

Time and Costs of Trade in SASEC

Findings of ADB-ESCAP Business
Process Analysis (BPA) Study
(Phase I)



Outline

- I. WHY BUSINESS PROCESS ANALYSIS (BPA)?
- II. WHAT IS BPA?
- III. SELECTION OF CORRIDORS AND PRODUCTS
- IV. KEY FINDINGS
- V. RECOMMENDATIONS
- VI. NEXT STEPS



I. WHY BPA?



The Case of Trade Facilitation in SASEC

NTBs in South Asia

- SPS, TBT: 86.3% of total NTBs applied; Tariff quota 9.8%; Anti-dumping measures 7.4%; License requirement 5.3%; Countervailing measures 1.2%
- *Inefficient border clearance processes*
- *Lack of physical infrastructure at borders (e.g., storage, loading facilities etc.,)*

(Source: Quantification of South Asia Trade Benefits (ADB, 2008))



Need for Trade Facilitation Database in SASEC

- **Doing Business:** X & M documents, days to X & M, and cost to X & M)
- **Logistics Performance Index** (i) Customs efficiency ; (ii) infrastructure; (iii) shipments; (iv) logistics; (v) tracking; and (vi) Timeliness
- **Enabling Trade Index.** (i) Customs efficiency; (ii) X&M procedures; and (iii) transparency of border administration
- **Enterprise Survey.** (i) Export clearance time; (ii) import clearance time



Issues of Doing Business Study

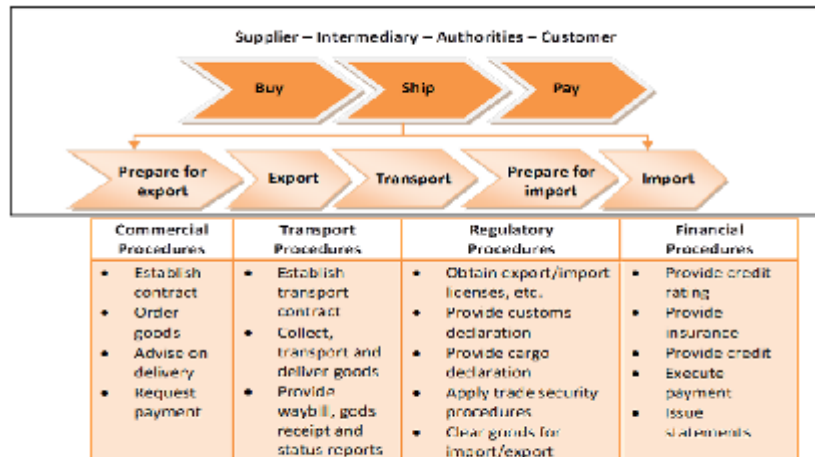
- Spurring debates rather than creating genuine momentum and providing directions for domestic reforms
- Questionable reliability of data and ranking due to:
 - Oversimplified indicators
 - Limited number of data informants
 - Focusing largely on large cities

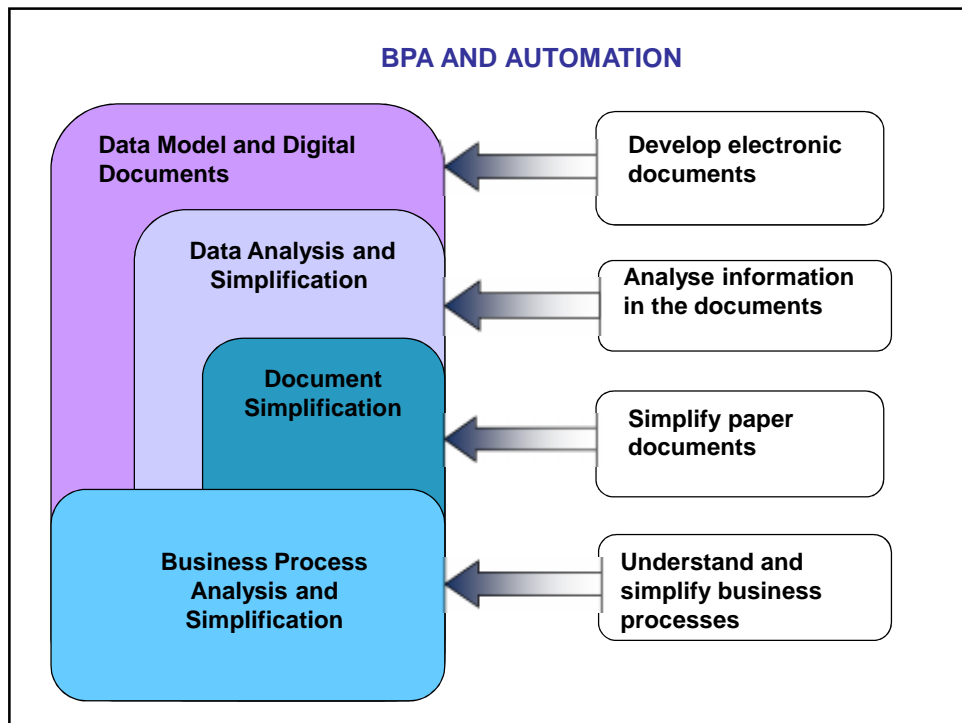
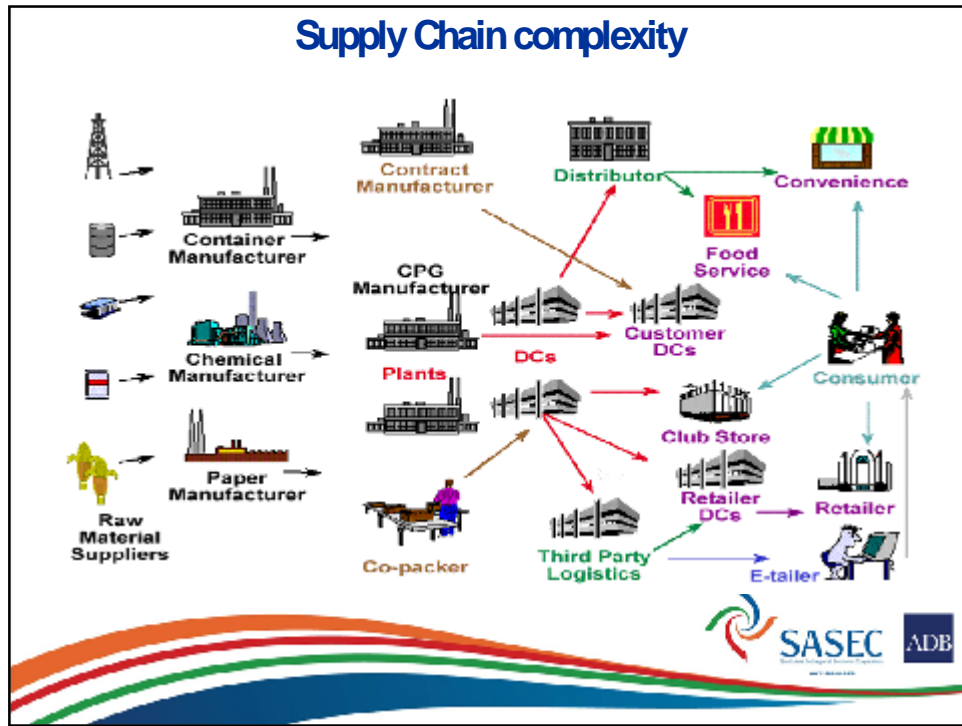


