

Data Collection Survey for Cross-Border Logistics Promotion in South Asia Region

Final Report

August 2024

JAPAN INTERNATIONAL COOPERATION AGENCY

PADECO Co., Ltd.

4R
JR
24-014

**Data Collection Survey
for Cross-Border Logistics Promotion
in South Asia Region**

Final Report

August 2024

JAPAN INTERNATIONAL COOPERATION AGENCY

PADECO Co., Ltd.

Table of Contents

Chapter 1	Introduction and Background.....	1-1
1.1	Project Background	1-1
1.1.1	Logistics Development in South Asia	1-1
1.1.2	Trade between India and Bangladesh.....	1-1
1.2	Survey Overview	1-2
1.2.1	Outline of the Survey	1-2
1.2.2	Work Schedule	1-4
1.2.3	Deliverables	1-4
Chapter 2	Review of Current Plans and Policies Related to Cross-Border Logistics	2-1
2.1	General Background	2-1
2.2	Sector Development Plans, Policies, and Studies in Each Country.....	2-1
2.2.1	Introduction.....	2-1
2.2.2	India	2-1
2.2.3	Bangladesh.....	2-6
2.2.4	Summary of Findings.....	2-8
2.3	Policies Related to the Development of India's North Eastern Region.....	2-9
2.3.1	The Act East Policy and the Neighbourhood First Policy.....	2-9
2.3.2	The North Eastern Region (NER) Vision 2020 and North Eastern Council (NEC) Regional Plan	2-9
2.3.3	Prime Minister's Development Initiative for North Eastern Region	2-9
2.4	Plans, Policies, and Studies to Strengthen Regional Connectivity in South Asia.....	2-10
2.4.1	Summary of Regional Initiatives	2-10
2.4.2	BIMSTEC	2-10
2.4.3	SASEC	2-13
2.4.4	SAARC	2-15
2.4.5	Summary of Findings.....	2-15
2.5	Legal and Regulatory Instruments Related to Cross-Border Transport, Logistics and Trade Promotion in the Region.....	2-15
2.5.1	Introduction.....	2-15
2.5.2	Multilateral/Bilateral Legal Instruments	2-16
2.5.3	Summary of Findings.....	2-17
2.6	Reports on Cross-Border Transport and Logistics in South Asia by Development Partners and Other Organizations	2-18
2.6.1	Introduction.....	2-18
2.6.2	Japan International Cooperation Agency	2-18
2.6.3	The World Bank	2-20
2.6.4	Asian Development Bank	2-22
2.6.5	Other Partners, Organizations, and Groups.....	2-23
2.6.6	Summary of Findings.....	2-24
2.7	Identification of Stakeholders.....	2-25
2.7.1	Introduction.....	2-25
2.7.2	India	2-25
2.7.3	Bangladesh.....	2-27
2.8	Policies and Measures to Utilize Digital Technologies in Cross-Border Logistics	2-27
2.8.1	Introduction.....	2-27
2.8.2	India	2-28

2.8.3	Bangladesh.....	2-30
2.9	Map for the Connectivity Improvement Projects	2-31
Chapter 3	Current Assessment of the Targeted Corridors and the Border Operations	3-1
3.1	Introduction	3-1
3.2	Analysis of the Current State of Transport and Logistics along the Targeted Corridors	3-1
3.2.1	General Situation of the Kolkata-North Eastern Region (NER) Transit	3-1
3.2.2	Petrapole-Benapole Connection.....	3-12
3.2.3	Sabroom-Ramgarh Connection.....	3-18
3.2.4	Transit through the Agartala-Akhaura Corridor	3-23
3.2.5	Other Issues related to the Logistics Infrastructure.....	3-29
3.3	Details of Customs Clearance Procedures	3-31
3.3.1	Clearance Procedures for Goods Imported to and Exported from India	3-31
3.3.2	Procedures at the Petrapole ICP	3-32
3.3.3	Customs Clearance Procedures of Bangladesh	3-38
3.3.4	Time Release Study Result	3-44
3.3.5	Procedural Costs	3-51
3.4	DX and ICT Applications	3-54
3.4.1	Land Port Management System in India	3-54
3.4.2	e-Suvidha Operation	3-54
3.4.3	ECTS Operation in India.....	3-58
3.4.4	CCTV Surveillance System in Benapole	3-59
3.4.5	Other Interventions	3-60
3.5	Demand Forecast	3-62
3.5.1	Background and Overview.....	3-62
3.5.2	Methodology for the Demand Forecast.....	3-72
3.5.3	Demand Forecast.....	3-73
3.5.4	Logistics Characteristics and Demand of the Major Land Borders	3-79
Chapter 4	Strategic Approach and Proposals.....	4-1
4.1	Major Findings in Each Area.....	4-1
4.1.1	Findings Related to the Institutional Setting for Cross Border Transport.....	4-1
4.1.2	Findings Related to the Infrastructure Setting.....	4-3
4.1.3	Findings Related to Customs Operations and DX	4-6
4.2	Lessons from International Experience	4-7
4.2.1	Relevant International Experience with Land Ports and Related Trade/Transport Facilitation Initiatives	4-7
4.2.2	Lessons from the International Experience.....	4-10
4.3	Strategic Approaches and Project Proposals.....	4-11
4.3.1	Strategic Approach and Project Screening.....	4-11
4.3.2	Development Directions and Interventions.....	4-14

Appendices

Appendix A: Economic Partnership Agreement among BBIN Countries

Appendix B: Statistics of Traffic at Land Borders

List of Figures

Figure 1-1: Target (Survey) Region and Border.....	1-3
Figure 1-2: Work Schedule.....	1-4
Figure 2-1: India's Bharatmala Pariyojana.....	2-4
Figure 2-2: Various Relevant Regional Initiatives	2-10
Figure 2-3: Required Enhancement of Regional Connectivity to Support Economic Growth.....	2-18
Figure 2-4: Summary of Japan's Official Development Assistance Projects in the BBIN Region	2-19
Figure 2-5: Responsibility Matrix of Members of the National Committee on Trade Facilitation of India	2-27
Figure 2-6: Schematic Showing Key Aspects of the ICEGATE System.....	2-28
Figure 2-7: Example of a KML Map Display	2-32
Figure 3-1: Kolkata - NER Corridor with Bangladesh Transit.....	3-1
Figure 3-2: Comparison of Freight Traffic Volumes by Borders (India-Bangladesh, 2022-23).....	3-2
Figure 3-3: Comparison of Trade Volumes by Borders (India-Bangladesh, 2022-23).....	3-3
Figure 3-4: India - Bangladesh Export/Import Annual Change (million USD)	3-4
Figure 3-5: India - Bangladesh Trade (2021)	3-4
Figure 3-6: Indicative Map of the Infrastructure Development along Kolkata-Dhaka Corridor (as of Feb 2024).....	3-7
Figure 3-7: Indicative Map of Infrastructure Development along the Chattogram-NER Corridor	3-8
Figure 3-8: East Bangladesh-Tripura Industrial Ladder (EBTIL) Initiative.....	3-11
Figure 3-9: Petrapole-Benapole Cross Border Trade Facility before 2016	3-13
Figure 3-10: Petrapole-Benapole Cross-Border Trade Facility After 2016 (Until 2023).....	3-14
Figure 3-11: Petrapole-Benapole Cross-Border Trade Facility after 2025.....	3-14
Figure 3-12: New Passenger Facility at Petrapole (November 2023, Under Construction, Nighttime View)	3-16
Figure 3-13: Passenger Queues in Front of the Border Facility at Benapole (November 2023).....	3-16
Figure 3-14: BLPA's Monitoring Panel with 378 CCTVs at Benapole (February 2024).....	3-17
Figure 3-15: Queue of Out-going Bangladesh Cargo at the Zero Point and Weighbridge (February 2024)	3-17
Figure 3-16: Sabroom Border Facility and Cargo Handling Flows	3-19
Figure 3-17: Warehouse at the Sabroom ICP (as of Nov 2023)	3-19
Figure 3-18: The Connection of Bangladesh Dual Gauge and Indian Broad Gauge at Agartala	3-26
Figure 3-19: Drawing of the Nischintapur Yard.....	3-26
Figure 3-20: Track at the Zero Point (Boundary), Dual Gauge with Readiness for Extra Rail Installation	3-27
Figure 3-21: Aggregate Receiving Sites on the Akhaura (Bangladesh) Side	3-28
Figure 3-22: Cold Chamber (temperature control room) in Agartala.....	3-28
Figure 3-23: Before / After with MVA and SEZ	3-31
Figure 3-24: Layout of the Petrapole ICP Facilities	3-32
Figure 3-25: Truck Movement Flow in Petrapole (Import to India)	3-33
Figure 3-26: Major Steps for Import Clearance for Bangladesh	3-38
Figure 3-27: Layout of the Benapole Land Port.....	3-39
Figure 3-28: Truck Movement Flow in Benapole (Import to Bangladesh)	3-40
Figure 3-29: Business Process at Benapole Land Port.....	3-42
Figure 3-30: The Business Process of Chattogram Port.....	3-44
Figure 3-31: Export Release Time at Petrapole ICP	3-47
Figure 3-32: Share of Time Across Major Stages of Import Clearance - Benapole	3-48
Figure 3-33: Share of Time Across Major Stages of Import Clearance for Post-Arrival Processing - Chattogram	3-50
Figure 3-34: Stakeholder Wise Share of Time - Chattogram	3-50
Figure 3-35: ICEGATE Reservation Screen by e-Suvidha	3-55
Figure 3-36: Suvidha Pass.....	3-55
Figure 3-37: e-Suvidha Screen Installed at the Gate of the Petrapole ICP.....	3-56

Figure 3-38: e-Suvidha Current Operation and Future Operation.....	3-57
Figure 3-39: CAR Pass operated using 3-copy paper	3-57
Figure 3-40: Examples of Cargo Seals with ECTS	3-58
Figure 3-41: Location Tracking (left) and Transshipment at Railway Stations (right)	3-58
Figure 3-42: Mobile Phone Network Service Level.....	3-59
Figure 3-43: CCTV Surveillance System in Benapole.....	3-59
Figure 3-44: Conceptual Diagram of ICIS with ASYCUDA	3-60
Figure 3-45: Kolkata-Chattogram-India NER Corridor	3-62
Figure 3-46: Baseline Traffic Data for the Petrapole ICP	3-64
Figure 3-47: Map of Asian Highway Network.....	3-65
Figure 3-48: Section of AH1 from Petrapole to Bangaon	3-66
Figure 3-49: Section of AH1 from Benapole to Jashore	3-66
Figure 3-50: Section of AH2 at Siliguri Corridor.....	3-67
Figure 3-51: Phase 1 of the World Bank's ACCESS Project73.....	3-71
Figure 3-52: Roadmap of Ladder Network for the Chattogram-India NER Corridor.....	3-76
Figure 3-53: Section of AH1 and 2 at Dhaka-Sylhet Corridor	3-77
Figure 4-1: Demarcation Mapping of Projects by Development Partners and Proposed Projects	4-2
Figure 4-2: On-going Road Projects overlaying with Major Cities	4-5
Figure 4-3: Non-Pipelined Road Links to Be Developed in the Target Region	4-5
Figure 4-4: Strategic Approaches for Interventions	4-12
Figure 4-5: Target Borders for the Development of Border Facilities by WB and ADB and Unplanned Borders	4-15
Figure 4-6: Mapping of Projects Proposed by JICA Survey Team	4-18

List of Tables

Table 1-1: Integrated Check Posts (ICPs) in India	1-1
Table 1-2: Outline of the Survey	1-2
Table 1-3: List of Reports.....	1-4
Table 2-1: List of Policies and Plans in India.....	2-5
Table 2-2: List of Policies and Plans in Bangladesh	2-8
Table 3-1: Multimodal Transit Approach by Commodity	3-5
Table 3-2: Connection Level of Service along the Kolkata-Dhaka-Agartala Corridor	3-10
Table 3-3: Movement of People and the Value of Imports/Exports at Petrapole-Benapole	3-13
Table 3-4: Expected Transit Operations from Chattogram to NER.....	3-21
Table 3-5: Trade Statistics at Agartala (Akhaura)	3-23
Table 3-6: Trade Values Between Tripura and Bangladesh	3-23
Table 3-7: Present Restricted Items in Export from Agartala.....	3-24
Table 3-8: BLPA's proposals for Border Facility Improvement	3-29
Table 3-9: Benapole Customs House Import Clearance Process.....	3-41
Table 3-10: Chattogram Customs House Clearance Process.....	3-43
Table 3-11: Time Release Study Conducted Customs Ports.....	3-45
Table 3-12: Import Release Time and Distance Travelled towards NTFAP Targets	3-46
Table 3-13: Import ART at Petrapole	3-47
Table 3-14: Stage-wise Export Release Time at ICP Petrapole.....	3-47
Table 3-15: Process-Wise Time Taken for Major Steps of Clearance Process- Benapole.....	3-48
Table 3-16: Time Taken by Customs - Benapole	3-49
Table 3-17: Time Taken by Importers and Customs Brokers - Benapole.....	3-49
Table 3-18: Time Taken by Customs - Chattogram.....	3-51
Table 3-19: Customs duties in India and other import-related charges	3-51
Table 3-20: Example of Calculation of Total Duty Amount for Imported Goods	3-52
Table 3-21: Accessible Data Through the ULIP	3-61

Table 3-22: Socioeconomic Indicators of the Target (Survey) Countries.....	3-63
Table 3-23: Bilateral Trade as a Percentage of Total Trade (2022)	3-63
Table 3-24: Relevant Asian Highway Sections	3-65
Table 3-25: AADT of Relevant Asian Highway Sections	3-67
Table 3-26: Comparison of Generalized Cost for Bulk Cargo from Kolkata to Agartala	3-68
Table 3-27: Comparison of Generalized Cost for Container Cargo from Kolkata to Agartala	3-69
Table 3-28: Linkages between Commodity Types and Transport Modes	3-72
Table 3-29: Travel Time in Hours by Road Section along the Kolkata-Dhaka-Agartala Corridor	3-73
Table 3-30: Projection Scenario and Traffic Growth Rate	3-74
Table 3-31: Traffic Projection for Kolkata-Dhaka Corridor.....	3-74
Table 3-32: Traffic Projection for Sabroom Connection	3-76
Table 3-33: Baseline Traffic of the Dhaka-Sylhet-India NER Corridor.....	3-77
Table 3-34: Traffic Projection for Agartala-Akhaura Corridor.....	3-78
Table 3-35: Logistics Characteristics and Demand of the Major Land Borders	3-79
Table 4-1: List of Non-pipelined Road Links with Development Potentials	4-6
Table 4-2: Priority Recommendation of Proposed Projects	4-18

