3	Receive purchase order	1.00	15	Move cargo to border	1.00
4	Preparing documents for opening import L/C	1.00	16	Obtain quarantine certificate	1.00
5	Import L/C opened in Bank	4.50	17	Custom clearance at border (kakarvitta)	1.00
6	L/C copy sent to exporter by courier	2.50	18	Custom clearance at transit custom	1.00
7	Receive L/C	3.00	19	Move cargo to importer customs	1.00
8	Approval of exporter on L/C	1.00	20	Customs inspection and clearance	0.31
9	Preparing documents for customs & sent to CFA	4.50	21	Out Pass handed over by C&F agent to importer's representative	0.10
10	Deposit Chalan Fee by CFA	0.10	22	Transport to importer's warehouse	1.00
11	Obtain COO	1.00	23	Pay	4.00
12	Obtain Insurance policy	1.00			

Figure 5.4 Time Procedure Chart of Corridor 3: Trade in Carpet

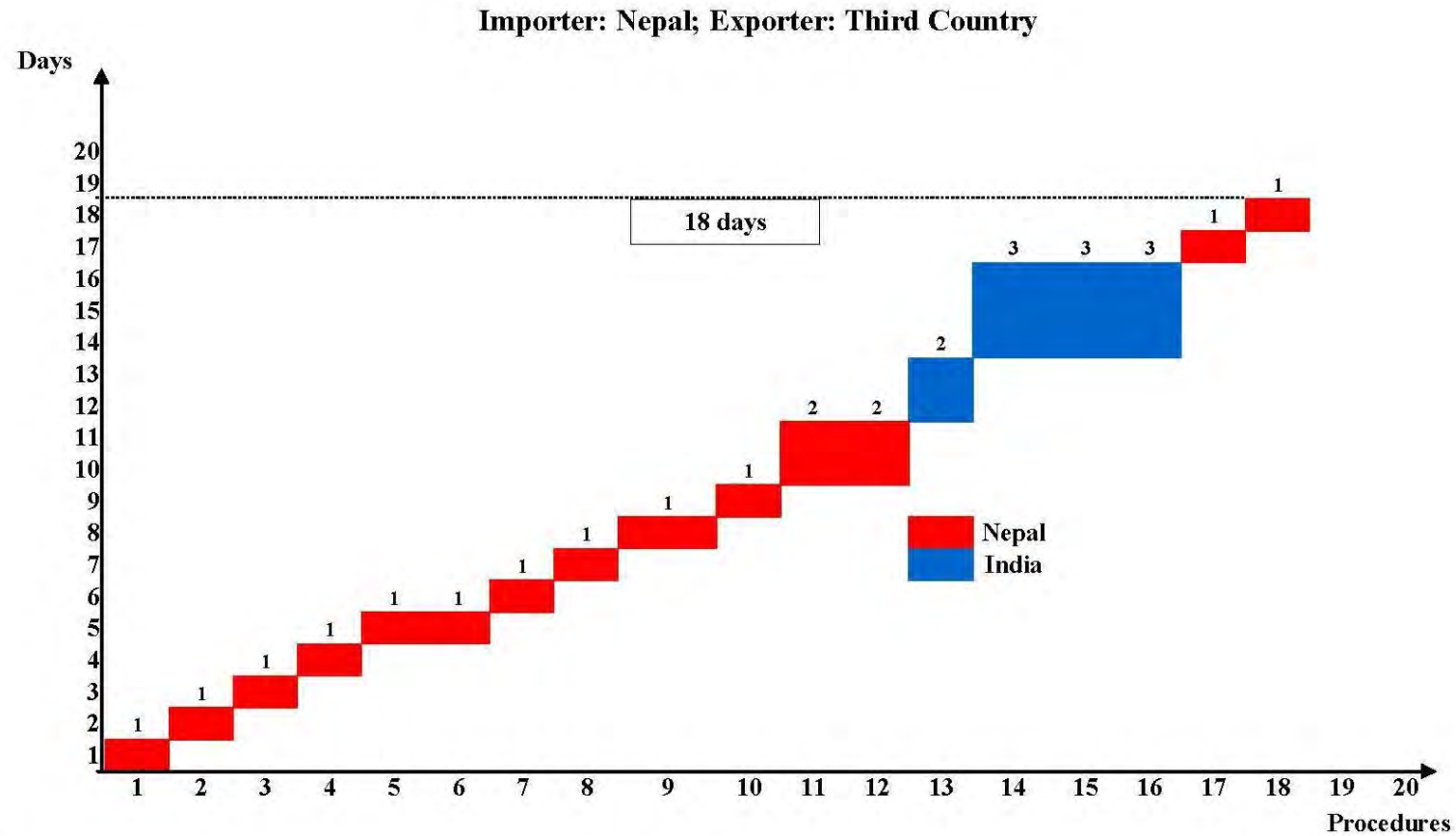
Exporter : Nepal; Importer: Third Country



Sr. No.	Procedures	Days	Sr. No.	Procedures	Days
1	Buy	1	12	Arrange transportation	1
2	Factory visit and selection of sample	1	13	Appoint CFA and handover document	1
3	Prepare contract document	1	14	Move cargo from factory to Birgunj (Nepal)	2
4	Sign and exchange of contract	1	15	Custom clearance at exporter custom's premise	2
5	Sample dispatch to importer	1	16	Cargo moves to Kolkata/ Haldia port	4
6	Receive purchase order	1	17	Custom clearance at Raxoul (India)	4
7	Receive advance payment / L/C	1	18	Custom clearance at Kolkata/Haldia port	2
8	Prepare export document	1	19	Loading cargo on vessel at Kolkata/Haldia	3
9	Obtain COO	1	20	Preparation of bank document	1
10	Obtain GSP	1	21	Pay	1
11	Obtain insurance	1			

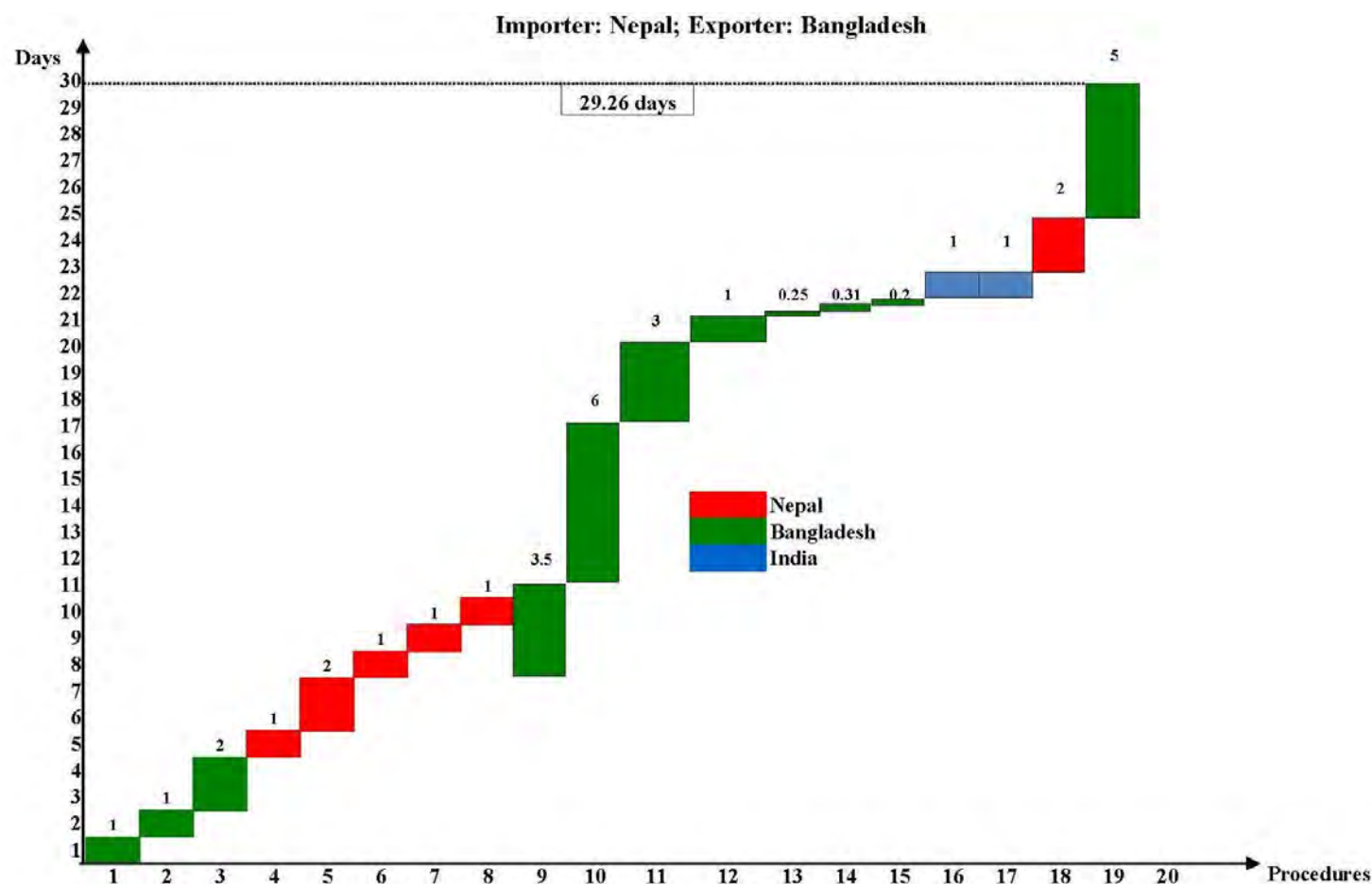


Figure 5.5 Time Procedure Chart of Corridor 3: Trade in CSO



Sr. No.	Procedures	Days	Sr. No.	Procedures	Days
1	Buy	1	10	Collect and prepare required document	1
2	Negotiate trade term	1	11	Appoint CFA	2
3	Receive contract	1	12	Handover document to CFA	2
4	Exchange contract	1	13	Custom clearance at Kolkata	2
5	Request Proforma Invoice	1	14	Arrange transportation from Kolkata port to Nepal	3
6	Received Proforma Invoice	1	15	Move cargo towards importer's border at Birgunj	3
7	Open L/C	1	16	Custom clearance at Raxoul	3
8	Obtain approval from QFTQC	1	17	Customs clearance at importer's border	1
9	Receive shipment notice	1	18	Pay	1

Figure 5.6 Time Procedure Chart of Corridor 1: Trade in LAA

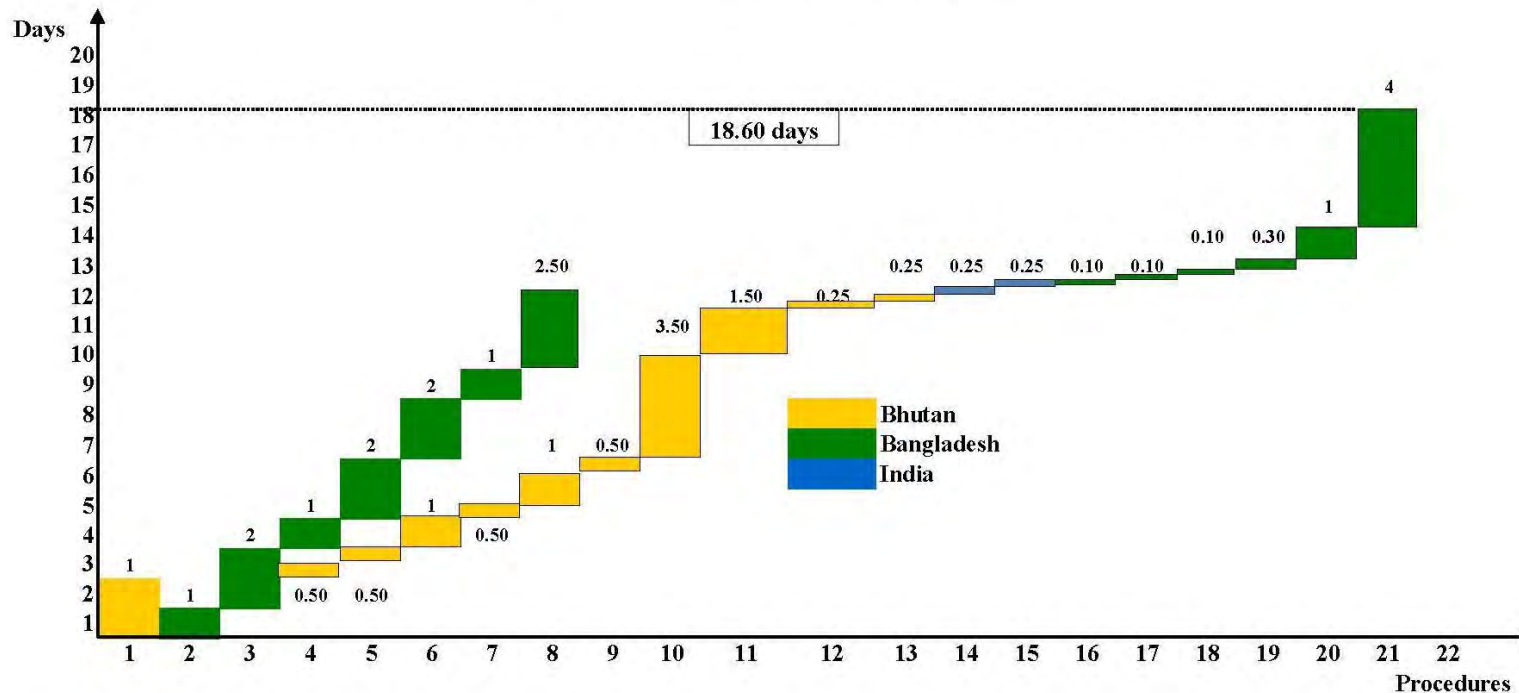


Sr. No.	Procedures	Days	Sr. No.	Procedures	Days
1	Contacting importers	1.00	11	Preparing Documents for Export	3.00
2	Fixing terms of trade with importer via local office	1.00	12	Load in truck and deliver to Port	1.00
3	Sending draft contract & Proforma Invoice	2.00	13	Deposit Chalan Fee, VAT and custom Declaration	0.25
4	Receive Performa Invoice	1.00	14	Customs Inspection and Clearance By C& F	0.31
5	Open L/C	2.00	15	Out Pass Handled over by C&F to Importer representative and unloading to their carrier	0.20
6	Obtain approval from AEPC	1.00	16	Contact Custom, arrange transshipment and transport and move cargo to importer border	1.00
7	Collect and prepare document,	1.00	17	Custom clearance at transit and importer custom points	1.00
8	Appoint Agent and handover Document	1.00	18	Move cargo from custom point to importer destination	2.00
9	Receiving Acceptance letter & Acknowledge L/C copy	3.50	19	Receive Payment	5.00
10	Obtaining Cargo Insurance	6.00			



Figure 5.7 Time Procedure Chart of Corridor 2: Trade in Orange

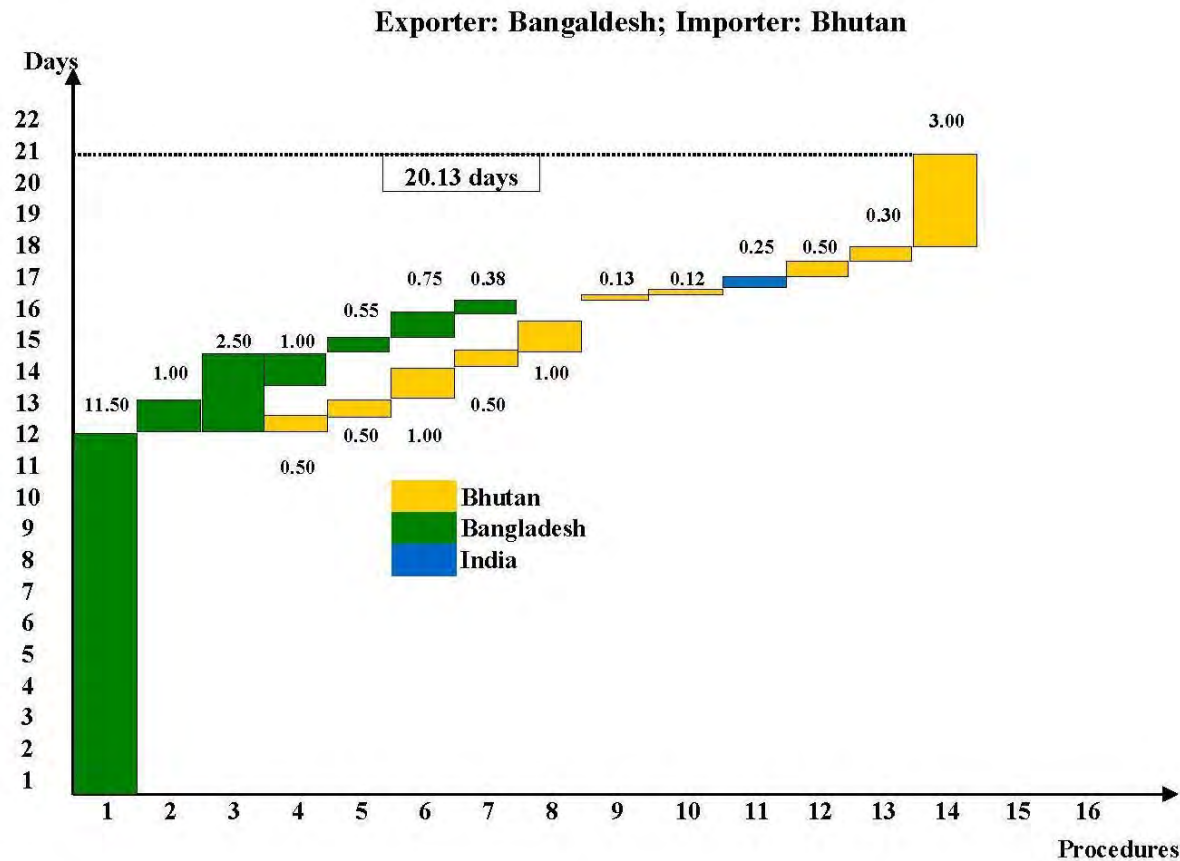
Exporter: Bhutan; Importer: Bangladesh



Sr. No	Procedures	Days	Sr. No	Procedures	Days
1	Buy	2.00	9	Apply for COO, ARAC & FHCC	0.50
2	Representative of the importer visits Bhutan	1.00	10	Apply for Labor Permit	3.50
3	Fixing terms of trade with exporter via Representative	2.00	11	Obtain Work Permit	1.50
4.1	Sending Proforma Invoice to importer	1.00	12	Complete Export Documentation	0.25
4.2	Obtain Trade License	0.50	13	Obtain Export Declaration	0.25
5.1	Documents prepared & Import L/C opened in Bank	2.00	14	Transport to Jaigaon / Changrabanda	0.25
5.2	Become BCCI Member	0.50	15	Transport to Burimari	0.25
6.1	L/C copy sent to Exporter (via Courier)	2.00	16	Deposit Chalan Fee by C&F	0.10
6.2	Obtain Token Number	1.00	17	Customs inspection and Clearance	0.10
7.1	Approval of Exporter after cross checking with his Bank	1.00	18	Out Pass Handled over by C&F to Importer representative	0.10
7.2	Become BEA Member	0.50	19	Loading Importers truck	0.30
8.1	Documents prepared for customs declaration	2.50	20	Transport to Importer Trading Place	1.00
8.2	Apply for Phyto-sanitary Certificate	1.00	21	Payment through L/C Settlement	4.00