II. WHAT IS BPA?



Business Process Analysis





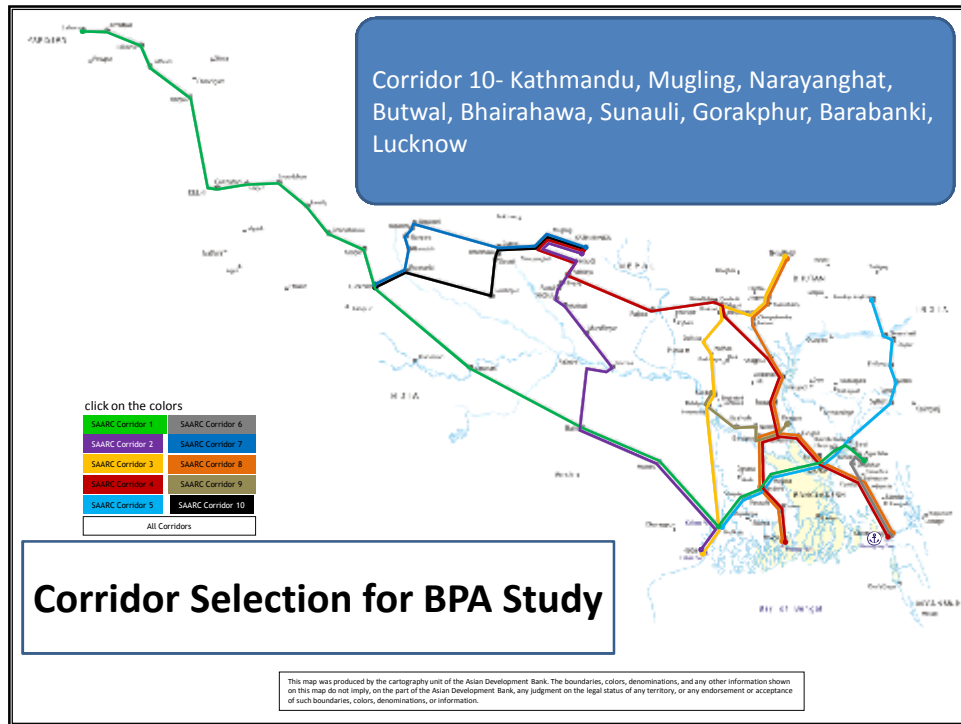
BPA Tools

- **BPA software modeling:** Unified Modeling Language (UML) from <http://www.uml.org> for data analysis
- **Face-To-Face interview** for data collection



III. SELECTION OF TRANSPORT CORRIDORS AND PRODUCTS





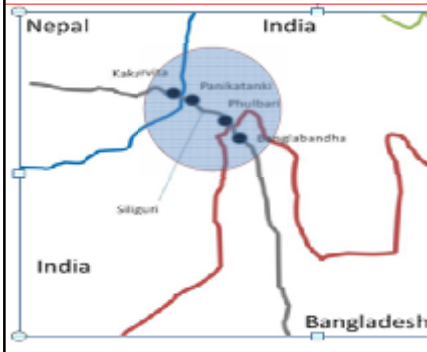
Selected Products

		Export Processes			
		Bhutan	Bangladesh	Nepal	Third Country
Import Processes	Bhutan		Fruit juice (0.0, 1.83)		
	Bangladesh	Orange (1.54, 6.57)		Lentil (1.03, 42.56)	
	Nepal		LAA (0.06, 1.56)		CSO** (8.72, 82.01)
	Third country			Carpet* (146.36, 60.61)	

* Import processes excluded from analysis. ** Export processes excluded from analysis.
 LAA and CSO mean lead acid accumulator and trade soya bean oil, respectively.
 Data in parentheses are trade volumes in US\$ million for the years 2000 and 2010, sourced from CCMTRADE

Corridor 1 (Nepal corridor)

Kakarvitta (Nepal) – Panitanki (India) – Fulbari (India) –
Banglabandha (Bangladesh)



1. Nepal's import of lead acid accumulator
2. Nepal's export of lentil
3. Transit distance: 54 km [Kathmandu to Dhaka – 1152 km]
4. Nepal's 1% total trade (US\$ term) passes through this corridor



Corridor 2 (Bhutan corridor)

Phuentsholing (Bhutan) – Jaigaon (India) – Hasimara (India) –
Changrabandha (India) – Burimari (India)



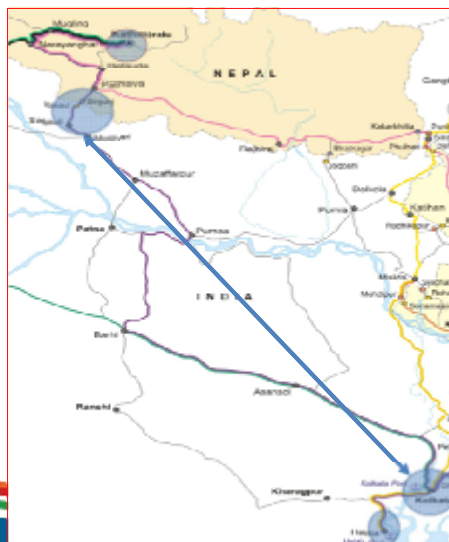
1. Bhutan's import of fruit juices
2. Bhutan's export of oranges
3. Distance: 115 km



Corridor 3 (Nepal corridor)

Kathmandu (Nepal) – Birgunj (Nepal) –
Raxaul (India) – Kolkata (India)

1. Nepal's import of Crude soya bean oil
2. Nepal's export of carpet
3. Distance: 704 km (Kolkata port), 832 km (Haldia port)
4. Share of Birgunj customs to total trade: 44%



Handling of cargo by ICD Birgunj

	Containerized Cargo		Break Bulk Cargo	
	No of Train	Total TEUs	No of Train	Total MT
2008/09	178	14702	7	18242
2009/10	207	17616	81	194313
2010/11	222	19440	128	326826
Growth (%)	12.36	16.11	864.29	845.81

Source: Rajkarnikar (2013)

