Report



Disentangling transit costs and time in South Asia

Lessons from firms in Bhutan and Nepal importing through Kolkata and Haldia ports

Prabir De

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Abbreviations

Abbreviation	Description
BBIN	Bhutan, Bangladesh, India and Nepal
CIF	Cost, insurance and freight
СНА	Customs House Agent
CTD	Customs Transit Declaration
GDP	Gross domestic product
INR	Indian Rupees
L/C	Letter of credit
LCS	Land customs station
LLDC	Landlocked least developed country
PPP	Purchasing power parity
SAP	System Application and Product
TEU	Twenty-foot Equivalent Units

1 Introduction

The geographical disadvantages faced by landlocked countries are widely recognised. A lack of territorial access to seaports, and the resulting marginalisation from major international markets, significantly raises the transit costs faced by landlocked countries (Limão and Venables, 1999; Chowdury and Erdenebileg, 2006). These problems are more pronounced in landlocked least developed countries (LLDCs), which tend to suffer from a lack of effective transit options. As a result, exporters and importers face substantially inflated transportation costs in these countries. This serves to lower the effective participation of LLDCs in international trade and contributes to widespread poverty.

As LLDCs in South Asia, Bhutan and Nepal face these geographical disadvantages. Both countries depend heavily on transit through neighbouring India in order to access regional and international markets. Exports originating from Bhutan and Nepal must be transported to the nearest ports of Kolkata and Haldia, located on the east coast of India, in order to be shipped overseas. Similarly, imported goods from overseas markets must enter these two gateway ports before being transported to their final destinations in Bhutan or Nepal. As a result, the efficiency of trade logistics services at the ports of Kolkata and Haldia, together with the costs associated with transporting goods along the transit corridors between these ports and Bhutan and Nepal, has a major influence on the trade competiveness of these two countries (ADB-ESCAP, 2014).

Both Bhutan and Nepal face the added disadvantage that the two ports are located a significant distance away. This means that even though there are dedicated transport routes from Bhutan and Nepal to these ports, the cost of transporting goods along these corridors is substantial. The trade-reducing effects of the high transport costs faced by these two countries are considerable. The burden of high transportation costs limits the range of potential exports and markets in which goods can be competitively and profitably traded, meaning that both Bhutan and Nepal have comparatively small export baskets and face considerable difficulty accessing external markets for their exports (Lakshmanan et al., 2001; Uprety, 2006; Mitra et al., 2014). On the importing side, the high transit costs raise the price of imports in these two countries, which limits the ability of firms to access imported intermediate inputs and raises the cost associated with producing final goods. This, in turn, has adverse implications for firm productivity (De, 2009).

Despite these high transportation costs, both Bhutan and Nepal boast significant potential in the form of unrealised trade (De, 2012). Much of this could be unlocked through improved trade facilitation and connectivity (ADB, 2012). In many different settings, reductions in the transaction costs associated with trade and the time taken to trade have been found to be important factors in easing the economic isolation of specific regions (World Bank, 2014). The potential for reductions in transit costs appears to be substantial in the cases of Bhutan and Nepal where several avoidable bottlenecks – including those visible at border crossings, along trade corridors and at the transit ports of Kolkata and Haldia – hamper the development of a more efficient transit trade regime (De and Kumar, 2014).

Under the overarching research theme of the impact of regional infrastructure for trade facilitation on growth and poverty reduction, this study attempts to identify the trade barriers that impede the trade flow of Nepal and Bhutan through the gateways ports of Kolkata and Haldia in India. This case study focuses on the impact of transit regulations and agreements on the cost of services required to transit goods between the ports and Bhutan or Nepal. The primary objectives are as follows: (1) to identify trade costs (particularly those produced by administrative, transport, regulatory, financial and procedural barriers) that affect the flow of goods between the two ports and Bhutan and Nepal; and (2) to compare the cost and length of time taken to get a similar product out of the ports and on the road to the gateway importer (India) and to each of the landlocked countries (Bhutan or Nepal). Attention is given to how the two landlocked countries are affected by the cost of transit services; which trade costs vary most significantly; and how firms are affected by the cost of transit services.

The remainder of the study is structured as follows. The next section provides a brief overview of relevant trade and transit agreements between Bhutan, India and Nepal. In order to further contextualise the case study, the third section presents a comparison of economic performance indicators in these three countries, the aggregate values of transit trade in Bhutan and Nepal (through India), and performance in terms of trading across borders. The fourth section outlines the survey methodology adopted to collect primary data to inform the case study, and discusses the key characteristics of the survey data. This is followed in the fifth section by an analysis of the key survey findings, focusing on the main administrative, transport, regulatory, financial and procedural barriers impeding the flow of imports to Bhutan and Nepal through the gateway ports of Haldia and Kolkata and in transit to the two countries. The final section concludes.

2 Trade and transit agreements and procedures involving Bhutan, India and Nepal

Until recently, transit trade in eastern South Asia was not in the forefront of regional and multilateral cooperation. However, increasing trade volume and the evolution of global supply chains in recent years have forced countries in South Asia to be more open to transit trade, both regional and otherwise. Bhutan, Bangladesh, India and Nepal (BBIN) have recently signed the Motor Vehicles Agreement to facilitate subregional trade. They are also part of the World Trade Organization Trade Facilitation Agreement. Furthermore, India has signed various bilateral trade and transit agreements with Bhutan and Nepal, which have been renewed periodically. At the bilateral level, some unique developments have taken place. For example, India has allowed imported vehicles transiting India to be moved to Nepal under their own power.¹ This subsection provides a brief overview of these bilateral agreements.

2.1 Bhutan–India Agreement

Bhutan and India signed a bilateral trade agreement in 1995 that set out the broad contours for free trade between the two countries. The Protocol to the Agreement specifies bilateral trade routes (including transit) and detailed trading procedures. Interestingly, there are no references to transport, although the common understanding is that free movement of vehicles between the two countries is accommodated by the Agreement. As noted above, India provides transit to Bhutan through the Kolkata and Haldia ports located in the State of West Bengal in India.

2.2 India–Nepal Agreement

India and Nepal first signed a bilateral 'Treaty of Trade and Commerce' in 1950. In the period between the 1960s and 1980s, new treaties were signed in different forms – sometimes covering only trade and commerce, and at other times including transit as well. After the restoration of multiparty democracy in Nepal, a new Treaty was signed on 6 December 1991. The Treaty has been renewed, revised or updated a number of times since then, and the validity of the Treaty in its existing form runs until 2016. A Protocol attached to the Treaty defines the operational modalities, including the list of bilateral trade routes.

Nepal and India also signed an Agreement to Control Unauthorized Trade on 6 December 1991, which, after some revisions and renewals, exists even today. The

¹ Earlier, there was no provision under the Nepal–India Treaty of Transit allowing motor vehicles that were being imported by a third country to transit India under their own power. Such vehicles could be transported only by railway wagons and trucks or trailers after proper sealing by Indian Customs.