Shadow parts are parallel procedures

Figure 5.8 Time Procedure Chart of Corridor 2: Trade in Fruit Juice



Sr. No.	Procedures	Days	Sr. No.	Procedures	Days
1	Receiving order from buyer and fixing trade terms	11.50	7.1	Customs inspection and clearance	0.38
2	Obtaining Certificate of Origin	1.00	7.2	Issue LoG	0.50
3	L/C Opening	2.50	8	Arrange Transport	1.00
4.1	Contracting Inland Transport Agency	1.00	9	Clear Goods at Burimari	0.13
4.2	Obtain Trade License	0.50	10	Clear Goods at Changrabanda	0.12
5.1	Transport to port of departure	0.55	11	Transport to Jaigaon / Phuentsholing	0.25
5.2	Register for Import House Permit	0.50	12	Complete Import Documentation	0.50
6.1	Obtaining customs declaration	0.75	13	Obtain Import Declaration	0.50
6.2	Obtain Import License	1.00	14	Pay	3.00

*Shadow parts are parallel procedures*

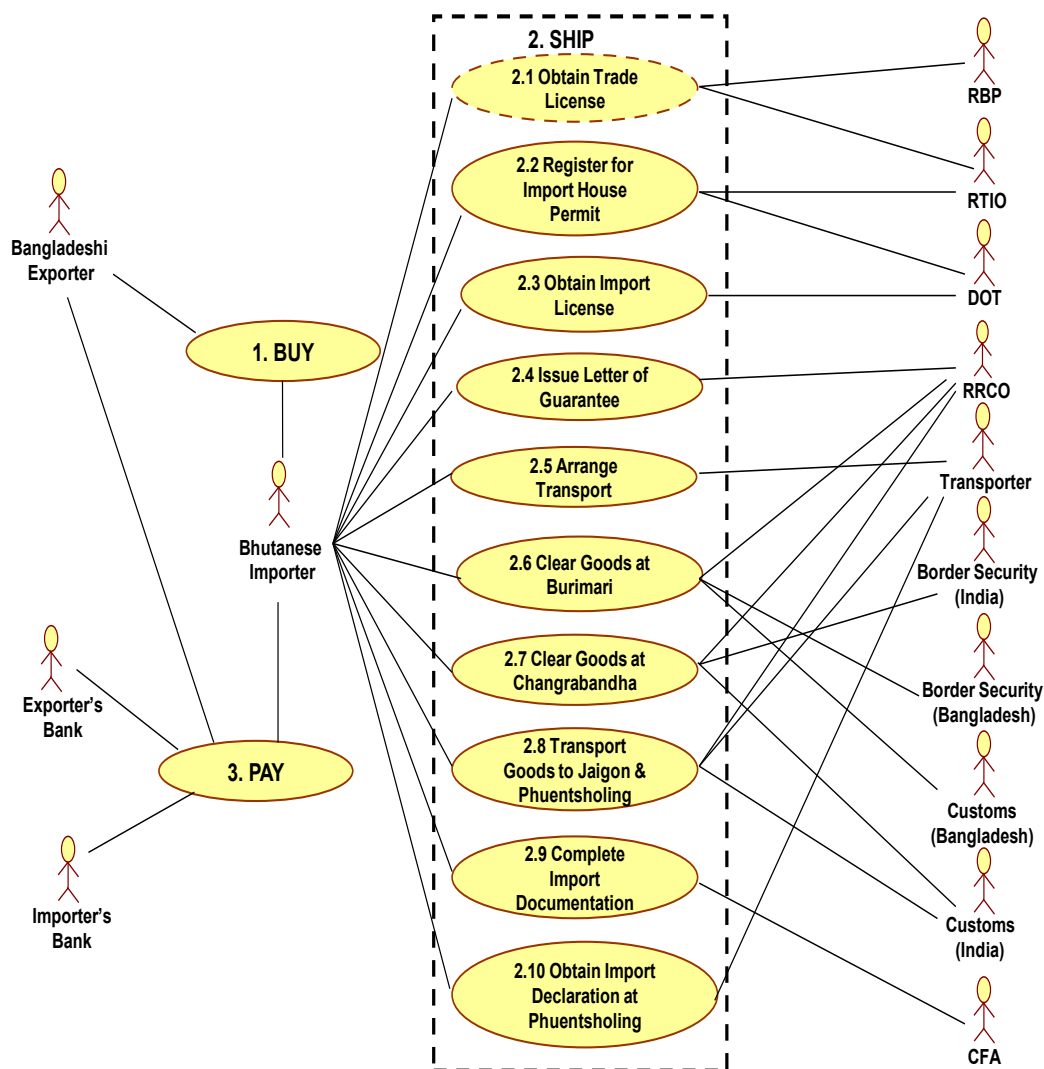
The figures 5.3 through 5.8 show that the complete process range from about 18 days for import of CSBO by Nepal, to 29.26 days for export-import of LAA from Bangladesh to Nepal (including payment to the exporter, which takes place 5 days after arrival of goods in the importer warehouse). Contrary to popular belief, transport is found to be a significant component, but often not the largest component of total trade transaction time. Concluding trade terms, opening L/C account, obtaining cargo insurance, payment delays and the time required for various inspections often take up a larger share of total time. Some other important observations are as follows.

- Time to conclude sales contract between the importer and exporter in corridor 2 outnumbers the time taken to complete any other trade process in this study. It has been observed that 57 percent of the total trade time (11.50 days) is spent on concluding a sales contract between Bangladeshi exporter and Bhutanese importer involved in import-export of fruit juice, suggesting that improvement of contract procedure on both sides would certainly reduce the time spent on trade along the corridor 2. The private sector plays a critical role in the facilitation of trade in SASEC corridors.
- Procedural bottlenecks often seem to be more while exporting goods rather than importing them. For example, it takes nearly 23.4 days to complete trade of lentils in corridor 1 from signing the contract to getting the payment, where a Nepalese firm is an exporter and Bangladeshi firm is the importer. More than 66percent of that time (15.5 days) is spent on procedures in the exporting country such as opening a L/C account with a bank and preparing documents for customs. Time spent on managing the L/C account with bank takes an average of 11 days, while preparation of customs documents takes 4.5 days. In case of import of LAA from Bangladesh, opening a L/C account with a bank takes 2 days. Opening a L/C account takes 2.5 days in Bangladesh, when Bangladesh is an exporter of fruit juice and Bhutan is the importer in corridor 2. Similarly, obtaining cargo insurance and preparation of export documents take 6 and 3 days respectively in Bangladesh in case of export of LAA in corridor 1, which are certainly very high when compared with total time spent on export. The contribution of procedural measures to overall trade restrictiveness in corridors 1 and 2 is significant, and in all cases far more trade restrictive than ‘on the border’ and transit related measures. That said, total time spent ‘beyond the border’ is quite substantial, suggesting that improvement of procedures in SASEC is essential in order to raise the competitiveness of the sub-region.
- Physical inspection by government authorities before as well as at the time of export/ import and other regulatory procedures also create bottlenecks in trade along SASEC corridors. Sometimes, there are multiple inspections from different ministries, particularly in Bhutan. Referring to the UML case diagrams for Bhutan’s export to and import from Bangladesh along corridor 2 in Figure 5.9 (a, b), it is very clear that over half of total import process (5 out of 10 steps) of Bhutan’s import of fruit juice from Bangladesh and 75 percent of the total export process (9 out of 12 steps) of export of orange to Bangladesh involve physical (or

verbal) inspections and permissions. It takes almost 5 days in Bhutan to get labour and work permits in case of export of oranges to Bangladesh. The same restrictiveness continues, to a smaller extent, in case of Nepal's export of carpets and import of CSBO through port of Kolkata.<sup>39</sup> It takes 2 days for customs clearance at Kolkata/Haldia port and then 3 days for loading the cargo on the vessel in case of export of carpets. Hence, about 19 percent of the total time for the export of carpets is spent at Kolkata/Haldia port. In case of import of CSBO, customs clearance takes 2 days at the same port. Therefore, process reengineering along with single window may help reduce the transaction time in SASEC corridors.

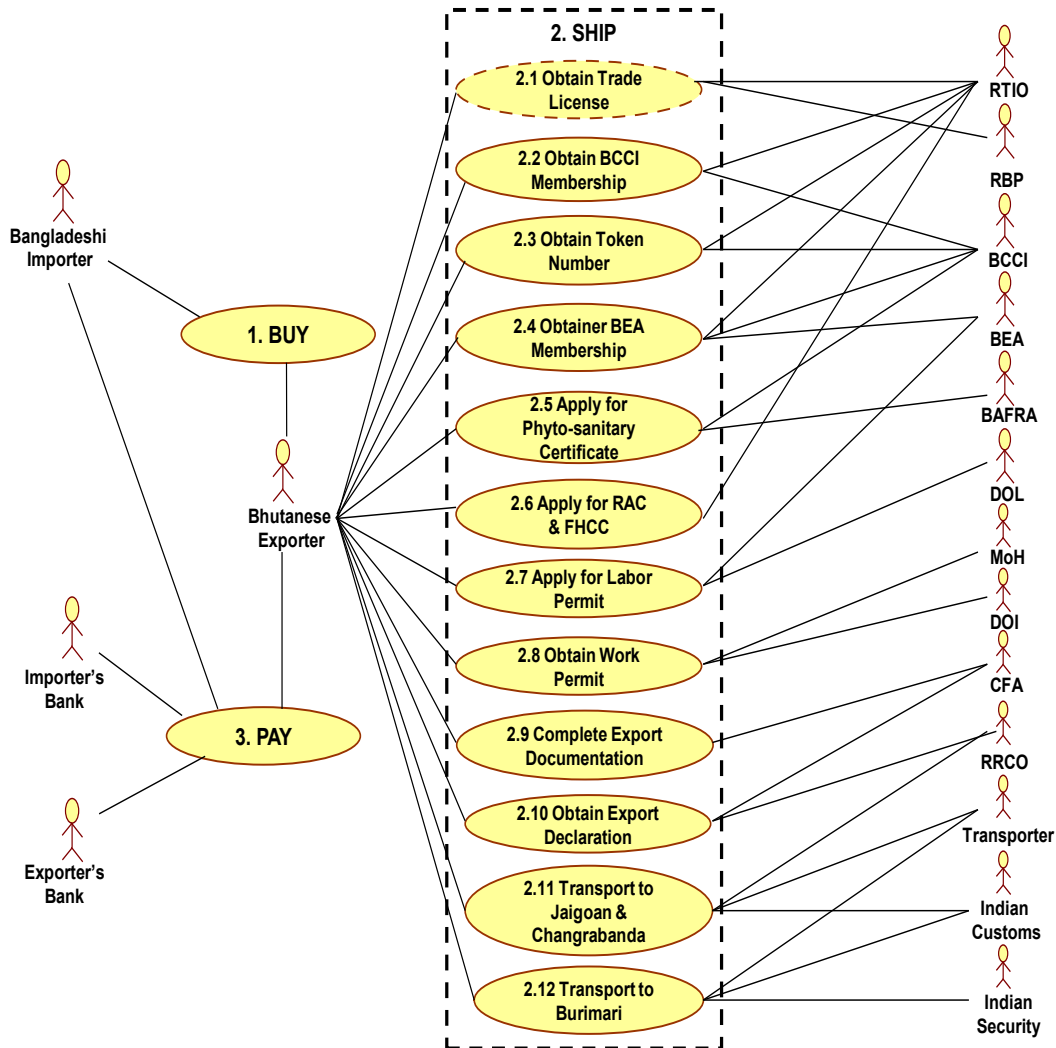
**Figure 5.9 UML Case Diagrams**

**(a) Bhutan's Import of Fruit Juice from Bangladesh**



<sup>39</sup> Refer, Appendix 5.2 for UML case diagrams for Bangladesh and Nepal

## (b) Bhutan's Export of Orange to Bangladesh



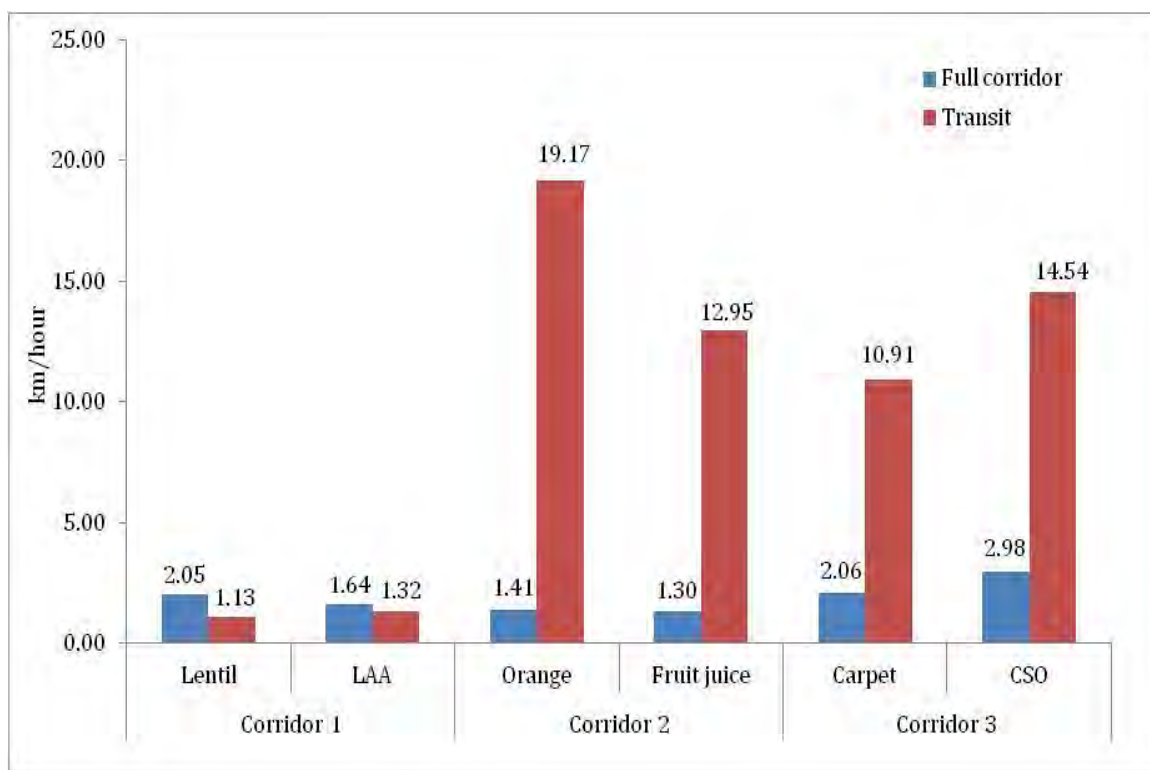
- While inspection is required for making trade safe and secure, excessive inspections by government authorities impede trade the same way tariff does. Physical inspections, between control officers and traders (or their representatives), also potentially provide opportunities for informal payments and rent seeking, thus increasing overall cost of trade and, most importantly, uncertainties associated with each transaction. Implementation of Risk Management Systems (RMS), Standard Operating Procedures (SOP), and Authorized Economic Operator (AEO) programmes may help minimise the need for inspections in SASEC corridors. Therefore, while streamlining regulatory procedures and related documentation is imperative, broader policy reforms targeting the services sectors supporting trade transactions (such as, financial transactions) may also be needed.
- Delay in receiving payment after a shipment has been delivered may negate some of the advantages of time savings in documentation or inland transportation or customs clearances. This has been the case observed in exporting

- lentils from Nepal to Bangladesh (4 days),
  - oranges from Bhutan to Bangladesh (4 days),
  - LAA from Bangladesh to Nepal (5 days), and
  - fruit juice from Bangladesh to Bhutan (3 days).
- The enhancement of trust between exporter and importer through better exchange of information would significantly (and positively) impact the performance of overall business. Any process improvement may therefore enhance the competitiveness at the organizational as well as the sub-regional level.
  - Finally, time required of documentation such as in pre-arrival documentation, opening L/C account with a bank, getting labour and work permits, memberships of chambers of commerce, etc. appear to be equally important in all time procedure charts. However, their significance varies across products and routes. What appears is that simplification of commercial, transport, financial, regulatory and procedures and their alignment with regional or international practices would be important for facilitating trade in SASEC. In doing so, we would then lead towards Single Window and paperless trading systems.

#### **(v) Vehicle Speed along Corridors**

The speed of vehicle carrying the goods is an important indicator of trade facilitation. A ‘specific’ speed helps deliver goods on time across border, thereby improves competitiveness of goods. Slow speed, on the other hand, may undo the benefits of trade facilitation such as wider road or faster customs. SASEC corridors studied here suggest the sub-region has tremendous ‘speed deficit’ along the corridors. As shown in Figure 5.10, container vehicle moves only 3 km per hour on average in corridor 3 (for import of CSBO). The speed goes down further in corridor 2, where a container vehicle moves only one km in an hour. In contrast, the speed at transit is relatively high, particularly in corridors 2 and 3, whereas it becomes lower than the average of full corridor speed in corridor 1, thereby indicating huge congestion at the border. Hence, there is an urgent need for improvement of all SASEC corridors in general; and transit part of the corridor 1 (Panitanki to Phulbari) in particular. Therefore, unlike corridors 2 and 3, the speed of vehicle in transit (India) is slow in corridor 1. Congestion, bad quality of road, inflexible transit time, narrow width, etc. force vehicles to slow down in corridor 1.

**Figure 5.10 Travel Speed at SASEC Corridors**



#### **(vi) Export and Import Time: Corridor-wise Analysis**

Export and import time are re-calculated from the time the contract is signed to loading goods on a vehicle or ship at the nearest land or seaport. Export and import time have been discussed in the previous section. Here, we have grouped them into the four major components by corridor:

- documents preparation
- inland transportation
- time at custom
- time at border, and
- time at transit

The following observations are worth noting.

Firstly, the time required for preparation of trade documents is the main component of export and import time. However, transit time in India (such as, export of carpet from Nepal or import of CSBO for Nepal) in corridor 3, inland transit time in some cases, and the time to settle payment in all the three corridors are very significant in determining the overall time required for the completion of export or import procedures in SASEC corridors. At the same time, time spent at customs, inland transport and border in corridors 1 and 2 are relatively low, compared to that of the corridor 3. Document preparation is thus typically the largest time component in both import



and export processes, in the case of Nepal's export of carpets and import of CSBO through India, for which both transit time components are large.

Secondly, export of lentils from Nepal to Bangladesh and LAA from Bangladesh to Nepal require 13.60 and 12.50 days, respectively, to complete export documentation. In contrast, export of fruit juice from Bangladesh to Bhutan takes just 2 days, which is found to be lowest among the countries considered in this study. Corridor 1 takes comparatively longer for preparation of documents among the three corridors.

Thirdly, barring Nepal's trade with third country through India, inland transportation time does not account for a large share of the export and import time. Inland transportation in case of corridor 2 varies from less than one day to about a day (which is found to be lowest amongst the three corridors). For the other two corridors, inland transportation takes 1-2 days time on average. While the actual location of the importing and exporting firm in relation to the nearest sea or land port (or from each other) is a crucial factor in inland transportation time, governments may reduce overall inland carriage and handling by enhancing the transport infrastructure within the partner countries (as well as transit countries in the case of a landlocked country like Nepal and Bhutan), promoting the development of logistics services and reducing the number of police and other check points en route to the port or the border. Establishment of special economic zones (SEZ) or industrial zone near seaports (or near the border) may also help in this regard.

Fourthly, customs and other control agencies take on average a day to clear an export consignment in case of export from Nepal to Bangladesh and vice versa along corridor 1. In contrast, it takes a day to maximum 2 days to clear an export or import consignment in corridor 3.<sup>40</sup> In case of corridor 2, trade consignments are found to be cleared by customs within half a day to one day.