IV. BPA FINDINGS



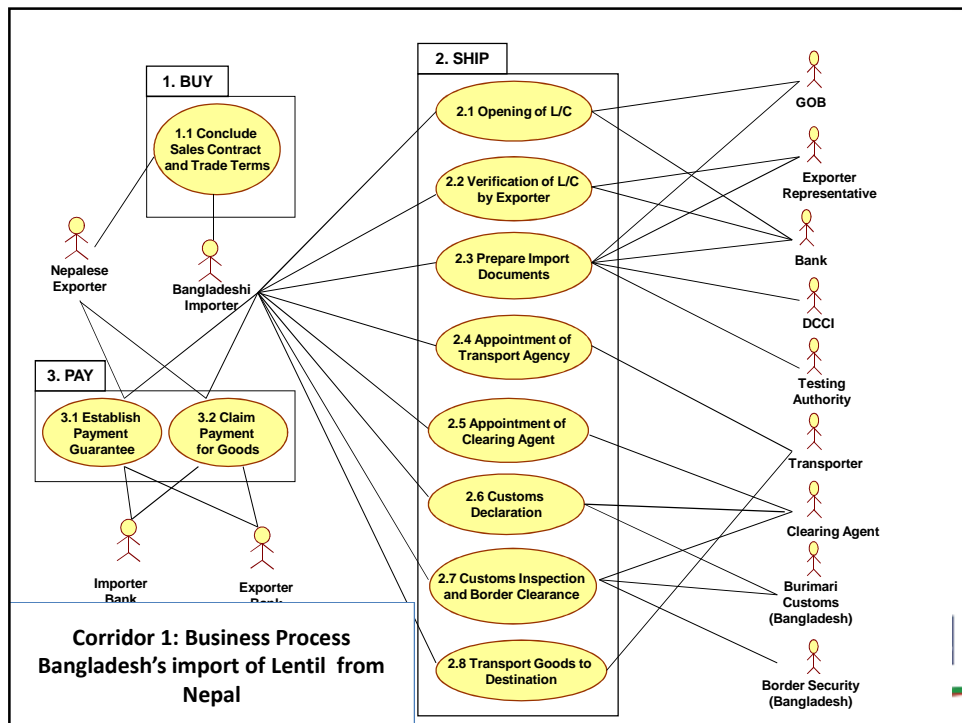
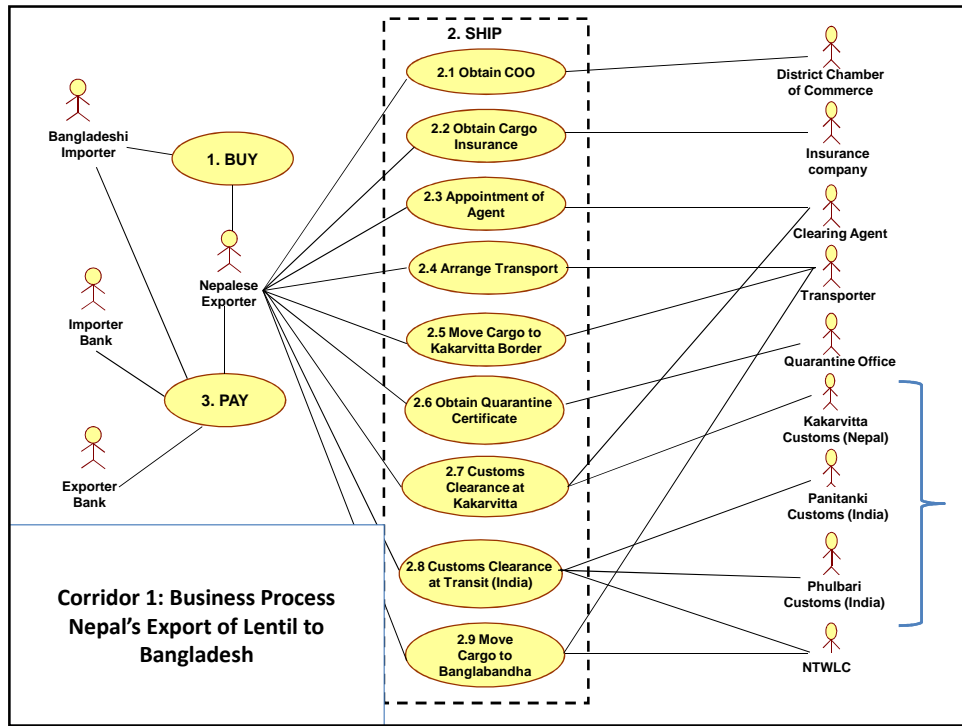
Key Findings

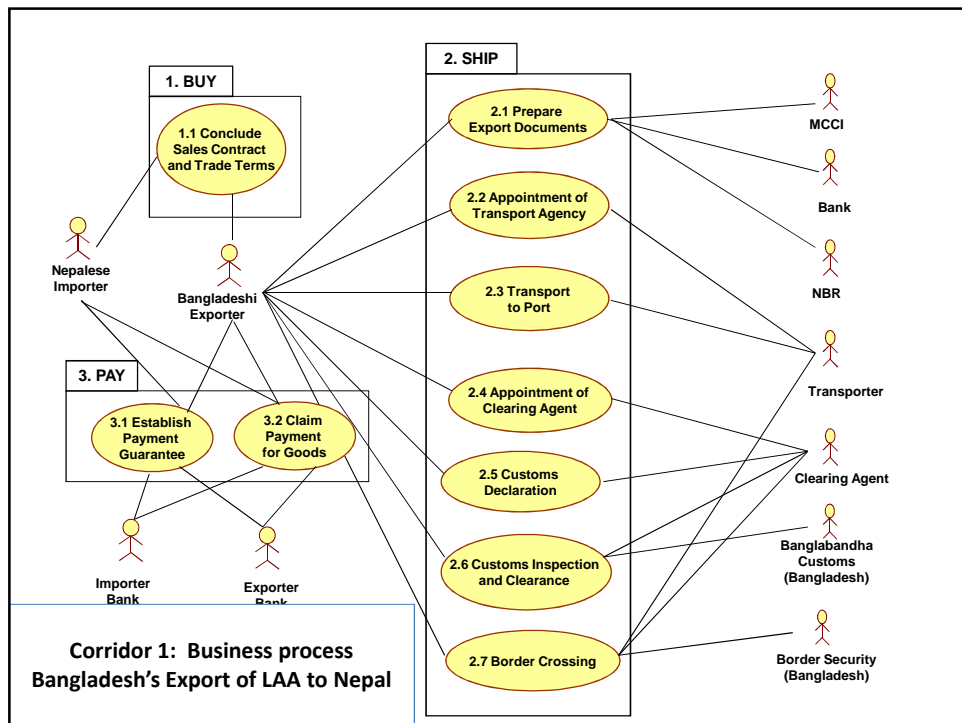
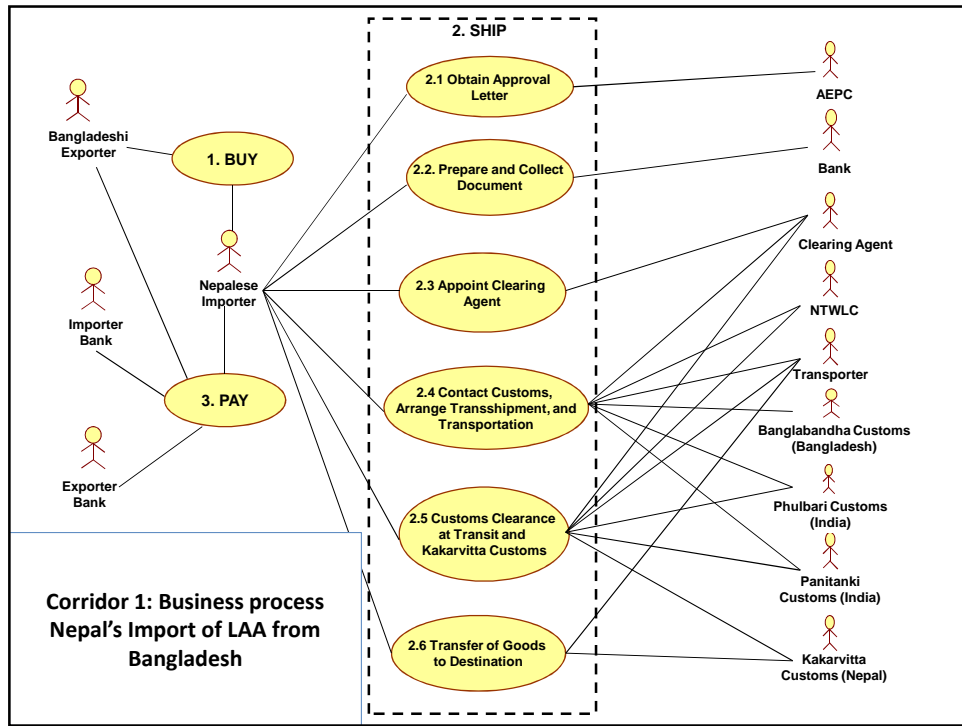
1. Business process
2. Number of documents
3. Cost
4. Time
5. Transit
6. Parties involved
7. Other findings