List of Boxes

Box 2-1: Selected Projects in the BIMSTEC Transport Connectivity Master Plan Related to Corridors and Border Crossings in This Survey	2-11
Box 3-1: Major Improvements of Road, Rail, and Waterborne Transit Infrastructure along the Chattogram- NER Corridor	3-9
Box 4-1: Structure of the EAC OSBP Procedures Manual	4-10

Abbreviations

AADT	annual average daily traffic
ACCESS	Accelerating Transport and Trade Connectivity in Eastern South Asia
ACCS	Air Cargo Community System
ACMP	Agreement on the Use of Chattogram and Mongla Port[s]
ACS	Agreement on Coastal Shipping
ADB	Asian Development Bank
AEO	authorized economic operator
AfCFTA	African Continental Free Trade Area
AIIB	Asian Infrastructure Investment Bank
APIs	application programming interfaces
APSI	Action Plan on SASEC Initiatives
ARO	Assistant Revenue Officer
ART	average release time
ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
BBIN	Bangladesh-Bhutan-India-Nepal
BBIN MVA	Bangladesh-Bhutan-India-Nepal Motor Vehicles Agreement
BDT	Bangladesh taka
BEZA	Bangladesh Economic Zones Authority
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
B/L	Bill of Lading
BLPA	Bangladesh Land Port Authority
BRTA	Bangladesh Road Transport Authority
BSF	Border Security Force
CBIC	Central Board of Indirect Taxes and Customs (India)
CBM	Coordinated Border Management
CCTV	closed circuit television
CEPA	Comprehensive Economic Partnership Agreement
CH	Clearing House
CIF	Cost, Insurance, and Freight
CLAP	Comprehensive Logistics Action Plan
COVID-19	coronavirus 2019
CSEP	Centre for Social and Economic Progress
CWC	Central Warehousing Corporation
D/P	document(s) against payment

DGFT	Directorate General of Foreign Trade
DPIIT	Department for Promotion of Industry and Internal Trade (India)
DPP	Detailed Project Proposal
DPR	detailed project report
DX	digital transformation
e-ABMS	Electronic Automated Border Management Systems
EAC	East African Community
EBTIL	East Bangladesh-Tripura Industrial Ladder
ECEC	East Coast Economic Corridor (India)
eCMS	Electronic Customs Management System
ECTS	electronic cargo tracking system
EDI	electronic data interchange
EIMC	Empowered Inter-Ministerial Committee
ELD	electronic logging device
EPA	Economic Partnership Agreement
e-POD	electronic proof of delivery
EPZ	Export Processing Zone
ESCAP	Economic and Social Commission for Asia and the Pacific
Exim	export-import
F/R	final report
FICCI	Federation of Indian Chambers of Commerce and Industry
GDP	gross domestic product
GMS	Greater Mekong Subregion
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GDP	Gross Domestic Product
GNSS	global navigation satellite system
GPS	global positioning system
GSM	Global System for Mobile Communications
IBCCI	India-Bangladesh Chamber of Commerce and Industry
IC/R	inception report
ICDs	inland container depots
ICEGATE	Indian Customs Electronic Data Interchange Gateway
ICES	Indian Customs EDI System
ICIS	Integrated Customs Information System
ICP	integrated check post
ICT	information and communication technology
IEC	Importer-Exporter Code

IGM	import general manifest
INR	Indian rupee
IPR	Intellectual Property Rights
IT	information technology
IT/R	interim report
JETRO	Japan External Trade Organization
JICA	Japan International Cooperation Agency
JWG	Joint working group
KLM	Keyhole Markup Language
L/C	letter of credit
LCL	less-than-container load
LCS	Land Customs Stations
LEO	Let Export Order
LOCs	Lines of Credit (India)
LOS	level of service
LPAI	Land Ports Authority of India
LPI	Logistics Performance Index
LPMS	land port management system
LTE	Long Term Evolution
MDoNER	Ministry of Development of [the] North Eastern Region
MEA	Ministry of External Affairs (India)
MHA	Ministry of Home Affairs (Bhutan and India)
MICS	Model for International Container Simulation
MMLP	multimodal logistics park
MoRTH	Ministry of Road Transport and Highways (India)
MVA	Motor Vehicles Agreement
NACCS	Nippon Automated Cargo and Port Consolidated System
NBR	Bangladesh's National Board of Revenue
NCAER	National Council of Applied Economic Research
NCTF	National Committee on Trade Facilitation (India)
NEC	North Eastern Council
NEEC	North East Economic Corridor
NER	North Eastern Region
NERSDS	North East Road Sector Development Scheme
NESIDS	North East Special Infrastructure Development Scheme
NHICDL	National Highways and Infrastructure Development Corporation Limited
NLP	National Logistics Policy

NNSW	Nepal National Single Window
NSW	national single window
NTFAP	National Trade Facilitation Action Plan (India)
OSBP	one-stop border post
P/L	Packing List
PBL	policy-based loan
PGAs	Participating Government Agencies
PIWTT	Protocol on Inland Water Transit and Trade
PPP	public-private partnership
RBI	Reserve Bank of India
RFID	radio frequency identification
RHD	Roads and Highways Department (Bangladesh)
SAARC	South Asian Association for Regional Cooperation
SANEM	South Asian Network on Economic Modelling
SARDP-NE	Special Accelerated Road Development Programme for the North East
SASEC	South Asia Subregional Economic Cooperation
SDGs	Sustainable Development Goals
SEZ	Special Economic Zone
SLDE	secured logistics document exchange
SMILE	Strengthening [the] Multimodal and Integrated Logistics Ecosystem
SRMTS	SAARC Regional Multimodal Transport Study
SOP	Standard Operating Procedure
SOW	Statemeent of Work
SWIFT	Single Window Interface for Facilitating Trade
TFA	Trade Facilitation Agreement
TIR	Transports International Routers / International Road Transport
TOS	Terminal Operating System
TRS	Time Release Study
TT	telegraphic transfer
TVPP	truck visibility and positioning platform
ULIP	united logistics interface platform
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UPI	Unified Payments Interface
USAID	United States Agency for International Development
USD	United States dollar

Vizag	Visakhapatnam
WB	World Bank
WCO	World Customs Organization
WTO	World Trade Organization
XML	Extensible Markup Language

Notes:

1. Following best practice, the first letters have been capitalized only in proper nouns.
2. The boundaries, colors, denominations, and any other information shown on the map in this report do not imply, on the part of the JICA Survey Team, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.
3. The page numbers shown in the text of this report are correspond to those of the referenced reports.

Chapter 1 Introduction and Background

1.1 Project Background

1.1.1 Logistics Development in South Asia

The South Asia region – consisting of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka – is working to promote logistics through economic corridor development projects based on various frameworks, including Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), which aim for increased economic growth through regional cooperation.

India's population and economic growth have led to an increase in passenger and freight traffic, and accordingly, the Government of India has been developing roads, railways, and other transport infrastructure to serve this increased transport demand. In 2017, the government launched the Bharatmala Plan (*Bharatmala Pariyojana*) to develop national economic corridor, implement related development policies, and further develop the country's logistics network. In addition, integrated check posts (ICPs) are being established at border crossings to facilitate the cross-border movement of goods and people by reducing delays from border procedures and poor infrastructure (e.g., inadequate or insufficient parking). As of 10 June, 2024, India was operating eleven ICPs according to the website of the Land Ports Authority of India (LPAI). Five ICPs were under development, and another seven ICPs were proposed to be developed. Table 1-1 sets out the details.

Table 1-1: Integrated Check Posts (ICPs) in India

Status	Number of ICPs	ICPs and Adjoining Countries
Operational	11	- Bangladesh: Agartala, Dawki, Petrapole, Sutarkandi, Srimantapur - Myanmar: Moreh - Nepal: Raxaul, Rupaidiha, Jogbani - Pakistan: Attari, Dera Baba Nanak
Under Development	5	- Bangladesh: Kawrpuichhuah, Sabroom - Nepal: Banbasa, Bhithamore, Sonauli
Proposed	7	- Bangladesh: Changrabandha, Fulbari, Ghojadanga, Hili, Mahadipur - Nepal: Panitanki - Bhutan: Jaigaon

Source: Created based on the website of the Land Ports Authority of India (LPAI) (<https://lpai.gov.in/>), on 14 February 2024

For neighboring countries such as Bangladesh, which is major regional trading partners of India, the establishment and development of ICPs is important from the perspective of national economic development. The governments of both countries are promoting the diversification of port use, including discussions at the summit level regarding the use of Chattogram (and Mongla) Ports.

1.1.2 Trade between India and Bangladesh

With the aim of promoting trade between the North Eastern Region of India and Bangladesh, the Governments of India and Bangladesh signed a memorandum of understanding on cooperation in 2015. The aim was to reduce transport times and revitalize logistics between Northeast India and Chattogram Port, the port with the largest handling volume in Bangladesh, and Matarbari Deep Sea Port, which is currently under development with financing through a Japanese yen loan from the Japan International Cooperation Agency (JICA).

At present, India operates four ICPs along its border with Bangladesh; Agartala, Dawki, Petrapole, Sutarkandi, and Srimantapur. The busiest is at Petrapole (India) opposite Benapole (Bangladesh), which connects Kolkata (West Bengal), India, and Dhaka, the capital of Bangladesh, where the movement of

people and the value of import and export transactions are the largest in the South Asian region, making it an important hub for the trade of both countries.

However, there are still challenges in establishing a smooth logistics network between India (especially in the North Eastern Region) and Bangladesh. Logistics efficiency between these countries has been hindered by the slow development of border infrastructure and institutions.

1.2 Survey Overview

1.2.1 Outline of the Survey

This Survey reviewed existing logistics plans and systems; analyzing issues related to cross-border logistics in India (especially in the North Eastern Region) and Bangladesh; and collecting and organizing basic information on international transport and economic corridors. Information on a proposed cooperation¹ policy for the improvement of logistics at borders in the region, which is assumed to include yen loan projects, and the prerequisites for the formulation and implementation of cooperation programs and new projects, was collected and analyzed. Specifically, the border areas to be covered were mainly between the North Eastern Region of India and Bangladesh and between Kolkata and Dhaka.

The main mode covered by the survey is road transport. Port and railway infrastructure are not focuses of the survey, but from the perspective of infrastructure development, access roads to ports and railways as transport nodes and measures to address bottlenecks in their logistics and trade procedures are included in the survey.

An outline of the survey, including the survey objectives and the target (survey) region, is summarized in Table 1-2.

Table 1-2: Outline of the Survey

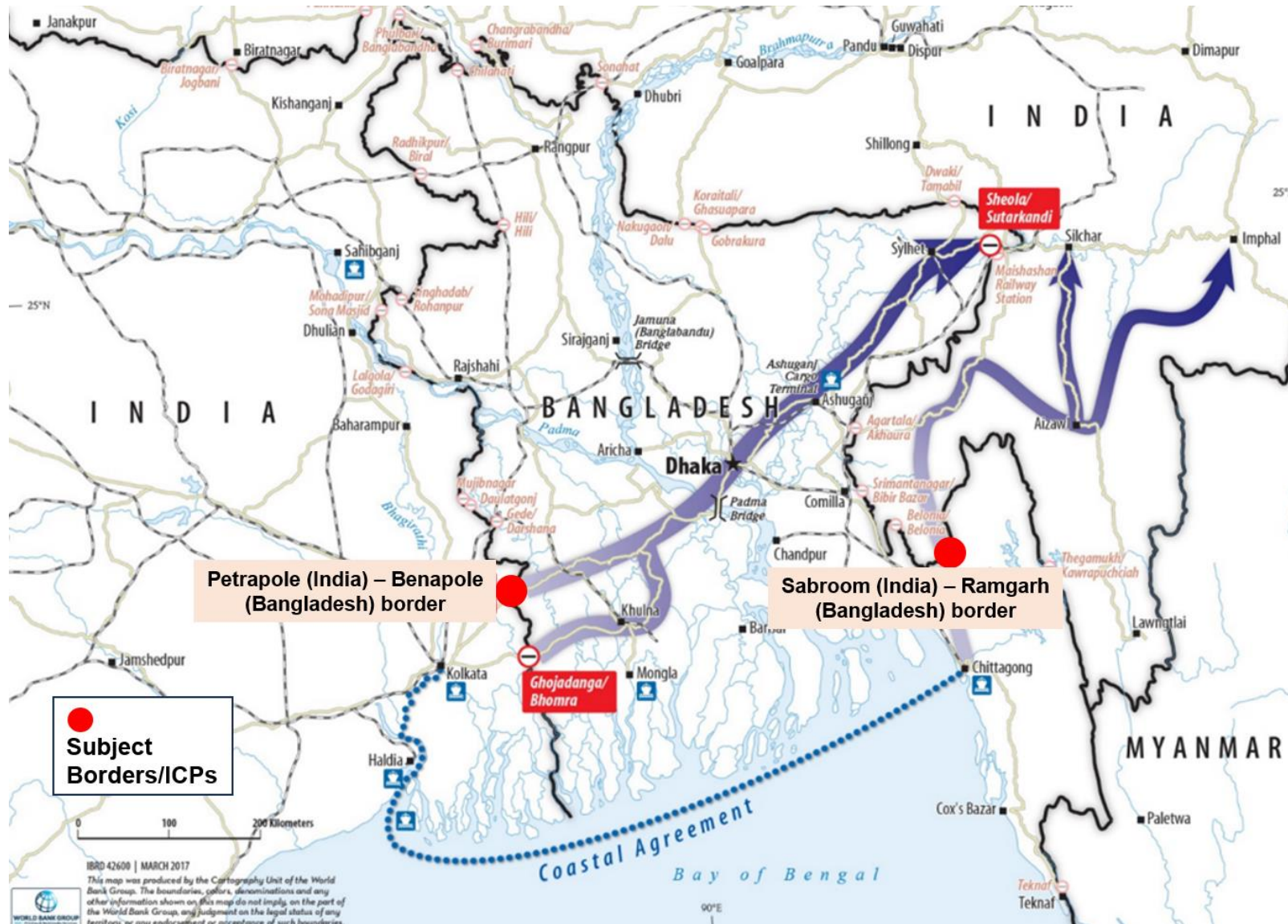
Objectives	- To identify, analyze, and organize issues based on an understanding of logistics and logistics policies, systems, and initiatives in India (especially in the North Eastern Region) and Bangladesh, and trends for support and cooperation from other development partners. - To examine reasonable and realistic improvement measures, both soft and hard, including measures for the target borders, and compile and propose the necessary information for the formation of a draft cooperation policy and individual cooperation programs/new projects, assuming a yen loan project.
Target (Survey) Region	- The major logistics network(s) between India and Bangladesh, especially ICPs located on the border. Target Borders/ICPs^{*1} - Petrapole (India)-Benapole (Bangladesh) border - Sabroom (India)-Ramgarh (Bangladesh) border (not yet operational as an ICP)
Counterpart Organization	The Ministry of External Affairs, India, as the facilitator agency.
Survey Period	September 2023-August 2024

Note: ^{*1} Although the Agartala (India)-Akhaura (Bangladesh) border is not directly covered as a target border, descriptions on the Agartala-Akhaura border are also included in this report.