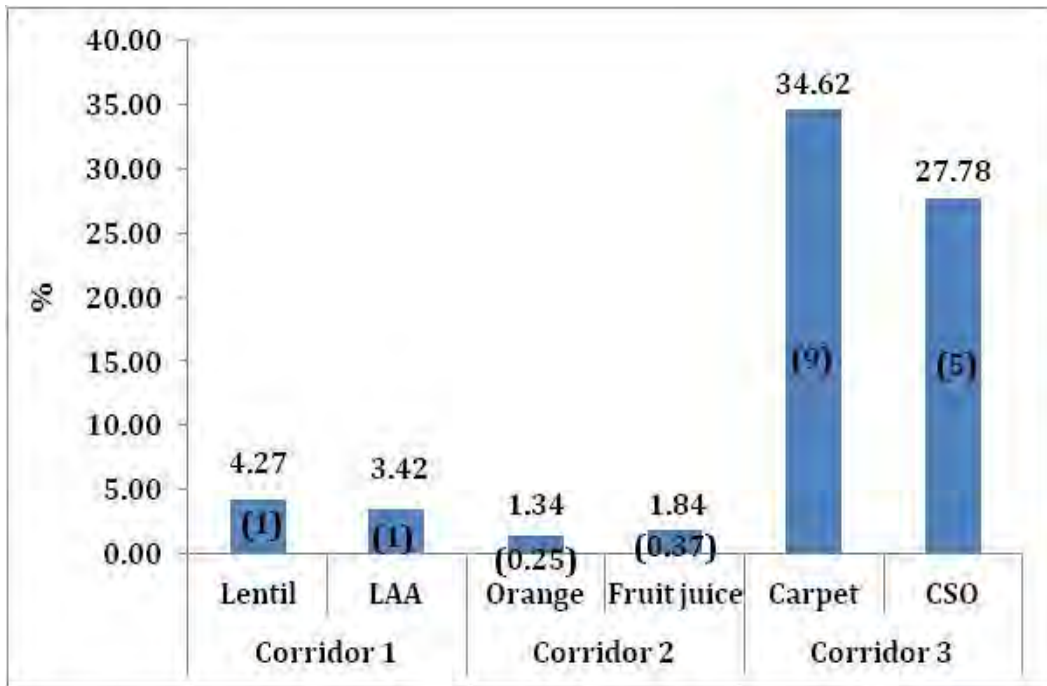
Lastly, the time and cost spent on transit are not substantial in corridors 1 and 2, compared to other components of the export and import processes. Whereas the same in case of corridor 3 is found to contribute significantly to overall export and import time (Figure 5.11). The study shows that 1-4 percent of the total export and import time is spent on transit (in India) in corridors 1 and 2, whereas the transit takes about 28 percent of total import time (5 days) in case of import of CSBO by Nepal and about 35 percent of total export time (9 days) in case of export of carpet by Nepal through Kolkata port. However, disparities across corridors and products for that particular component deserve deeper analysis. Thus, corridor 3 takes longer time to cross transit route (in India). In terms of cost, corridor 3 witnesses higher cost for transit of goods (48 percent in export of carpets and 58percent in import of CSBO), compared to other two corridors (Figure 5.12).

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<sup>40</sup> Noted earlier, handling of goods at customs is not necessarily the sole responsibility of customs authority. A series of activities are involved before or after the customs process, involving both public and private sectors. Detailed analysis would thus be needed to draw conclusions on those agencies responsible for inefficiencies.

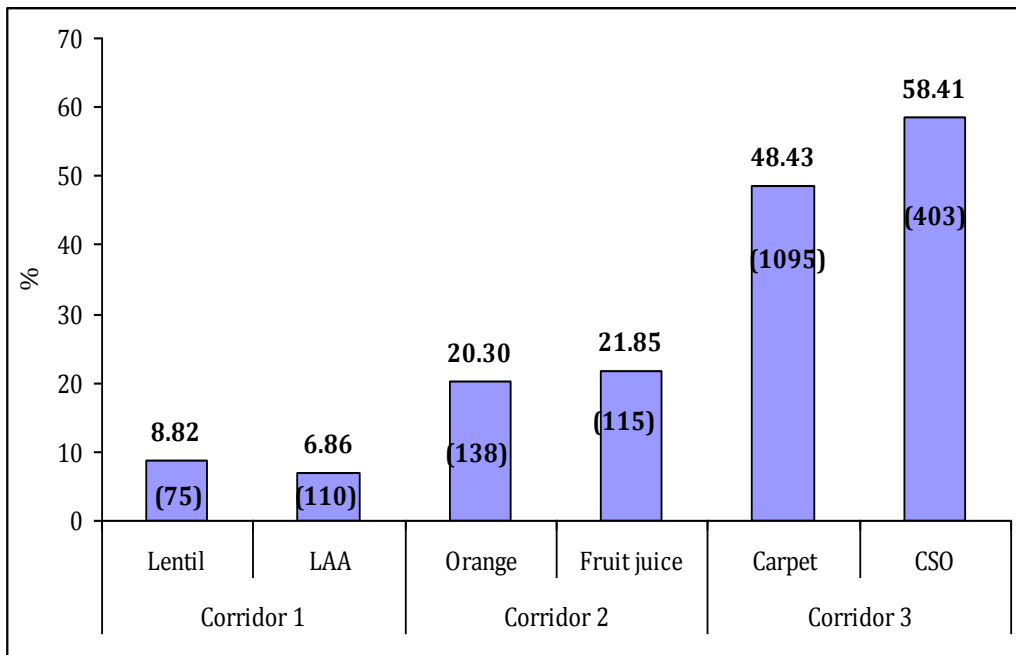


**Figure 5.11 Time Spent on Transit**



*Note:* Data in parentheses are actual days spent on transit in India

**Figure 5.12 Cost of Transit**



*Note:* Data in parentheses are actual cost in US\$ spent on transit in India

Table 5.25 shows both the export and import time obtained through the detailed product and partner country-specific case studies and those available in the World Bank's DBD and previous UNESCAP databases. Given that time estimates in the DBD are for import or export of non-sensitive products that do not require any special controls or inspections, one would expect the DBD to provide lower bound estimates of import and export times. However, we find that DBD import and export times are generally higher than those obtained by this study. In many cases, export and import costs in DBD are also generally found to be higher than those collected through this study.

**Table 5.25 Trading across Borders: Comparisons with World Bank**

**Doing Business Database (DBD)\*, 2013**

<b>Economy</b>	<b>Time to export (days)</b>			<b>Cost to export (US\$ per container)</b>		
	<b>WB</b>	<b>UNESCAP</b>	<b>ADB</b>	<b>WB</b>	<b>UNESCAP</b>	<b>ADB</b>
Bangladesh <sup>1</sup>	25.00	13.50	23.26	1025.00	1015.00	[463.25]
Bhutan <sup>2</sup>	38.00	#	20.00	2230.00	#	[435.69]
India <sup>3</sup>	16.00	22.00	#	1120.00	532.00	#
Nepal <sup>4</sup>	41.00	40.5	26.00	1975.00	1066.86	2285.40

<b>Economy</b>	<b>Time to import (days)</b>			<b>Cost to import (US\$ per container)</b>		
	<b>WB</b>	<b>UNESCAP</b>	<b>ADB</b>	<b>WB</b>	<b>UNESCAP</b>	<b>ADB</b>
Bangladesh <sup>1</sup>	34.00	9.00	17.10	1430.00	[415.00]	[134.15]
Bhutan <sup>2</sup>	38.00	#	15.00	2330.00	#	[303.01]
India <sup>3</sup>	20.00	13.00	#	1200.00	359.00	#
Nepal <sup>4</sup>	38.00	22.00	18.00	2095.00	[320.00]	689.74

*Notes:*

1. Export of garments and import of fabrics for UNESCAP and export of LAA and import of lentils in case of ADB.

2. Export of oranges and import of fruit juice in case of ADB.

3. Export of fabrics and import of rubber tyres for UNESCAP;

4. Export of vegetable ghee and import of fabrics for UNESCAP and export of carpet and import of CSO for ADB.

[ ] indicate that the bracketed numbers are not comparable to those of DBD since they do not reflect the cost of moving goods to the nearest port

\*DBD 2013 presents data for the year 2012 whereas the UNESCAP (ARTNeT) data were collected in 2010.

#Bhutan was not considered in UNESCAP study, whereas India was not considered for ADB study.

*Sources:* Calculated based on World Bank's DBD (World Bank 2013), UNESCAP (2011) and ADB country studies

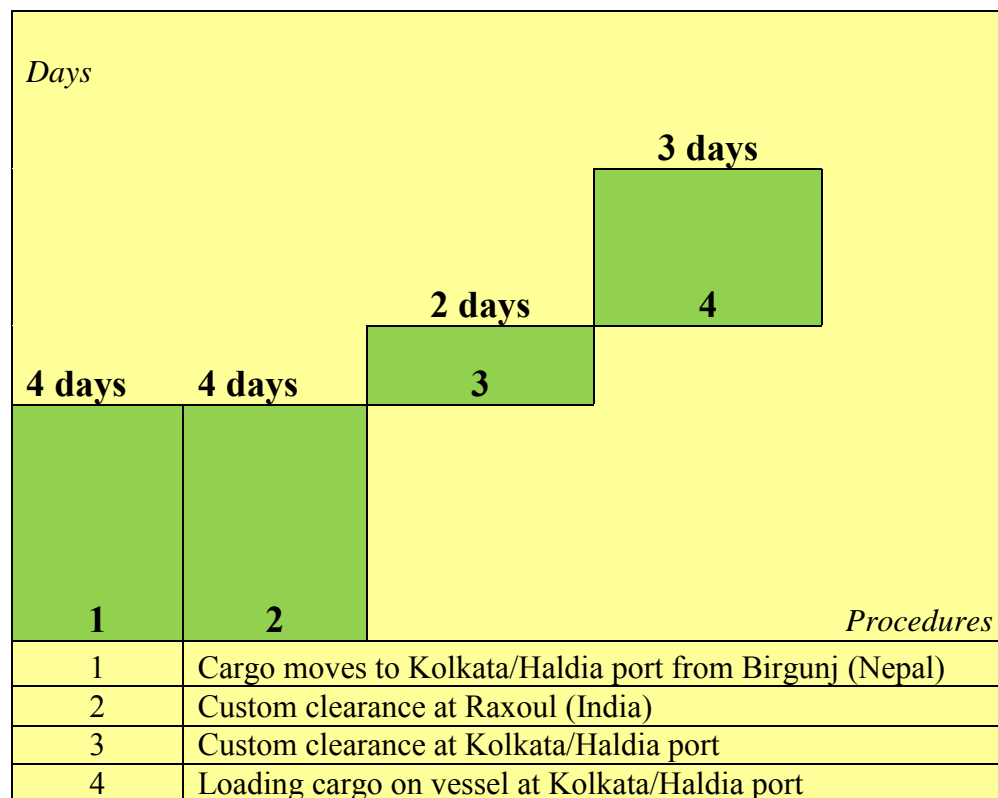
## 5.5 Improving Trade Facilitation Measures: Critical Issues

The trade process analyses conducted in SASEC countries provide much details and insights on import and export procedures. The national studies provide some critical information on how procedures vary across products, corridors and countries. Some of the critical issues are highlighted below.

### (a) Customs and cargo handling time at Port of Kolkata/Haldia in corridor 3

Trade processes and their efficiency do vary significantly depending on the corridor or mode of transport selected. For example, the export processes of carpets to third country by sea and lentils to Bangladesh by land are compared in this study. Export time (which excludes international ocean transport) is found to be longer by sea than by land, mainly due to the extra time involved in transit via India, customs and handling of the container at the port of Kolkata/Haldia. It takes about 2 days for customs clearance at Kolkata/Haldia port and 3 days for loading cargo on vessel at the same place (Figure 5.13). At the same time, the customs clearance process at India and Bangladesh borders is found to take much lesser time than the clearance process at the port of Kolkata. Box 5.2 presents import and export procedures for Nepal-bound transit cargoes.

**Figure 5.13 Nepal's Export of Carpets: Time at Transit and Port of Kolkata**



Reductions in customs and/or handling time at Kolkata port by way of streamlining procedures would heavily improve the competitiveness of Nepal's exports to third country. Similar findings are also reported in other studies, many of which imply that import and export time and cost for a same product may vary significantly depending on the port through which it is shipped—and distance of the firm to the port. While these findings are not surprising, they make it clear that cross-country comparisons in terms of trade efficiency will have to be made with caution as results will be very much influenced by the underlying assumptions. They also suggest that evaluating the trade facilitation performance of a country or corridor require that much more detailed assessments be conducted, as reform priorities and procedural bottlenecks may be different across routes and modes of transport for a given country. In that context, process analysis and improvements at the corridor level may indeed be preferable.

### **Box 5.2 Export and Import Procedures for India-Nepal Transit Cargo by Road (Route: Kolkata–Raxaul–Birganj)**

#### **Import procedure**

When goods are imported from a third country for Nepal in transit through India, the following procedures are observed:

- Transit of Nepalese imports is allowed against import licences issued by the Government of Nepal and L/C account opened through a commercial bank in Nepal.
- In case of Nepalese imports, for which there is no requirement of import licence or L/C, the Royal Nepalese Consul General, Consulate office at Kolkata furnishes a certificate on the Customs Transit Declaration (CTD).
- At the Indian port of entry (Calcutta Customs House), the importer or his agent shall furnish six copies of CTD containing:
  - (i) Name of ship, rotation no. and line no
  - (ii) Name & address of the importer
  - (iii) Number, description, marks and serial no of the packages
  - (iv) Country of consignment and country of origin (if different)
  - (v) Description of goods
  - (vi) Quantity of goods
  - (vii) Import licence number and date
  - (viii) L/C No, date and name and address of the bank
  - (ix) Route of transit
  - (x) A declaration
- All six copies of CTDs along with the Bill of Lading, invoice, packing list, a copy of import licence and copy of L/C shall be presented at Nepal Unit of Customs House, Kolkata. The data is then entered into a computer.
- After assessment and verification of documents, an appraiser issues examination order, and the CTD no. is generated from computer.
- On arrival of the Nepalese containerised cargo, the customs officer at Kolkata port checks seal of the container, which was put by shipping agent. If found intact, customs officer allows transportation of the cargo without examination.

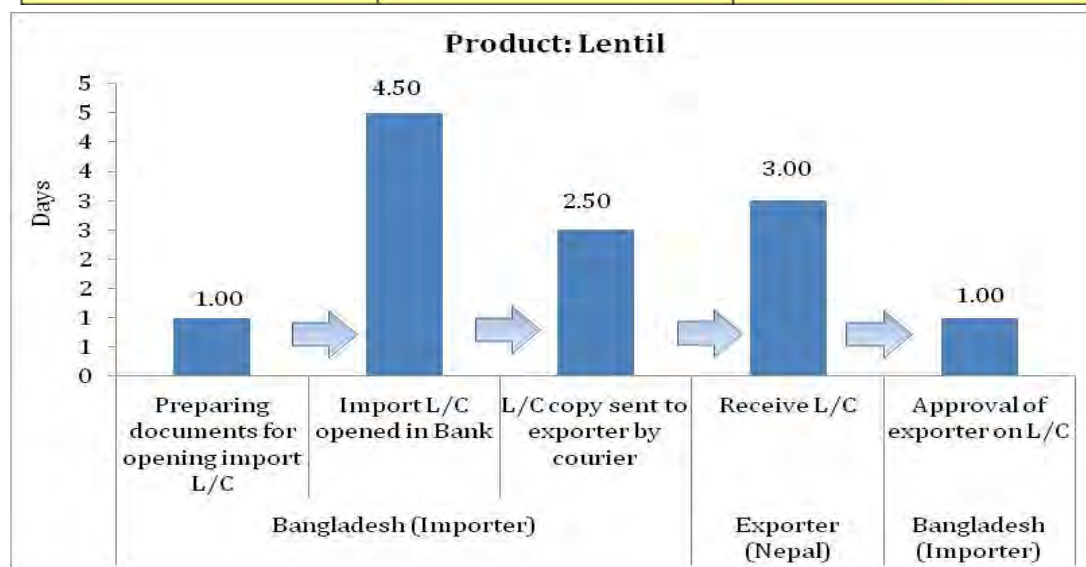
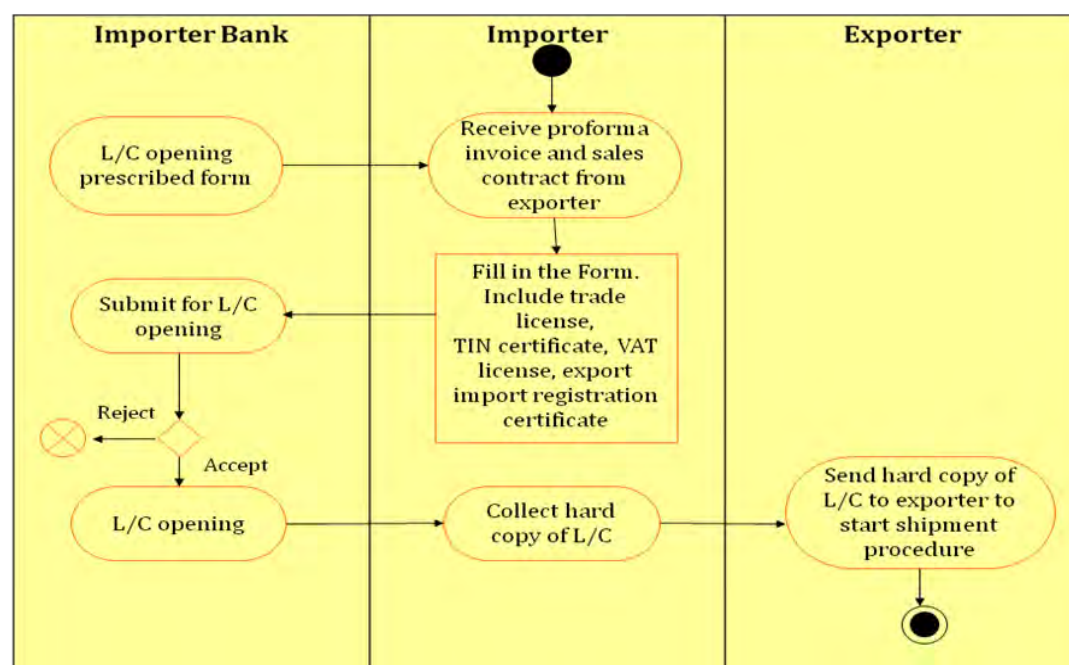
- In case, the seal on the container is found broken or defective, the customs officer examines the goods and puts a fresh customs seal on the container, and allows transportation. The serial number of the new seal is also endorsed in the CTD.
- In respect of non-containerised cargo, the customs makes a selective percentage examination of the goods.
- The sensitive goods, as specified by the Government of India from time to time, are covered by an insurance policy or bank guarantee (at the option of the importer) for an amount equal to the Indian customs duties on such goods.
- For goods other than those specified as sensitive by the Government of India, the importer furnishes a legally binding undertaking that the amount equal to the difference between the market value of goods in India and their CIF value is paid, on demand, to the Commissioner of Customs in Kolkata in the event of the goods not reaching Nepal.
- After the Customs House is satisfied, it endorses all the copies of the CTDs. The original copy is handed over to the importer. The duplicate and triplicate are sent by post to the Indian border customs officer and the remaining copies are retained by the Customs House. In order to avoid delay in postal transmission, duplicate and triplicate copies of the CTD are handed over to the importer or his agent in a sealed cover, if desired.
- On arrival of the Nepalese containerised cargo, the Indian customs authority posted at the land customs station or the railway station checks the seal of the container. If found intact, it is approved for onward transmission of the cargo without examination.
- On arrival of the traffic-in-transit in open trucks or open railway wagons, the Indian customs authority at the border LCS carries out selective percentage examination.
- On arrival of the traffic-in-transit at the border LCS or at border railway station, the importer presents the original copy of CTD duly endorsed by Customs House to the Indian customs officer at the border LCS who compares the original copy with the duplicate and triplicate received by him. He/she then endorses all the CTDs. The Indian customs officer, thereafter, through escorts or supervision ensures that the goods cross the border and reach Nepal. The Indian customs officer then hands over the original copy of the CTD to the importer, sends the duplicate to the Indian customs house, sends the triplicate to the Nepalese customs officer and after it is received back duly endorsed by the Nepalese customs officer, retains it to maintain records.
- The Nepalese customs officer sends a telex/fax communication on a daily basis to the Commissioner of Customs, Kolkata, giving the number and date of the CTDs received on the day confirming that the goods covered by those CTDs have been received in Nepal.
- The Indian customs officer at the border LCS sends fax/telex communication on a daily basis to the Commissioner of customs, Kolkata, giving details of the original copies of the CTDs received on a particular day from the importer duly endorsed by the Nepalese customs authorities that the goods have been received in Nepal.