Agreement sets out certain procedures to control and prevent unauthorised trade between the two countries.

Similarly, India and Nepal signed a 'Treaty of Transit' on 5 January 1999, which has also been revised and renewed a number of times. Under this Treaty, India provides maritime transit, and supporting services and facilities, to Nepal at the Kolkata and Haldia ports. A Protocol attached to the Treaty of Transit specifies detailed operational modalities, including entry and exit points to and from India for Nepal's transit trade. In addition, both countries have signed a Memorandum to the Protocol that specifies the detailed procedures to be applied to imports to, and exports from, Nepal.

In addition, India and Nepal have entered into a Rail Services Agreement for operating and managing rail services for Nepal's transit trade as well as bilateral trade between the two countries. It specifies transit trade between the Kolkata or Haldia ports in India and Birgunj in Nepal via Raxaul in India, as well as between stations on Indian Railways and Birgunj via Raxaul for bilateral trade.

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

- Transit of Nepalese imports is allowed against import licences issued by the Government of Nepal and letter of credit (L/C) account opened through a commercial bank in Nepal.
- In the case of Nepalese imports, for which there is no requirement of government approval 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 furnish six copies of the CTD containing the following:
 - name of ship, rotation number and line number
 - name and address of the importer
 - number, description, marks and serial number of the packages
 - country of consignment and country of origin (if different)
 - description of goods
 - quantity of goods
 - import approval number and date
 - L/C number, date and name and address of the bank
 - route of transit
 - a declaration.
- All six copies of the CTD along with the Bill of Lading, invoice, packing list, a copy of the import approval and a copy of the L/C are presented at the Nepal Unit of Customs House, Kolkata. The data is then entered into a computer.
- After assessment and verification of documents, an appraiser issues an examination order, and the CTD number is generated by computer.
- When the Nepalese containerised cargo arrives, the customs officer at Kolkata port checks the seal of the container, which was placed by the shipping agent. If it is found intact, the customs officer allows transportation of the cargo without examination.
- If the seal on the container is found to be 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 officer conducts a selective percentage examination of the goods.
- 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 an amount equal to the difference between the market value of goods in India and their CIF (cost, insurance and freight) value will be 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, the 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 the seal is intact, the cargo is approved for onward transmission without examination.
- On arrival of the traffic-in-transit in open trucks or open railway wagons, the Indian Customs authority at the border Land Customs Station (LCS) carries out selective percentage examination.
- On arrival of the traffic-in-transit at the border LCS or border railway station, the importer presents the original copy of the 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 that he or she has received, and 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, retains it to maintain records.
- The Nepalese Customs officer sends a telex/fax/email communication on a daily basis to the Commissioner of Customs, Kolkata, giving the numbers and dates of the CTDs received that day and confirming that the goods covered by those CTDs have been received in Nepal.
- The Indian Customs Officer at the border LCS sends fax/telex/email 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.

3 Bhutan and Nepal in comparative context

Bhutan and Nepal are growing economies, but they remain heavily dependent on imports. In this respect, India is a key trade partner. For example, in 2013, the value of Nepal's exports to India totalled \$428 million, while it sourced some \$3,521 million in imports from India, accounting for 53.8% and 50.7% of the country's total exports and imports, respectively.

Table 1 shows that the contribution of exports to gross domestic product (GDP) in Bhutan increased from 29% in 2000 to 39% in 2014, while the exports-to-GDP ratio contracted by almost half in Nepal over that period. Both Bhutan and Nepal have experienced declines in absolute poverty levels. In Nepal, although the poverty headcount ratio has fallen from 77% in 2000, more than half (56%) of Nepal's population still live on under \$2 a day. Progress in alleviating poverty has been more rapid in Bhutan, where the poverty headcount ratio declined from 47% in 2000 to 15% in 2014. In 2014, Bhutan's per capita income of \$2,070 was almost five times higher than that of Nepal.

Table 1: Basic economic indicators for Bhutan and Nepal, 2000and 2014

Series Name	Bhutan	Nepal	Bhutan	Nepal
	2000	2000	2014	2014
GDP per capita (constant 2005 US\$)	991.88	289.87	2,069.85	425.67
GDP growth (annual %)	6.93	6.20	6.26	5.48
Population (million)	0.56	23.75	0.77	28.18
Surface area (sq. km)	40,077	147,180	38,394	147,180
Exports of goods and services (% of GDP)	28.98	23.28	39.02	12.14
Imports of goods and services (% of GDP)	53.48	32.43	66.60	40.30
Poverty headcount ratio at \$2 a day (purchasing power parity, PPP) (% of population)	46.94	77.30	15.15	55.95

Source: World Bank, World Development Indicators

The value of transit trade between Bhutan and Nepal (through India) and countries outside the region increased substantially between 1991 and 2014 (see Table 2). In 2014, the value of Nepal's and Bhutan's transit trade through the Kolkata and Haldia

ports totalled \$368 million and \$401 million, respectively. Nevertheless, when expressed as a share of each country's total trade, the values of both Nepal's and Bhutan's transit trade through India declined substantially between 1991 and 2014. This suggests that bilateral trade with neighbouring India is not only growing but is replacing Bhutan's and Nepal's extra-subregional transit trade.

Country	Transit through	1991	2000	2006	2014		
	-	(US\$ million)					
Nepal	India	239.73 (93.17)	411.60 (57.11)	263.37 (31.75)	367.82 (35.20)		
Bhutan	-	58.79 (93.04)	77.85 (75.80)	275.34 (66.46)	401.14 (67.70)		

Table 2: Transit trade values

Notes: Number in parentheses represent share in country's total trade.

Source: Authors' calculation based on International Monetary Fund DOTS database.

The comparison presented in Table 3 of the World Bank's *Trading Across Borders* indicators of the time and cost associated with exporting and importing a shipment of goods across borders in Bhutan, Nepal and India suggests that these processes are significantly more cumbersome in the two LLDCs. For instance, it takes over a month to export and import goods to or from Bhutan and Nepal, but just 16 days to export and 20 days to import goods in India. Furthermore, India has substantially reduced the time taken to complete these processes since 2006; while the time taken to import actually increased in Nepal between 2006 and 2015.