Source: JICA Survey Team

Figure 1-1 shows the target region and borders of the survey.

¹ In this report (and project) the term “cooperation” is usually used instead “support” or “assistance” to reflect the equal nature of the relationship between the parties.

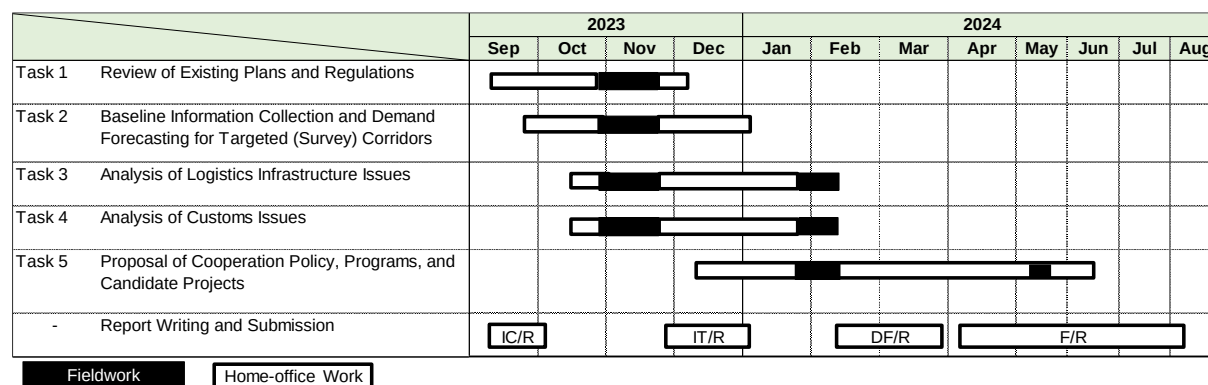


Source: This Survey based on *Bangladesh Regional Connectivity Project*, World Bank

Figure 1-1: Target (Survey) Region and Border

1.2.2 Work Schedule

Figure 1-2 presents the work schedule. The survey team commenced the survey work on 7 September 2023 and conducted the field surveys from late October 2023 to mid-November 2023, from late January 2024 to early February 2024, and from early to mid-May 2024. The Final Report was submitted in August 2024.



Source: JICA Survey Team

Figure 1-2: Work Schedule

1.2.3 Deliverables

Table 1-3 lists the reports prepared and submitted in this survey.

Table 1-3: List of Reports

Reports	Time of Submission
Inception Report (IC/R)	September 2023
Interim Report (IT/R)	December 2023
Draft Final Report (DF/R)	March 2024
Final Report (F/R) (this report)	August 2024

Source: JICA Survey Team

Chapter 2 Review of Current Plans and Policies Related to Cross-Border Logistics

2.1 General Background

This section reviews and analyzes plans, policies, regulations, institutions, and cooperation (support) related to cross-border logistics, with respect to India and Bangladesh. This review and analysis cover both soft and hard aspects, specifically addressing:

- (i) sector development plans, policies, and studies in each country (e.g., for transport and logistics infrastructure, the use of digital technology utilization);
- (ii) plans, policies, and studies related to the development of India's North Eastern Region;
- (iii) plans, policies, and studies to strengthen regional connectivity in South Asia;
- (iv) legal and regulatory instruments related to cross-border logistics;
- (v) an identification of key stakeholders related to logistics and related policies;
- (vi) reports on cross-border logistics prepared by international development partners and other organizations;
- (vii) policies and measures to utilize digital technologies in cross-border logistics; and
- (viii) projects related to road connectivity in India and neighboring countries.

2.2 Sector Development Plans, Policies, and Studies in Each Country

2.2.1 Introduction

Each of the countries covered by the survey has prepared relevant logistics, trade, and transport plans, policies, and studies, some of which relate to the corridors that are the subject of the survey. This section reviews these plans and studies mainly for India, which is the most advanced with respect to logistics and transport, but also for Bangladesh.

2.2.2 India

Relevant logistics, trade, and transport plans, policies, and studies for India include the following (generally in reverse chronological order, i.e., from newest to oldest, but also considering relevance to the survey):

- (i) India's **Foreign Trade Policy, 2023** – issued in March 2023 – was launched to promote exports and facilitate the ease of doing business for exporters, while also placing a stronger emphasis on the "export control" regime. The policy targets an increase in India's overall exports to USD 2 trillion by 2030. It is built on the principles of trust and partnership with exporters and is based on four pillars: incentive to remission, export promotion through collaboration with exporters, ease of doing business, and emerging areas.
- (ii) The **National Logistics Policy (NLP)** – which was launched on 17 September 2022 – includes process reforms, improvements in logistics services, digitalization, and human resource development. The vision of the NLP is to drive economic growth and business competitiveness of the country through an integrated, seamless, efficient, reliable, green, sustainable, and cost-effective logistics network by leveraging state-of-the-art technologies, various processes, and skilled personnel, to reduce logistics costs and improve logistics performance. Targets are (a) to reduce the cost of logistics; (b) improve the Logistics Performance Index ranking of the country, with the aim for India to be in the top 25 countries by 2030; and (c) creating a data-

driven decision support mechanism for an efficient logistics ecosystem.¹ However the impact of the NLP is mainly on domestic rather than international trade and transport.

- (iii) Appendix A of the NLP is a **Comprehensive Logistics Action Plan (CLAP)** to implement the policy. The CLAP includes the following action areas: (a) integrated digital logistics systems, (b) standardization of physical assets and benchmarking of service quality standards, (c) logistics human resource development and capacity building, (d) state engagement, (e) export-import (EXIM) logistics, (f) a services improvement framework, (g) sectoral plans for efficient logistics, and (g) facilitation of the development of logistics parks. Appendix A-1 of the NLP lists digital / IT systems / individual platforms, including the Unified Logistics Interface Platform (ULIP), a Secured Logistics Document Exchange (SLDE) platform to replace the physical exchange of documents, and a digital dashboard to improve container availability in the country by reducing turnaround time through effective monitoring of container dwell times. Appendix A-2 indicates the scope of sectoral plans for efficient logistics, including specific items for specific agencies, e.g., for the Ministry of Railways; the Ministry of Road Transport and Highways; the Ministry of Ports, Shipping and Waterways; and the Central Board of Indirect Taxes and Customs.² Pursuant to the state engagement component of the CLAP, the **Tripura Integrated Logistics Policy, 2022**, was issued in January 2023, which among other things is to develop Tripura as a Gateway of the North East to neighboring countries, including Bangladesh (p. 5).³
- (iv) The **National Master Plan for Multi-Modal Connectivity**, also known as **Prime Minister (PM) Gati Shakti**, was launched in October 2021 to provide multimodal connectivity infrastructure for all economic zones of India. PM Gati Shakti entails “a transformative approach for integrated and holistic planning across concerned Ministries/Departments to improve multimodal connectivity, logistics efficiency and to address critical infrastructure gaps for seamless movement of people and goods, with focus on minimizing disruptions and ensuring timely completion of projects”.⁴ It is creating a digital platform bringing together 16 ministries for integrated planning and coordinated implementation of infrastructure connectivity projects.
- (v) India’s National Committee on Trade Facilitation (NCTF) published the **National Trade Facilitation Action Plan [NTFAP] 2020-2023** on implementation of the Trade Facilitation Agreement (TFA) of the World Trade Organization (WTO). The vision of the action plan is to transform the cross-border clearance ecosystem through efficient, transparent, risk-based, coordinated, digital, seamless, and technology-driven procedures for state-of-the-art ports and border crossings, rail, road, and other logistics infrastructure. Multiple stakeholders including customs, participating government agencies, and logistics stakeholders have been working together to ease bottlenecks to cross-border trade.⁵ In 2023, the NCTF has been formulating NTFAPs 2023-2026 in consultation with stakeholders to provide a further roadmap for trade facilitation.

¹ <https://logistics.gov.in/media/download/239205.pdf>. The Department for the Promotion of Industry and Internal Trade (DPIIT) of the Ministry of Commerce and Industry spearheads implementation of the NLP. Other ministries and departments participating in the implementation of the NLP through regular inter-ministerial meetings include the Ministry of Road Transport and Highways; the Ministry of Railways; the Ministry of Ports, Shipping and Waterways; the Ministry of New and Renewable Energy; Ministry of Power; Department of Telecommunications; Ministry of Petroleum and Natural Gas; Ministry of Civil Aviation, NITI Aayog (an apex public policy think tank); Ministry of Environment, Forest[s] and Climate Change; Ministry of Housing and Urban Affairs; Department of Revenue; and the Department of Commerce.

² Source in the previous footnote.

³ https://dpiit.gov.in/sites/default/files/logisticPolicy_Tripura_14February2023.pdf.

⁴ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1906685>.

⁵ <https://old.cbic.gov.in/resources/htdocs-cbec/imlplmntin-trade-facilitation/NTFAP2020-23jk.pdf>, p. 3.

- (vi) The **North East Road Sector Development Scheme (NERSDS)** was launched during the 2015-2016 financial year for rehabilitation/upgrading of important but neglected interstate roads of the region.
- (vii) In 2015 the government launched the **Bharatmala Plan** (*Bharatmala Pariyojana*, the India “garland project”) to develop national economic corridors and implement related development policies. Phase 1 includes 34,800 km of major roads across the country, including border-related roads and international roads, notably including a Northeast Corridor, EC (Economic Corridor) -44⁶, which is highlighted by red lines in Figure 2-1. The Bharatmala Phase 2 project was in the planning stage, but in late 2023 and early 2024 it was announced that the Bharatmala project would be subsumed under a new 2047 Vision Plan, which aims to build 50,000 km of high-speed corridors across the country.⁷

⁶ https://mdoner.gov.in/contentimages/files/Guidelines_for_NERSDS.pdf

⁷ Mukesh Jagota, “Bharatmala Project to be Subsumed in Vision 2047”, *Financial Express*, 6 January 2024 [https://www.financialexpress.com/business/roadways-bharatmala-project-to-be-subsumed-in-vision-2047-3357373/].