Export procedures are same as procedures followed in case of import.

*Source: Khan (2013)*

#### **(b) Opening of L/C account with bank**

**Figure 5.14 Opening of L/C Account by Importer in Bangladesh: Activity Diagram**

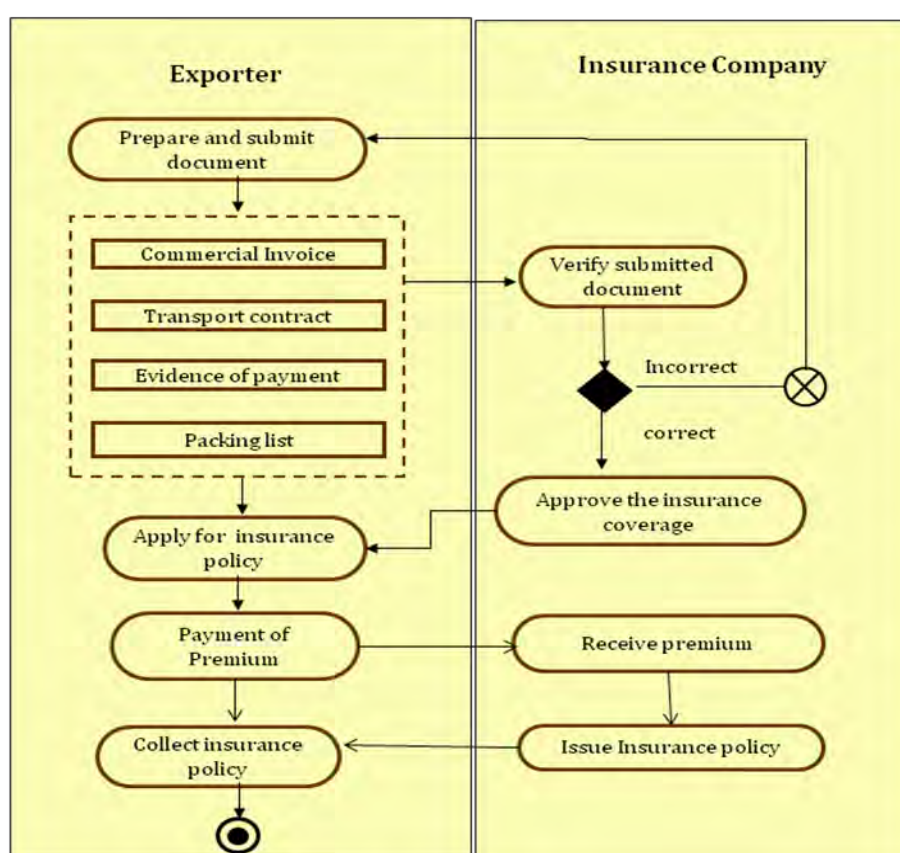


Unlike popular belief the time spent on opening of L/C account with bank, both in Bangladesh and Nepal, is substantially high. In many cases, time spent in opening L/C account takes more time than the inland transportation of goods. For example, as shown in Figure 5.14, it takes 4.50 days to open an L/C account with a bank in Bangladesh for import of lentils from Nepal. While the L/C account opening procedures appear to be simple, the complicated documentations along with manual handling process make the entire procedure very time consuming as well as cumbersome. This study shows that an importer in Bangladesh spends almost 9 days in opening an L/C account. Therefore, introduction of electronic process with further procedural simplification would help Bangladesh in cutting trade cost and time.

Private sector has a strong role to play in improving trade facilitation measures. This study also provides evidence of large variations in opening L/C account across products. The opening of L/C in Bangladesh for export of fruit juice to Bhutan is found to take up about 2.5 days, while that for sending L/C copies by post takes another 3 to 5 days. This highlights the need to assess trade facilitation needs and priorities, and possibly develop solutions for faster opening of the L/C account. We, therefore, should remove bottlenecks and redundancies, and automate the entire trade process.

### (c) Obtaining cargo insurance

**Figure 5.15 Obtaining Cargo Insurance in Case of Export of Carpets from Nepal: Activity Diagram**



Sometimes obtaining cargo insurance takes 6 days (for instance, the export of LAA from Bangladesh to Nepal through corridor 1). Without insurance certificate, export documentation becomes incomplete. Lengthy time in getting insurance automatically negates the time saved in export processes. In most of the cases studied here, obtaining insurance is handled manually. Normally, an exporter applies for cargo insurance to a local insurance company for inland transportation. Usually the insurance covers the export processes up to the border. Each time an individual order is placed and shipped, the exporter needs to provide a copy of L/C, commercial invoice and warranty certificate to verify the damage and access the claim (if any). Figure 5.15

presents activity diagram of obtaining insurance in case of export of carpets from Nepal. Transparency, simplification of the process and using electronic submission would not only reduce the overall transaction time, particularly when the goods are perishable, but also attract more firms to do insurance business, making the market more competitive.

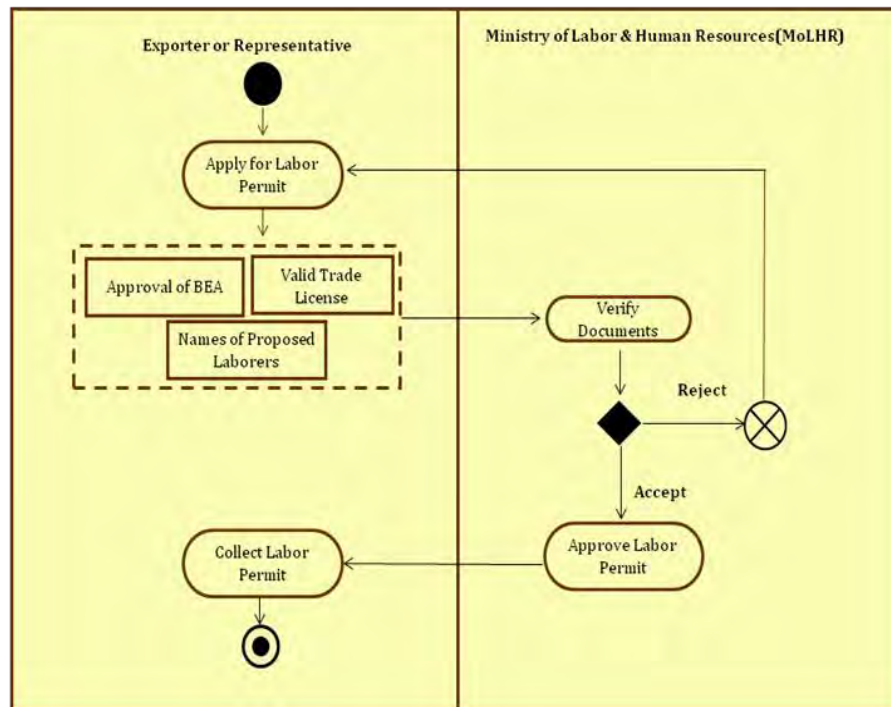
#### **(d) Obtaining permits and certificates**

Interestingly, getting permits and licenses is identified as a key bottleneck in the export process of Bhutan. Procedures related to the issuance of certificate of origin (COO) or phyto-sanitary certificate (PSC) are also identified as sources of inefficiencies in some of the country studies. Figures 5.16 and 5.17 present activity diagrams of getting labour and work permits in case of Bhutan's export of oranges to Bangladesh. It takes 3.5 days to get labour permit from the Ministry of Labour and Human Resources (MLHR) and 1.5 days to obtain work permit from the immigration office. Both the procedures are handled manually, due to which the exporter in Bhutan devotes almost 1/4<sup>th</sup> of total export time in obtaining these two permits. By carrying out these two procedures electronically, Bhutan's exports would inevitably gain comparative advantage in international markets.

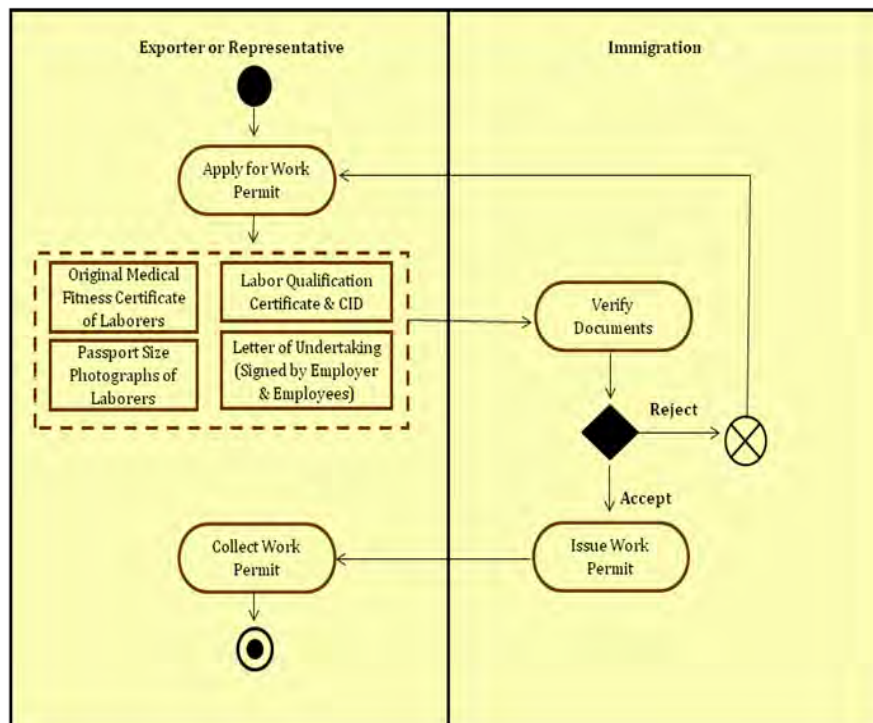
Given that private sector associations play a key role in managing the COO or PSC procedures, this finding emphasizes the importance for governments to ensure that these associations provide efficient and non-discriminatory service to all exporters and importers in SASEC.



**Figure 5.16 Getting Labor Permit in Case of Export of Oranges in Bhutan:  
Activity Diagram**



**Figure 5.17 Acquiring a Work Permit in Case of Export of Oranges from Bhutan:  
Activity Diagram**



## 6. Major Recommendations

SASEC countries have witnessed an expansion of trade. Import tariffs fell sharply due to SAFTA and bilateral trade agreements. However, as firms in an increasing number of countries compete for a share of the global market, finding new ways for governments to enhance trade competitiveness remains essential. Facilitating intra-regional trade will be particularly important to sustain growth in the sub-region. Facilitating trade is about reducing the time and cost of trade transactions, including risks associated to them. While the trade facilitation performance of individual economies vary greatly, it takes about three times the time to import or export to or from a developing country in the sub-region than it does in a developed country. It also often costs more for South Asian countries to trade with each other than to trade with the USA or Europe. These facts, along with the now well established finding that benefits from trade facilitation generally exceed those that may be achieved through further tariff cuts, call for urgent attention of the sub-region in streamlining its trade procedures across SASEC corridors.

In this context, this first SASEC study of trade procedures is very timely. This study examined in some details the export and import processes between three countries of the sub-region (Bangladesh, Bhutan and Nepal) by conducting BPA of trade procedures of specific products to and from these countries along three SASEC corridors. The procedures analysed cover the entire trade transaction, including buying, shipping and payment processes. A total of 4 product-and country-specific back-to-back export and import processes and 1 export and import processes of two separate products are mapped and analysed by a team of ADB-UNESCAP researchers on the basis of the UNNExT BPA guide.

Based on the information from the four country studies, four complete import/export processes—from the factory of the manufacturer in the exporting country all the way to the warehouse of the importer—have been put together. Although far from comprehensive and subject to limitations (outlined in the next section), the study clearly documents the complexity of the overall trade process, in particular, that of the export process faced by firms in many countries of the region.

While country-specific detailed recommendations can be found in individual studies summarised in the second part of this study, a number of policy implications may be drawn from the sub-regional study.

- **Full and inclusive representation of the private sector in trade facilitation initiatives is essential**

Reducing time and cost of trade transactions cannot be done without the support of the private sector. All procedures and steps in the import/export process involve the private sector, while only a few involve national regulatory authorities directly. While governments could and should streamline the procedures on which they have direct control (such as,

customs and other regulatory procedures), they may also need to encourage private sector collaboration and coordination initiatives to achieve significant results. Chambers of Commerce and/or Industry Associations play a significant role in issuing trade-related documents; such as, certificates of origins or quality certificates, and the procedures put in place by these entities may not always facilitate trade or be non-discriminatory. Some of the private sector intermediaries (for instance, transport and logistics service providers or customs agents) do not always have an incentive to support trade facilitation as some of the services they render may become unnecessary once the import/export process has been successfully simplified or automated. Governments may address this issue by ensuring a more inclusive representation of the private sector in national trade facilitation bodies, or similar institutions in charge of enabling trade.

- **Implementation of basic trade facilitation measures should be consistently enforced and reinforced nation-wide**

**Figure 6.1 BPA+: Coverage of BPA, TCD and TRS Methods**

Country 1 (Exporter)			Country 2 (Importer)		
Trade-related procedures before cargo movement	Cargo origin	Border crossing point	Border crossing point	Cargo destination	Trade-related procedures after cargo arrival
		TRS	TRS		
	TCD				
BPA					

Source: UNESCAP (2013)

The process analyses conducted revealed that simple trade facilitation measures; such as provision of customs clearance during holidays or weekends, or the harmonisation of work hours at border checkpoints on either sides of a land border, were not always implemented. The situation varies significantly depending on the route and border crossings used in SASEC. These results highlight the need for government central authorities to promote a change of mind set among staffs of trade control agencies in terms of the importance of trade facilitation and their role in it. Development of regular change management programmes encouraging participating officials to develop and test simple and pragmatic trade facilitation solutions at the local level in consultation with the private sector—and/or officials on the other side of the border, if possible—may be considered. At the same time, countries may conduct Time-Cost-Distance (TCD) analysis that will enable comparison and evaluation of competing modes of transport operating on the same route and comparison of alternate transit routes. This TCD model will also help countries identify inefficiencies and isolate bottlenecks along a particular route. The second phase of BPA and/or BPA+ may also consider for other corridors that are important for sub-regional trade and investment. A Business Process

Analysis ‘Plus’ (BPA+) approach is proposed, where the system builds on the UNNExT BPA methodology, supplemented by UNESCAP TCD and WCO Time Release Studies (TRS) methodologies. TCD and TRS methodologies that focus on a subset of procedures covered by BPA (see Figure 6.1) and provide for alternative data collection methods would be used to verify and supplement the data and outputs from the standard BPA.

- **Paperless trade, including development of national and sub-regional single windows, needs to be prioritised for trade facilitation**

Preparation of documents and exchange of information among various parties involved (before the goods start moving from the factory, or before they even arrive at the port as in the case of imports) account for the largest share of the import or export process time. As such, the development of single window facilities for submission and processing of information and documents is essential. Taking into account the importance of private sector actors in the transaction chain, the development of single window facilities enabling not only submission of information to regulatory and control agencies but making available relevant transaction information to both public and private actors along the transaction chain seem essential in facilitating trade. These ‘extended’ national single windows are now operating in Korea and some ASEAN countries. The success of ICEGATE also offers good lessons for other SASEC countries to strengthen their national single windows. More generally, the various process analyses conducted as part of the study have pointed out the limited use of modern ICT and the heavy reliance on paper documents throughout the import or export process. Increased use of ICT and development of paperless trade should therefore be pursued more vigorously in SASEC. Acceptance of cross-border Bill of Lading (BL) electronically or Customs Transit Document (CTD) would certainly lead to paperless trade in SASEC and effective implementation of single window.

Countries should form an exclusive wing for trade facilitation. Bhutan has decided to accede to the Revised Kyoto Convention of modernization of customs. A National Trade Facilitation Committee with representatives from key stakeholders is also being constituted in Bhutan to coordinate and implement measures towards customs modernisation.

- **Remove the regulatory burden on exports and imports**

SASEC countries must remove regulatory burden on exports and imports. For example, Bangladesh may withdraw the NTMs imposed on Bhutan, namely, NRAC and FMCC that are irrelevant. Bhutan, on the other, can simplify, merge and automate the IHR and other processes. The process of a Bhutanese customs inspector traveling to Burimari/Changrabanda to clear imports, which often causes delays, should also be removed. Similarly, documentations imposed by port of Kolkata and Haldia and customs on Nepal cargo must become automated.

- **Physical inspections should be minimised whenever possible, in particular through adoption of risk management techniques by all organisations involved in the trade process**

Inspection and testing procedures can and often do account for a significant of the average transaction time. More importantly, inspections were found to affect the timeliness and predictability of the trade transaction process, a key factor in enabling firms from a given country to participate in international productions networks. Inspection may be required at various times, typically at the border or port for imports, but also often as part of preparation of documents in case of exports. Inspections may be minimised through the use of appropriate risk management techniques. While customs often have some form of risk management system in place, other regulatory agencies often do not. Building capacity of these non-customs agencies and developing inter-agency risk management systems should be considered, along with joint (multi-agency) inspections when needed. Setting up certification programmes where quality and other characteristics of goods can be ensured through control of the production process at the factory rather than for every shipment may also be promoted as a way to reduce the need for inspections.

- **Healthy competition among transport, logistics and other trade-related service such as insurance providers should be encouraged**

The study has clearly shown the key role played by service providers in the trade process. Aside from preparation of documents, which is often outsourced in part to service providers, inland carriage and handling and terminal handling are the most time consuming procedures in the import and export process. Providing traders with access a variety of high quality and affordable services is therefore essential to reducing the cost and time of import and export. This implies the need to ensure that existing service providers are not unduly protected and have clear incentives to provide the efficient services needed by the trading community.

- **Reviewing payment systems in place and their efficiency may reveal new opportunities for improving trade facilitation performance**

The analysis of the entire BUY-SHIP-PAY process has provided some evidence of the importance and time involved in the buying and payment process relative to the shipping process. In some cases, the payment process accounts for a large part of the overall trade process. While in others, this can be due to the payment method or negotiated payment terms, some of the process analyses have revealed delays in receiving payment using L/C after all the necessary documents specified in the L/C had been submitted to the bank. These findings call for a more detailed review of payment systems in place, as well as of the efficiency and practices of financial intermediaries as a way to improve trade facilitation performance,

particularly since the cost of L/Cs is also found to represent nearly half of the direct cost of export of a 20-foot container.