Table 3: Trading Across Borders indicators

Efficiency of logistical processes for exporting									
Year	Documents to	o export (r	number)	Time to e	xport (day	rs)	Cost to exp	ort (US\$ per c	ontainer)
	Bhutan	India	Nepal	Bhutan	India	Nepal	Bhutan	India	Nepal
2006	9	7	11	38	27	43	1,150.00	814.00	1,600.00
2007	9	7	11	38	27	43	1,150.00	814.00	1,600.00
2008	9	7	11	38	18	43	1,150.00	770.00	1,600.00
2009	9	7	11	38	17	41	1,210.00	895.00	1,764.00
2010	9	7	11	38	17	41	1,210.00	895.00	1,764.00
2011	9	7	11	38	17	41	2,230.00	1,005.00	1,960.00
2012	9	7	11	38	16	41	2,230.00	1,045.00	1,960.00
2013	9	7	11	38	16	41	2,230.00	1,070.00	1,975.00
2014	9	7	11	38	16	42	2,230.00	1,120.00	2,295.00
2015	9	7	11	38	16	40	2,230.00	1,120.00	2,545.00
Efficiency of logistical processes for importing									
Efficien	icy of logistica	l process	es for import	ing					
Efficien Year	Documents to	l process	es for import	ing Time to ir	nport (day	rs)	Cost to imp	ort (US\$ per c	ontainer)
Year	Documents to Bhutan	l process o import (r India	es for import	Time to ir Bhutan	nport (day India	rs) Nepal	Cost to imp Bhutan	ort (US\$ per c India	ontainer) Nepal
Year 2006	Documents to Bhutan	D import (r India 10	es for importion number) Nepal	ing Time to ir Bhutan 37	nport (day India 41	s) Nepal 35	Cost to imp Bhutan 1,780.00	ort (US\$ per c India 1,324.00	ontainer) Nepal 1,725.00
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Source: World Bank Doing Business Indicators

Bhutan and Nepal also fare poorly in comparison to India on measures of the cost to export and import. The costs per container to export or import in India are less than half those faced by exporters and importers in Bhutan and Nepal. In Bhutan and Nepal, the costs and time associated with completing documentary and other import and export procedures for international trade can account for a substantial portion of the value of traded goods.

The aggregate indicators presented in Table 3 suggest that there is clear room for improvement in the efficiency of export and import procedures along the transit corridors in both Bhutan and Nepal. Less clear are the underlying factors that are contributing to inefficiencies along the key transit corridors between India, Bhutan and Nepal. This case study adopts a focused approach in order to identify some of these factors. Specifically, an analysis is undertaken of the underlying trade costs (both financial and in terms of time) that impede the flow of *imports* to Bhutan and Nepal through the gateway ports of Haldia and Kolkata in India. The emphasis is on transit agreements and regulations and their impacts on the efficiency and quality of transit logistics services at the two ports and on the cost of services necessary for transit to Bhutan and Nepal.

4 Data and methodology

The analysis focuses on two transport corridors (Kathmandu to Kolkata and Thimpu to Kolkata) and two border crossings (Raxual–Birgunj and Jaigaon–Phuntsholing) that connect Nepal and Bhutan with the gateway ports of Kolkata and Haldia. The selected corridors are purely transit corridors and involve important border crossings. Information on the countries linked through these two corridors and ports, and the total road distances and transit distances along the corridors, is presented in Table 4 and Figure 1. These two transport corridors are immensely important for the economic exchange of goods and services between India and Bhutan or Nepal.

Table 4: Transit corridors and distances from gateway ports

Corridor	Countries Linked	Distance, Total	Distance, Transit	Border Posts	Transit Port
Corridor 1 (Nepal Transit corridor) Kathmandu – Birgunj –Raxaul – Kolkata	Nepal – India	1,287 km	1,047 km	Raxual (India) and Birgunj (Nepal)	Kolkata and Haldia
Corridor 2 (Bhutan Transit corridor) Thimpu – Phuntsholing – Jaigaon – Kolkata	Bhutan – India	990 km	760 km	Jaigaon (India) and Phuntsholing (Bhutan)	Kolkata and Haldia

Figure 1: Transit corridors and distances from gateway orts



Total: 1,287 km





Total: 990 km

Using a field survey, the study collected primary data on both the costs involved and the time taken to get a product out of the port at Kolkata or Haldia and on the road for the gateway importer (India) and the landlocked countries (Bhutan and Nepal). The main focus was on identifying barriers – including trade procedures and regulatory requirements for importers – that impede the flow of imports to Bhutan and Nepal through the gateway ports of Haldia and Kolkata.

The field survey was conducted at the Kolkata and Haldia ports; in Kathmandu and Thimpu; and at the Raxual–Birgunj and Phuentsholing–Jaigaon land borders (see Appendix 1 for a mapping of the survey locations). In each location, information was collected through interviews with different firms. These interviews were conducted using a structured, open-ended questionnaire with questions that varied according to the type of firm being interviewed (a sample questionnaire is provided in Appendix 2). The cost and time of the transit were calculated as part of the analysis. In addition, the survey collected data that could be used to determine the market structure of logistics service providers engaged in transit of cargo between importing countries and gateway ports.

As a starting point for identifying the firms to be interviewed in the field survey, six imported products were selected to form the focus of the case study. A mix of intermediate and final products was selected based on the importance of the products in Nepal's or Bhutan's overall import basket (see Table 5). In all cases, the products are imported through both Kolkata and Haldia ports. The nature of the selected products points to the spatial importance of the transit corridors in carrying imports destined for Bhutan and Nepal.

Country: No	epal			
HS Code	Product	Imports (US\$ million)	Share in Total Import (%)	Import through
230400	Soya-bean oil-cake & other solid residues, whether or not ground or pellet	47.479	0.651	Kolkata
080810	Apples, fresh	30.775	0.422	Kolkata
870332	Automobiles with diesel engine displacing more than 1500 cc to 2500 cc	14.908	0.204	Haldia
Country: Bh	utan			

Table 5: Imported products selected for the survey

HS Code	Product	Import (US\$ million)	Share in Total Import (%)	Import through
870333	Automobiles with diesel engine displacing more than 2500 cc	1.419	0.536	Haldia
870332	Automobiles with diesel engine displacing more than 1500 cc to 2500 cc	0.558	0.211	Haldia
847989	Machines & mechanical appliances having individual functions	0.440	0.166	Kolkata

Source: Nepal Customs and Department of Revenue and Customs, Bhutan

Following the selection of products, firms from the subregion were identified that import the products listed in Table 5 and which utilise the Kolkata and Haldia ports and the Nepal and Bhutan transport corridors outlined in Table 1. These firms were identified from databases such as the membership list of the Nepal Exporters and Importers Association and the lists of Customs Clearing House Agents (CHAs) in India, Nepal and Bhutan. A secondary list of importers was also obtained from the Nepal and Bhutan Consulates in Kolkata. On this basis, a final sample of 50 firms was selected and interviewed. A basic profile of the firm sample is provided in Table 6.

Table 6: Sample survey characteristics

	Nepal	Bhutan	India
Sample size	20	10	20
Firm business – importer	100%	100%	100%
Firm type – domestic	100%	100%	100%
Turnover (US\$ million)	87	75	132
Employees	86	39	63
Years in business	21	15	27

The sample includes both small and large importing firms. The average number of employees ranges from 39 for firms in Bhutan to 86 in Nepal. On average, the domestic importers in the sample have been in business for 15 years in Bhutan, 21 years in Nepal, and 27 years in India. There is wide variation in average annual firm turnover (as of 31 March 2015) across the countries in the sample, ranging from \$75 million in Bhutan to \$132 million in India.