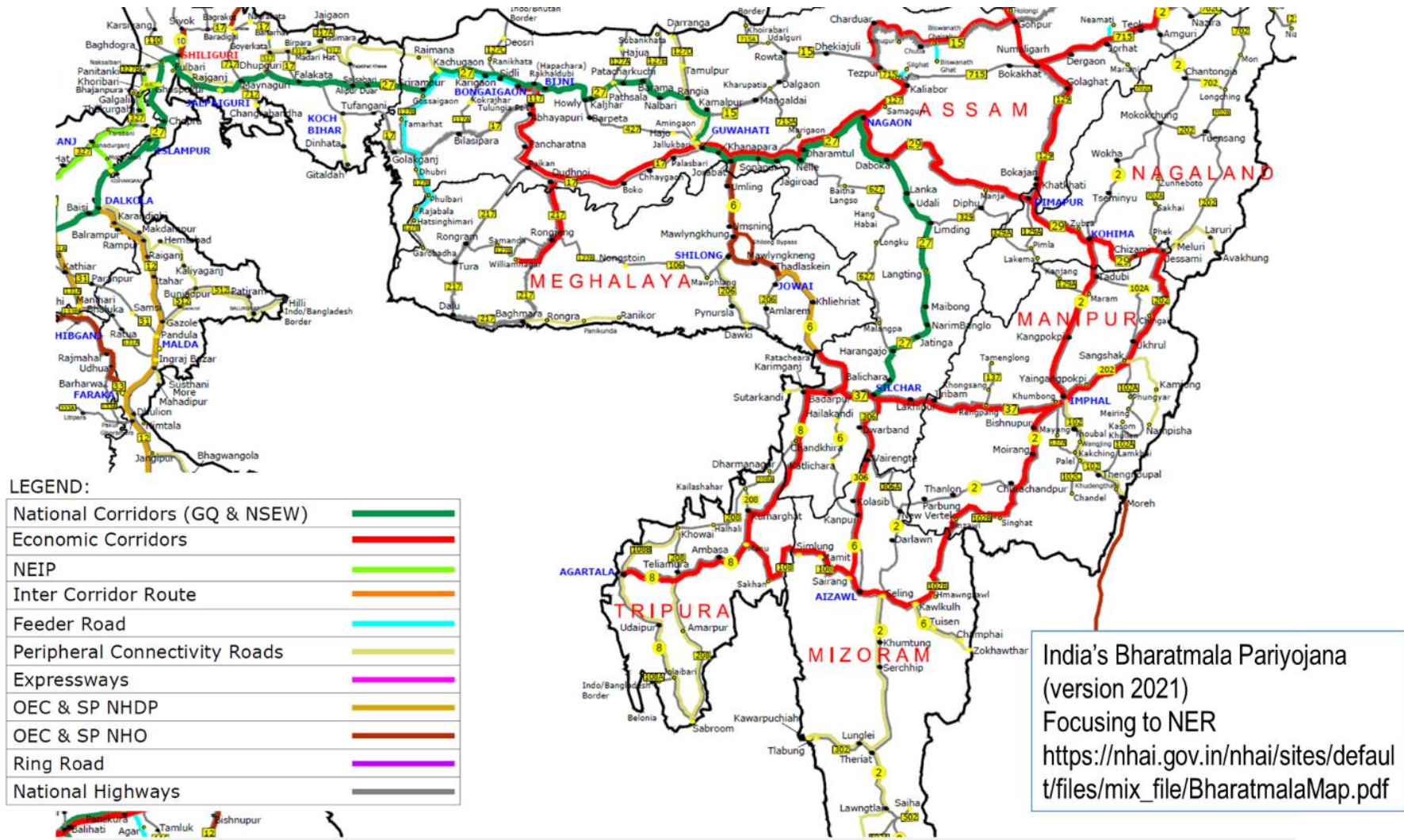


Figure 2-1: India's Bharatmala Pariyojana

- (viii) Commenced in October 2007, the Special Accelerated Road Development Programme for the North East (SARDP-NE) is providing road connectivity to all district headquarters in the North Eastern Region to a minimum two-lane highway standard, as well as providing road connectivity to remote areas, areas of strategic importance, and neighboring countries. A related program is the North East Special Infrastructure Development Scheme (NESIDS), launched in the 2015-2016 financial year, and continued with an approved outlay of INR 8,139.50 crore for the period from 2022-2023 to 2025-2026, with NESIDS–Road and NESIDS–Other Than Road Infrastructure components.
- (ix) The **Land Ports Authority of India (LPAI)** publishes annual reports (the latest for the 2022-2023 financial year), including vision, mission, the status of current projects, and planned projects. The last annual report of LPAI – for the 2022-2023 financial year published in October/November 2023 – stated that it had received “in-principle” approval for upgrading (upgradation of) 25 land customs stations to land ports; a detailed “project-cum-feasibility report” for these land customs stations is under preparation. The proposed projects will be developed with budget from the Government of India and do not require any specific external financial cooperation or support.

Table 2-1 summarizes these policies and plans in India.

Table 2-1: List of Policies and Plans in India

No.	Name of Policy/Plan	Month / Year of Issue	Name of Issuer (Organization)	Month / Year of End	Remarks
(i)	India's Foreign Trade Policy, 2023	May 2023	Ministry of Commerce and Industry	Not yet specified – the policy is to be "amended from time to time"	
(ii)	National Logistics Policy (NLP)	September 2022	The Prime Minister and the Ministry of Commerce and Industry	Not specified	
(iii)	Comprehensive Logistics Action Plan (CLAP)	September 2022	The Prime Minister and the Ministry of Commerce and Industry	Not specified	Appendix A of the NLP
(iv)	National Master Plan for Multi-Modal Connectivity	October 2021	The Prime Minister	Not specified	
(v)	National Trade Facilitation Action Plan [NTFAP] 2020-2023	2020 (month unstated)	India's National Committee on Trade Facilitation	2023 (month unstated)	
(vi)	North East Road Sector Development Scheme (NERSDS)	2015-2016 financial year	Ministry of Development of North Eastern Region	End of the 2016 financial year (March 2016)	
(vii)	Bharatmala Plan (<i>Bharatmala Pariyojana</i> , the India “garland project”)	2015 (budgeted from April 2017)	Ministry of Road Transport and Highways	December 2022 (Phase 1); Phase 2 expected to start in 2024	Phase 2 will be subsumed under Vision 2047
(viii)	Special Accelerated Road Development Programme for the North East (SARDP-NE)	October 2007	Ministry of Road Transport and Highways	Ongoing	
(ix)	Annual Reports of the Land Ports Authority of India	October-November 2023	Land Ports Authority of India	March 2023	Noting a “project-cum-feasibility report” for land customs stations

Source: JICA Survey Team

2.2.3 Bangladesh

- (i) The **National Logistics Policy (NLP)**, 2024 – considered a “game changer” in the development of Bangladesh – was approved by the Cabinet of Bangladesh in April 2024 and published by the Prime Minister’s Office. Key aspects of the NLP include the following:
- (a) The NLP noted that the 8th Five-Year Plan (2020-2025) and Bangladesh Perspective Plan 2021-2041 recognized the importance of improving efficiency and reducing costs through deregulation, automation, and development of an integrated transport system. In addition, the National Industrial Policy 2022 recognized the logistics sector as a “Priority” and “Export Diversification” industry (p. 5, English version).
 - (b) The NLP is a “living document”, valid for five years, and subject to review every two years (p. 15, English version).
 - (c) Cross-border logistics is defined as: “[t]he overall process of transporting goods from one country to another is referred to as cross-border logistics.” It is further noted that customs and tax policies of different countries, customs processes, border management, security measures, tracking and tracing systems, transportation-related documents, as well as banking, insurance, and other financial transactions, are coordinated through cross-border logistics management.” (p. 10, English version).
 - (d) A National Logistics Development and Coordination Committee led by Prime Minister is to be formed to review and evaluate implementation of the policy.
 - (e) The NLP recognizes that the logistics sector plays an important role in the country’s exports, leading to increased prices of exports, reduced transport times, and efficient supply chains.
 - (f) Institutional capacity, the need for skilled personnel in the sector, and the need for investment in sector were incorporated in the NLP.
 - (g) Major activities in the NLP include the development of multidimensional logistics hub, economic zones, international economic corridors, airports, river ports, sea ports, and land ports. The policy also calls for the development of environment-friendly transport, the development of technology-based logistics system, and the introduction of modern cargo services at all domestic and international airports.
 - (h) The NLP calls for road infrastructure to use state-of-the-art technology, e.g., to provide advanced information to road users, ensure transport safety, and enable vehicle tracking and tracing. In addition, all existing meter gauge rail lines will be gradually converted to broad gauge and dual lines. Also, necessary infrastructure will be developed to facilitate the smooth movement of goods from river ports, ensuring seamless connectivity via road, rail, and other transport modes. Further, cargo transport capacity will be increased by developing and modernizing land port infrastructure. To increase investment and production in economic zones and export processing zones, the master plan for each will provide assistance in locating logistics hubs and developing infrastructure. (pp. 18-21, English version)
 - (i) Simplification and acceleration of customs clearance processes, the development of port management, electronic customs declarations, digital documentation, automated clearance systems, integrated and coordinated border management systems, and port community systems will be undertaken (p. 22, English version).
 - (j) The NLP listed notable projects in the logistics sector, including land port development at Benapole, Burimari, and Bhomra (p. 6, English version).
 - (k) The NLP has seven appendices, including important definitions related to the logistics sector, a list of relevant and important sector policies, and a proposal for reform of the sector, particularly,

Appendix 2 lists important policies, laws, and regulations, including the Bangladesh-Bhutan-India-Nepal, Motor Vehicles Agreement (p. 49, English version).⁸

Other relevant logistics and transport plans and studies for Bangladesh include the following:

- (ii) ADB TA 6911-BAN, the **SASEC Integrated Trade Facilitation Sector Development Program**, the terms of reference for a “transaction” technical assistance⁹ approved in April 2022¹⁰, targets the following key outputs: (a) assessment of the impact of modern customs processes at border crossings; (b) preparation of a road map and plan for operationalization of the central customs laboratory, customs regional training academy, and central customs warehouse; (c) strengthening of the capacity of the National Board of Revenue to implement modern processes at border crossings; and (d) strengthening of project implementation units. Specific infrastructure support is being provided at Akhaura and Tamabil land ports, with plans in a follow-on project for similar support at Darshana, Birol, Sonahat, Bibirbazar, and Teknaf land ports (for the Birol, Bibirbazar, and Teknaf land ports, agreement with concessionaires under the Bangladesh Land Port Authority [BLPA] is required.)
- (iii) ADB TA 9409-BAN is updating the country’s **road master plan (Highway Master Plan 2041)**, with the previous master plan having been prepared in 2009. A draft of the master plan is currently under review by the Government of Bangladesh and the details remain proprietary or confidential; it is expected that the plan will be completed by August 2024. The master plan is to include (a) expressway development, (b) the subregional transport network, and (c) multimodal development.
- (iv) The **Bangladesh Export Policy, 2021-24** (available only in Bangla) seeks to increase annual export earnings to USD 80 billion from about USD 45 billion by facilitating non-traditional and labor-based goods exports. In addition, the policy seeks to promote the shipment of high-value products by ensuring standards and compliance, and encouraging green, sustainable, and modern technologies. The plan places a special emphasis on meeting needs of the “4th Industrial Revolution”, expanding markets, and revitalizing exports.
- (v) With the support of ADB, the National Board of Revenue of Bangladesh prepared the **Customs Modernization Strategic Action Plan, 2019-22**, which outlined a comprehensive development plan for Bangladesh Customs with time-bound, evidence-based, and results-driven activities to be implemented over the plan period, in line with the WTO TFA.
- (vi) Bangladesh’s **Revised Railway Master Plan** for 2016-2045 includes 230 projects, with the Padma Bridge Rail Link and projects linking Chattogram Port with Akhaura/Agartala among them.
- (vii) Bangladesh’s **Inland Water Transport Master Plan** for 2009-2029 aims to revive inland waterway transport. It sets out guidelines for rehabilitation and maintenance of existing facilities and developing new ones over a 20-year period.
- (viii) Bangladesh’s **National Industrial Policy 2022** was formulated for economically enriching Bangladesh, increasing sector-wise productivity and achieving excellence in the quality of

⁸ (i) Executive Cell, Prime Minister’s Office, Government of Bangladesh, *National Logistics Policy 2024*, 2024. (ii) Logistics Bangladesh, “Cabinet Approves National Logistics Policy – 2024,” 8 April 2024, <https://logistics.gov.bd/services/cabinet-approves-national-logistic-policy-2024-1>

⁹ In ADB parlance, a transaction technical assistance is linked to a TA linked to an ADB-financed project or program, and which prepares and enhances the implementation readiness of a specific ensuing project, develops capacity, and provides policy advice. <https://www.adb.org/business/how-to/technical-assistance>.

¹⁰ March 2025 is the expected time for completion of the services.

manufactured products by exploiting technological advances along with labor-intensive industrialization using domestic raw materials and resources.¹¹

- (ix) Additional Studies undertaken by development partners (e.g., *Bangladesh Development Update, Moving Forward: Connectivity and Logistics to Strengthen Competitiveness*, published by the World Bank Dhaka Office in April 2021) are summarized in sections 2.4 and 2.6).

Table 2-2 summarizes these policies and plans in Bangladesh.

Table 2-2: List of Policies and Plans in Bangladesh

No.	Name of Policy/Plan	Month/ Year of Issue	Name of Issuer (Organization)	Month / Year of End	Remarks
(i)	National Logistics Policy	April 2024	Prime Minister's Office	April 2029	Primary document in the sector
(ii)	SASEC Integrated Trade Facilitation Sector Development Program	April 2022	ADB, National Board of Revenue, and Bangladesh Land Port Authority	March 2025	ADB TA 6911-BAN
(iii)	Updating the Road Master Plan [Highway Master Plan 2041] (Bangladesh)	November 2018	ADB/PADECO and Roads and Highways Department	2024 (date not yet determined)	ADB TA 9409-BAN
(iv)	Bangladesh Export Policy, 2021-24 (available only in Bangla)	March 2021	Cabinet / Ministry of Commerce	July 2024	
(v)	Customs Modernization Strategic Action Plan, 2019-22	July 2019	ADB / National Board of Revenue	July 2022	
(vi)	Revised Railway Master Plan for 2016-2045 (Bangladesh)	November 2016	Bangladesh Railway	2045	
(vii)	Inland Water Transport Master Plan for 2009-2029 (Bangladesh)	2009	Ministry of Shipping	2029	
(viii)	National Industrial Policy	2022	Ministry of Industries	Not specified	
(ix)	Additional studies undertaken by development partners (e.g., <i>Bangladesh Development Update, Moving Forward: Connectivity and Logistics to Strengthen Competitiveness</i>)	Various	Various	Various	

Source: JICA Survey Team

2.2.4 Summary of Findings

India is the most advanced country in the region with respect to logistics and transport, most notably with its **National Logistics Policy**, and the associated **Comprehensive Logistics Action Plan**, formulated to implement the policy, e.g., through integrated digital logistics systems, state engagement, sectoral plans for efficient logistics, and facilitation of the development of logistics parks. **The Tripura Integrated Logistics Policy, 2022**, was issued in January 2023, to develop Tripura as a Gateway of the North East to neighboring countries.

¹¹ *Bangladesh Economic Review 2023*, Chapter 7.

Notably, the Government of Bangladesh approved a National Logistics Policy in April 2024, which is to move the country in the direction of establishing the necessary institutional framework for developing the sector.

2.3 Policies Related to the Development of India's North Eastern Region

2.3.1 The Act East Policy and the Neighbourhood First Policy

Building upon the Look East Policy formulated in the 1990s, the **Act East Policy** was announced in November 2014 to promote relations with the Asia-Pacific region, through a proactive and pragmatic approach of improving economic development of the North Eastern Region. The Agartala (India)-Akhaura (Bangladesh) as well as the Jogbani (India)-Biratnagar (Nepal) rail lines are projects under the initiative.

Related to the Act East Policy is the **Neighbourhood First Policy**, according to which the Government is committed to developing friendly and mutually beneficial relations with all of its neighbors, promoting Connectivity, Commerce, and Cultural Commonalities. The Neighbourhood First Policy exclusively focuses on India's immediate neighbors, while the Act East Policy focuses on the extended neighborhood in the Asia-Pacific region. Under this policy, India has supported or is supporting several road and rail projects in Bangladesh, including the Ashuganj River Port-Sarail-Dharkhar-Akhaura Land Port Road (a four-lane national highway project, at a cost of USD 50.58 million), four-laning of the Benapole-Jashore-Narail-Bhatiapara-Bhanga Road Project (USD 100 million), four-laning of the Ramgarh-Baruerhat Road (USD 80.06 million), and the Dhaka-Tongi-Joydebpur Railway Line Project (USD 235.10 million). See section 2.9 ([Interactive Map](#)) and 1.2 (Figure 1-1) for detailed locations.