1. Business Process (Example of Corridor 1)







2. Number of Documents



Documents and Copies Required

Corridor	Exporter	Importer	Products	Documents & Copies (No.)		
				Exporter	Importer	Total
Corridor 1: Kakarvitta-Panitanki-Fulbari-Banglabandha	Nepal	Bangladesh	Lentil	18 (44)	18 (71)	36 (115)
	Bangladesh	Nepal	LAA	15 (50)	15 (33)	30 (83)
Corridor 2: Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari	Bhutan	Bangladesh	Orange	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*	Carpet	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.



3. Costs



Direct Costs of Trade in LAA in Corridor 1

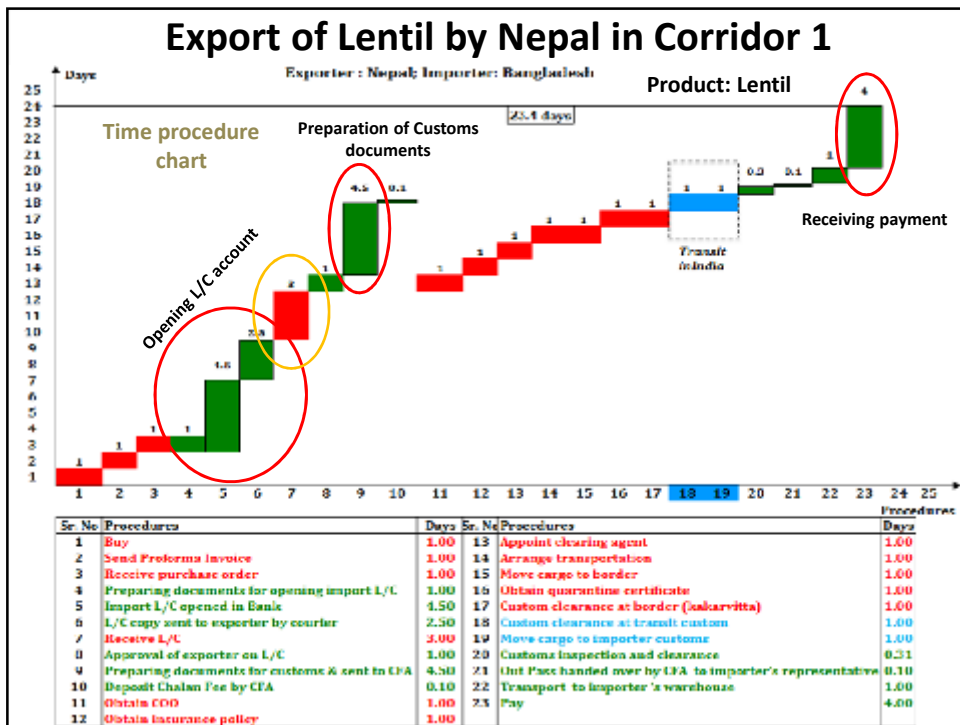
Exporter: Bangladesh Importer: Nepal

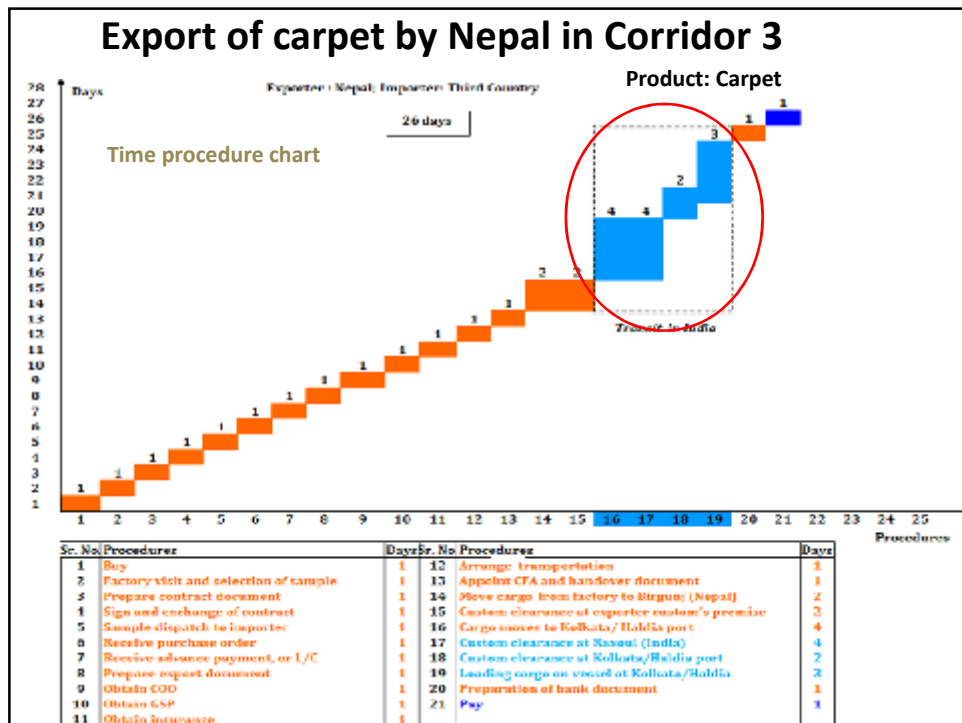
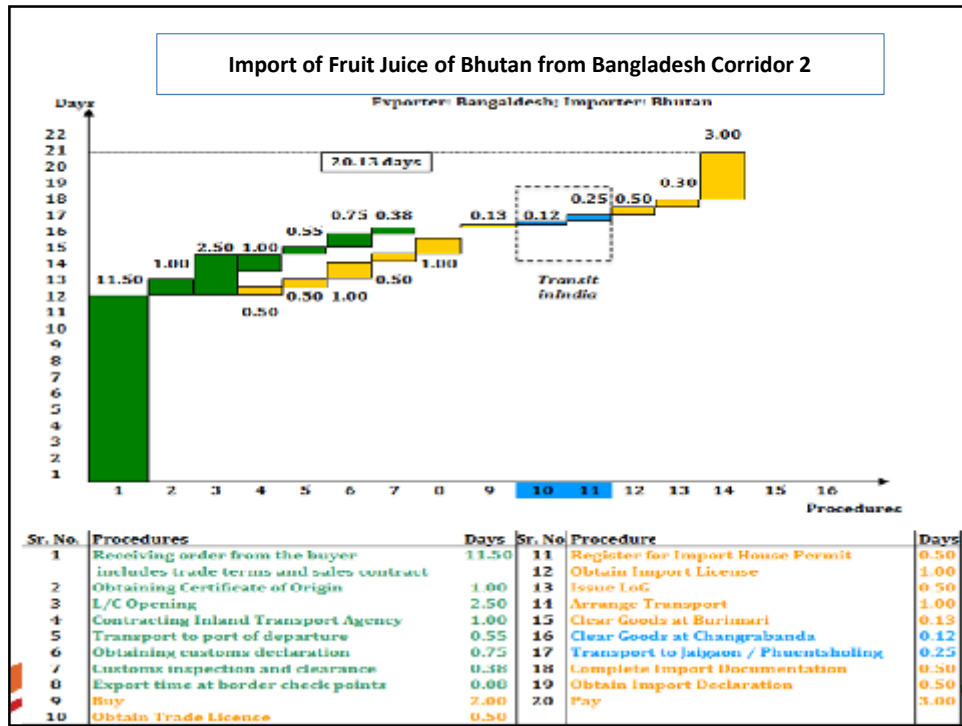
Sr. No.	Procedures	Cost (US\$)#	Share (%)
1	Fixing terms of trade with importer via local agent	6.00	0.37
2	Cargo Insurance*		
3	Documents preparing for export	19.50	1.22
4	Custom Declaration	6.90	0.43
5	VAT*		
6	C&F charge	221.00	13.78
7	Customs inspection and clearance	200.00	12.47
8	Out pass from port	1.10	0.07
9	Unload to importers vehicle	8.75	0.55
10	Transport cost	202.00	12.59
	Sub-total (export process costs at Bangladesh)	665.25	41.47
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 AEPIC	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 cost for clearing Agent	6.10	0.38
19	Custom clearing cost for 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
	Sub-total (import process costs at Nepal)	938.80	58.53
	Total trade process cost	1604.05	100.00