Finally, the survey helps us estimate transit time and cost, and identifies a set of trade barriers. The main findings from the field survey are presented in the next section.

5 Barriers affecting trade and transit of imports to Bhutan and Nepal

Using the data collected through the field survey, this section documents and discusses the main barriers identified as impediments to the flow of imports to Bhutan and Nepal through the gateway ports of Haldia and Kolkata and in transit to the two countries. It highlights specific trade barriers, including cumbersome documentation requirements and import procedures; lengthy periods to complete procedural requirements; high costs incurred at gateway ports and in transit; the high cost of auxiliary charges associated with clearing imported goods through the gateway ports; and inefficiencies and low levels of productivity among transport service providers. These issues are discussed in turn below.

5.1 Onerous documentation and import procedures

Data gathered through the field survey on the average number of documents and procedures required to import, the time taken to import, transit times, and the costs associated with importing and transit in Nepal, Bhutan and India are compared in Table 7. Greater numbers of documents and procedures are required to import goods to Nepal through the two gateway ports compared to Bhutan and India. An importer in Nepal is required to submit 22 documents when importing through Kolkata or Haldia, while an importer in Bhutan submits 16 documents for the same purpose, of which three documents are exclusively required for the handling of goods at the gateway ports. Import and transit times are also notably longer for Nepal in comparison to Bhutan.

Particulars	Nepal	Bhutan	India
Documents required (number)	22	16	13
Import procedures (number)	20	17	14
Import time (days)	16.34	7.43	1.88
Transit time# (days)	5.15	0.34	
Import cost* (US\$)	904.84	1,007.26	358.87 (138.71)
Transit cost* (US\$)	707.26	577.42	

Table 7: Transit indicators for Nepal, Bhutan and India, 2015

*Per truck with gross vehicle weight of 12 tonne. #Does not include handling time at the port. Time includes only freight on road.

The onerous documentation requirements and lengthy import and transit times in Nepal, and to a lesser extent Bhutan, are indicative of a cumbersome trade process. This serves to slow down import volumes, raise prices and encourage inefficiency. Though the Treaty of Transit prescribes a certain number of mandatory documents for Nepal's transit trade, the requirement of documents by Customs, both India and Nepal, and Kolkata/Haldia Port is excessive. There is a need to simplify documentary requirements, including those added in the Treaty of Transit, and improve alignment with international standards, particularly in the case of Nepal.

5.2 Lengthy transaction times at gateway ports and in transit

Tables 8(a) and 8(b) present detailed data collected from the field survey on import and transit times for Bhutan and Nepal, respectively (in both 2010 and 2015). The survey data indicates that, as of 2015, firms in Nepal take marginally more than 16 days to complete all 20 major import procedures required, of which five procedures are necessary to fulfil the requirements imposed by the transit country (India) and 15 are required by the importing country itself (Nepal). Overall, the longer import times for Nepal are the product of significantly longer transit times between the Kolkata or Haldia ports and the border (Raxual and Birgunj), more time spent at the border (in terms of idle time, time spent loading and unloading goods, customs clearance times, and idle time spent inside the port), and the length of time taken to transport goods from the land border to the warehouse.

Particulars	Unit	2010	2015
Time at Kolkata/Haldia port	Hrs	141.60	156.10
Time on transit between the Kolkata/Haldia port and border#	Hrs	7.90	8.10
Time at border, of which:	Hrs	9.40	8.40
- Idle time before entering port	Hrs	6.00	5.60
- Loading/unloading		NA	NA
- Customs clearance	Hrs	1.70	1.30
- Idle time inside port	Hrs	1.70	1.50
Time from land border to warehouse	Hrs	6.00	5.80
Total	Hrs	164.90 (6.87)	178.40 (7.43)

Table 8(a): Import time – Bhutan

Note: Number in parentheses presents time in days. #Jaigaon and Phuentsholing

Particulars	Unit	2010	2015
Time at Kolkata/Haldia port	Hrs	130.80	135.60
Time on transit between the Kolkata/Haldia port and border#	Hrs	114.00	123.60
Time at border, of which:	Hrs	109.20	104.40
- Idle time before entering port	Hrs	34.80	30.00
- Loading/unloading	Hrs	24.00	24.00
- Customs clearance	Hrs	25.20	25.20
- Idle time inside port	Hrs	25.20	25.20
Time from border to factory warehouse	Hrs	25.20	28.50
Total	Hrs	379.20 (15.80)	392.10 (16.34)
Note: Number in perentheses presents time in days. #Devuel and Direvel			

Table 8(b): Import time – Nepal

Note: Number in parentheses presents time in days. #Raxual and Birgun

In the case of Nepal, for instance, the transit time amounts to a little more than 5 days, representing almost one third of total import time. In contrast, firms in Bhutan take, on average, less than 7.5 days to complete all import procedures, of which the current transit time through India is currently less than one day. Bhutan, therefore, enjoys the benefits of faster movement of transit goods through India compared to Nepal.

One reason for the lengthier time spent on import procedures is congestion at the India-Nepal land border (Raxual-Birgunj), which handles Nepal's imports. The average time spent at the Raxual-Birgunj border for cargo handling procedures (including idle time before entering port, time taken in loading and unloading, customs clearance time, and idle time inside the port) amounts to more than 104 hours (over 4 days). In comparison, the equivalent time spent at the India-Bhutan border is only 8.4 hours.

Faster customs clearance is central to the on-time delivery of goods. However, it takes on average 25 hours to clear imported cargo through the India-Nepal land border, while it only takes approximately one hour to clear goods through Bhutan's customs authorities. This suggests that there is significant scope to reform Nepal's customs clearance system in order to facilitate faster clearance of goods at the border. Simplification of the documentation requirements may represent a fruitful starting point. At Birgunj LCS, the Nepalese customs authority has moved on from the use of a consignment-wise Declaration Form (Pragyapan Patra) to a product-wise Declaration Form, which has led to a substantial increase in the time taken for customs clearance. A declaration form has to be filled for individual products (some firms import more than 100 products at a time), which has pushed up the average time spent in customs from less than one day to three days. Moreover, delays and uncertainty related to this procedure have also led to an increase in idle time spent inside customs. On top of this, most respondents reported incurring additional informal charges in order to facilitate faster clearance of goods at all border points in Nepal.

Another constraint is the considerable length of time taken for cargo destined for Bhutan or Nepal to clear the Kolkata or Haldia ports. The survey data indicates that it takes an average of 135.6 hours (5.65 days) for cargo destined for Nepal and 156.1 hours (6.50 days) for cargo en route to Bhutan to clear the ports; and these clearance times have increased since 2010. Transit times from the Kolkata and Haldia ports to the Bhutan and Nepal borders have also increased marginally since 2010, although this has been offset somewhat by reductions in the amount of time typically spent at borders. Even so, the time spent at the gateway ports and in transit are critical components of the entire import process for Nepal and Bhutan. In this context, efforts to reduce transaction times at the gateway ports, in transit, and at the border should be prioritised by both Nepal and Bhutan.