- **National and sub-regional trade facilitation performance monitoring mechanisms are required to identify the real and most important barriers to trade efficiency**

Regulatory authorities have a limited view of the entire trade process, often only aware of their own internal efficiency—or inefficiency. Traders also have limited awareness and information on the procedural bottlenecks. It is the intermediaries that hold most of the information available on the time and cost of specific procedures. Whether the inefficiencies are actually due to the intermediaries or to other parties (such as, regulatory authorities) and their impact would need to be assessed independently and regularly in order to identify priorities for reform. Governments may therefore consider the establishment of national trade facilitation performance monitoring mechanisms or measurement systems. The same may also be applicable to the SASEC region. Regular and systematic conduct and update of business process analyses of import and export processes similar to the ones conducted in this study may be considered as the basis for such systems, possibly in combination with the WCO TRS methodology (which focuses on a narrower set of procedures). Embedding the performance measurement and monitoring function into ICT systems being developed as part of paperless trade initiatives (for instance, customs automation systems; RFID tracking of container systems) should also be systematically considered. These systems may provide real-time information and detailed records on the time taken to move goods as well as exchange of electronic documents for all transactions. We may also look at international examples instruments for simplification of trade-related procedures (see Box 6.1).

- **Industry specific trade facilitation programmes should be considered**

Product-specific studies have clearly highlighted differences in the complexity and length of the trade process depending on the type of goods traded. For example, the often mandatory sampling and testing procedures on agricultural products are found to account for nearly half of the export time in some cases; in many cases due to limited availability of recognised testing facilities in the exporting country. Such industry or sector specific bottlenecks may best be addressed through the implementation of industry or sector specific trade facilitation programmes.

#### **Box 6. 1 Examples of International Instruments for the Simplification of Trade-related Procedures**

##### **UN/CEFACT Recommendation No. 18**

Facilitation measures related to international trade procedures UN/CEFACT Recommendation 18 provides a comprehensive set of recommendations regarding international best practices and standards for the facilitation and harmonisation of trade transactions. In order to understand the

complexity of international trade, including the key elements of a trade transaction, UN/CEFACT has developed a model of an international supply chain. Based on this model, specific measures have been developed to cover the key elements of the trade transaction process. These are grouped into four major categories, namely, commercial measures, international payment measures, official control measures, and transport-related measures. UN/CEFACT Recommendation No.18 can be downloaded in English, French and Russian from: [http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

### **Revised Kyoto Convention**

The Revised Kyoto Convention sets out standards and recommended practices for the clearance of goods, the payment of duties and taxes, the use of risk management, the establishment of dialogue between customs and trade, and the application of information technology in the context of customs. Given that the Convention promotes the use of simplified practices, its implementation is expected to bring about a reduction in time and cost associated with customs processing. Further information is available at <http://unstats.un.org/UNSD/trade/WS%20Bangkok06/Workshop%20materials/KYOTO%20Convention.pdf>

### **Customs SAFE Framework of Standards**

The SAFE Framework sets forth the principles and standards that promote the harmonisation of advanced electronic cargo information requirements on inbound, outbound and transit requirements, the consistent use of risk management approach to address security threats including the conduct of an outbound inspection of high-risk cargo. The SAFE Framework encourages the establishment of cooperative arrangements between customs and other government agencies especially for the integrated border management. Various elements and necessary steps that have to be taken into account when implementing an integrated border management system are summarised in Customs Compendium # 9: Integrated Border Management. The SAFE Framework also supports the establishment of partnerships between customs and the private sector through the implementation of the Authorized Economic Operator (AEO) programme. It describes the concepts of the AEO and outlines a set of standards, practices, and procedures that both customs and members of trade community aspiring to the AEO status are expected to adopt into routine usage. AEO implementation guidance and related information is provided in separate documents in WCO Safe Package, available at <http://www.wcoomd.org>

### **WCO Customs Guidelines on Integrated Supply Chain Management (ISCM)**

The ISCM Guidelines describes how various processes i.e., the advance electronic transmission of an initial export goods declaration by the exporter, the advance electronic transmission of an initial declaration by the carrier, and the advance electronic transmission of an initial import goods declaration by the importer should be integrated into an integrated customs control chain with an aim to ensure the integrity of the consignment from the time it leaves the place of origin until it arrives at the place or destination. The ISCM Guidelines encourage the use of a Unique



Consignment Reference (UCR) that is in line with the WCO Recommendation on the UCR and its accompanying Guidelines as it is important instrument that allows customs to link consignment information received from different parties. The ISCM Guidelines also explained how the customs controlled chain can be further simplified when the Authorised Economic Operator programme is also implemented. Further details are available at <http://www.wcoomd.org>

*Source: UNESCAP (2012)*

- **Corridor specific trade facilitation programmes should be developed**

The BPA study must cover more SASEC/South Asian corridors and utilities; such as, ports. Detailed BPA analysis would help understand the corridor and utility specific trade procedures and draw the policy measures accordingly.

- **Harmonisation of documentary requirements across countries should be actively pursued**

This study has shown that different documentation is needed for export to different destinations along SASEC corridors, which appears to create confusion and delays. Besides simplification of documentary requirements, a continuous effort to align national procedures and documents to international standards and conventions is required. It is worth noting that differences in documentation stem not only from differing regulations across importing countries, but also from different requirements by individual buyers (for instance, requiring different types of quality certificates, or requiring the information to be sent in different formats), such that involvement of international private sector associations in the harmonisation efforts would be needed.

- **Synchronisation of cross-border customs in SASEC should be the priority**

Customs must operate 24x7 in SASEC. At present there are differences in working hours between customs of two neighbouring countries. For example, Birgunj Customs opens at 8 am, whereas Raxaul Customs opens only at 10 am. It is recommended that full automation and link-up between customs will reduce transaction time and cost.

- **Bilateral and regional free trade agreements should systematically address trade facilitation issues**

Preferential treatment given to or negotiated with selected trade partners typically involves additional documentary requirements. The study provides some evidence of significant delays associated with such requirements. These include trade facilitation provisions and



standard guidelines to ensure that the procedures involved in obtaining the additional documents and exchanging them across borders are as efficient as possible. This should be considered to maximise the utilization and benefits from bilateral and regional trade agreements.

- **All trade documents including customs should be submitted electronically**

By legislation, e-filing of documents can be made mandatory. Apart from a few initial hiccups, the application of modern ICT is manageable. For example, in case of India's ICEGATE it would then lead SASEC moving from a semi-electronic to a full electronic system. Excessive documentations will disappear with the use of a full electronic system in place.

- **Trade will be much faster with minimum process reengineering**

Receiving order from buyer (Bhutan) takes 11.50 days in case export of fruit juice from Bangladesh. This procedure can easily be reduced to just a day or two with use of ICT (Figure 6.2). Post-shipment payment can be faster; which can save 2 days for each of the 3 countries in SASEC. By making submission of documents electronically, Bhutan can save over a week time. With application of ICT, opening of L/C with bank can be reduced to 1-2 days in Nepal and Bangladesh. Harmonisation of documentations would reduce average transaction time from over 22 days to less than 10 days in SASEC.

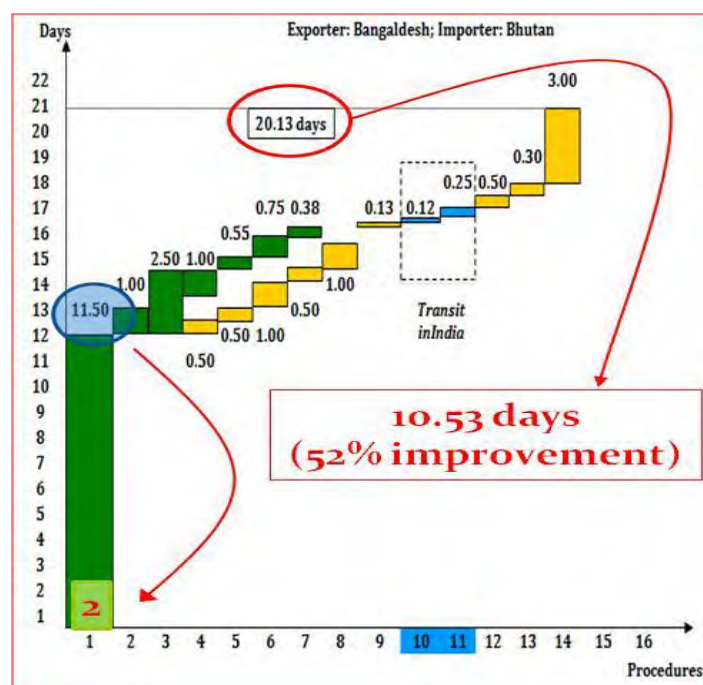
- **Acceptance to sub-regional transit**

Elimination of transshipment system in Banglabandha (Bangladesh) can clearly save one day. Similar benefits are achievable in other corridors. Regional transit in SASEC is an achievable task. It will help Bangladesh, Bhutan, India and Nepal to reduce costs and time of transportation and benefit from seamless movement of vehicles. It would lead to generate cross-border production networks in SASEC (for instance, food processing, T&C, etc.) To start with, sub-regional transit may be implemented in corridors 1 and 2.

- **Ensure Faster travel time in transit**

Unlike corridors 2 and 3, speed of vehicle in transit (India) is relatively slow in corridor 1. Congestion, bad quality of road, inflexible travel time, narrow width, etc. force the vehicle to move slowly in transit corridors. There is a need to improve the road quality along with security and maintenance. Learning from other successful corridors would be useful for SASEC countries to build a template of efficient corridor management.

**Figure 6.2 Time Procedure Chart for Export of Fruit Juice by Bangladesh to Bhutan**



\*Envisaged improvement

- **List of Recommendations: Priority of Areas of Cooperation**

This study also recommends some important areas of cooperation, more sort of as intuitive suggestions. These are as follows:

- Development of SASEC transit system
- Development of SASEC single window
- Training programmes for personnel handling trade facilitation
- Capacity building for management of corridors
- Development of SASEC BPA database and periodic analysis and dissemination
- Monitoring the trade facilitation programmes through joint task force committee at the national level
- Development of a BPA software and training
- Cooperation and coordination among border agencies, such as security, etc.
- Building a dispute settlement mechanism of trade facilitation
- Acceptance of cross-border signature digitally in bill of lading, and other trade transactions such as CTD7
- Periodic risk management of border facilities
- Set-up one anchor TF project in corridors 1 or 2
- Set-up trade facilitation forum in SASEC to give policy direction
- Set-up trade facilitation task force for implementation of regional/sub-regional projects and capacity building

## ***7. Corridor Specific Recommendations***

With the sharp reduction of tariffs and gradual dismantling of NTBs over the years, trade facilitation has now become an issue of pivotal importance for increased trade competitiveness and sustainable growth. Some broad recommendations resulting from this synthesis report are reported in the previous chapter would be useful in drawing a sub-regional trade facilitation programme. However, it would be worth considering corridor specific recommendations that were suggested by the stakeholders at the time of doing this study, in order to draw an implementation programme to facilitate the trade along SASEC corridors.

We recommend the implementation of a series of projects leading to an improvement in transaction time and cost of trade in SASEC. Table 7.1 to Table 7.6 present the list of trade procedures and identify the potential time that is achievable through a series of interventions; such as, process reengineering, introduction of automation in customs, building infrastructure facilities, business reforms, etc. by each corridor. In general, we aim at developing a set of observations related to the current business processes that have potential for improvement; such as, identification of duplicated and redundant procedural and documentary requirements that cause delays. Improvements would be substantial and may vary between 28 to 54percent. Business process improvement can take various forms. Some recommendations may include the following measures in SASEC corridors:

- Re-organise activities in a more appropriate order
- Elimination of redundant procedures
- Elimination of business processes or activities that do not add any value to the delivery of goods, the collection of national revenue, the enhancement of border security, the protection of public health and safety
- Integration of business processes that have similar objectives by fostering collaboration between all concerned parties
- Merging some procedures that may also lead to the elimination of duplicate or unnecessary documentary requirements
- Elimination of redundant data and unnecessary documentary requirements
- Enhancing information sharing among concerned parties through automation such as the automation of paper-based transactional operations, either in a full-scale trade and transport information exchange among stakeholders (paperless trade)
- Elimination of outdated laws, rules, and regulations
- Introduction of new procedure; such as, testing of goods to meet certain standards
- Modification of existing or creation of new laws, rules and regulations to support the implementation of recommendations

**Table 7.1 Actual vs. Target Time involved in the Trade of Lentils in Corridor 1**

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Nepal	1.0	1.0
2.	Send proforma invoice	Nepal	1.0	
3.	Receive purchase order	Nepal	1.0	
4.	Preparing documents for opening import L/C	Bangladesh	1.0	2.0
5.	Opening of import L/C in bank	Bangladesh	4.5	
6.	L/C copy sent to exporter by courier	Bangladesh	2.5	
7.	Receive L/C by importer	Nepal	3.0	2.0
8.	Approval of exporter on L/C	Bangladesh	1.0	0.5
9.	Preparing documents for customs & sent to CFA	Bangladesh	4.5	2.0
10.	Deposit Challan Fee by CFA	Bangladesh	0.1	0.1
11.	Obtain COO	Nepal	1.0	2.0
12.	Obtain insurance policy	Nepal	1.0	
13.	Appoint clearing agent	Nepal	1.0	
14.	Arrange transportation	Nepal	1.0	1.0
15.	Move cargo to border	Nepal	1.0	1.0
16.	Obtain quarantine certificate	Nepal	1.0	1.0
17.	Custom clearance at border (Kakarvita)	Nepal	1.0	1.0
18.	Custom clearance at transit custom	India	1.0	0.5
19.	Move cargo to importer customs	India	1.0	
20.	Customs inspection and clearance	Bangladesh	0.3	0.3
21.	Out Pass handed over by CFA to importer's representative	Bangladesh	0.1	0.1
22.	Transport to importer's warehouse	Bangladesh	1.0	0.5
23.	Pay	Bangladesh	4.0	2.0
<b>Total</b>			<b>23.4</b>	<b>15.0</b> <b>(36% improvement)</b>

**Table 7.2 Actual vs. Target Time involved in the Trade of LAA in Corridor 1**

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Bangladesh	1.00	1.0
2.	Fixing terms of trade with importer via local office	Bangladesh	1.00	
3.	Sending draft contract and proforma invoice	Bangladesh	2.00	1.0
4.	Receive of contract	Nepal	1.00	1.0
5.	Sign and exchange of contract	Nepal	1.00	1.0
6.	Receive Performa invoice	Nepal	1.00	1.0
7.	Open L/C account with bank	Nepal	2.00	0.5
8.	Obtain approval from AEPC	Nepal	1.00	1.0
9.	Collect and prepare documents	Nepal	1.00	1.0
10.	Appoint agent and handover documents	Nepal	1.00	0.5
11.	Receiving acceptance letter and acknowledge L/C copy	Bangladesh	3.50	2.0
12.	Obtaining cargo insurance	Bangladesh	6.00	1.0
13.	Preparing documents for export	Bangladesh	3.00	1.0
14.	Load in truck and deliver to the port	Bangladesh	1.00	1.0
15.	Deposit Challan Fee, VAT and custom declaration	Bangladesh	0.25	0.25
16.	Customs inspection and clearance by C&F agent	Bangladesh	0.31	0.31
17.	Out Pass handed over by C&F agent to importer representative and unloading to their carrier	Bangladesh	0.20	0.20
18.	Contact custom, arrange transshipment and transport and move cargo to importer's border	Nepal	1.00	1.0
19.	Custom clearance at transit and importer custom points	India	1.00	1.0
20.	Move cargo from custom point destination	Nepal	2.00	1.5
21.	Pay	Nepal	5.00	2.0
		<b>Total</b>	<b>29.26</b>	<b>14.75</b>
				<b>(50% improvement)</b>

**Table 7.3 Actual vs. Target Time involved in the Trade of Oranges in Corridor 2**

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Bhutan	2.00	1.00
2.	Representative of the importer visits Bhutan	Bangladesh	1.00	1.00
3.	Obtain trade license	Bhutan	0.50	1.00
4.	Become BCCI member	Bhutan	0.50	
5.	Obtain token number	Bhutan	1.00	
6.	Become BEA member	Bhutan	0.50	
7.	Apply for Phyto-sanitary Certificate	Bhutan	1.00	1.00
8.	Apply for COO, ARAC & FHCC	Bhutan	0.50	0.50
9.	Apply for labour permit	Bhutan	3.50	1.00
10.	Obtain work permit	Bhutan	1.50	0.50
11.	Complete export documentation	Bhutan	0.25	0.25
12.	Obtain export declaration	Bhutan	0.25	0.25
13.	Transport to Jaigaon/Changrabanda	India	0.25	0.25
14.	Transport to Burimari	Bhutan	0.25	0.25
15.	Deposit challan fee by C&F agent	Bangladesh	0.10	0.10
16.	Customs inspection and clearance	Bangladesh	0.10	0.10
17.	Out pass handed over by C&F agent to importer representative	Bangladesh	0.10	0.10
18.	Loading importers truck	Bangladesh	0.30	0.30
19.	Transport to importer's trading place	Bangladesh	1.00	1.00
20.	Pay	Bangladesh	4.00	2.00
<b>Total</b>			<b>18.60</b>	<b>9.60</b>
				<b>(48% improvement)</b>

**Table 7.4 Actual vs. Target Time involved in the Trade of Fruit Juice in Corridor 2**

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Bangladesh	11.50	2.00
2.	Obtaining COO	Bangladesh	1.00	0.50
3.	L/C opening	Bangladesh	2.50	1.50
4.	Contracting inland transport agency	Bangladesh	1.00	
5.	Transport to port of departure	Bangladesh	0.55	0.55
6.	Obtaining customs declaration	Bangladesh	0.75	0.75
7.	Customs inspection and clearance	Bangladesh	0.38	0.38
8.	Clear goods at Burimari	Bhutan	0.13	0.13
9.	Clear goods at Changrabandha	Bhutan	0.12	0.12
10.	Transport to Jaigaon/Phuentsholing	Bhutan	0.25	0.25
11.	Complete import documentation	Bhutan	0.50	0.50
12.	Obtain import declaration	Bhutan	0.50	0.50
13.	Pay	Bhutan	3.00	2.00
<b>Total</b>			<b>20.13</b>	<b>9.18</b>
				<b>(54% improvement)</b>

**Table 7.5 Actual vs. Target Time involved in the Trade of Carpets in Corridor 3**

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Nepal	1.0	1.0
2.	Factory visit and selection of sample	Nepal	1.0	1.0
3.	Prepare contract document	Nepal	1.0	1.0
4.	Sign and exchange of contract	Nepal	1.0	
5.	Sample dispatch to importer	Nepal	1.0	1.0
6.	Receive purchase order	Nepal	1.0	1.0
7.	Receive advance payment or L/C	Nepal	1.0	1.0
8.	Prepare export document	Nepal	1.0	1.0
9.	Obtain COO	Nepal	1.0	
10.	Obtain GSP	Nepal	1.0	
11.	Obtain insurance	Nepal	1.0	1.0
12.	Arrange transportation	Nepal	1.0	1.0
13.	Appoint C&F agent and handover document	Nepal	1.0	
14.	Move cargo from factory to Birgunj	Nepal	2.0	2.0
15.	Custom clearance at exporter custom's premise	Nepal	2.0	
16.	Cargo moves to Kolkata/Haldia port from Birgunj	Nepal	4.0	2.0
17.	Custom clearance at Raxaul	India	4.0	
18.	Custom clearance at Kolkata/Haldia port	India	2.0	1.0
19.	Loading cargo on vessel at Kolkata/Haldia port	India	3.0	1.0
20.	Preparation of bank document	Nepal	1.0	0.5
21.	Pay	Third country	1.0	1.0
		<b>Total</b>	<b>26</b>	<b>17.5 (33% improvement)</b>