Direct Costs of Trade in Orange in Corridor 2			
Exporter: Bhutan; Importer: Bangladesh			
Sr. No.	Procedure	Cost (US\$)	Share (%)
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 No.	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	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
	Sub-total (export process costs in Bhutan)	444.44 (2,230)	65.30
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 port	0.00	0.00
	Sub-total (import process costs in Bangladesh)	236.15 (1,430)	34.70

Direct costs of trade in carpet in Corridor 3			
Exporter: Nepal; Importer: Third Country			
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 e.g. refreshment)	7.30	0.32
3	Prepare contract document	4.30	0.19
4	Sign and exchange of document by courier	16.50	0.72
5	Prepare and collect document	3.00	0.13
6	Obtain COO from District Chamber of Commerce	130.00	5.69
7	Obtain GSP Trade and Export Promotion Centre	91.50	4.00
8	Custom service charge	8.30	0.36
9	Insurance premium	540.00	23.63
10	Freight from Kathmandu to Kolkata	1100.00	48.13
11	Custom clearing agent cost at border	46.00	2.01
12	Preparation of Bank document	0.80	0.04
13	Bank service charges for receiving payment	270.00	11.81
14	Other cost	67.00	2.93
	Total (export process costs in Nepal)	2285.37 (1,975)	100.000

4. Time

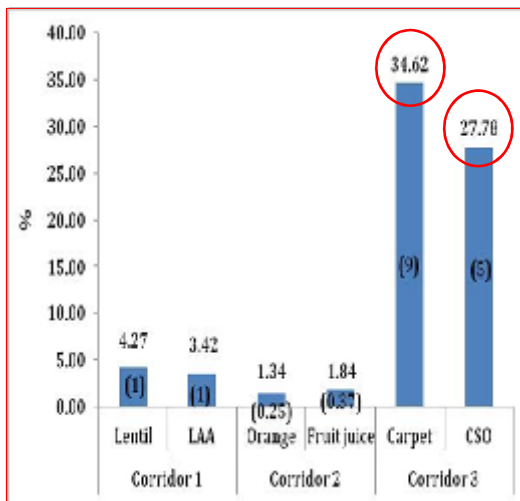




5. Transit



Time spent in transit (India)

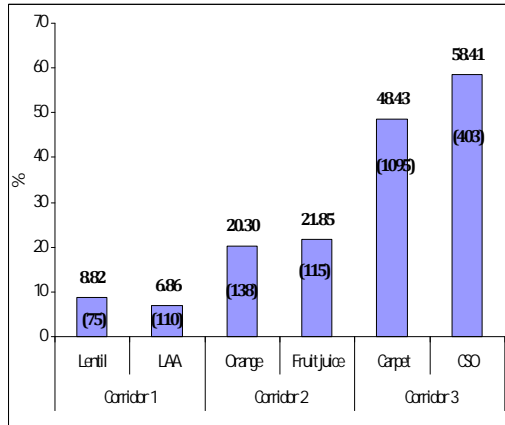


- Corridor 3 takes longer time to cross transit route (in India)
- Nepal spends over 1/4th of export or import time in transit in Corridor 3
 - 9 days for export of carpet (35% of total export time)
 - 5 days for import of CSO (28% of total import time)



Caveat: Length varies across corridors

Cost of transit



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

- Corridor 3 witnesses higher cost for transit of goods
 - 48 percent in export of carpet;
 - 58 percent in import of CSO



6. Parties involved



Parties engaged in export and import processes

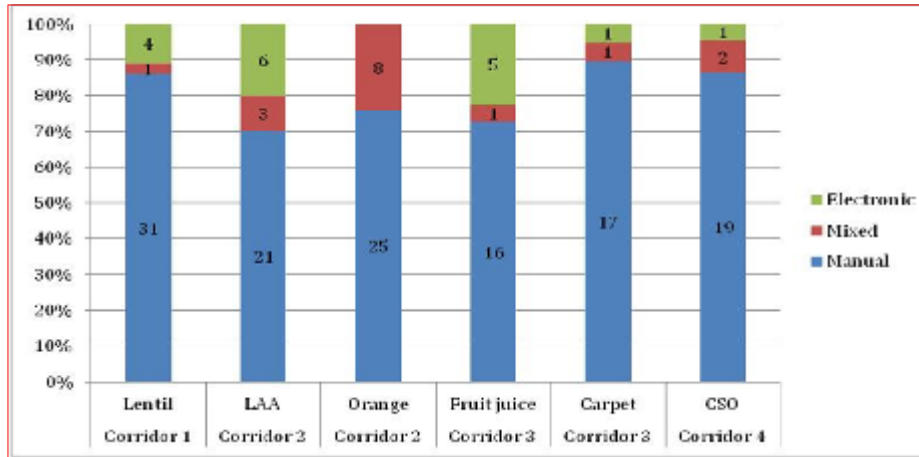
Corridor	Exporter	Importer	Products	Parties (No.)						
				Exporter			Importer			Total
				Public	Private	Total	Public	Private	Total	
Corridor 1: Kakarvitta-Panitanki-Fulbari-Banglabandha	Nepal	Bangladesh	Lentil	7	7	14	4	5	9	23
	Bangladesh	Nepal	LAA	3	4	7	7	5	12	19
Corridor 2: Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari	Bhutan	Bangladesh	Orange	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*	Carpet	8	7	15				15
	Third country**	Nepal	CSO				7	6	13	13