5.3 High costs incurred at gateway ports and in transit

Tables 8(a) and 8(b) present detailed breakdowns of the costs incurred throughout the import processes for Bhutan and Nepal, respectively. The survey data shows that in 2015 it cost a total of \$904.84 per truck load to import goods into Nepal, with the cost of transit between Kolkata or Haldia ports and the Raxual–Birgunj border amounting to \$707.26 (approximately 78% of the total cost). In comparison to Nepal, the total import cost is higher, on average, although the cost of transit from the Kolkata or Haldia ports to the Jaigaon–Phuentsholing border is lower.² In both cases, these costs have increased since 2010.

Calculations based on the survey data indicate that the cost of importing a container load of goods is approximately \$1,174 per Twenty-foot Equivalent Unit (TEU) in the case of Nepal, of which the cost of transportation from the Kolkata/Haldia port to the importer's warehouse accounts for over 60%. By comparison, in Bhutan the total cost of importing a container is higher at \$1,216 per TEU, but the cost of transportation from the Kolkata/Haldia port to the importer's warehouse in Bhutan accounts for a smaller share (48%). In both cases, the transit charges and the costs associated with the handling of goods at the Kolkata/Haldia ports constitute large shares of the total import costs.

Particulars	2010			2015		
	INR	US\$	Share* (%)	INR	US\$	Share* (%)
Costs at Kolkata/Haldia port	18100	385.11	38.92	22250	358.87	35.63
Costs on transit between Kolkata/Haldia port and border#	25200	536.17	54.19	35800	577.42	57.33
Cost at border	3200	68.09	6.88	4400	70.97	7.05
Total	46500.00	989.36	100.00	62450.00	1007.26	100.00

Table 8(a): Import cost – Bhutan

Note: #Jaigaon and Phuentsholing *In US\$ terms

 2 The costs shown do not, however, include international shipping costs, or tariffs (customs duties), nor do they include costs associated with loss of opportunities (such as waiting time).

Table 8(b): Import cost – Nepal

Particulars	2010			2015		
	INR	US\$	Share* (%)	INR	US\$	Share* (%)
Costs at Kolkata/Haldia port	5950	126.60	16.48	8600	138.71	15.33
Costs on transit between Kolkata/Haldia port and border#	27300	580.85	75.62	43850	707.26	78.16
Cost at border	2850	60.64	7.89	3650	58.87	6.51
Total	36100	768.09	100.00	56100	904.84	100.00

Note: #Raxual and Birgunj *In US\$ terms

Table 9(a): Disaggregated import cost – Bhutan

Sr. No.	Procedures	Cost (US\$)#	Share (%)
1	Obtain trade license	78.00	6.41
2	Registration for import house	0.00	0.00
3	Obtain import license/permit	0.00	0.00
4	Open L/C account	0.00	0.00
5	Obtain Letter of Guarantee	0.00	0.00
6	Arrange transport	45.46	3.74
7	Handling charges at Kolkata/Haldia port	358.87	29.51
8	Clear goods at Changrabanda	33.33	2.74
9	Transport goods to Jaigaon/Phuentsholing	577.42	47.49
10	Complete import documentation	11.25	0.93
11	Cargo transfer	12.56	1.03
12	Custom service charge	4.52	0.37
13	Payment at India/Bhutan border	30.21	2.48
14	Payment to CHA	23.40	1.92
15	Obtain import declaration	40.91	3.36
	Total	1,215.93	100.00
# I	Per TEU		

Sr. No.	Procedure	Cost (US\$)#	Share (%)
1	Contact importer/broker	0.15	0.01
2	Fix trade term	0.52	0.04
3	Sign and exchange contract	7.16	0.61
4	L/C opening service charge	39.55	3.37
5	Insurance cost	49.30	4.20
6	Obtain approval from concerned ministry	0.00	0.00
7	Collect and prepare required document	7.24	0.62
8	Handover of document to clearing agent by courier	6.60	0.56
9	Handling charge at Kolkata/Haldia port	138.71	11.82
10	Custom clearing cost at transit custom	14.50	1.24
11	Warehouse charge at Kolkata/Haldia	24.87	2.12
12	Freight from Kolkata to factory in Nepal	707.27	60.26
13	Cargo transfer	28.78	2.45
14	Custom service charge	30.45	2.59
15	Clearing cost to CHA at importer's customs	6.09	0.52
	Other (including informal costs)	112.56	9.59
	Total (import process costs in Nepal)	1,173.75	100.00

Table 9(b): Disaggregated import cost – Nepal

Per TEU

Recognising the significance of transaction costs associated with clearing goods destined for Bhutan and Nepal through the Kolkata and Haldia ports, Tables 9(a) and 9(b) present disaggregated breakdowns of the charges incurred that are not necessarily related to transit. As per the transit agreement, there are certain charges that Bhutan and Nepal have to pay for importing through Kolkata and Haldia ports. But the survey has found that customs inspection and clearance charges, insurance charges for obtaining trade license and import declaration, bank service charges for receiving payments, service charges for opening L/C, etc., are some of the major costs incurred in the import processes in both Nepal and Bhutan, whereas regulatory costs and documentation charges are found to be low or in some cases (Bhutan) nil. Interestingly, relative to other factors that contribute to import costs, costs incurred at the border are less significant in both Bhutan and Nepal. However, disparities across corridors and products deserve deeper analysis. In terms of cost,

the India–Nepal transit corridor witnesses higher costs for transit of goods, compared to the India–Bhutan corridor.

5.4 Falling productivity of transporters

Between India and Bhutan, the direct cost of import in Bhutan is relatively high. Interestingly, while many steps involve both public and private parties across the two transit corridors, a significant number of procedures involve private parties only in Bhutan and Nepal. This, in turn, suggests that efficiency of the international trade process crucially depends on the capacity of private individuals to exchange information with each other and provide effective transport, logistics, payment and other services. As of August 2015, about 37 transporters are carrying imports of Nepal by road from Kolkata/Haldia port, whereas about 20 transporters handle imports of Bhutan (Table 10). However, the number may go up if we count the third party transporters handling the import cargo. Transporters are mostly Indian. While the number of transporters has increased between the years 2010 and 2015 in both countries, according to the importers interviewed through the field survey, transporters handling Nepal's import cargo have witnessed a fall in productivity. In contrast, productivity has gone up in the case of Bhutan. The transit agreements have clearly defined transit procedures but are silent on the type or structure of transporters. The India-Nepal Treaty of Transit underlines the rationale of transit of goods on a point-to-point basis. Therefore, one likely cause of falling productivity in the India-Nepal corridor could be operational inflexibility and also the rising costs of transit. In the perception of transporters, regulation on competition among transporters involved in the transit of India's and Nepal's cargo may lead to improved productivity and efficiency through higher quality of services.