**Table 7.6 Actual vs. Target Time involved in the Trade of CSBO in Corridor 3**

r. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1.	Buy	Nepal	1.0	1.0
2.	Negotiate trade term	Nepal	1.0	
3.	Receive contract	Nepal	1.0	1.0
4.	Exchange contract	Nepal	1.0	
5.	Request proforma invoice	Nepal	1.0	1.0
6.	Received proforma invoice	Nepal	1.0	
7.	Open L/C account	Nepal	1.0	0.5
8.	Obtain approval from QFTQC	Nepal	1.0	1.0
9.	Receive shipment notice	Nepal	1.0	1.0
10.	Collect and prepare required document	Nepal	1.0	1.0
11.	Appoint C&F agent	Nepal	2.0	1.0
12.	Handing over document to C&F agent	Nepal	2.0	
13.	Custom clearance at Kolkata port	India	2.0	1.0
14.	Arrange transportation from Kolkata port to Nepal	India	3.0	3.0
15.	Move cargo towards importer's border at Birgunj	India	3.0	
16.	Custom clearance at Raxaul	India	3.0	
17.	Customs clearance at importer's border	Nepal	1.0	0.5
18.	Pay	Nepal	1.0	1.0
<b>Total</b>			<b>18</b>	<b>13</b>
				<b>(28% improvement)</b>

Achieving such improvements requires removal of bottlenecks, both physical and non-physical, along SASEC corridors. Tables 7.7 to 7.9 provide a summary of the analysis of each corridor of:

- bottleneck that needs intervention
- recommendation to remove the bottlenecks
- list of implementing authority and
- benefits and risks involved



**Table 7.7 Recommendations for Trade Facilitation Improvement in Corridor 1  
(Kakarvita-Panitanki-Phulbari-Banglabandha)**

<b>Sr. No.</b>	<b>Bottleneck/Barrier</b>	<b>Recommendation</b>	<b>Implementing Authority</b>	<b>Benefit and Risk Involved</b>
1.	Bad road conditions in Kakarvita to Phulbari section of the corridors	<ul style="list-style-type: none"> <li>• Improve road condition</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• It helps smooth and speedy flow of goods but involves big budget, and also not very important for India.</li> </ul>
2.	Congestion in Panitanki custom	<ul style="list-style-type: none"> <li>• Expansion of custom area with parking</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Involves big budget</li> <li>• Difficulty in land acquisition</li> </ul>
3.	Absence of competent decision making officer in Panitanki and Phulbari customs	<ul style="list-style-type: none"> <li>• Depute high level officer in Panitanki and Phulbari customs or delegate requisite power to current officer</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Avoids delay in decision making but increases cost of the Panitanki custom office</li> <li>• Volume of transaction is not big enough.</li> </ul>
4.	Inadequate infrastructure facilities in Phulbari custom	<ul style="list-style-type: none"> <li>• Develop border infrastructure such as warehousing facilities, parking space, scanner, banks, etc.</li> <li>• Improve approach road</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Faster dwell time, reduces transaction cost and time</li> <li>• Involves big budget</li> <li>• Problem of cost recovery</li> </ul>
5.	Restriction on the movement of Nepali truck beyond Banglabandha	<ul style="list-style-type: none"> <li>• Implement policy to allow Nepali trucks loaded with export cargo to move to final destination in Bangladesh within specified time period</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• It avoids transshipment, but domestic carriers in Bangladesh may get threat.</li> </ul>
6.	Restriction to enter the Nepali exporter to Banglabandha with cargo	<ul style="list-style-type: none"> <li>• Allow multiple entry visa on arrival</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• This will help enhancing flow of goods and human traffic in the corridor but needs effective passport control.</li> </ul>
7.	Shortages of skill manpower and equipment in Kakarvita custom	<ul style="list-style-type: none"> <li>• Develop skill manpower</li> <li>• Keep provision of required equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>• Department of Custom is planning to implement e-custom. Therefore, capacity building of human resource is an important component.</li> <li>• This also involves a big budget, and recovery of cost may be a problem.</li> </ul>
8.	Custom related offices are scattered outside the	<ul style="list-style-type: none"> <li>• Confine all related offices within ICD</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces custom clearance time but</li> </ul>

	Kakarvita ICD	compound		requires coordination among related ministries
9.	Inadequate infrastructure facilities in Banglabandha custom	<ul style="list-style-type: none"> <li>• Add infrastructure facilities; such as, warehousing, parking space, scanner, banks, etc</li> <li>• Develop residential space for officers</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces transaction cost and time</li> <li>• Involves investment</li> <li>• Political disturbances</li> </ul>
10.	Inadequate automation of cargo clearance at Banglabandha custom station	<ul style="list-style-type: none"> <li>• Add ICT facilities in line with Chittagong Customs House project.</li> <li>• Training and capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bangladesh</li> <li>• Private sector</li> <li>• Industry associations</li> </ul>	<ul style="list-style-type: none"> <li>• Faster cargo handling</li> <li>• Involves investment and technical resources</li> <li>• Political disturbances</li> </ul>

**Table 7.8 Recommendations for Trade Facilitation Improvement in Corridor 2  
(Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari)**

<b>Sr. No.</b>	<b>Bottleneck/Barrier</b>	<b>Recommendation</b>	<b>Implementing Authority</b>	<b>Benefit and Risk Involved</b>
1.	Inability of a vehicle move from Bangladesh to deliver exports to Bhutan	<ul style="list-style-type: none"> <li>• Adopt proposed SAARC Agreement on Motor Vehicles</li> <li>• Conclude bilateral/subregional Transport Agreement</li> <li>• Political commitment to conclude the Agreement.</li> </ul>	<ul style="list-style-type: none"> <li>• Governments of the SASEC countries</li> </ul>	<ul style="list-style-type: none"> <li>• Improves competitiveness, reduces transport cost and time, generates trade, and builds production networks</li> <li>• Uncertain political environment in some SASEC countries</li> </ul>
2.	Poor road condition of road	<ul style="list-style-type: none"> <li>• Improve road surface, especially the section from Hasimara to Birpara, and Dhupguri to Mainaguri, the turn-off point on NH 31 (52 km)</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Faster travel time</li> <li>• ADB willing to finance the project</li> <li>• Land acquisition risk</li> </ul>
3.	Poor customs facilities in Jaigaon, Changrabandha, and Burimari	<ul style="list-style-type: none"> <li>• Construct a new customs office for Jaigaon with parking &amp; warehousing, and provide office equipment</li> <li>• Improve approach road, particularly at Changrabandha</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• Improve trade condition by reducing transaction time and security</li> <li>• Lack of willingness in Government of India to change present conditions</li> <li>• Insufficient funds</li> </ul>
4.	Slow payments	<ul style="list-style-type: none"> <li>• Negotiate faster payment mechanism between Bangladesh and Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces transaction time, improves trade competitiveness and removes informal transaction</li> <li>• Respective banks agreeing to act may be difficult in present situation</li> <li>• Political uncertainty</li> </ul>
5.	Bhutanese traders unfamiliar with payment by L/C	<ul style="list-style-type: none"> <li>• Train Bhutanese traders on use of L/C</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Industry associations</li> <li>• Private sector</li> </ul>	<ul style="list-style-type: none"> <li>• Improve trade competitiveness</li> <li>• Capacity building of human resources</li> <li>• Requires funding</li> </ul>
6.	Poor coordination among Bhutanese agencies	<ul style="list-style-type: none"> <li>• Constitute a coordination mechanism at the departmental and field levels</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Industry associations</li> <li>• Private sector</li> </ul>	<ul style="list-style-type: none"> <li>• Rise in trade environment and development of trade capacity</li> <li>• Bureaucratic inertia for change</li> </ul>
7.	Delays due to use of paper-based permits and clearances of exports and imports	<ul style="list-style-type: none"> <li>• Change over to use of ICT and adopt a 'Single Window' for clearance of export and import</li> <li>• Political leadership and</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces transaction time and cost</li> <li>• Needs external technical and financial support</li> </ul>

		administrative support		
8.	Heavy documentations for clearance of exports and imports, both at national and regional levels	<ul style="list-style-type: none"> <li>• Review present documents in use, reduce the number, where possible, and harmonize the documentary standard</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Governments of SASEC countries</li> </ul>	<ul style="list-style-type: none"> <li>• Improves both national and regional competitiveness of goods</li> <li>• Lack of will to coordinate and change of existing procedures</li> <li>• Resource constraints</li> </ul>
9.	Lack of equipment and machinery with RRCO	<ul style="list-style-type: none"> <li>• Provide basic machinery and equipment to handle export and import</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Faster cargo handling, leading to reduction of dwell time</li> <li>• Require funds and technical training</li> </ul>
10.	Inadequate staff for export clearance	<ul style="list-style-type: none"> <li>• Increase staff in RRCO</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Quicker clearances of goods</li> <li>• Approval of staff strength by RCSC, and availability of budget</li> </ul>
11.	Difficulties for Bangladesh traders to visit Bhutan by land for business negotiations	<ul style="list-style-type: none"> <li>• Extend SAARC Visa Exemption Scheme to those traders or on arrival visa at both India and Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• SAARC Secretariat</li> <li>• Government of Bhutan</li> <li>• Government of India</li> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• Creates for more trade opportunities and improves trade environment</li> <li>• Political will to expand coverage under Scheme</li> <li>• Risk of abuse of facility</li> </ul>
12.	Redundancies in procedure at BCCI	<ul style="list-style-type: none"> <li>• Remove the need for obtaining a token number/registration for export of orange</li> <li>• Introduce electronic submission or e-filling of documents</li> </ul>	<ul style="list-style-type: none"> <li>• Industry association (BCCI)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces transaction time</li> <li>• Financial sustainability of BCCI</li> <li>• Lack of cooperation from Bhutan government in sharing trade data with BCCI</li> </ul>
13.	High cost of membership fee in BCCI and BEA	<ul style="list-style-type: none"> <li>• Reduce these fees and make it exporters to pay either one</li> <li>• Introduce electronic submission or e-filling of documents</li> </ul>	<ul style="list-style-type: none"> <li>• Industry association (BCCI)</li> <li>• Government of Bhutan (BEA)</li> </ul>	<ul style="list-style-type: none"> <li>• Improves price advantages</li> <li>• Financial sustainability of BCCI and BEA, and their willingness to reduce and rationalize fees</li> </ul>
14.	Delays in obtaining labour and work permits	<ul style="list-style-type: none"> <li>• Delegate authority for approval to regional labour and immigration offices at Phuentsholing</li> <li>• Introduce electronic submission or e-filling of documents</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Faster clearances</li> <li>• Two departments unwilling to delegate authority to their regional head</li> </ul>
15.	Irrelevance of Non-Radio Active Certificate and Fit for Human Consumption Certificate	<ul style="list-style-type: none"> <li>• Withdraw the need for obtaining the two certificates</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Government of Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>• Improves competitiveness and market access</li> <li>• Willingness of Government of Bangladesh to withdraw</li> <li>• No consumer pressure in Bangladesh to retain</li> </ul>

16.	Import House Registration is a burden	<ul style="list-style-type: none"> <li>• Withdraw the requirement</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> </ul>	<ul style="list-style-type: none"> <li>• Faster clearance of goods</li> <li>• Government willingness to dispense with it.</li> </ul>
17.	Unnecessary need for Bhutanese customs inspector to travel to Burimari/Changrabanda to clear imports causes delays	<ul style="list-style-type: none"> <li>• Appoint agents in Burimari and Changrabanda to perform the function of the Bhutanese customs inspector, or post a Bhutanese Customs Inspector at Burimari</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce transaction time and cost</li> <li>• Readiness on the part of stakeholders to change current practice</li> </ul>
18.	Lack of border infrastructure at Phuentsholing	<ul style="list-style-type: none"> <li>• Development of a mini dry port at Phuentsholing</li> <li>• Setting-up a second international gate at Phuentsholing</li> <li>• Construction of a bypass road from Phuentsholing to Pasakha</li> <li>• Provision of equipment for RRCO &amp; opening of a new road from Bolan Chaupatti (India) to Pasakha along with a land customs station</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bhutan</li> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• Trade creation and trade capacity</li> <li>• Political differences</li> <li>• Lack of cooperation from one of the major parties involved</li> <li>• Problems of coordination among stakeholders</li> </ul>
19.	Inadequate automation of cargo clearance at Burimari custom stations	<ul style="list-style-type: none"> <li>• Add ICT facilities in line with Chittagong Customs House project.</li> <li>• Training and capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Bangladesh</li> <li>• Private sector</li> <li>• Industry associations</li> </ul>	<ul style="list-style-type: none"> <li>• Faster cargo handling</li> <li>• Involves investment and technical resources</li> <li>• Political disturbances</li> </ul>

**Table 7.9 Recommendations for Trade Facilitation Improvement in Corridor 3  
(Kathmandu-Birgunj-Raxaul-Kolkata)**

<b>Sr. No.</b>	<b>Bottleneck/Barrier</b>	<b>Recommendation</b>	<b>Implementing Authority</b>	<b>Benefit and Risk Involved</b>
1.	Congestion in Birgunj Custom	<ul style="list-style-type: none"> <li>Expedite on-going project of building Integrated Check Post (ICP), both at Birgunj and Raxaul.</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It reduces transaction time.</li> <li>It is a big project, requires investment, and may take long time to complete.</li> </ul>
2.	Bad road condition and congestion within Birgunj city and further to Raxaul custom	<ul style="list-style-type: none"> <li>Expand and improve road condition</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It makes flow of goods smooth and fast.</li> <li>It requires big budget.</li> </ul>
3.	Difference in working time between Birgunj and Raxaul customs	<ul style="list-style-type: none"> <li>Harmonize working time</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> <li>Government of India</li> </ul>	<ul style="list-style-type: none"> <li>It reduces crowding in custom complex.</li> <li>It requires inter-governmental coordination between India and Nepal.</li> </ul>
4.	Shortage of trailers	<ul style="list-style-type: none"> <li>Increase number of trailers</li> </ul>	<ul style="list-style-type: none"> <li>Private sector (transport companies)</li> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It reduces cost of demurrage currently being paid by the traders.</li> <li>Private sector may not be interested to invest in this sector. They need to be encouraged.</li> </ul>
5.	Inadequate skill manpower in Birgunj custom	<ul style="list-style-type: none"> <li>Provide training for skill development</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It increases efficiency of custom.</li> <li>It requires additional budget.</li> </ul>
6.	Scattered quarantine offices in Birgunj	<ul style="list-style-type: none"> <li>Establish quarantine offices within custom complex, or connect it with customs electronically</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It reduces clearance time.</li> <li>It requires enough budget and coordination among a number of government agencies.</li> </ul>
7.	Inadequate modern equipment like X-ray machine in Birgunj, ICD Birgunj and TIA customs	<ul style="list-style-type: none"> <li>Increase equipment facilities</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It makes physical examination easy and fast.</li> <li>It requires additional budget.</li> <li>Equipments may not be used in absence of skilled man power</li> </ul>
8.	Double burden of COO and GSP	<ul style="list-style-type: none"> <li>Waive COO requirement where GSP is required</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It reduces trading cost</li> <li>It will be difficult to implement in absence of consensus with private sector trade associations like FNCCI.</li> </ul>
9.	High transport cost between Kathmandu and Birgunj	<ul style="list-style-type: none"> <li>Expedite construction of Fast Track Road linking Kathmandu and Tarai region in Nepal</li> </ul>	<ul style="list-style-type: none"> <li>Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>It will reduce distance between Kathmandu and Tarai drastically.</li> <li>As movement of goods also becomes fast,</li> </ul>

				<p>it reduces transport cost significantly.</p> <ul style="list-style-type: none"> <li>• Government has accorded priority to this project, but its completion may be delayed due to political uncertainty.</li> </ul>
10.	Irregular supply of electricity	<ul style="list-style-type: none"> <li>• Ensure smooth power supply to run computer system and other equipment smoothly</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Nepal</li> </ul>	<ul style="list-style-type: none"> <li>• This makes custom administration efficient</li> <li>• It involves big budget.</li> </ul>
11.	Lack of testing laboratories in Birgunj and Raxaul customs	<ul style="list-style-type: none"> <li>• Establish laboratory in major customs</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Nepal</li> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• It reduces transaction time and cost for bilateral trade between India and Nepal.</li> <li>• It needs budget and competent people with technical skill</li> </ul>
12.	Lengthy travel time between Raxaul and Kolkata/Haldia port by road	<ul style="list-style-type: none"> <li>• Ensure on-time travel of Nepal-bound road traffic (both export and import) by introducing SOP</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> </ul>	<ul style="list-style-type: none"> <li>• It reduces travel time and cost, and improves competitiveness of goods.</li> <li>• It needs coordination with state governments.</li> <li>• It involves investment for maintenance of road and related infrastructure.</li> </ul>
13.	Lack of rolling stock at Birgunj ICD	<ul style="list-style-type: none"> <li>• Make available railway engine and wagon</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Nepal</li> <li>• Private sector</li> </ul>	<ul style="list-style-type: none"> <li>• It reduces transaction time between Birgunj and Raxaul and Kolkata/Haldia port.</li> <li>• It involves investment, both from government and private sector.</li> </ul>
14.	Lengthy customs operation at Kolkata/Haldia port, and longer dwell time at Kolkata/Haldia port	<ul style="list-style-type: none"> <li>• Fast track clearance of Nepal cargo</li> <li>• Introduce electronic submission of CTD, link customs in Nepal and India (Raxaul and Kolkata and Haldia ports), handle documents electronically, and scanner for container</li> </ul>	<ul style="list-style-type: none"> <li>• Government of India</li> <li>• Government of Nepal</li> <li>• Private sector</li> </ul>	<ul style="list-style-type: none"> <li>• Improve transaction time and cost.</li> <li>• Reduces transit time</li> <li>• Involves investment, needs capacity building, etc.</li> <li>• Political uncertainty in Nepal could be a major risk</li> </ul>

**Table 7.10 Development of Border Infrastructure at SASEC Corridors**

Banking & finance	<ul style="list-style-type: none"> <li>• Setting-up bank in Panitanki and Phulbari (India)</li> </ul>
Testing lab and equipment	<ul style="list-style-type: none"> <li>• Setting-up testing laboratory / facilities at Phuentsholing</li> <li>• X-ray machines in all the LCSs</li> </ul>
Warehouse and parking	<ul style="list-style-type: none"> <li>• Add parking spaces and warehouses in Panitanki (India), Jaigaon (India), Phuentsholing (Bhutan), Changrabandha (India), Birganj (Nepal), Raxaul (India), Phulbari (India), etc.</li> </ul>
Cargo handling	<ul style="list-style-type: none"> <li>• Phuentsholing needs cranes, loaders, forklifts and scanning machines, etc.</li> <li>• Birgunj need modern handling equipment</li> <li>• Changrabanda and Jaigaon need office and handling equipment.</li> <li>• Birganj ICD needs modern handling equipment</li> </ul>
Approach road	<ul style="list-style-type: none"> <li>• Road to Kakarvitta from Panitanki and Raxaul to Birgunj congested and narrow. Need to be improved – either separate bypass or underpass</li> <li>• The road condition is not good between Phuentsholing and Hasimara (18 km) and Birpara and Dhupguri (25 km) in India. Development and maintenance of road is needed.</li> </ul>
Service facilities	<ul style="list-style-type: none"> <li>• All border posts urgently need addition of service facilities in terms of hotel, Internet, etc. to operate as 24x7.</li> </ul>
Electricity	<ul style="list-style-type: none"> <li>• All the border facilities face frequent power cut. Uninterrupted supply of electricity is essential to have the port work 24x7. Captive power facility may be set-up.</li> </ul>
Rolling stocks and railway service	<ul style="list-style-type: none"> <li>• Increase number of trailers in both Raxaul and Birgunj</li> <li>• Make available adequate number of railway engine at Birgunj ICD</li> </ul>