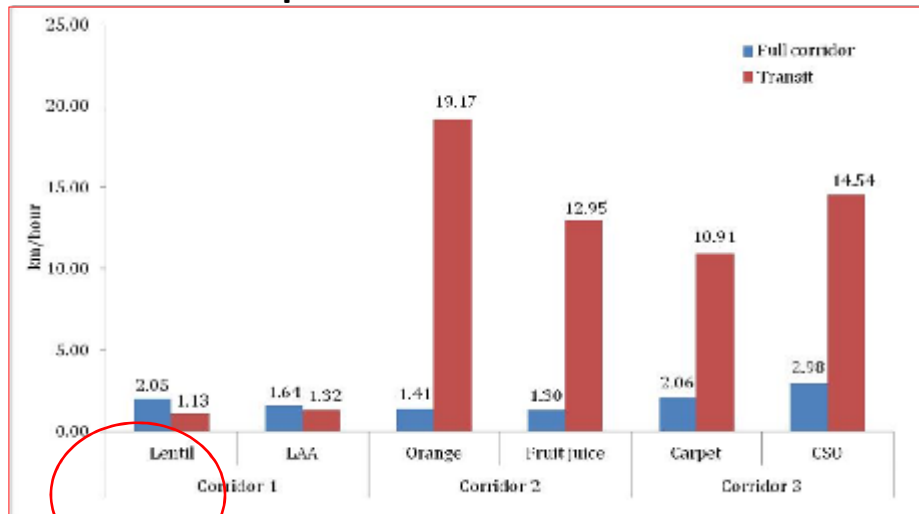
6. Other Findings



Submission of documents



Travel speed at SASEC corridors



World Bank Doing Business 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013
Bangladesh	7	7	7	6	6	6	6	6
Bhutan	10	10	8	8	8	8	8	9
India	10	10	8	8	8	8	8	9
Nepal	7	7	9	9	9	9	9	11

ADB ESCAP Business Process Analysis 2012

Corridor	Exporter	Importer	Products	Documents & Copies (No.)		
				Exporter	Importer	Total
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	Bangladesh	Nepal	LAA	15 (50)	15 (33)	30 (83)
Corridor 2: Phuentsholing- Jalgaon-Haximara- Changabandha-Buimari	Bhutan	Bangladesh	Orange	14 (25)	18 (69)	32 (94)
	Bangladesh	Bhutan	Fruit Juice	9 (30)	16 (44)	25 (74)
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	Third country***	Nepal	CSO		22 (49)	22 (49)

Trading across Borders: Comparisons
with World Bank DBD, 2013

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

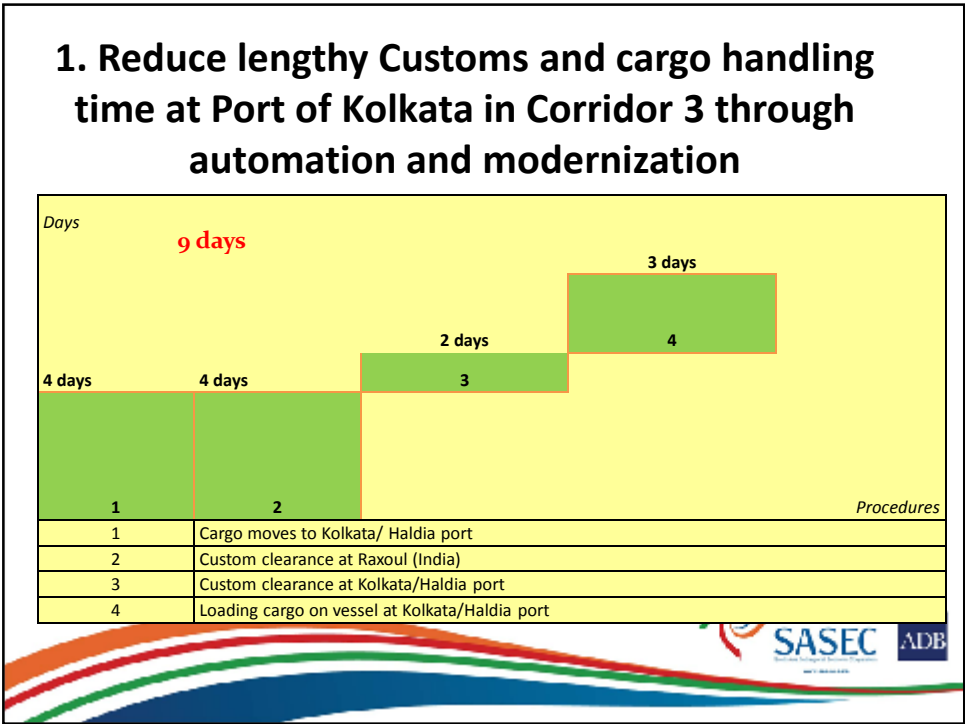
Economy	Time to import (days)			Cost to import (US\$/TEU)		
	WB	ESCAP	ADB	WB	ESCAP	ADB
Bangladesh ¹	34.00	9.00	17.10	1430.00	[415.00]	[134.15]
Bhutan ²	38.00	#	15.00	2330.00	#	[303.01]
India ³	20.00	13.00	#	1200.00	359.00	#
Nepal ⁴	38.00	22.00	18.00	2095.00	[320.00]	689.74

Notes: 1. Export of garments and import of fabrics for ESCAP and export of LAA and import of lentil in case of ADB. 2. Export of orange and import of fruit juice in case of ADB. 3. Export of fabrics and import of rubber tyres for ESCAP; 4. Export of vegetable ghee and import of fabrics for ESCAP 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 ESCAP (ARTNet) data were collected in 2010. #Bhutan was not considered in ESCAP study, whereas India was not considered for ADB study.

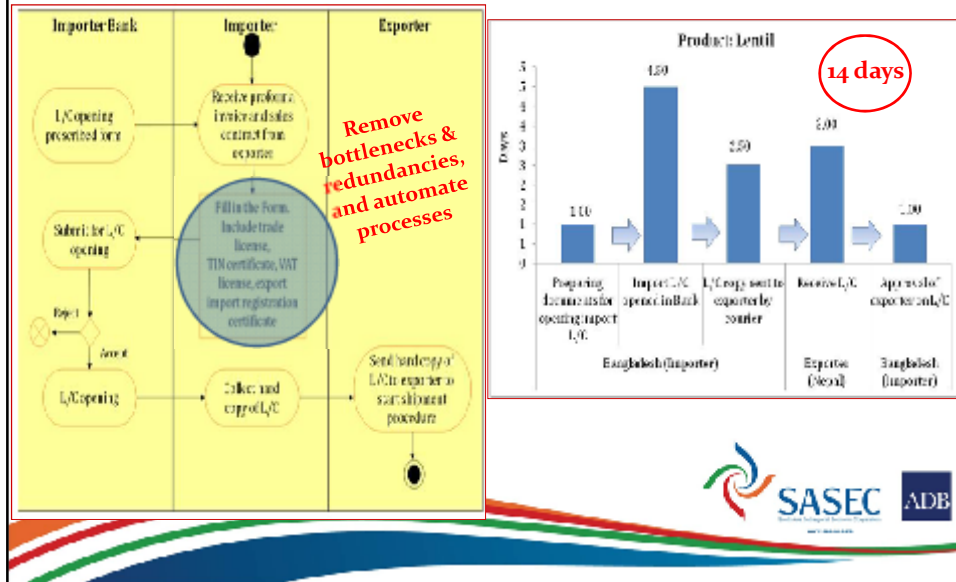
Sources: Calculated based on World Bank's DBD (2013), ESCAP (2011) and ADB country studies