Corridors	Ownership	Types	Number of Transporters		Product	ivity*
			2010	2015	2010	2015
India – Nepal	Indian	Private	26	37	5,220	5,100
India – Bhutan	Indian	Private	12	20	2,200	4,400

Table 10. Transporters and estimated productivity

*Cargo handled in tonnes per week

5.5 Structural inflexibility and lack of competition among transporters

The Treaty of Transit between India and Nepal has laid down procedures for exports and imports. Imports (transit traffic) have been allowed to move by road and rail against an insurance or bond or bank guarantee. Truck operators prefer to handle both export and import cargoes to optimise the scale economy. Therefore, imports (other than automobiles) are mostly carried on trucks by road from Kolkata/Haldia port to Nepal and Bhutan. While the transportation process is regulated by the India–Nepal and India–Bhutan transit agreements, road transporters are mostly unregulated. Having a smaller fleet, Nepali truck owners fail to compete with larger Indian truck operators when picking up or delivering cargo at Kolkata and Haldia ports. While the transportation from the ports to the India–Nepal border has been dominated by Indian transporters, Nepali truck owners manage the transportation from the border to destinations inside Nepal. Indian arrangements such as requirements of driver's insurance, permission of Indian authority, fixed time of entry and exit, financial guarantee, etc. discourage Nepali trucks from operating in India. In addition, a transporter has to face congestion, poor quality roads, inflexible travel times, narrow roads, etc., which often not only add to the costs but also force the vehicle to move slowly along transit corridors, thereby making it difficult for small transporters to conduct business on profitable terms. There is a need to improve the road quality, as well as security and maintenance. Learning from other successful corridors would be useful for Nepal, India and Bhutan to improve the efficiency of transit corridors.

5.6 Perceived barriers and inefficiencies at gateway ports and land customs stations

The field survey questionnaire asked importers to provide their perceptions of the main trade barriers that they face at their respective LCSs and at the gateway ports (Kolkata and Haldia). This allowed for a high-level assessment of prevailing perceptions of the competence of various actors involved in providing transit and other trade services relevant to the survey respondents for importing, including road transporters, custom agents and quality compliance agencies. These perceptions provide some indication of the quality of trade facilitation infrastructure and logistical competency at relevant customs points, information which can help identify possible areas for improvement.

Figures A.2 to A.7 in Appendix 3 present aggregate information on the perceptions of survey respondents regarding the difficulties that they face in relation to 12 potential barriers to the efficiency of transit and other trade-related services, both on Nepal and India and Bhutan and India. Perceptions were collected on barriers experienced at both land border facilities (LCSs) and gateway ports (Kolkata and Haldia). We focus here on current perceptions for 2015.

In the case of the two gateway ports, respondents in both Bhutan and Nepal identified a number of key barriers affecting the efficiency of transit and other trade-related services at the ports: costly cargo handling charges, a lack of amenities (such as hotels), a lack of appropriate cargo handling equipment to load and unload cargo more rapidly, a lack of trained human resources, the absence of electronic vehicle tracking systems, shortages of warehouses and parking, slow turnaround of vessels, the prevalence of time consuming manual examinations of goods, a narrow approach road, and poor telecommunications facilities.

Focusing on the LCSs, respondents in Nepal involved in exporting cited bureaucracy and red tape, corruption and bribery, and lengthy paperwork as the most important barriers they face. For their part, the importers noted that an increase in the volume of cargo combined with limited infrastructure facilities at the Indian border has been the primary reason behind most of the problems related to warehousing and roads at Birgunj LCS. In addition, importers mentioned that the attitude of customs officers at both Birgunj and Raxual is poor, and customs-related barriers arising due to the need to manually inspect goods at the Bhutan border have worsened in recent years.

Lengthy paperwork requirements at Nepalese and Indian customs facilities is the primary concern for the Nepalese traders. Respondents mentioned that the shift to the System Application and Product (SAP) technology at Raxaul LCS in the past two years has increased the time taken at the Indian customs point. The use of SAP technology means that each consignment must be verified from a database in Delhi. Furthermore, respondents provided anecdotal evidence that there are many checkpoints near the Indian border, and an illegal payment of around INR 1,000 is required at each checkpoint in order to ensure that goods are allowed to pass through.

Overall, stakeholder perceptions gathered through the survey indicate significant variation in the level of satisfaction with the competence and quality of services offered by public and private providers at the two gateway ports and the various LCSs. Specifically, the majority of surveyed firms in Bhutan believe that the trade and transit service providers in Bhutan and India are delivering good quality services; whereas firms in Nepal and India that deal with cargo destined for Nepal are less happy with many of the services provided by private and public agencies. Capacity constraints at the Birgunj and Raxual border posts mean that the existing facilities are ill-equipped to deal with the rising volumes of exports and imports crossing the India–Nepal border.

6 Concluding remarks

Being landlocked, Bhutan and Nepal have to mobilise additional resources to deal with trade transactions, as supplies for their daily needs have to make a long transit across India. This case study indicates that transit is a major obstacle to trade, and despite transit agreements with India, both Bhutan and Nepal have yet to witness significant breakthroughs. Therefore, cutting transit costs and time by improving trade facilitation, such as by rationalising trade procedures, would be the key to enhancing trade flows and raising competitiveness in terms of trade and investment. Reducing customs and/or handling time at the ports of Kolkata and Haldia by way of streamlining procedures, developing infrastructure, etc. would improve the competiveness of Nepal's and Bhutan's imports. At the same time, allowing more transporters, both in India and Nepal, for door to door multimodal operation would not only lead to lower transaction costs but also improve the efficiency of service providers. Labour-intensive transport services will see application of efficient technology at an increasing scale along the transit corridors. We recommend the implementation of a series of projects leading to improved transaction time and trade cost of trade in the eastern South Asia subregion. The projects should generate trade process re-engineering, improve performance at the ports of Kolkata and Haldia, introduce automation in customs, build border infrastructure facilities, rationalise trade procedures by revisiting the Treaty of Transit, enable electronic data interchange between the countries, introduce acceptance of cross-border electronic signatures on CTDs, etc. The bottom line is that we need to do away with redundant procedural and documentary requirements that cause delays and increase costs.