**Table 7.11 Proposed SASEC Trade Facilitation Policy Framework**

<b>Sr. No.</b>	<b>Title</b>	<b>Issue</b>	<b>Policy suggestions</b>
1.	Procedure	Procedural simplification	<ul style="list-style-type: none"> <li>• Minimise physical inspection except special cases (e.g. security), using risk management techniques (RMS)</li> <li>• Permits and licences online only and eliminate fees</li> <li>• Convergence and build common standards</li> <li>• Accept to SASEC transit, 24x7 Customs, etc.</li> </ul>
2.	Documentary	Harmonisation of documents and introduction electronic submission of documents	<ul style="list-style-type: none"> <li>• Harmonize Customs &amp; other trade processes, data, etc.</li> <li>• Phase-out manual process and move towards electronic system</li> <li>• Acceptance of electronic signature in trade across borders</li> </ul>
3.	Transparency	Transparency of trade facilitation measures	<ul style="list-style-type: none"> <li>• National and sub-regional (SASEC) TF performance monitoring system</li> <li>• Regular and timely publication of all border measures</li> <li>• Payment through electronically</li> </ul>
4.	Infrastructure	Development of infrastructure	<ul style="list-style-type: none"> <li>• Cargo handling equipment, scanner, testing laboratory, banks, etc.</li> <li>• Improved border corridors and management</li> <li>• Faster handling of cargo at Kolkata/Haldia port</li> <li>• Capacity building and training</li> <li>• National and sub-regional single windows</li> </ul>
5.	Financing	Financing trade facilitation projects and measures	<ul style="list-style-type: none"> <li>• Availability of insurance at lower rate</li> <li>• Eliminate bank charges</li> <li>• Faster opening of L/C with bank</li> <li>• Faster post-shipment payment</li> </ul>

**Table 7.12 Proposed SASEC Trade Facilitation Projects**

<b>Government</b>	<b>Private sector</b>	<b>International Organisation</b>
<ol style="list-style-type: none"> <li>1. Development of SASEC transit system</li> <li>2. Corridor specific (and also industry specific) trade facilitation programmes</li> <li>3. Implementation of basic trade facilitation measures</li> <li>4. Monitoring the TF programmes through joint task force committee</li> <li>5. Ensure cooperation among border agencies such as security, customs, etc.</li> <li>6. Develop a dispute settlement mechanism</li> <li>7. Visa on arrival for business people trading through SASEC corridors</li> <li>8. Set-up anchor TF projects in corridors 1 or 2 (e.g. development of dry port at Phuentsholing)</li> <li>9. Capacity building and training for personnel handling trade, trade facilitation, etc.</li> <li>10. Joint customs control and corridor and border management in SASEC</li> <li>11. United cargo manifest for SASEC</li> <li>12. e-filling trade procedures and through (cross-border) bill of lading, CTD, to start with, in SASEC</li> <li>13. Development of SASEC single window</li> </ol>	<ol style="list-style-type: none"> <li>1. Full and inclusive participation of the private sector</li> <li>2. Use of modern vehicle tracking system (e.g. RFID, GPS, GPRS, etc.)</li> <li>3. Capacity building and training</li> </ol>	<ol style="list-style-type: none"> <li>1. Development of SASEC TF database and periodic analysis and dissemination</li> <li>2. Development of a comprehensive analysis tool taking TRS, BPA and TCS together (BPA+)</li> <li>3. Development of a BPA software and training</li> <li>4. Second phase BPA on other corridors / sectors in SASEC (e.g. Phuentsholing-Kolkata corridor)</li> <li>5. Training and capacity building</li> <li>6. Financing corridor projects</li> <li>7. Advisory services</li> </ol>

Recommendations resulting from the analysis are derived from the country BPA analysis and the country level consultations.

The recommendations outlined here are to assist the policymakers and trade facilitation practitioners in improving trade facilitation performance. Development of border infrastructure at SASEC corridors is crucial since it will have a strong region-wide impact on trade flow. Table 7.10 presents recommendations on border infrastructure development at SASEC corridors. It is recommended to introduce a comprehensive trade facilitation programme for the SASEC. The suggested policy framework is given in Table 7.11. To pursue the trade facilitation programme, SASEC countries have to undertake implementable projects. Table 7.12 suggests some projects for three major stakeholders, namely, government, private sector and development organisations.

To conclude, the trade facilitation measures such as the simplification, harmonisation, and automation of procedures and documents involve interagency coordination and collaboration. Their successful implementation requires not only political and governmental support in terms of both policy directives and human and financial resources, but also an in-depth understanding about existing business processes, including their related information flows, laws, rules, and regulations. Analysis of business processes involved in moving goods across borders is, therefore, a necessary exercise that must be carried out prior to implementing any other trade facilitation measure. Trade facilitation measures, in other words, cannot be applied without locating the source of problem areas, bottlenecks and redundancies. Finally, convey the necessity of trade facilitation and business process analysis through awareness-raising programmes—starting at the top. Educate both relevant government officials and the trade and transport community on the necessity of business process analysis and its potential return on investment for all stakeholders in the long run.

## ***8. Conclusions, Limitations of the Study and Future Research Agenda***

High trade facilitation and transportation cost and time are cited as having a significant impact on landlocked country's ability to effectively export. This Business Process Analysis (BPA) on major export commodities in SASEC has assessed and mapped the trade processes and procedures by three major corridors. The BPA is therefore instrumental in highlighting actual uncompetitive trade facilitation practices as well as identifying helpful suggestions in improving trade facilitation procedures and processes at the national as well as sub-regional level. It envisaged how much improvements can be made through process reengineering and development of infrastructure. Benefits are more than the costs. This is the bottom line of the study.

The outcomes of the BPA study would certainly assist SASEC countries improve the country's trade facilitation system that is supportive of their export goals. These outcomes would also help to improve trade efficiency by identifying capacity gaps in trade related agencies and private sector actors as well addressing their capacity building requirements to build a sustainable foundation for the region's transition to the Single Window.

However, the findings and conclusions of the study—including those in the individual country studies—are not beyond limitations.

Firstly, the findings are based on a limited number of product-and corridor-specific case studies. It may therefore be premature to generalise these findings to reflect all import and export procedures in SASEC. As highlighted throughout this report, the trade process and its time and cost indeed vary significantly depending on the product, origin, destination and corridor considered.

Secondly, the various business process analyses that form the basis of the study are dependent on the quality of input provided by those interviewed. Although we tried to minimise the error through stakeholders' consultation, it is likely that both the researchers and investigators might have overlooked some documents or costs involved in the process due to the repetitive and sometimes complex nature of these procedures. In fact, the research team members and their respective institutions often had difficulty gathering some of the information necessary to conduct BPA and to estimate the cost and time of export and import. As mentioned earlier, traders do not always have detailed information of specific procedures, while both intermediaries (service providers) and government agencies are often reluctant to share any information. Traders themselves are also sometime concerned about providing information for BPA because of fear of that information being used against them by a competitor or a regulatory agency.

While various efforts were made by individual country research team to cross-check or validate their results, it would have been best to validate the results through a public national

consultations co-organised with the relevant government agency or industry association, and to open to all interested public and private stakeholders. Such consultations may take place more systematically as part of future business process analyses for trade facilitation and would not only help in validating results, but also in building awareness and political will for reform. It is also worth noting that some of the difficulties associated with collecting information and holding national consultations would have probably been alleviated if the BPA studies had been conducted under the work programme of a national trade facilitation body—or the relevant agency in charge of trade—as opposed to as part of a regional research initiative.

Overall, while the study is useful in gaining an understanding of the trade facilitation situation and the need of improving regional trade processes and procedures in SASEC, it is clear that more corridor-wise studies should be undertaken.

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## **Appendix 4.1**

### **(a) Nepal's export of carpets to a third country**

	<b>Export (US\$ million)</b>	<b>Share in total export (%)</b>
1998	128.93	29.06
1999	146.27	25.41
2000	146.36	20.31
2003	41.14	6.42
2009	72.65	10.87
2010	60.61	7.76

Source: UN Comtrade

### **(b) Nepal's export of lentils to Bangladesh**

	<b>Export (US\$ million)</b>	<b>Share in total lentils' export (%)</b>
1998	7.19	54.62
1999	11.63	73.11
2000	1.034	7.11
2003	2.65	20.55
2009	44.07	60.27
2010	42.56	83.05

Source: UN Comtrade

**(c) Nepal's import of crude soya-bean oil from a third country**

<b>Year</b>	<b>Import (US\$ million)</b>
1998	14.46
1999	21.89
2000	8.72
2003	21.02
2009	96.71
2010	82.01

Source: UN Comtrade

**(d) Nepal's import of lead acid accumulator from Bangladesh**

<b>Year</b>	<b>Import(US\$ million)</b>	<b>Share in total import of lead acid accumulator (%)</b>
1999	0.034	12.048
2000	0.056	10.025
2003	0.139	12.925
2009	0.209	1.356
2010	1.561	7.777

Source: UN Comtrade

**(e) Bhutan's import of fruit juices from Bangladesh**

<b>Year</b>	<b>Import (US\$ million)</b>	<b>Share in total import of fruit juices (%)</b>
2005	0.067	6.193
2006	0.179	14.255
2007	0.613	33.162
2008	0.737	35.596
2009	0.868	41.517
2010	1.833	63.393

Source: UN Comtrade

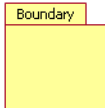



**(f) Bhutan's export of oranges to Bangladesh**

<b>Year</b>	<b>Export to India</b>	<b>Export to Bangladesh</b>
	<b>(US\$ million)</b>	
2001	0.31	2.91
2005	0.33	5.11
2011	0.46	6.57




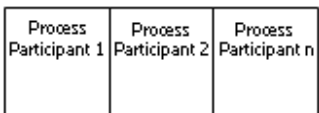


Source: UN Comtrade

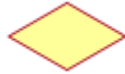



## Appendix 4.2

### (i) Use Case Notations

Notation	Description and instruction for use
	Boundary: <ul style="list-style-type: none"> <li>– Represents a process area</li> <li>– Includes the name of a subject boundary on top</li> <li>– E.g., ship</li> </ul>
	Individual: <ul style="list-style-type: none"> <li>– Represents a role that participates in a particular business process</li> <li>– Can be an individual, an organization, a department, etc.</li> <li>– Is labelled with a role-name</li> <li>– Is placed outside the subject boundary</li> <li>– E.g., Exporter or Representative, Exporter's Bank</li> </ul>
	Use Case: <ul style="list-style-type: none"> <li>– Represents a core business process</li> <li>– Is labelled with a descriptive verb-noun phrase</li> <li>– E.g., Buy, have product sampled and examined</li> </ul>
	Relationship Association: <ul style="list-style-type: none"> <li>– Links actors with the use cases (later business processes) they participate in</li> </ul>

### (ii) Activity Diagram Notations

Notation	Description and instruction for use
	Initial State <ul style="list-style-type: none"> <li>– Represents the beginning of a set of activities</li> <li>– Can only be one initial state for each activity diagram</li> </ul>
	Final Flow State <ul style="list-style-type: none"> <li>– Is used to stop the flow of activities</li> <li>– Indicates that further activities cannot be pursued within the described context</li> </ul>
	Final Activity State <ul style="list-style-type: none"> <li>– Is used to indicate the completion of the business process</li> </ul>
	Swimlane <ul style="list-style-type: none"> <li>– Is used to break up individual actions to individuals/ agencies that are responsible for executing their actions</li> <li>– Is labelled with the name of the responsible individual, organization, or department</li> <li>– E.g., Exporter or Representative, Department of Fisheries</li> </ul>
	Activity <ul style="list-style-type: none"> <li>– Represents a non-decomposable piece of behaviour</li> <li>– Is labelled with a name that 1) begins with a verb and ends with a noun; and 2) is short yet contains enough information for readers to comprehend</li> <li>– E.g., Prepare information needed for export permit application, Verify submitted information, Issue Export Permit, Collect R.9</li> </ul>
	Object <ul style="list-style-type: none"> <li>– Represents a document or information that flows from one activity to another activity</li> <li>– Is labelled with a name of a document</li> <li>– E.g., Application Form for Export Animals/Animal Remains Through Thailand (R. 1/1), Commercial Invoice, Packing List, Export Permit (R. 9)</li> </ul>

Notation	Description and instruction for use
	<p>Decision</p> <ul style="list-style-type: none"> <li>– Represented by a diamond</li> <li>– Refers to the point where a decision, depending on the outcome of a specific prior activity, has to be made</li> <li>– Has multiple transition lines coming out of a decision point and connecting to different activities</li> <li>– Label each transition line that comes out of 'Decision' with the condition; such as, correct or incorrect</li> </ul>
	<p>Transition line</p> <ul style="list-style-type: none"> <li>– Indicates a sequential flow of activities and information flows in an activity diagram</li> </ul>
	<p>Fork (Splitting of Control)</p> <ul style="list-style-type: none"> <li>– Is used to visualize a set of parallel activities or concurrent flow of activities</li> </ul>
	<p>Join (Synchronisation of Control)</p> <ul style="list-style-type: none"> <li>– Is used to indicate the termination of a set of parallel activities or concurrent flow of activities</li> </ul>

Source: UN (2012)

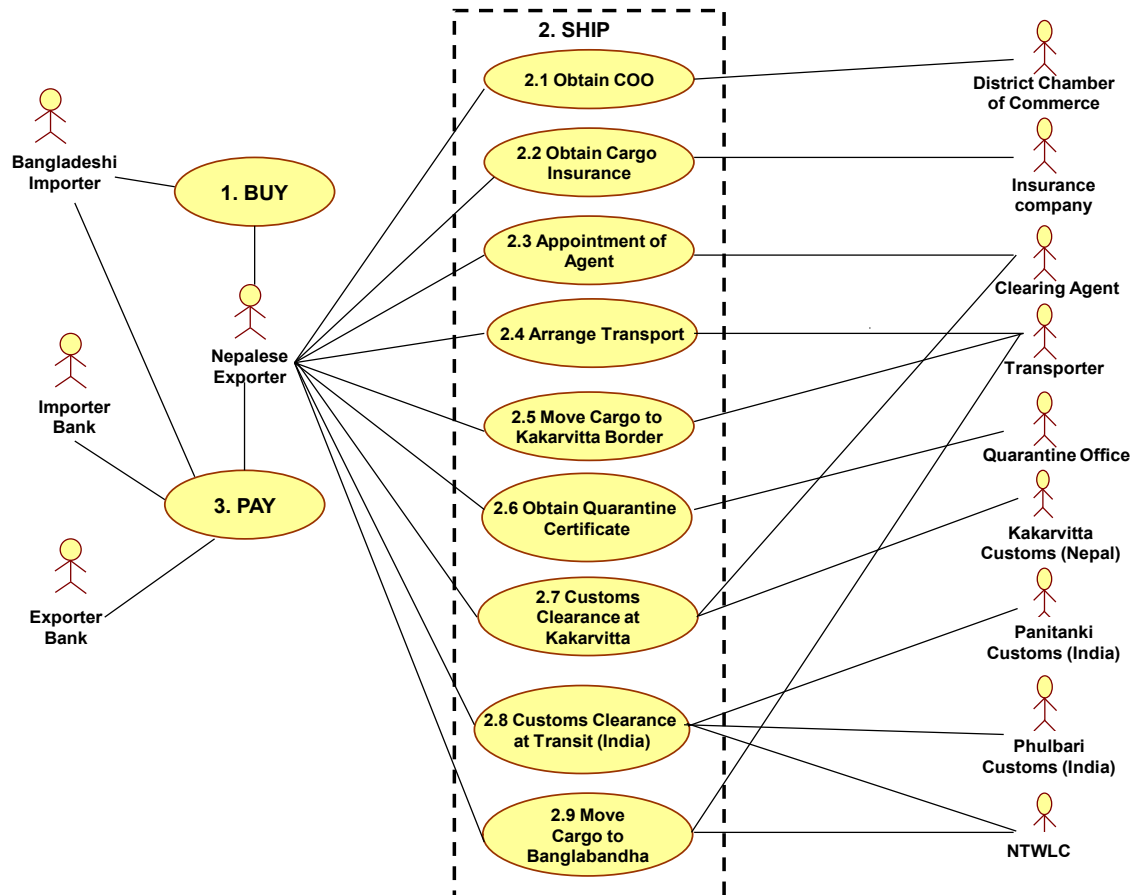
## **Appendix 5.1 List of Documents Required**

### **(a) Export of Lentil from Nepal to Bangladesh**

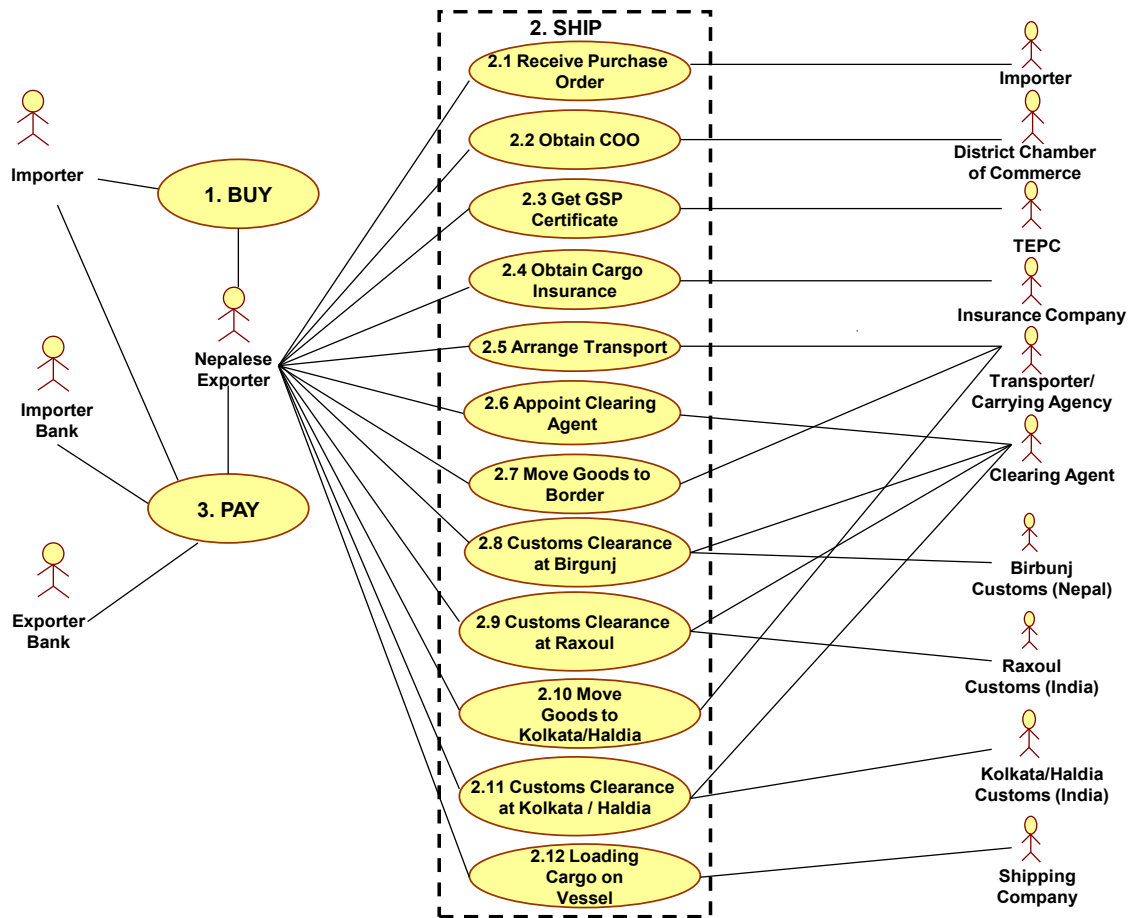
<b>Sr. No.</b>	<b>Type</b>	<b>No of copies</b>	<b>How document is issued</b>	<b>Where to submit</b>
1.	Application	3	Manual	Chamber of Commerce, Quarantine office and bank
2.	Industry registration certificate	3	Manual	Chamber of Commerce, Kakarvitta custom and bank
3.	PAN/VAT certificate	4	Manual	Chamber of Commerce, Kakarvitta custom and bank
4.	Performa invoice	1	Manual	Quarantine office
5.	Contract document	3	Manual	Chamber of Commerce, Transport company, Kakarvitta customs
6.	L/C account	2	Manual	Insurance company, Kakarvitta customs
7.	Quarantine certificate	2	Manual	Kakarvitta custom and Panitanki customs
8.	COO	3	Manual	Quarantine office, Kakarvitta customs and bank
9.	Road Consignment Note	4	Manual	Bank, Kakarvitta custom, Panitanki customs and Phulbari custom
10.	Insurance policy	1	Manual	Bank
11.	Packing list	4	Manual	Bank, Kakarvitta customs, Insurance company and Transport company
12.	Commercial invoice	4	Manual	Insurance company, Transport company, Kakarvitta customs and bank
15.	CHA Appointment letter	3	Manual	Kakarvitta custom, Panitanki customs and Phulbari custom
16.	Custom Clearance form	1	Electronic /Manual	Kakarvitta customs
17.	Foreign Exchange declaration form	1	Manual	Kakarvitta customs
18.	CTD	3	Manual	Kakarvitta customs, Panitanki customs and Phulbari custom
19.	Bill of Exchange	1	Manual	Bank
20.	Transport contract	1	Manual	Insurance company
Total		44		