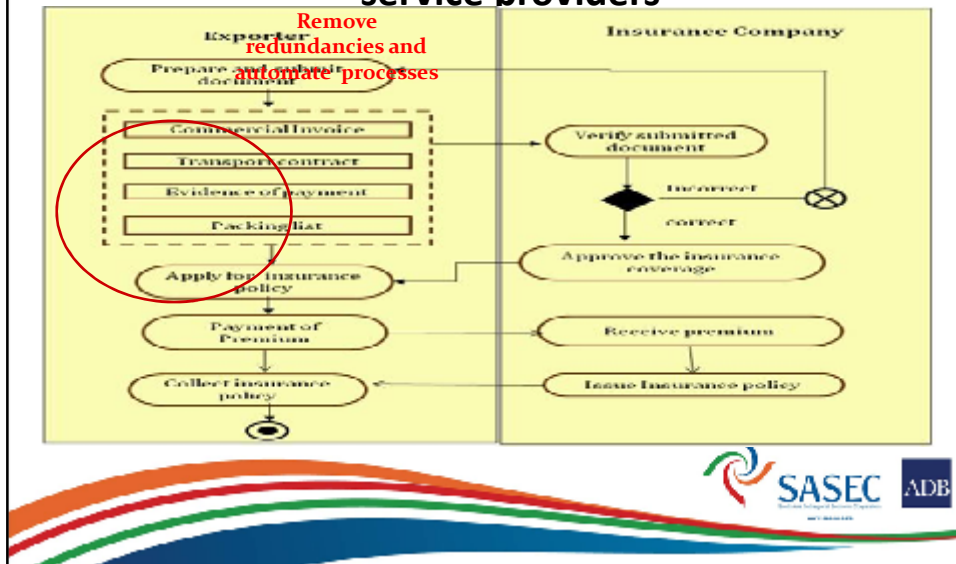
V. Selected Recommendations

2. Faster opening of L/C account in bank with the help of ICT

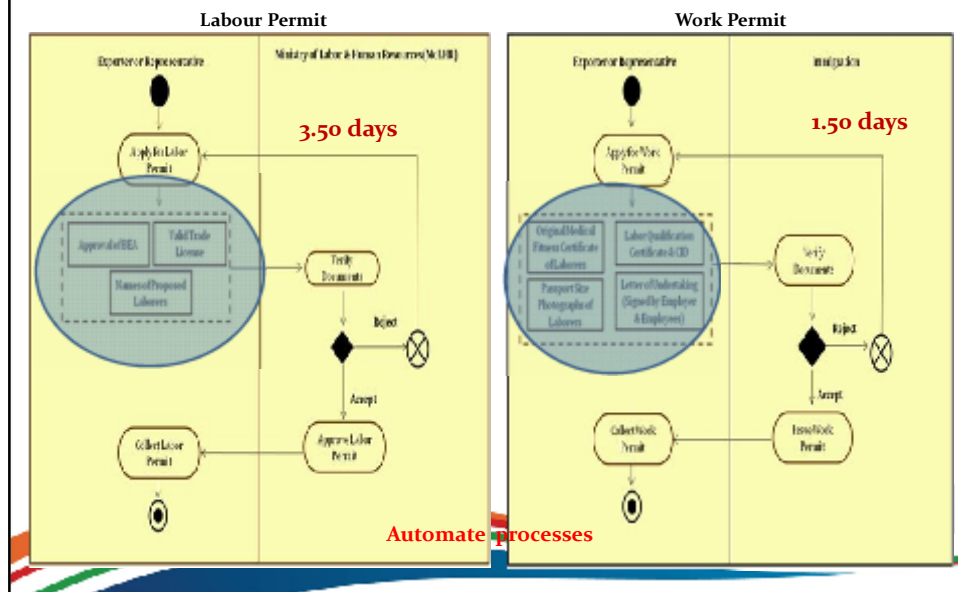


3. Faster cargo insurance with the help of ICT, process reengineering and competition among service providers



4. Use of ICT to obtain permits and certificates

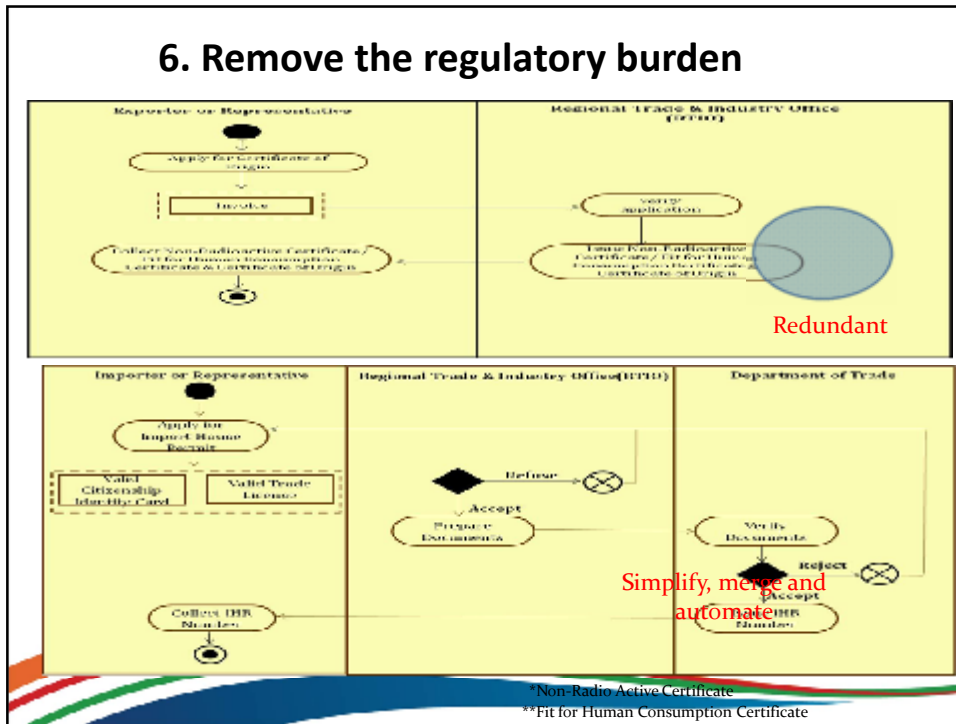
Export of Orange by Bhutan to Bangladesh



5. Synchronization of cross-border Customs in SASEC should be the priority objective.

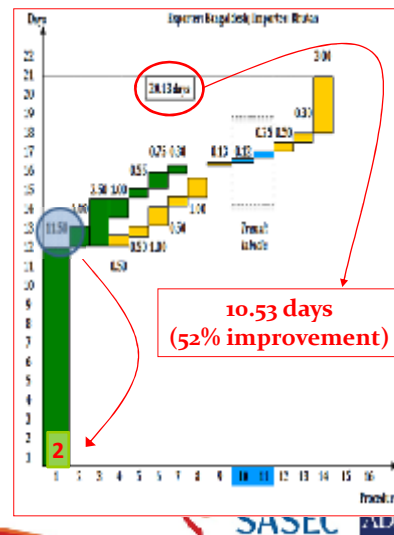
- Customs should operate 24x7 basis
 - Birgunj Custom opens at 8 am whereas Raxaul Customs opens only at 10 am
- Full automation and link-up between Customs would reduce transaction time and cost
- Acceptance of cross-border Bill of Lading electronically ?
- Lead to paperless trade

6. Remove the regulatory burden



7. 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.
- 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.
- Harmonization of documentations would reduce avg. transaction time from over 22 days to less than 10 days in SASEC.