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Appendices

Appendix 1: Mapping survey locations

Figure A.1: Map of survey locations and transit corridors



Appendix 2: Sample questionnaire

ID	
Country	

Trade Flow: Import

1. General Information

Name of the Firm	
Name of the Respondent and Designation	
Address of Firm	
Location	
Firm type	□ Foreign □ Domestic □ Mixed
Turnover (\$), specify year	□ Up to 25 □ 25-200 □ 200-1000 □ More than 1000
Total number of employees	
Years in business	

Type of Respondent (Please tick the option applicable to you)					
Exporter (Trader)	Importer (Trader)				
Exporter + Manufacturer	Importer + Manufacturer				
Freight Forwarder	Clearing Agent				
Freight Forwarder + Clearing Agent	Transporter				
Others (Please specify)	· · ·				

2. Product Imported

Select the Port – Kolkata / Haldia / Any Other (Write the Name: _____)

List of Commodities Imported	Imports (HS Code)	Importing Port
Commodity 1 – (Name)		
Commodity 2 – (Name)		
Commodity 3 – (Name)		
Commodity 4 – (Name)		
Commodity 5 – (Name)		
Commodity 6 – (Name)		

3. List of LCS / border check-post used for transit trade

	LCS1	LCS2	LCS3	LCS4
Bhutan				
India				
Nepal				

4. Complete the import logistics supply chain:

Country: Bhutan / Nepal

Transit route	
Importing port	
Mode of transport (Rail / Road / Water)	
Destination place (country)	
Distance in km	
Avg. travel time total distance (days)	
Avg. transport cost total distance (\$)	
Halt on way, if any (name of the places)	
Halting time (hours)	
Border crossing points (name)	
Customs post (name)	
Unloading point (name)	
Payment transaction time (days)	

5. Parties involved in import:

Country: Bhutan / Nepal

Sl. No	Activity	Name of the Office / Authority	Type (Government / Private)

6. List of documents required for import of goods

Port: Kolkata / Haldia Country: Bhutan / Nena

	Country: Bhutan / Nepal							
Sl. No	Particulars	No of copies	Submission of document (Electronic / Manual)					

7. List of documents required by transit country (India) for import of goods

	Country: Bhutan / Nepal						
Sl. No	Particulars	No of copies	Submission of document (Electronic / Manual)				

Port: Kolkata / Haldia Yountry: Bhutan / Nepal

8. Transport arrangement for import of goods

Sl. No	Particulars	Type of operators (Public / Private)	Availability (Yes / No)	Pricing (Fixed / Negotiable)	No. of operators
1	Cargo operation inside port				
2	Transportation from port to border				
3	Transportation from border to warehouse				
4	Transportation from port to warehouse				

9. Time and cost of import

Please fill in the time and cost taken for the following (Importers)						
	Distance (km)	: Time Taken*	Cost Taken**	Time Taken*	Cost Taken**	
		2	010		2015	
Time and costs at Kolkata / Haldia port						
Time and costs on transit between the Kolkata / Haldia port and border of importing country (Nepal / Bhutan)						
Time and cost at border / port, of which:						
- Idle time before entering port						
- Loading / unloading						
- Custom clearance						
- Idle time inside port						
Time & cost from border / port						

*Specify unit (Day / Hour): ______ **Specify unit (INR per ton or per truck): _____ ***Location of warehouse / factory and border / port

10. Application of regulatory barriers in importing goods

Country: Dhutum / 1 (cpur	Vog / No
	165/100
Sanitary and phytosanitary measures (SPS)	
Technical Barriers to Trade (TBT)	
Pre-shipment inspection and other formalities	
Contingent Trade-protective measures	
Non-automatic licensing, quotas	
Price-control measures, including:	
Finance measures	
Measures affecting competition	
Trade-related investment measures	
Distribution restrictions	
Restrictions on post-sales services	
Intellectual property	
Rules of origin	
Export-related measures	

Country: Bhutan / Nepal

11. Experiences with procedural obstacles

Country: Bhutan / Nepal Please rank difficulty for each attribute on a scale of: 1 (Easy) – 5 (Extremely hard)

	2010	2015
A. Arbitrary or inconsistent behaviour:		
A1: Behaviour of customs officials or any other government official (1)		
A2: With regard to how your product has been classified or valued (2)		
A3: In the manner that procedures, regulations or requirements have been applied (3)		
B. Discriminatory behaviour favouring specific producers or suppliers:		
B1: Favouring local suppliers or producers in destination markets (4)		
B2: Favouring suppliers or producers from other countries (5)		
B3: Favouring large (or small) companies in destination (6)		
C. Inefficiency or cases of outright obstruction consisting of:		
C1: Too much documentation or forms to be supplied or completed (7)		
C2: Too strict, too detailed or redundant testing / certification or labelling requirement (8)		
C3: Substantial delays in obtaining authorisation / approval (9)		
C4: Complex clearing mechanism such as a need to obtain approval from several entities (10)		
C5: Short submission deadlines to supply information (11)		
C6: Outdated procedures such as lack of automation (12)		
C7: Lack of resources such as understaffing or scarce equipment in destination market (13)		
D. Non-transparent practices consisting of:		
D1: Inadequate information on laws / regulations / registration (14)		
D2: Unannounced change of procedure, regulation or requirement (15)		
D3: There is no focal point for information (16)		
D4: Opaque government bid or reimbursement processes (17)		
D5: Opaque dispute resolution process (18)		
D6: Request for an informal payment (19)		
E. Legal obstacles consisting of:		
E1: Lack of enforcement with regard to breaches of patents, copyrights, trademarks, etc. (20)		
E2: Inadequate dispute resolution or appeals mechanisms and processes (21)		
E3: Inadequate legal infrastructure (22)		
F. Unusually high fees or charges:		
F1: Fees or charges are unusually high (e.g. fees for stamp, testing, or other services) (23)		
G. Non-transparent practice of requesting an informal payment (24)		
H. Enforcement is weak, hence compliance is easy (25)		
I. Regulatory requirements easy to meet (26)		
J. Regulatory requirements easy to meet because of weak enforcement (27)		
K. Any other (please specify) (28)		

12. Barriers faced by importers at the importing port, in the past and now:

Name of the port (India):

Pleas	e rank	difficulty	y for each	attribute in	the scale of:	1 (Easy) -	- 5 (Extr	remely	hard)
	T 11	CI 1							

India Side	2010	2015
Low turnaround of vessel		
Low productivity of port (name of the port:)		
High handling charges		
Lack of warehouse / parking		
Narrow approach road		
Poor telecom facilities		
Bureaucracy and red tape		
Corruption and bribery		
Lack of faster handling equipment		
Lack of trained human resources		
Lengthy paper work		
Manual examination of goods		
Lack of amenities such as hotel		
Lack of banks		
Lack of vehicle tracking system electronically (e.g. RFID)		
Others (if any) (specify)		

13. Barriers faced by importers at the LCS, in the past and now:

Name of the LCS (India):

Please rank difficulty for each attribute in the scale of: 1 (Easy) – 5 (Extremely hard)

India Side	2010	2015
Lack of warehouse / parking		
Narrow road		
Poor telecom facilities		
Bureaucracy and red tape		
Corruption and bribery		
Lack of faster handling equipment		
Lack of trained human resources		
Lengthy paper work		
Manual examination of goods		
Lack of amenities such as hotel		
Lack of banks		
Lack of vehicle tracking system electronically (e.g. RFID)		
Others (if any) (specify)		

Name of the LCS (Nepal):