2.3.2 The North Eastern Region (NER) Vision 2020 and North Eastern Council (NEC) Regional Plan

Formally issued in May 2008, the **North Eastern Region Vision 2020** document sets out goals, identified challenges, and suggested implementation strategies for various sectors for peace and prosperity of the region.

Established in 1972, the North Eastern Council is a statutory advisory body based in Shillong, Meghalaya, complement and supplement the developmental efforts of the states. It formulated a sector-wise outline of development plans and projects for the three years commencing in April 2017 with a view to accelerating development of the region.

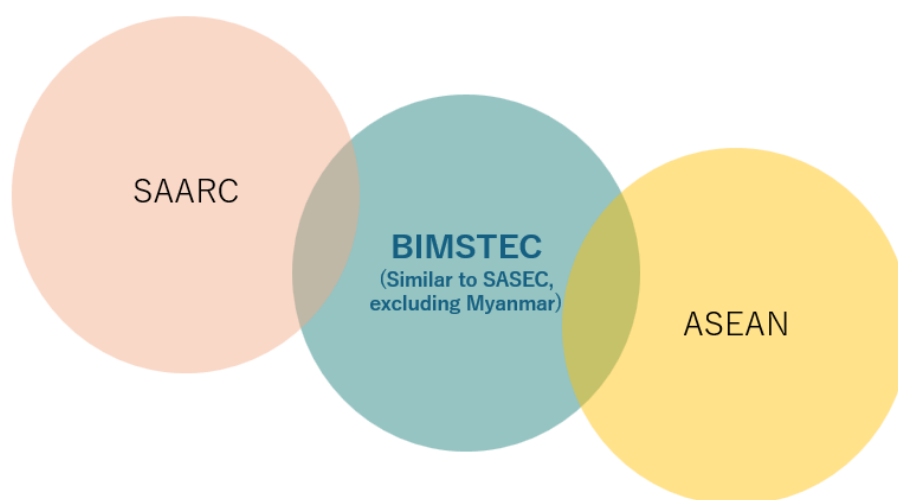
2.3.3 Prime Minister's Development Initiative for North Eastern Region

Launched in October 2022 as a central government initiative, the Prime Minister's Development Initiative for [the] North East Region (PM-DevINE) is implemented by the Ministry of Development of North Eastern Region (MDoNER). It includes infrastructure development in line with the spirit of the **National Master Plan for Multi-Modal Connectivity** (also known as **PM Minister Gati Shakti**, and described in subsection 2.2.2), and seeks to fund infrastructure projects in a cohesive manner, ensuring seamless connectivity and accessibility across the North Eastern Region. Over the four-year period from 2022-23 to 2025-26, the initiative has an overall outlay of INR 6,600 crore (USD 800 million). Lists of projects approved in the 2022-2023 financial year by state are available. An Empowered Inter-Ministerial Committee (EIMC), under MDoNER, oversees selection, approval, and monitoring of projects under the initiative in consultation with the ministry/ministries concerned, the state government, and the North Eastern Council.

2.4 Plans, Policies, and Studies to Strengthen Regional Connectivity in South Asia

2.4.1 Summary of Regional Initiatives

Plans, policies, and studies to strengthen regional connectivity have been developed by the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), South Asia Economic Cooperation (SASEC), and the South Asian Association for Regional Cooperation (SAARC).¹² Each is considered in turn in this section, with a focus on projects and policies relevant to the corridors and border crossings covered by the current survey. Figure 2-2 show the various relevant (overlapping) regional initiatives. BIMSTEC looks eastward, toward Myanmar and Thailand; to a degree, SAARC has a westward orientation, as it includes Pakistan and Afghanistan.¹³ SASEC substantially overlaps with BIMSTEC, including Myanmar but not Thailand. BIMSTEC has a full-fledged regional connectivity master plan endorsed by the Leaders of the Member States (on 30 March 2022), while SASEC and SAARC also have planning documents, they have been endorsed at the Summit level.¹⁴ The projects shown in this section are summarized on a regional map (in KML format)¹⁵ in section 2.9.



Abbreviations: ASEAN = Association of Southeast Asian Nations, BIMSTEC = the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, SAARC = South Asian Association for Regional Cooperation
Source: JICA Survey Team

Figure 2-2: Various Relevant Regional Initiatives

2.4.2 BIMSTEC

BIMSTEC – with its Secretariat located in Dhaka, Bangladesh – includes the four BBIN countries as members, as well as Myanmar, Thailand, and Sri Lanka. In recent years the most notable contribution of BIMSTEC regarding transport and logistics has been the BIMSTEC Master Plan for Transport Connectivity, published in April 2022 after the 5th BIMSTEC Summit in Sri Lanka in March 2022 at

¹² The Bangladesh-Bhutan-India-Nepal (BBIN) initiative does not have a directly corresponding institutional body, but it may be considered subsumed under the SASEC initiative (and perhaps to a lesser extent under BIMSTEC).

¹³ However, Afghanistan has not actively participated in SAARC connectivity initiatives since 2022.

¹⁴ All of these initiatives are supported by ADB technical and financial assistance and accordingly there is (indirect) coordination and sharing of information related to the respective initiatives. For example, in the last quarter of 2019 ADB conducted an internal assessment of the correspondence of SASEC transport and trade facilitation projects to BIMSTEC transport and trade facilitation projects.

¹⁵ Keyhole Markup Language (KML) is an Extensible Markup Language (XML) notation for expressing geographic annotation and visualization within two-dimensional maps and three-dimensional Earth browsers.

which the leaders of the BIMSTEC Member States adopted the Master Plan and called for its immediate implementation. The Master Plan is designed to guide policies, programs, and projects to promote seamless multimodal transport linkages and simplified transit facilities between South Asia and Southeast Asia. Its key features include upgrading border and port access roads, and arterial links to borders and ports; improving the rail connectivity of landlocked Nepal and Bhutan, and between ports and their hinterlands; deepening ports and improving container handling; and expanding airport capacity. It presents a comprehensive 10-year strategy and action plan for improving the subregion's transport and trade linkages. It includes a total of 267 projects to enhance transport connectivity in the Bay of Bengal region at an estimated cost of USD 124.4 billion. These projects cover eight operational areas: (i) roads and road transport, (ii) railways and rail transport, (iii) ports and maritime transport, (iv) inland water transport, (v) civil aviation and airports, (vi) multimodal and intermodal transport, (vii) trade facilitation, and (viii) human resource development. Box 2-1 shows projects included in the BIMSTEC transport connectivity master plan specifically related to corridors and border crossings in the current survey.¹⁶

**Box 2-1: Selected Projects in the BIMSTEC Transport Connectivity Master Plan
Related to Corridors and Border Crossings in This Survey**

Road Projects

BAN-RD-004: Construction of the Padma Multipurpose Bridge at Mawa, linking of Dhaka and the Indian border near Kolkata, as well as connecting southern parts of the country (completed)

BAN-RD-012: Improvement of the Ashuganj River Port-Sarail-Dharkhar-Akhaura Land Port Road as a 4-lane national highway (50.6 km), linking to the northeastern states of India and beyond (ongoing)

REG-RD-049 (India and Nepal): Nepal-India Transit Roads (e.g., Biratnagar, Birgunj, Bhairahawa, and Nepalgunj Roads connecting with Visakhapatnam, and Kolkata-Kanchanpuri (Bhimdatta) linkage, to provide road connectivity for transit cargo of Nepal (Nepal links yet to proceed)

BAN-RD-051: 4-laning of the Bhanga-Bhatiapara-Kalna-Lohagora-Narail-Jashore-Highway, upgrading of the main border corridor linking Bangladesh and India, a key trade link (135 km, originally scheduled for completion in 2024)

IND-RD-063: Upgrading of the NH 44 Silchar-Agartala-Sabroom in Assam and Tripura (NH 53 and NH 44), for improved connectivity between India and Bangladesh (programmed for completion in 2023)

IND-RD-065: Improvement of NH 208 between Teliamura and Harina (158 km) in Tripura, for improved connectivity between India and Bangladesh (originally programmed for completion in 2022)

IND-RD-066: Upgrading of the road between Kolkata and Bongaon near Petrapole on the India-Bangladesh border, to improve connectivity between India and Bangladesh (programmed for completion in 2022)

IND-RD-072: Construction of a new extradosed bridge over the Feni River at Sabroom in southern Tripura, connecting India and Bangladesh (completed in 2022)

IND-RD-073: Khowai-Agartala link road, to improve connectivity between India and Bangladesh (programmed for completion in 2023)

¹⁶ The box generally does not include connections with Myanmar, which are not directly related to the corridors and border crossings in the current survey, and which may be affected by the Rohingya issue and the related security situation in Myanmar, which has affected relations between Bangladesh and Myanmar. However, work to implement transport projects in the BIMSTEC region continues, for example as evidenced by the ADB-sponsored Workshop on the Implementation of the BIMSTEC Master Plan for Transport Connectivity, held in Dhaka on 2-3 October 2023, with the active participation of Myanmar.

IND-RD-088: Additional approach roads to ICPs / land ports (ongoing)

REG-RD-111: Formulation of a regional through-transport agreement among BIMSTEC Member States (to be undertaken)

REG-RD-112: Phased implementation of through-transport agreements (after REG-RD-112)

Railway Projects

BAN-RW-002: Construction of dual-gauge, double rail line and conversion of existing rail line into dual gauge between Akhaura and Laksham (nearly completed in 2023)

BAN-RW-015: Conversion of meter gauge double line to dual gauge between Bhairab Bazar and Akhaura including rebuilding of the existing Bhairab and Titas bridges (2023-2025)

BAN-RW-016: Conversion of existing meter gauge double line to dual gauge between Laksam and Chattogram (2024-2027)

IND-RW-20: New Belonia-Feni line connecting with the India-Bangladesh border (timing not specified)

REG-RW-031 (BAN and IND): Akhaura-Agartala rail link (new 12-km line completed in 2023)

Port and Maritime Projects

BAN-PM-002: Karnaphuli Container Terminal at Chattogram (2022-2026)

BAN-PM-003: Development of Matarbari Port (completion in 2026)

IND-PM-008 and IND-PM-014: Development of Haldia Port (2019-2025)

Inland Water Transport

REG-IW-001 (BAN, BHU, NEP, IND): Improvement of inland water transport

Trade Facilitation Projects

BAN-TF-001: Improvement of automation of Benapole land port (to be undertaken)

BAN-TF-003: Improvement of Ramgarh and Benapole ports, under the Bangladesh Regional Connectivity Project 1 (ongoing)

IND-TF-005: Development of ICPs, ongoing/planned (e.g., Jaigaon on the Bhutan border; continuing to 2028)

REG-TF-021: Development and/or refinement of NSWs (continuing to 2028)

Human Resources Development

REG-HR-011: Training in Trade Facilitation (continuing to 2028)

See section 2.9 [Interactive Map](#) for the locations.

Abbreviations: BAN = Bangladesh, HR = human resources, IND = India, PM = ports and maritime, RD = road, RW = railway, TF = trade facilitation

Source: BIMSTEC and ADB, *BIMSTEC Master Plan for Transport Connectivity*, April 2022 [with years updated]

The BIMSTEC transport connectivity master plan is based on several principles, e.g., (i) connectivity initiatives must be based on universally recognized international norms, good governance, the rule of law, openness, transparency, and financial responsibility, and must be pursued in a manner that respects the sovereignty, equality, and territorial integrity of nations; (ii) the master plan should be flexible in its structure and recommendations to respond to emerging trends and priorities; (iii) projects recommended or listed in the master plan will be executed keeping in mind each Member State's procedures, practices, and relevant national laws; (iv) the master plan takes into account the specific circumstances and requirements of the respective Member States, with differing geographic areas and features, population, levels of economic activities, and other unique circumstances, while considering the requirement for seamless cross-border movement of people, goods, and vehicles; (v) the proposed projects benefit more than one Member State (rather than being purely national undertakings) to qualify as BIMSTEC initiatives, but there is no need for unanimous concurrence (i.e., the “2+x” principle may be applied); (vi) the recommended high-capital infrastructure projects should be reconfirmed in each case by feasibility studies, and infrastructure should be designed in such a way as to allow future development if and when such developments are justified by demand and covered by funding sources; and (vii) the master plan is a “live document” providing a robust platform for improving regional transport connectivity, but which requires reviews over time to respond to emerging trends and priorities.

Companion studies undertaken by BIMSTEC include (i) the Financing Framework for Transport Connectivity (2021), which developed an overarching framework that can be explored for projects identified in the BIMSTEC Transport Connectivity Master Plan; and (ii) the BIMSTEC Trade Facilitation Strategic Framework 2030 (2022).

2.4.3 SASEC

The SASEC subregion encompasses the four BBIN countries, i.e., Bangladesh, Bhutan, India, and Nepal, as well as Maldives, Myanmar, and Sri Lanka. **The Action Plan on SASEC Initiatives (APSI)**, prepared by ADB in October 2022, was developed to generate momentum for the SASEC Program for the medium-term period. The APSI identified priority SASEC projects mostly from the SASEC Operational Plan, 2016-2025.¹⁷

The SASEC corridors are less comprehensive than the corridors considered by the BIMSTEC transport connectivity master plan¹⁸. The most relevant SASEC corridor in the context of the current survey is SASEC Corridor 2, the Bay of Bengal Highway, which consists of an Indian East Coast Economic Corridor (ECEC) and a Bangladesh Southwest Economic Corridor and serves as a major trade route between India and Bangladesh, covering 65% (or more) of road-based bilateral trade between India and Bangladesh, with Petrapole/Benapole located along the corridor. In addition, various trade facilitation measures have been implemented along the SASEC corridors, drawing on the ADB-supported SASEC Cross Border Transport Facilitation Routes Initiative, which identified issues and challenges affecting trade along specified routes including Kolkata-Dhaka through Petrapole-Benapole and designed solutions to resolve them.