## Appendix 5.2 UML Case Diagrams

### (a) Nepal's Export of Lentils to Bangladesh

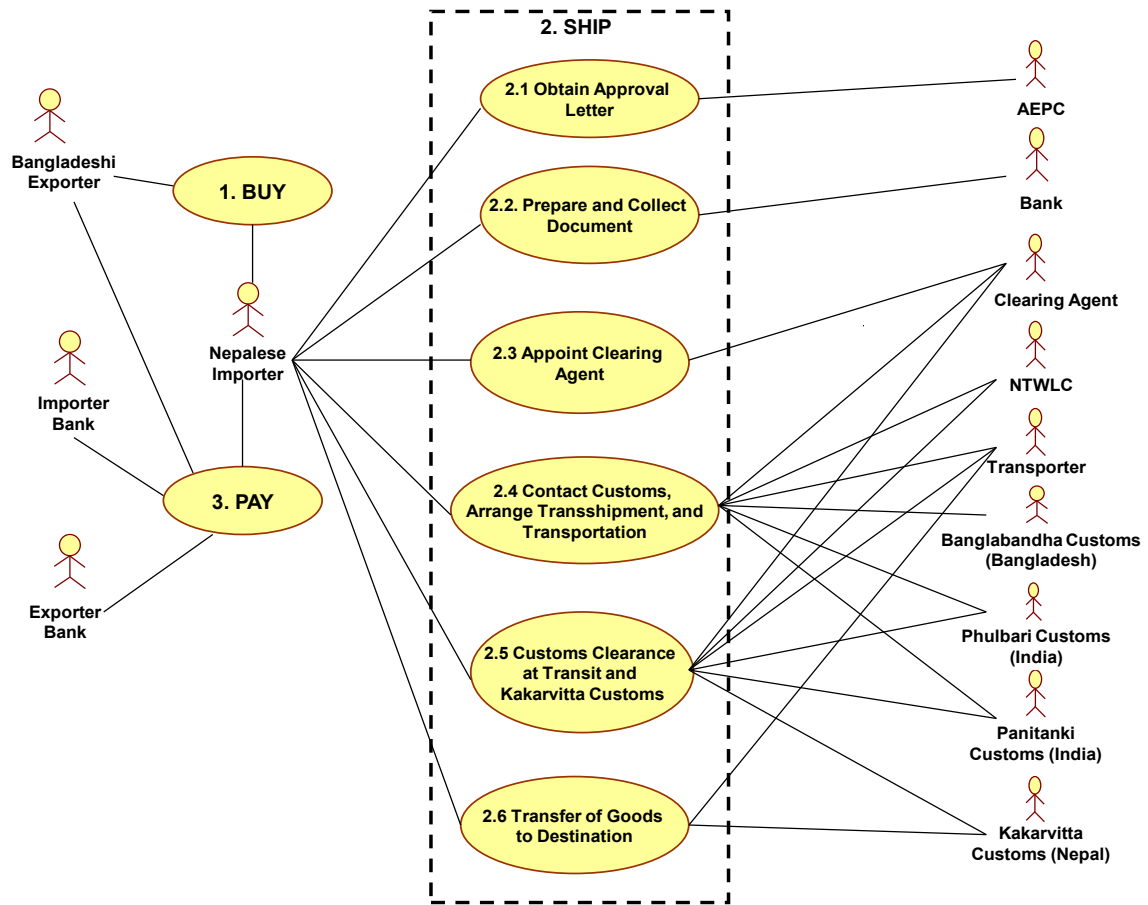


## (b) Nepal's Export of Carpets to a Third Country

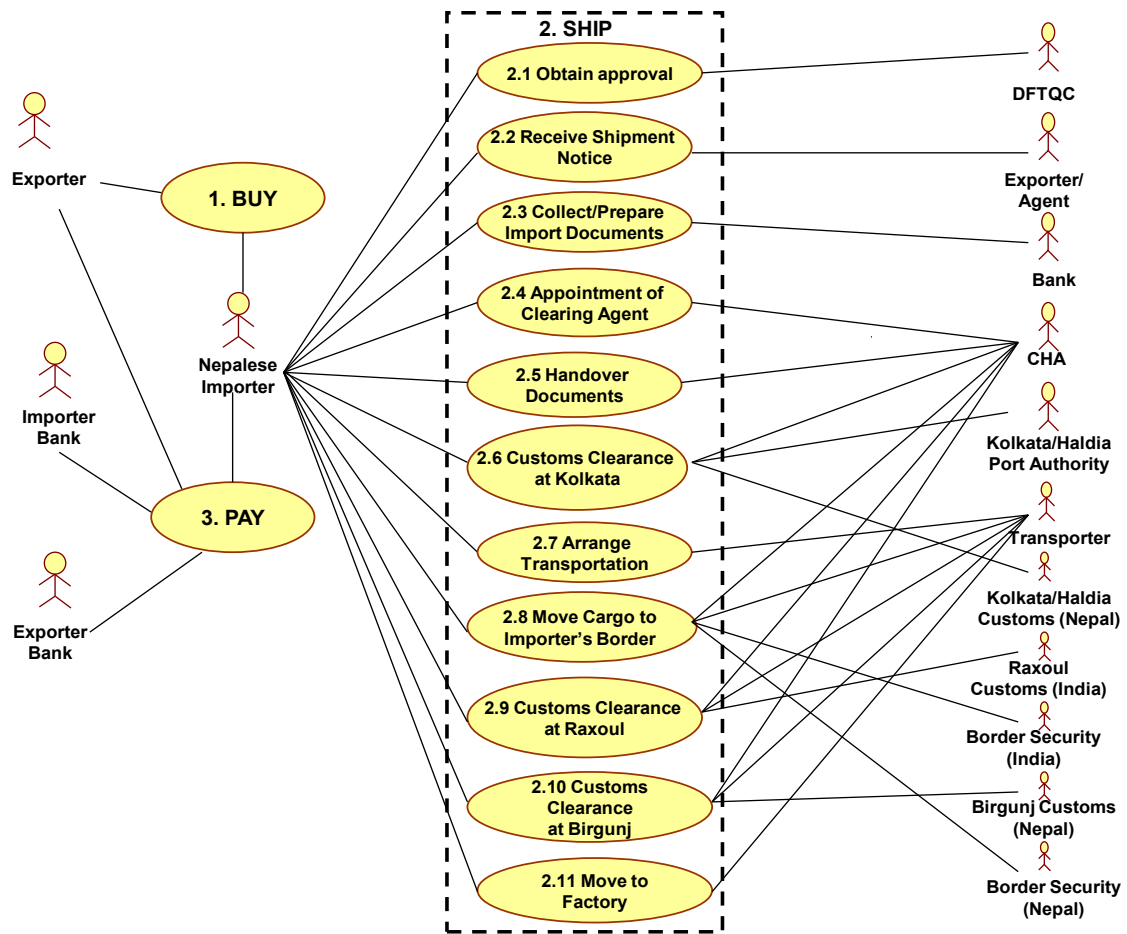




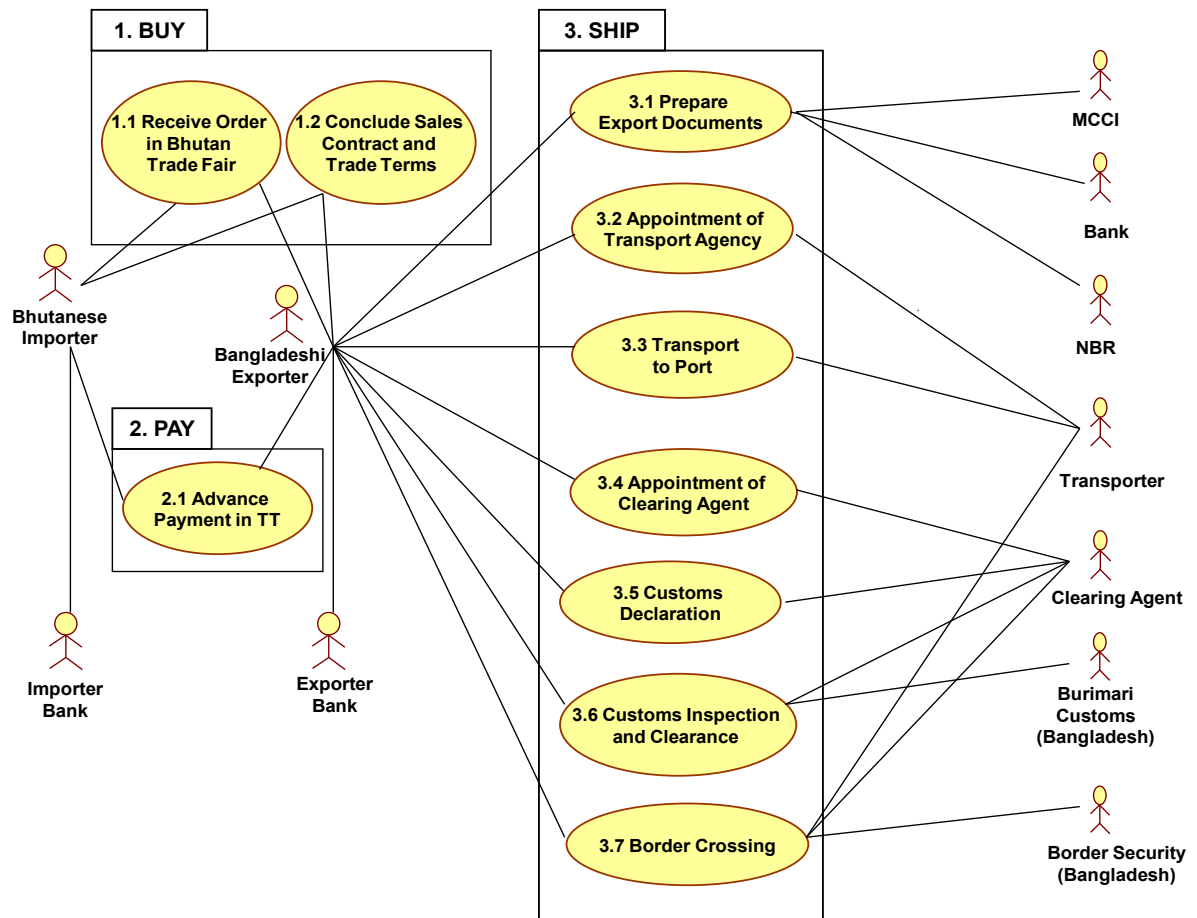
### (c) Nepal's Import of LAA from Bangladesh



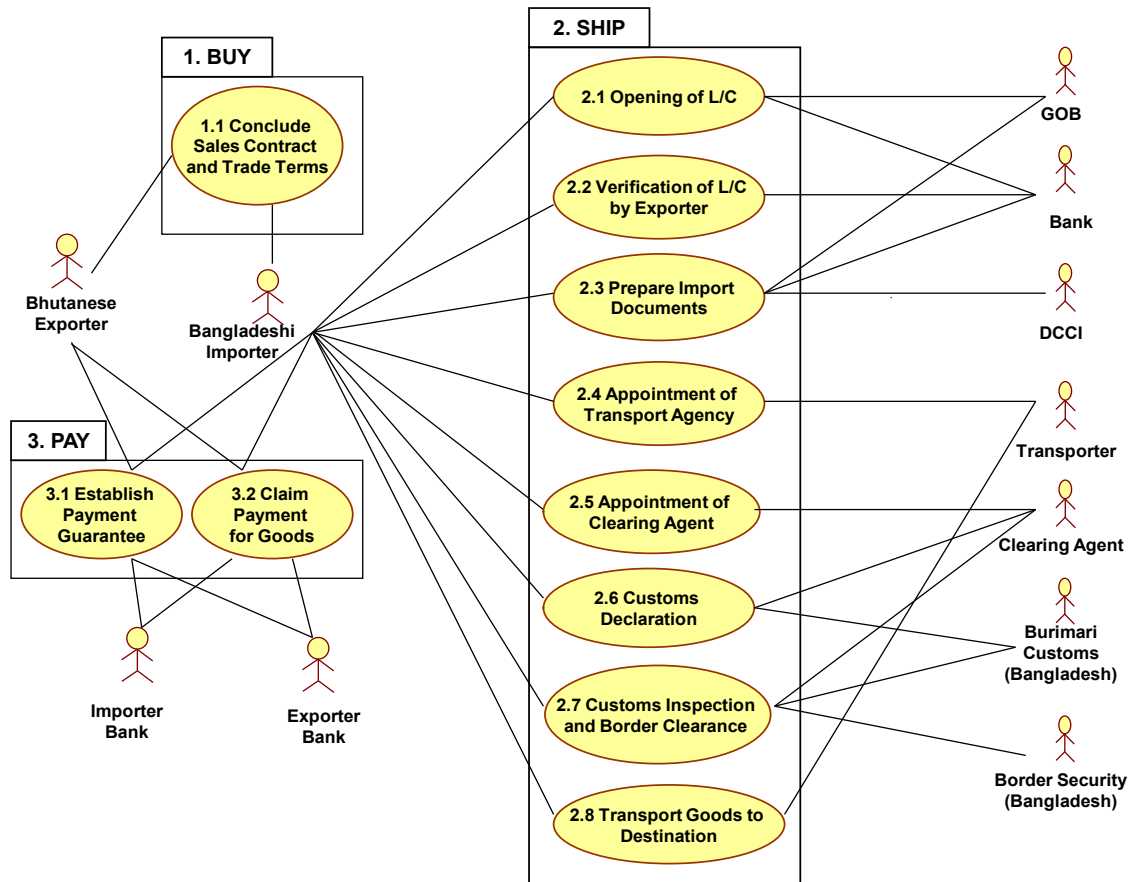
### (d) Nepal's Import of CSBO from a Third Country



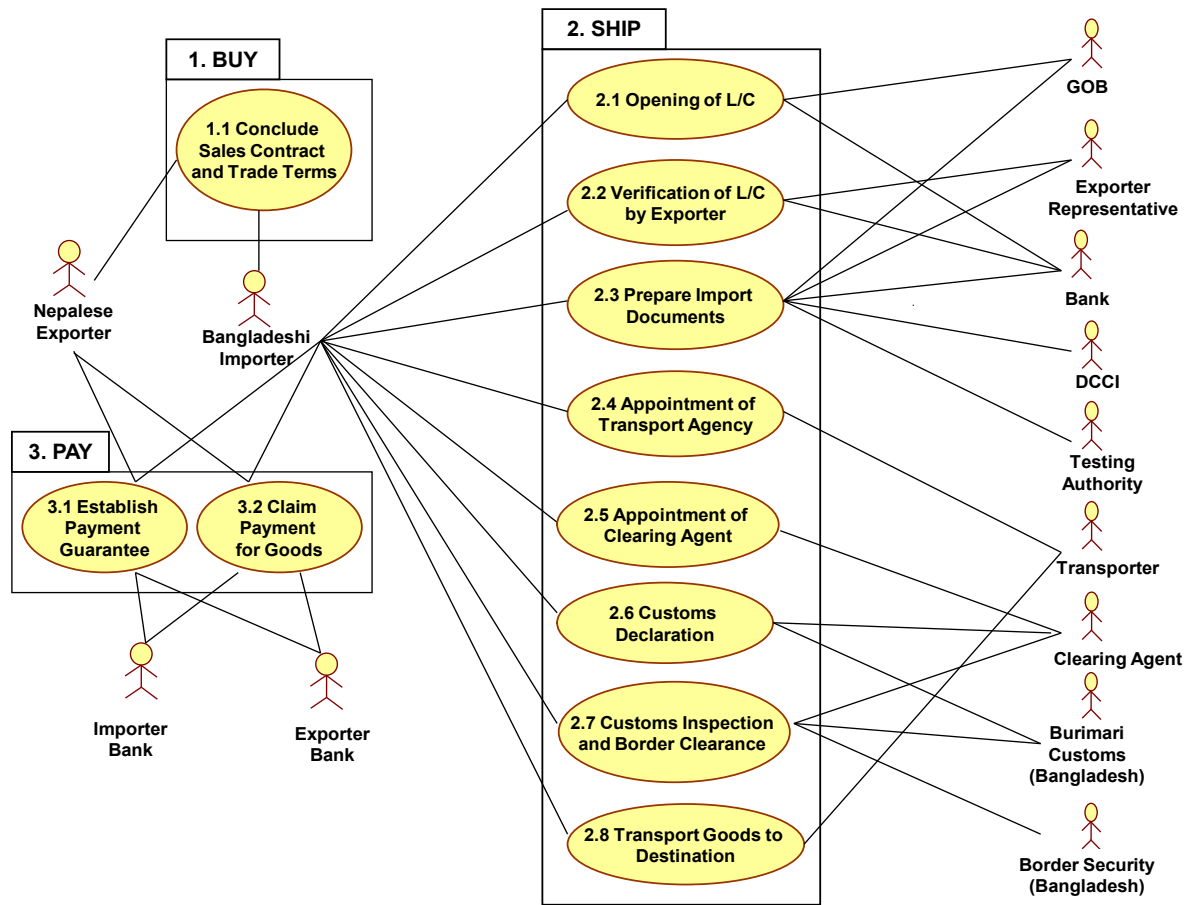
### (e) Bangladesh's Export of Fruit Juice to Bhutan



## (f) Bangladesh's Import of Fresh Oranges from Bhutan



### (g) Bangladesh's Import of Lentils from Nepal



### (h) Bangladesh's Export of LAA to Nepal