Please rank difficulty for each attribute in the scale of: 1 (Easy) – 5 (Extremely hard)

Nepal Side	2009-10	2012-13
Lack of warehouse / parking		
Narrow road		
Poor telecom facilities		
Bureaucracy and red tape		
Corruption and bribery		
Lack of faster handling equipment		
Lack of trained human resources		
Lengthy paper work		
Manual examination of goods		
Lack of amenities such as hotel		
Lack of banks		
Lack of vehicle tracking system electronically (e.g. RFID)		
Others (if any) (specify)		

14. Evaluate the competence and quality of services delivered

Country: Nepal / Bhutan [choose one rank only for each service provider]

	Low	Average	High
	1	2	3
Road transporters			
Rail transporters			
Air transporters			
Maritime transporters			
Warehouses / trans-loading and distribution			
Freight forwarders			
Customs house agents (CHAs) / clearing agents			
Quality / standards inspection agencies			
Health / SPS (Sanitary Phyto-sanitary) agencies			
Trade and transport related associations			
Consignees or shippers			

Country: India [choose one rank only for each service provider]

	Low	Average	High
	1	2	3
Road transporters			
Rail transporters			
Air transporters			
Maritime transporters			
Warehouses / trans-loading and distribution			
Freight forwarders			
Customs house agents / clearing agents			
Quality / standards inspection agencies			
Health / SPS (Sanitary Phyto-sanitary) agencies			
Trade and transport related associations			
Consignees or shippers			

15. Recommendations for Improvement of Trade Flows*

Nepal / Bhutan
1.
2.
3.

*Add separate sheet if need

Appendix 3: Perceptions of importers on barriers at gateway ports and land customs stations

Figure A.2: Perceived barriers faced by Bhutan importers of Bhutan at the Kolkata/Haldia ports





Figure A.3: Perceived barriers faced by importers of Nepal at the Kolkata/Haldia ports



Figure A.4: Perceived barriers faced by importers of Nepal at the Birgunj LCS: Nepal side



Figure A.5: Perceived barriers faced by importers of Nepal at the Raxual LCS: Indian side



Figure A.6: Perceived barriers faced by importers of Bhutan at the Phuntsholing LCS: Bhutan side



Figure A.7: Perceived barriers faced by importers of Bhutan at the Jaigaon LCS: Indian side

Nepal Side	Low	Medium	High
Road transporters	0	30	70
Rail transporters	100	0	0
Air transporters	0	0	100
Maritime transporters	0	35	65
Warehouses/trans-loading and distribution operators	0	15	85
Freight forwarders	0	15	85
Customs house agents / clearing agents	0	5	95
Quality/standards inspection agencies	0	5	95
Health/SPS (Sanitary Phyto-sanitary) agencies	0	5	95
Trade and transport related associations	0	5	95
Consignees or shippers	0	5	95
India side	Low	Medium	High
India side Road transporters	Low	Medium 30	High 70
India side Road transporters Rail transporters	Low 0 95	Medium 30 0	High 70 5
India side Road transporters Rail transporters Air transporters	Low 0 95 0	Medium 30 0 0	High 70 5 100
India side Road transporters Rail transporters Air transporters Maritime transporters	Low 0 95 0 0	Medium 30 0 0 35	High 70 5 100 65
India side Road transporters Rail transporters Air transporters Maritime transporters Warehouses/trans-loading and distribution operators	Low 0 95 0 0 10	Medium 30 0 0 35 15	High 70 5 100 65 75
India side Road transporters Rail transporters Air transporters Maritime transporters Warehouses/trans-loading and distribution operators Freight forwarders	Low 0 95 0 0 10 0	Medium 30 0 35 15 15	High 70 5 100 65 75 85
India sideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agents	Low 0 95 0 10 0 0	Medium 30 0 0 35 15 15 5	High 70 5 100 65 75 85 95
India side Road transporters Rail transporters Air transporters Maritime transporters Warehouses/trans-loading and distribution operators Freight forwarders Customs house agents / clearing agents Quality/standards inspection agencies	Low 0 95 0 10 0 0 0	Medium 30 0 35 15 15 5 5	High 70 5 100 65 75 85 95 95
India sideRoad transportersRail transportersAir transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agentsQuality/standards inspection agenciesHealth/SPS (Sanitary Phyto-sanitary) agencies	Low 0 95 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Medium 30 0 0 35 15 15 5 5 5 5 5 5	High 70 5 100 65 75 85 95 95 95 95
India sideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agentsQuality/standards inspection agenciesHealth/SPS (Sanitary Phyto-sanitary) agenciesTrade and transport related associations	Low 0 95 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Medium 30 0 35 15 15 5 5 5 5 5 5 5 5	High 70 5 100 65 75 85 95 95 95 95 95

Table A.1. Evaluate the competence and quality of servicesdelivered (% of respondents)

Perception on Bhutan Side	Low	Medium	High
Road transporters	0	0	100
Rail transporters	100	0	0
Air transporters	0	0	100
Maritime transporters	100	0	0
Warehouses/trans-loading and distribution operators	0	0	100
Freight forwarders	0	0	100
Customs house agents / clearing agents	0	0	100
Quality/standards inspection agencies	0	0	100
Health/SPS (Sanitary Phyto-sanitary) agencies	0	0	100
Trade and transport related associations	0	0	100
Consignees or shippers	0	0	100
Perception on India Side	Low	Medium	High
Perception on India Side Road transporters	Low 0	Medium 0	High 100
Perception on India Side Road transporters Rail transporters	Low 0 100	Medium 0 0	High 100 0
Perception on India Side Road transporters Rail transporters Air transporters	Low 0 100 0	Medium 0 0 0 0	High 100 0 100
Perception on India Side Road transporters Rail transporters Air transporters Maritime transporters	Low 0 100 0 0	Medium 0 0 0 0 0 0 0 0	High 100 0 100 100
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operators	Low 0 100 0 0 100	Medium 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwarders	Low 0 100 0 0 100 0	Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0 100
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agents	Low 0 100 0 0 100 0 0	Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0 100 100 100
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agentsQuality/standards inspection agencies	Low 0 100 0 100 0 0 0 100 100	Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0 100 100 0 0
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agentsQuality/standards inspection agenciesHealth/SPS (Sanitary Phyto-sanitary) agencies	Low 0 100 0 100 0 100 100 100	Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0 100 100 0 0 0 0
Perception on India SideRoad transportersRail transportersAir transportersMaritime transportersWarehouses/trans-loading and distribution operatorsFreight forwardersCustoms house agents / clearing agentsQuality/standards inspection agenciesHealth/SPS (Sanitary Phyto-sanitary) agenciesTrade and transport related associations	Low 0 100 0 100 100 100 100 100	Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	High 100 0 100 100 0 100 100 0 0 0 0 0



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Overseas Development Institute 203 Blackfriars Road London SE1 8NJ Tel +44 (0)20 7922 0300 Fax +44 (0)20 7922 0399