¹⁷ A more recent SASEC APSI – for 2023-2025 – identified “knowledge work” on “highly facilitated trade corridors” (HFTCs), including (i) preparation of an HFTC action plan for Bangladesh, India, and Nepal; (ii) a regional study enabling cross-border exchange of pre-arrival information; (iii) a study on the design and application of a regional electronic cargo tracking system; (iv) a regional study on cross-border coordinated border management appropriate to routes and border crossings covered in the route studies under the HFTC action plan; (v) studies of (a) the Nepal-Kolkata route traversing Birgunj/Raxual and Biratnagar/Jogbani, involving Nepal and India; (b) the route traversing Phuentsholing/Jaigaon, Changrabandha/Burimari, and Fulbari/Banglabandha to Chattogram, involving Bhutan, India, and Bangladesh; (c) the route from Phuentsholing/Jaigaon to Kolkata, involving Bhutan and India; (d) the route from Akhaura/Agartala to Moreh, involving Bangladesh and India; and (vi) a regional study to standardize business processes at border crossings.

¹⁸ One observation is that BIMSTEC includes Thailand while SASEC does not, and therefore BIMSTEC includes more corridors and projects in that direction than does SASEC.

Other relevant initiatives facilitated by the SASEC program have included pilots of electronic cargo tracking systems (ECTS), and the **Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement** signed in Thimphu, Bhutan on 15 June 2015.¹⁹

Several lessons may be drawn from ADB's experience – in the SASEC region and in neighboring subregions – including the following:

- (i) It will be beneficial to harness the transformative potential of the digital revolution (e.g., by focusing on in-demand logistics).²⁰
- (ii) Drawing on the experience of the Greater Mekong Subregion (GMS), also beneficial will be an “enhanced spatial approach to development based on an integrated network of economic corridors, dynamic border areas, and clusters of competitive cities that are well connected to rural areas”.²¹
- (iii) Investments and common standards in border crossing infrastructure should include health screening and further improvements in customs, immigration, quarantine, and security to ensure that trade flows and supply chains move smoothly on a continuing basis.²²
- (iv) Now that the countries, the subregion, and the world are transitioning beyond the COVID-19 pandemic, there is a need for the countries to address the unfinished agenda²³ on connectivity and logistics incorporating health risk mitigation and resilience.²⁴
- (v) In implementing initiatives and projects, a challenge will be to look beyond the goals of transport connectivity and trade facilitation, to also address sustainability dimensions (e.g., safety standards, disaster resilience, and environmental adaptation and mitigation measures). In addition, gender-specific elements are important as women take on a more central role in promoting growth and prosperity. Exchanging information and good-practice criteria for sustainability and safeguards, including climate proofing, and integrating social and environmental safeguards, should be part of the process of implementing projects and initiatives.²⁵
- (vi) Harmonization among countries with different economic and social situations should be pursued. The prolonged implementation of cross-border transport and motor vehicles agreements shows the importance of balancing unity and diversity among countries. Consider also that while regional projects (as regional public goods) are generally justified when the net benefits for the participating countries exceed the net costs, it will be necessary for projects to be perceived as “win-win” (or “win-win-win” with three countries, etc.).

¹⁹ South Asia Economic Cooperation, *Action Plan for SASEC Initiatives (APSI) 2022-2024*, October 2022.

²⁰ See, e.g., Durairaj Kumarasamy, “Assessing Supply Chain Resilience between ASEAN and India”, AIC [ASEAN-India Centre], No. 15, March 2021.

²¹ For reference, see Asian Development Bank, *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2030*, September 2021. On p. 18 the cited source refers to a “spatial approach to development by expanding the network of economic corridors throughout the subregion, building upon existing transport corridors to maximize network effects and connections between corridors to promote growth and transform key corridor sections into full-fledged economic corridors.”

²² See the source in the previous footnote.

²³ During the peak of the COVID-19 pandemic, attention and energies were necessarily focused on addressing the challenges presented by the pandemic. Now that COVID-19 is much less of an issue, it is possible to redirect attention and energies to addressing longstanding connectivity and logistics issues, while still seeking to mitigate health risks and provide resilient infrastructure.

²⁴ Arjun Goswami, *Joint ADB-Austrade Knowledge-Sharing and Business Opportunities Operational Priority 7: Fostering Regional Cooperation and Integration*, July 2020.

²⁵ South Asia Subregional Economic Cooperation and Asian Development Bank, *Proposed Action Plan of SASEC Initiatives, 2021-2023*, August 2020, p. 6.

2.4.4 SAARC

SAARC is an eight-country regional organization with Afghanistan,²⁶ Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka as Member States. Its secretariat is based in Kathmandu, Nepal. The SAARC Regional Multimodal Transport Study (SRMTS) – which was originally prepared in 2006 – has been updated between 2020 and 2023, with an updated draft final report stage submitted by ADB to the SAARC Secretariat in April 2024. While the SRMTS presents (or will present) a detailed roadmap / plan of action for developing SAARC transport connectivity, it is not a full-fledged master plan (nor was it intended to be), as is the BIMSTEC Master Plan for Transport Connectivity.

2.4.5 Summary of Findings

This section reviewed plans and policies to strengthen regional connectivity in the BIMSTEC, SASEC, and SAARC regions, focusing on projects and policies relevant to the corridors and border crossings covered by the current survey. The BIMSTEC master plan on transport connectivity is a full-fledged master plan that identified a large number of relevant projects along or related to the target corridors or borders in the current survey, while the SASEC corridors are less comprehensive than the corridors considered by the BIMSTEC transport connectivity master plan. The SRMTS prepared in the SAARC context presents a detailed roadmap / plan of action for developing SAARC transport connectivity, but it is not a full-fledged master plan as is the BIMSTEC master plan.

Specific policies identified particularly in the BIMSTEC and SASEC context were identified, e.g., connectivity initiatives must be based on universally recognized international norms; projects recommended or listed in the master plan should be executed keeping in mind each Member State's procedures, practices, and relevant national laws; and projects should take into account the specific circumstances and requirements of the respective Member States.

2.5 Legal and Regulatory Instruments Related to Cross-Border Transport, Logistics and Trade Promotion in the Region

2.5.1 Introduction

This section reviews (mainly) multilateral and bilateral legal and regulatory instruments related to cross-border logistics, with reference to relevant national instruments as appropriate (i.e., the National Board of Revenue of Bangladesh's "permanent transit order" of April 2023). Policies and measures to utilize digital technologies in cross-border logistics are considered in section 2.8. It is also worth noting that India and Bangladesh have been exploring a Comprehensive Economic Partnership Agreement (CEPA).²⁷ Appendix A summarizes related bilateral economic agreements in the region.

²⁶ Afghanistan joined SAARC in 2007 but is not actively participating in SAARC activities at present.

²⁷ The topic was discussed during a Joint Working Group Meeting on Trade (JWG) between India and Bangladesh held in Dhaka in September 2023. Issues to be considered include the removal of port restrictions, harmonization and mutual of recognition of standards, and the supply of essential commodities to Bangladesh. Deliberations also addressed issues related to the development of road and rail infrastructure, regional connectivity through multimodal transport, and creation/strengthening of infrastructure in land customs stations / integrated check posts, and border haats (markets). (i) "India, Bangladesh Discuss Preparations To Start Talks for Free Trade Agreement, *The Hindu*, 1 October 2023 [<https://www.thehindu.com/business/Economy/india-bangladesh-discuss-preparations-to-start-talks-for-free-trade-agreement/article67368793.ece>]. (ii) S.M. Saifur Islam, "Bangladesh-India Trade Cooperation: Expanding Market for Mutual Benefit", *The Geopolitics*, 15 January 2024 [<https://thegeopolitics.com/bangladesh-india-trade-cooperation-expanding-market-for-mutual-benefit/>].

2.5.2 Multilateral/Bilateral Legal Instruments

There are several multilateral and bilateral legal instruments related to logistics and transport in the region:

- (i) On 6 June 2015, Bangladesh and India signed an **Agreement on Coastal Shipping (ACS)**, which seeks to facilitate the coastal movement of cargo²⁸; in addition, a Standard Operating Procedure (SOP) between the two countries was signed on 15 November 2015 to implement the agreement. The agreement and associated SOP seeks to facilitate the coastal movement of cargo through river-sea vessels directly between ports in India and ports in Bangladesh along four protocol routes. The agreement provides that cargo bound for North Eastern India can go to Chattogram or Mongla via the coastal route and from there by road / inland waterways / rail to Agartala (Tripura) via Akhaura, to Dawki (Meghalaya) via Tamabil, to Sutarkandi (Assam) via Sheola, or Srimantpur (Tripura) via Bibirbazar (Figure 3-8). There has been some shipping to date pursuant to the agreement, notably including the delivery of steel bars to the North Eastern Region vis Ashuganj.
- (ii) Following the 6 June 2015 bilateral agreement, on 25 October 2018, the Ministry of Shipping, Road Transport and Highways, India, and the Ministry of Shipping, Bangladesh, signed the **Agreement on the Use of Chattogram and Mongla Port[s] for the Movement of Goods to and from India** between the People's Republic of Bangladesh and the Republic of India (ACMP).²⁹ The border crossings originally covered in the ACMP are those covered by the ACS. However, in December 2023 Bangladesh reportedly agreed in principle to add the Sabroom/Ramgarh border to those covered originally by the ACMS.³⁰ As for subsequent developments, the registration process within the Sabroom-Ramgarh agreement is expected to begin in 2024. Other later developments have included (a) signing of standard operating procedure(s) outlining how goods are to be moved, along which routes, and over what time period, on 5 October 2019; (b) commencement of transshipment (transloading) after trial runs in January 2020; and (c) offering by the Chattogram Port Authority to India of space for cargo handling on a priority basis (although not dedicated space) and priority cargo handling, in 2020. In April 2023 the National Board of Revenue of Bangladesh issued a “permanent transit order” stating that the transshipment of cargo will be undertaken in line with the 2018 agreement. Indian operators are required to obtain a five-year license from Bangladesh Customs and goods transshipped cannot be kept at Bangladeshi ports for longer than one week. They are to pay a fee (a transshipment fee, plus a security and administrative charge) of Bangladesh taka (BDT) 220 (USD 1.98) per ton for the transport of goods to the North Eastern region of India through the use of Mongla and Chittagong Ports; in addition, a document processing fee of BDT 30 (USD 0.27) per consignment, a container scanning fee of BDT 254 (USD 2.29), and an escort charge of BDT 85 (USD 0.765) per km is to be charged.³¹ A major constraint in the use of the ACMP has been that the ACMP has been limited to the movement of India's domestic cargo between the North Eastern Region and the rest of India through Chattogram Port – this could be productively expanded to facilitate movement of third-country export-import cargo of India,

²⁸ <https://www.mea.gov.in/Portal/LegalTreatiesDoc/BG15B2420.pdf>.

²⁹ Chattogram Port is about 72 km from Sabroom in Tripura State.

³⁰ The National Board of Revenue of Bangladesh would have to issue a notification to include Ramgarh. Interview with the Ministry of Development of North East Region, 8 May 2024.

³¹ (i) Rezaul H. Laskar, “Bangladesh Okays India's Use of Two Ports to Transport Goods to the Northeast”, *Hindustan Times*, 26 April 2023 [<https://www.hindustantimes.com/india-news/bangladesh-clears-use-of-chattogram-and-mongla-ports-by-india-for-transit-and-trans-shipment-of-cargo-cutting-time-and-cost-of-transport-to-northeastern-states-101682509293677.html>]. (ii) “India Will Pay Tk220 per Ton for Transportation of Goods through Mongla, Chittagong Ports”, *Dhaka Tribune*, 26 April 2023 [<https://www.dhakatribune.com/bangladesh/309830/india-will-pay-tk220-per-ton-for-transportation-of>]. A joint meeting on these charges was planned to be held in May or June 2024, since India considers the proposed charges to be high and not much traffic is moving along these routes. Interview with the Ministry of Development of North East Region, 8 May 2024.

especially from and to the North Eastern Region, to realize the full potential of Chattogram Port as a transshipment hub and make it a gateway port for South Asia.

- (iii) India and Bangladesh have signed a series of bilateral agreements to increase the use of their inland waterways for regional trade, considering that the development of sustainable³² and economically viable inland waterways in the region can contribute to the achievement of Sustainable Development Goals through poverty reduction and job creation, “leveraging history, geography and comparative advantage”.³³ The **Protocol on Inland Water Transit and Trade (PIWTT)** was originally signed by India and Bangladesh in 1972 and later amended (most recently in 2020) to add new routes and ports, to facilitate transit cargo movement through Bangladesh’s inland waterway network. In 2019, the two countries agreed on a standard operating procedure that operationalizes bilateral and transit movement along the waterways.³⁴
- (iv) The **Joint India-Bangladesh Guidelines for Border Authorities of the Two Countries**, 1975, paragraph 8(c), provide that: “After the identifiable boundary line, whether ‘real’ or ‘working’ has been fixed, neither side will have any permanent or temporary border security forces or any other armed personnel within 150 yards [137.16 m] on either side of this line. No permanent post will be constructed till the final demarcation has been done and the problem is resolved.” However, the agreement was never formalized,³⁵ and in recent years the countries have been working toward completion of the development works within 150 yards of the international border (the “zero line”), through implementation of confidence-building measures,³⁶ although challenges remain.³⁷

2.5.3 Summary of Findings

There are several multilateral and bilateral legal instruments related to logistics and transport in the region, most notably the Agreement on the Use of Chattogram and Mongla Port[s], and the associated standard operating procedure(s) (SOP).

³² One 200-ton vessel could replace 20 10-ton trucks, with significant reductions in carbon emissions. Veena Vidyadharan, “Harnessing Inland Waterways for Inclusive Trade among Bay of Bengal Countries”, *Asia Pacific Bulletin*, No. 558, 12 May 2021 [https://www.eastwestcenter.org/sites/default/files/private/apb558.pdf].

³³ Centre for International Trade, Economics, and Environment (CUTS CITEE), *Inland Water Transport Sector is to Create Livelihood Opportunities and Boost Economic Growth: Experts at CUTS Virtual Dialogue*, 28 February 2022 (quoting Jayant Singh, Vice Chairman, Inland Waterways Authority of India) [https://cuts-citee.org/inland-water-transport-sector-is-to-create-livelihood-opportunities-and-boost-economic-growth-experts-at-cuts-virtual-dialogue/].