Actual vs. Target Time for Trade in Lentil 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	Import L/C opened in Bank	Bangladesh	4.5	
6	L/C copy sent to exporter by courier	Bangladesh	2.5	
7	Receive L/C	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 Chalan 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
Total			23.4	15.0 (36% improvement)

Actual vs. Target Time for Trade in Fruit Juice in Corridor 2

Sr. No.	Procedures	Location	Actual Time (Day)	Target Time (Day)
1	Buy	Bangladesh	11.50	2.00
2	Obtaining Certificate of Origin	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
Total			20.13	9.18 (54% improvement)

Actual vs. Target Time for Trade in Carpet 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 CFA and handover document	Nepal	1.0	
14	Move cargo from factory to Birgunj (Nepal)	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)	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
Total			26	17.5 (33% improvement)

8. Acceptance to subregional transit

- Elimination of transshipment system in Banglabandha (Bangladesh) can save one day.
- Subregional transit in SASEC is a doable project.
- Transit will help Bangladesh, Bhutan 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 (e.g. food processing, T&C, etc.)
- To start with, subregional transit may be allowed in Corridors 1 and 2.
- Is GMS CBTA a template to follow? Any lessons from CAREC? Or any other region?

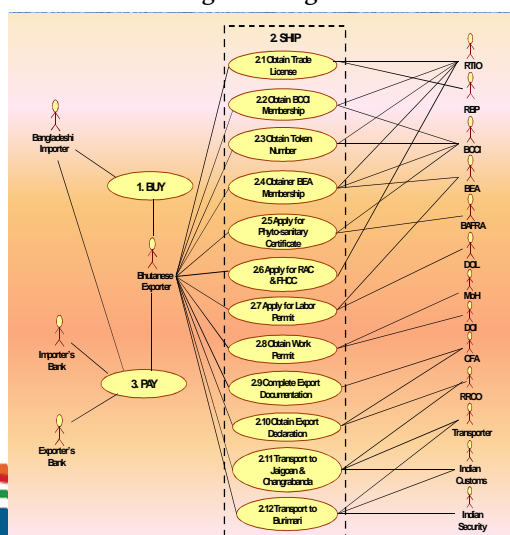
9. Development of border infrastructure at Corridors 1 and 2 is must.

Banking & finance	•Setting-up bank in Panitanki and Phuklbari (India)
Testing lab and equipment	•Setting-up testing laboratory / facilities at Phuentsholing •X-ray machines in all the LCSs
Warehouse and parking	•Add parking spaces and warehouses in Panitanki (India), Jaigaon (India), Phuentsholing (Bhutan), Changrabandha (India), Birganj (Nepal), Raxaul (India), etc.
Cargo handling	•Phuentsholing needs cranes, loaders, forklifts and scanning machines, etc. •Birgunj need modern handling equipment •Changrabanda and Jaigaon need office and handling equipment. •Birganj ICD needs modern handling equipment
Approach road	•Road to Kakarvitta from Panitanki and Raxaul to Birgunj congested and narrow. Need to be improved – either separate bypass or underpass •Road condition is not good between Phuentsholing and Hasimara (18 km) and Birpara and Dhupguri (25 km) in India. Development is needed.
Service facilities	• All border posts urgently need addition of service facilities in terms of hotel, Internet, etc. to operate 24x7.
Electricity	•All the border facilities face frequent power cut. Uninterrupted supply of electricity is essential to have the port work 24x7. Captive power facility?
Rolling stocks and railway service	•Increase number of trailers in both Raxaul and Birgunj. •Availability of railway engine at Birgunj ICD

10. National single window is essential for paperless trade in SASEC.

Use Case Diagram: Bhutan's Export of Orange to Bangladesh

- e-filing of documents in Bhutan can save lot of time and cost. Same also applies to Nepal and Bangladesh.
- Payment of duties and incentives should be done electronically.
- Pilot project may be initiated in Bhutan.
- This would effectively lead to establish national window in Bhutan and other SASEC countries.



V. NEXT STEPS



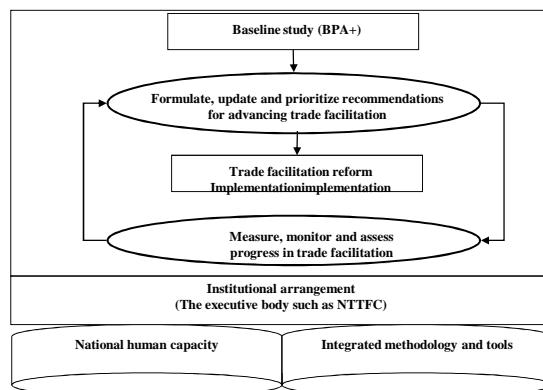
ADB & ESCAP TRADE AND TRANSPORT FACILITATION PERFORMANCE MONITORING SYSTEM (Second Phase)

BPA+: Coverage of BPA, TCD and TRS

<i>Country 1 (Exporter)</i>			<i>Country 2 (Importer)</i>		
Trade-related procedures before cargo movement	Cargo origin	Border crossing point	Border crossing point	Cargo destination	Trade-related procedures after cargo arrival
		Time Release Survey (TRS)			
	Time - Cost - Distance Survey (TCD)				
Business Process Analysis (BPA)					



An integrated and sustainable trade facilitation performance monitoring system



For more details, please refer to a draft paper titled
Towards integrated and sustainable trade facilitation performance monitoring systems: BPA+
 Prepared by Yann Duval, Tengfei Wang and Cuong Minh Nguyen.
 Available for downloading: <http://www.unescap.org/tid/unnext/tools/bpa+.pdf>

ANNUAL REPORT ON TRADE AND TRANSPORT FACILITATION PERFORMANCE IN SOUTH ASIA

- **Frequency:** Annual Report
- **Country coverage:** All SAARC countries. First phase 2014: SASEC. Second phase 2015: SASEC+Sri Lanka, Maldives Third phase 2016: SASEC+ other SAARC countries
- **Lead domestic agency:** National trade facilitation and transport committee
- **Technical secretariat:** ADB in collaboration with ESCAP supported by a core team of international and national consultants
- **Data source:** Findings from integrated methodologies of BPA, Time Release, and Time-Cost-Distance
- **Geographical coverage:** Important transport corridors, most populous cities, major land ports, seaports, and airports
- **Performance Indicators:** Time and cost needed to complete the various activities part of the import/export/transit process for selected/strategic products; Average time taken from the arrival of the goods to their release (by Customs) and breakdowns of each operation between arrival and release; Average time and cost involved in moving a shipment along a specified route/corridor
- **Process and procedure description.** List of agencies and stakeholders involved; List of , trade forms and documents and related laws, rules and regulations



Thank you