³⁴ There are no restrictions in the inland water transport agreements and associated SOPs. It is possible that import restrictions related to one mode may not apply to another mode. See, e.g., “Rail Can Rev Up Trade with India”, *Daily Star*, 28 September 2022.

³⁵ See e.g., Bharti Jain, “Dhaka OK to Fencing Within 150 Yards”, *Economic Times*, 12 March 2010 [https://economictimes.indiatimes.com/news/politics-and-nation/dhaka-ok-to-fencing-within-150-yards/articleshow/5674130.cms?from=mdr].

³⁶ “India and Bangladesh to Complete Ongoing Development Works Within 150 Yards of the International Border”, *India Today*, 21 July 2022 [https://www.indiatodayne.in/national/story/india-and-bangladesh-complete-ongoing-development-works-within-150-yards-international-border-427254-2022-07-21].

³⁷ As of June 2024, at Sabroom/Ramgarh a retaining or retention wall has been proposed within 150 yards of the zero line, but has not yet been approved, although it is needed for flood protection.

2.6 Reports on Cross-Border Transport and Logistics in South Asia by Development Partners and Other Organizations

2.6.1 Introduction

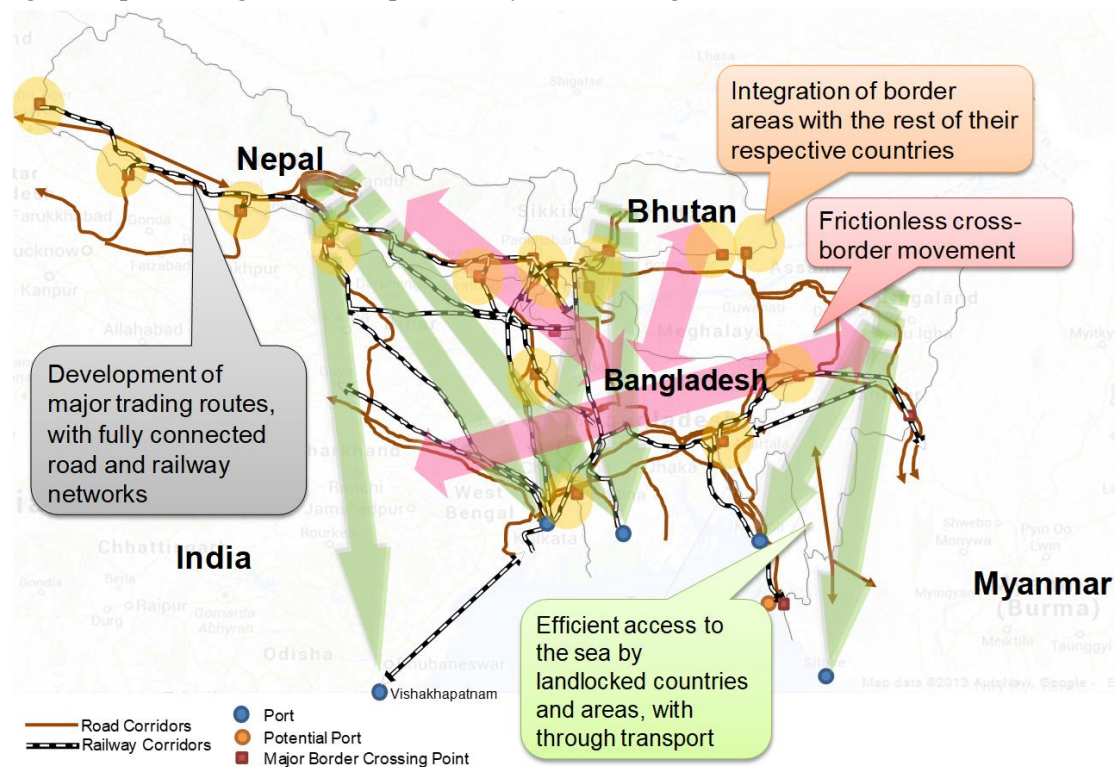
Various development partners and other organizations have prepared a large number of high-quality reports on transport and logistics in South Asia, including JICA, the World Bank, the Asian Development Bank (ADB),³⁸ and various other partners, organizations, and groups, the reports of which are reviewed and summarized in this section.

2.6.2 Japan International Cooperation Agency

(1) Regional Connectivity Study

The *Data Collection Survey on Transport Infrastructure Development for Regional Connectivity in and around South Asia*, March 2014, was a pathbreaking study that assessed development potential(s); road and railway infrastructure; soft regional transport infrastructure, including through-transport arrangements, and customs and other border procedures; logistics and other border facilities, including the freight transport/logistics system and containerization; and potential JICA cooperation projects.

Figure 2-3 shows the required enhancement of regional connectivity to support economic growth presented in the report summary. In particular, the green lines in this study show the connection routes from inland to the ports, with the aim of promoting future connections from inland to the outer ports. Appendix 4 – which estimated gains from transport cost reductions assuming implementation of through-transport arrangements – is particularly worth noting.³⁹



Source: Japan International Cooperation Agency and PADECO Co., Ltd., *Data Collection Survey on Transport Infrastructure Development for Regional Connectivity in and around South Asia*, March 2014, p. ES-iii

Figure 2-3: Required Enhancement of Regional Connectivity to Support Economic Growth

³⁸ It may be noted that there is also support from the Asian Infrastructure Investment Bank (AIIB) [the Mymensingh Kewatkhali Bridge Project in Bangladesh, connecting Shomvugang and Mymensingh, including access road construction].

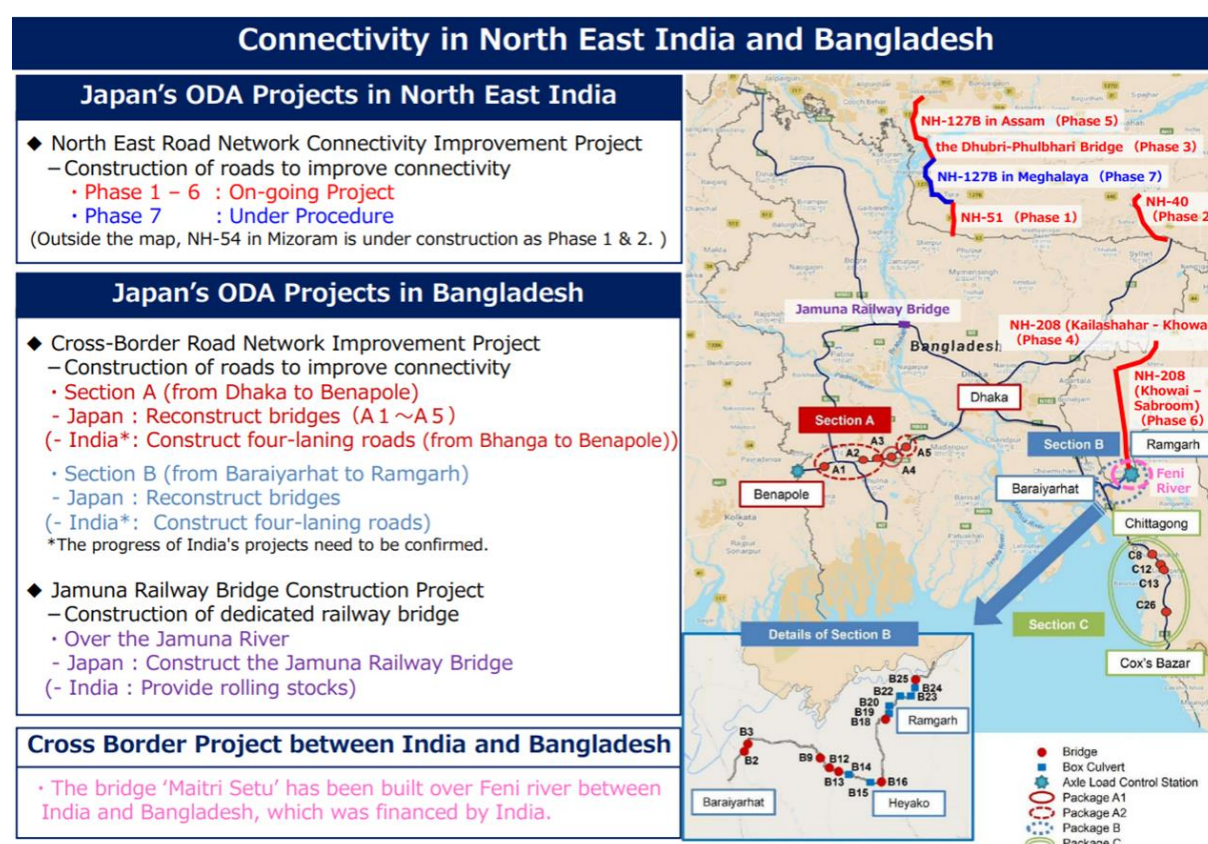
³⁹ Japan International Cooperation Agency and PADECO Co., Ltd., *Data Collection Survey on Transport Infrastructure Development for Regional Connectivity in and around South Asia*, March 2014,

Following the 2014 survey, the **Data Collection Survey on Cross-Border Maritime Traffic in South Asia**, March 2016, was undertaken. It included an assessment of the maritime network and development in the region, analysis of maritime freight transport scenarios, analysis of major ports in the region, and identification and evaluation of major projects. The survey used the Model for International Container Simulation (MICS), which includes the land and maritime intermodal network.⁴⁰

(2) Investment in Infrastructure

More recently, in March 2022, a JICA-sponsored preparatory survey of NH 208 and 127B in Tripura State in India was completed, with implications for the Sabroom corridor and border crossing, a focus of the current survey. The project assessed NH208 from Sabroom, which was to be improved to enhance connectivity and promote the economic development of the area.⁴¹

Other connectivity improvement projects are shown in Figure 2-4.



Source: Embassy of Japan in India, *Japan's Cooperation in [the] North Eastern Region of India and Industrial Value Chain*, presented at the Seminar for Promoting Multi-modal Connectivity in the BBIN Countries, in Shillong, Meghalaya, India, 22 November 2023

Figure 2-4: Summary of Japan's Official Development Assistance Projects in the BBIN Region

⁴⁰ Japan International Cooperation Agency and PADECO Co., Ltd., Overseas Coastal Area Development Institute of Japan, Japan Economic Research Institute Inc., Oriental Consultants Global Co., Ltd., *Data Collection Survey on Cross-Border Maritime Traffic in South Asia*, March 2016.

⁴¹ Japan International Cooperation Agency and PADECO Co., Ltd., *Preparatory Survey for North East Road Network Connectivity Improvement Project*, March 2022.

(3) Capacity Building for Bangladesh Customs (National Board of Revenue)

JICA is conducting country-specific training in a three-year course on Harmonized System (HS) classification for customs officers of Bangladesh's National Bureau of revenue. The first year and the second year of this training has been concluded, and the third year is planned for around autumn of 2024.

This training covers HS classification in general, including practical case studies, information sharing, and training management.

Bangladesh has not entered into a comprehensive economic partnership agreement (EPA) with any developed country. An evaluation of the current prospects for EPA implementation and future would be valuable. Further activities will be planned after an assessment of the achievements of the current training program with NBR.

2.6.3 The World Bank

Most notably, the World Bank has provided support for the *Accelerating Transport and Trade Connectivity in Eastern South Asia (ACCESS) Phase 1 program*, prepared in June 2022 as part of a multiphase program:

- (i) In **Bangladesh**, Phase 1 of the ACCESS program is to run from June 2022 to June 2028, with a total project (investment) cost of USD 1,045.95 million, including a commitment amount from the World Bank of USD 753.45 million. It includes (a) a component on digital systems for trade to support the transformation of the cross-border clearance process through the provision of digital solutions and automation to manage a projected increase in trade, with a subcomponent to develop an automated border management system (ABMS), aimed at improving the processes of the land border agencies, e.g., by enabling electronic tracking of truck entry and exit, electronic queuing, smart parking, and deploying an intelligent transport system to improve traffic flows to reduce congestion; (b) a component to support the development of green and resilient transport and trade infrastructure, and (c) a component for institutional and policy strengthening for transport and trade, based on anchored in the implementation of the WTO TFA and customs procedures of the World Customs Organization (WCO). A key strategic feature of the project is the development of “next-generation regional projects” (e.g., through comprehensive trade gateway connectivity assessments to improve the congested and less-developed transport sections that lead to ports, rail and inland water terminals, and international borders, as well as feasibility and design studies for additional land port and customs infrastructure and priority sections of the regional road network.

Also highly relevant is the World Bank's support for the **Bangladesh Regional Connectivity Project 1**, which is to run from April 2017 to December 2026, with a total project (investment) cost of USD 170.42, including a commitment amount from the World Bank of USD 150.45 million. The project (i) is investing in infrastructure, systems, and procedures to modernize key selected land ports essential for trade with India, Bhutan, and Nepal; (ii) enhancing trade sector coordination and economic empowerment and opportunities in trade for women; and (iii) supporting implementation of a national single window and customs modernization plan. Notably, the project appraisal document included a potential pilot for “colocation” at the border crossing at Ramgarh between Northeast Bangladesh and Tripura State (Sabroom), Northeast India,⁴² although it has not progressed to the implementation stage.

⁴² The World Bank, *Project Appraisal Document for Bangladesh Regional Connectivity Project 1*, 13 March 2017, p. 11 [<https://documents1.worldbank.org/curated/en/675531491616976672/pdf/Project-Appraisal-Document-PAD-P154580-03172017.pdf>].

In addition, the World Bank has undertaken a number of relevant studies,⁴³ including the following:

- (i) In April 2021, the World Bank Office, Dhaka, published ***Bangladesh Development Update, Moving Forward: Connectivity and Logistics to Strengthen Competitiveness***. It found that (a) Bangladesh lags its main competitors on measures of connectivity and logistics (p. 27); (b) congestion and delays are pervasive, from roads to seaports and land ports (p. 28); (c) Bangladesh's logistics system is fragmented in terms of both infrastructure and services (p. 29); (d) the logistics sector suffers from outdated policies and regulations (p. 29); (e) achieving efficient logistics requires a system-wide approach (p. 30); (f) a multimodal transport and logistics master plan should be developed to inform policy makers about investments in transport and logistics infrastructure (p. 31); (g) infrastructure investments should focus on service gaps instead of infrastructure gaps and should move away from the pattern of building infrastructure but neglecting its maintenance, and therefore having to rebuild it later (p. 31); (h) the logistics sector should address the effects of climate change (p. 32); (i) policymakers should facilitate multimodal logistics (p. 32); (j) the regulatory framework (e.g., axle load regulations) and the enforcement of laws must be strengthened (p. 32); (k) the role of the private sector in the financing, management, and operation of infrastructure should be increased (p. 32); and (l) Bangladesh should leverage its strategic location in South Asia to serve as a regional logistics node (p. 35).
- (ii) In March 2021, the World Bank Group published ***Connecting to Thrive: Challenges and Opportunities of Transport Integration in Eastern South Asia***, which was edited by Herrera Dappe and Charles Kunaka. It noted that while the India-Bangladesh border is the fifth longest border in the world (4,096 km), it is more costly for India and Bangladesh to trade with each other than it is for either to trade with Germany (p. 2). The report included chapters analyzing route and mode transport choice in Eastern South Asia following integration agreements (Chapter 2), and assessing economic gains and losses from integrating road transport between Bangladesh and India (Chapter 3).
- (iii) In 2020 the World Bank Group published ***Playing to Strengths: A Policy Framework for Mainstreaming Northeast India***, edited by Sanjay Kathuria and Prita Mathur. It includes a policy framework to build on Northeast India's strengths (Chapter 1, by Kathuria and Mathur) and a connectivity assessment (Chapter 3 by Prabir De and Charles Kunaka).
- (iv) Also in 2020, the World Bank Group published a report on ***Strengthening Cross Border Value Chains: Opportunities for India and Bangladesh***, edited by Sanjay Kathuria.⁴⁴ The report focused on spices, fruits and vegetables, and bamboo and bamboo products.⁴⁵
- (v) For the South Asia Development Forum, the World Bank Group published a collection of papers in 2018 titled ***A Glass Half Full: The Promise of Regional Trade in South Asia***, edited by Sanjay Kathuria. It "advocates an approach of open regionalism and views intraregional trade as complementary to and as a stepping-stone for deeper global integration" (p. 3). It "unpacks" four critical barriers to more effective intraregional trade integration (i.e., border tax distortions, nontariff barriers, connectivity costs, and trade barriers) and offers specific options for policy

⁴³ Details on cost and timeframe of the work are generally not available for publications.

⁴⁴ <https://openknowledge.worldbank.org/server/api/core/bitstreams/13aee4bf-6543-5250-bc6b-c8fb191b9aa6/content>.

⁴⁵ Chapter 3 (pp. 67-97) of this report – by Ruchita Manghnani – assesses the bamboo (sub)sector focusing on four strategic segments or user-product combinations and finds that bamboo products with high technical specifications that target environmentally conscious consumers have the potential to bring returns for the region in the medium-to-long term and generate employment, particularly for women and the lower 40% of the income distribution. However, the chapter found that there are several weak or missing links in the value chain of the bamboo segment – for example, the development of a commercial plantation sector is recommended (p. 67) The chapter suggests that urban Bangladesh can offer market potential for bamboo products with hard technical specifications for eco-conscious consumers ("B2"), can provide logistics services and access for export products from this segment, is a growing wood furniture industry, and could be a source of foreign direct investment (p. 82).

makers in the region to address these barriers. It considers “incremental, yet concrete steps” in the four areas to enhance intraregional trade in goods and services.

2.6.4 Asian Development Bank

As mentioned in sections 2.2 and 2.4, ADB has provided support or is supporting several specific projects and studies with a high degree of relevance to the current survey. Country-wise initiatives include: (i) ADB TA 6911-BAN, the SASEC Integrated Trade Facilitation Sector Development Program, a USD 1.5 million technical assistance project, implemented from April 2022 to March 2025, providing support to **Bangladesh**; and (ii) ADB TA 9408-BAN, a technical assistance project that has been updating **Bangladesh**’s road master plan, from November 2018 to August 2024, at a cost of USD 2 million;

Regional initiatives include (i) support for the **BIMSTEC** Transport Connectivity Master Plan, the Financing Framework for BIMSTEC Transport Connectivity, and the BIMSTEC Trade Facilitation Strategic Framework 2030, part of a larger TA project originally budgeted at USD 1.5 million, starting in August 2019, and which was to be completed in June 2021; (ii) development of the Action Plan on **SASEC** Initiatives (prepared internally by ADB); and (iii) support for the update of the **SAARC** Regional Multimodal Transport Study, funded as one of many components under TA 6528-REG: Strengthening the Implementation of Regional Cooperation and Implementation Initiatives of the South Asian Association of Regional Cooperation, with a total TA cost of USD 500,000, commencing in June 2000 and recently extended to mid-2025.

Other relevant studies, projects, or research conducted by ADB⁴⁶ include the following:

- (i) A paper on *Identifying Challenges and Improving Trade Facilitation in the States of Northeast India*, in the ADB South Asia Working Paper Series, No. 95, authored by Sanchita Basu Das and Soumya Chattopadhyay, was published in December 2022. The paper was based on the North East Economic Corridor (NEEC) technical study that the Government of India requested ADB to undertake in 2018, and it was completed under ADB TA 9665-IND: Strategic Interventions for Economic Transformation – Strengthening Knowledge for Enhancing Development Outcomes. The paper assesses the challenges of trade facilitation components, including “at-the-border” infrastructure, customs, nontariff measures, and transport facilitation. It provides a list of hard and soft initiatives to promote trade, which includes coordinating the development of border crossings and transport connectivity with partner countries, prioritizing customs automation, developing laboratory infrastructure for testing and conformance, removing border restrictions, and expediting implementation of cross-border motor vehicles agreements.
- (ii) ADB is implementing a technical assistance project in **India** for **Strengthening [the] Multimodal and Integrated Logistics Ecosystem (SMILE)**, which as outlined in the August 2021 concept paper provides a programmatic policy-based loan (PBL) to bolster the institutional and policy framework for interministerial coordination and planning, which will motivate private-sector players to participate in multimodal logistics parks (MMLPs), improve efficiencies in external trade logistics, and encourage the use of smart and automated systems for improved service delivery (p. 1). The project builds on innovative and transformational initiatives by ADB in India’s logistics segment since 2015, including the planning and operation of MMLPs in several states, coastal shipping, and improved regional connectivity with South Asia and Southeast Asia (p. 5).

⁴⁶ Details on cost and timeframe of the work are generally not available for publications.

- (iii) *ADB Briefs*, No. 182, in July 2021 published a paper by Soumya Chattopadhyay, Manish Sharma, and Dhruv Gadh on ***Using Chattogram Port as a Transshipment Hub for the North Eastern Region of India***. The brief presents a structured framework to promote the sustainable development of Chattogram Port by unlocking efficiencies across the logistics ecosystem in the North Eastern Region of India and Bangladesh (p. 4). To facilitate seamless transshipment movement through Chattogram Port the brief also stresses the need to systematically address infrastructure and regulatory gaps (p. 4). It makes several suggestions, e.g., extending the Agreement on the Use of Chattogram and Mongla Port[s] to include export-import cargo movement of the North Eastern Region from other countries to approach explore the full potential of Chattogram Port for transshipment.

2.6.5 Other Partners, Organizations, and Groups

Other partners, organizations, and groups have prepared relevant reports:

- (i) **Asian Confluence** – a thinktank headquartered in Shillong, Meghalaya, North East India, which carries out research, training, advocacy, and exchange programs towards creating better understanding of the Eastern South Asian region in the larger framework of the Indo-Pacific region as a confluence of ideas and geographies, in collaboration with the South Asian Network on Economic Modelling (SANEM, a Bangladesh-based nongovernmental organization), published ***Assessing Connectivity between Northeast India and Bangladesh: Towards a Prosperous Bay of Bengal Region***, 2023, focused on strengthening bilateral and trilateral relations between and among India, Bangladesh, and Japan (e.g., including Bangladesh-India and Bangladesh-Japan comprehensive economic partnership agreements, CEPAs); creating regional value chains (e.g., assessing value chain potential for Japan in the North Eastern Region of India and Bangladesh)⁴⁷; filling in gaps of hard infrastructure and physical connectivity (e.g., constructing a four-lane road from Agartala to Sabroom to Ramgarh to Chattogram); strengthening border infrastructure (e.g., building a cargo terminal at Ramgarh); filling in gaps in soft infrastructure and trade facilitation (e.g., digitalizing customs procedures, developing standard operating procedures for transit from the North Eastern Region to Bangladesh ports); overcoming obstacles to India-Bangladesh trade (e.g., relaxing port and commodity restrictions); creating vibrant border zones (e.g., promoting special economic zones and border *haats*); deepening institutional arrangements for people-to-people connectivity (e.g., eliminating visa restrictions); strengthening knowledge for the future (e.g., civil society dialogue); and building regional economic linkages with the support of Japan (e.g., setting up special economic zones).
- (ii) The **United Nations Economic Commission for Asia and the Pacific (UNESCAP)** – one of the five regional commissions under the jurisdiction of the United Nations Economic and Social Council – published ***Unlocking the Potential of Regional Economic Cooperation and Integration in South Asia: Potential, Challenges and the Way Forward***, in 2017. It noted that trade and economic integration are critical for the meeting the Sustainable Development Goals (SDGs). In addition, on 22-23 November 2023, UNESCAP in association with the Government of Meghalaya, India, supported a Subregional Capacity Building Workshop addressing policies on low-carbon and resilient transport infrastructure, promoting multimodal connectivity in the BBIN region, and providing for multi-stakeholder dialogue on sustainable transport and trade logistics in the BBIN region.

⁴⁷ E.g., potential was found for (i) supporting agro-processing and packaging industries, with Japanese companies playing a vital role; (ii) promoting the electric vehicle market, with support from Japan; and (iii) establishing garment industry linkages, with opportunities for Japan to use manufacturers to source ready-made garments from manufacturers in Bangladesh (p. 244 of the 2023 Asian Confluence report cited in the text).

- (iii) The **United States Department of Agriculture** has been implementing a Bangladesh Trade Facilitation Project to assist the Government of Bangladesh in implementing WTO TFA measures through (a) increasing the harmonization of processes, formalities, and pre-clearance processing; (b) increasing the transparency of trade information and WTO notification compliance; (c) strengthening risk management systems; (d) improving laboratories and testing procedures; and (e) enhancing cold storage infrastructure for perishable goods (p. v). Recommendations in a July/August 2021 baseline report included fostering automation and replacing outdated manual procedures within respective agencies, and developing a National Single Window including “transaction modules” (e.g., electronic payments of fees) (p. vi).
- (iv) The **United States Agencies for International Development (USAID)** has implemented a feasibility study of the development of high-quality inland waterway infrastructure projects to improve connectivity between India and Bangladesh in 2022, under its Cross-Border Infrastructure and Connectivity (CBIC) project⁴⁸. It envisions establishing a freight village in Balagar, India; developing a lock in Jangipur, India; and supporting the transition to a cleaner, greener, and more efficient vessel fleet in India and Bangladesh.
- (v) The New Delhi-based **Centre for Social and Economic Progress** – a nonprofit organization that conducts policy-relevant research and provides evidence-based recommendations to challenges facing India and the world – prepared a paper on *Linking Land Borders: India’s Integrated Check Posts*, CSEP Working Paper 9, published in June 2021. The paper considered best practices between the United States and Canada, and between Norway and Sweden, and made several recommendations (e.g., upgrading of border infrastructure and creating real-time data exchange platforms, focusing on off-border customs facilitation, and establishing facilitation lanes).

2.6.6 Summary of Findings

This section reviewed reports on cross-border transport and logistics in South Asia by development partners and other organizations, including JICA, the World Bank, and ADB, as well as by other partners, organizations, and groups, i.e., CUTS International, Asian Confluence, UNESCAP, the United States Department of Agriculture, and the Centre for Social and Economic Progress. Implications for corridors and border crossings targeted by the current survey were noted. Observations included (a) the need to prepare a multimodal transport and logistics master plan (World Bank Dhaka Office), (b) the need for infrastructure investments to focus on service gaps instead of infrastructure gaps (World Bank Dhaka Office), (c) the need to strengthen the regulatory framework and the enforcement of laws (World Bank Dhaka Office), (d) the benefits of implementing regional policy actions to strengthen the BBIN MVA such as establishing an efficient regional transit regime (World Bank), (e) the benefits of extending the Agreement on the Use of Chattogram and Mongla Port[s] to include export-import cargo movement of the North Eastern Region from other countries to approach explore the full potential of Chattogram Port for transshipment (ADB), (f) coordinated development and infrastructure augmentation at critical border crossings, digitization of documents, and development of standard operating procedures for transit from the North Eastern Region to Bangladesh ports (ADB); (g) the possibility of pursuing a phased approach to implementation of motor vehicle agreements; (h) the benefits of overcoming obstacles to India-Bangladesh trade, such as relaxing port and commodity restrictions (Asian Confluence); and (i) the benefits of building regional economic linkages with the support of Japan, e.g., for setting up special economic zones (Asian Confluence).

⁴⁸ https://pdf.usaid.gov/pdf_docs/PA0213PG.pdf

2.7 Identification of Stakeholders

2.7.1 Introduction

This section considers key stakeholders with respect to logistics and related policies in the countries considered in the survey. The role of the Ministry of External Affairs of India – as the facilitator for this survey – is examined. While the section focuses on government stakeholders, other stakeholders include private-sector organizations (e.g., the Federation of Indian Chambers of Commerce and Industry, FICCI; the India-Bangladesh Chamber of Commerce and Industry, IBCCI) and international development partners (see, e.g., the preceding section summarizing relevant reports and activities of development partners and other organizations).

2.7.2 India

The **Ministry of External Affairs (MEA)** of India played the role of facilitator for this survey – it is the government agency responsible for implementing the foreign policy of the Government of India. The **Neighbourhood First Policy** – a core or flagship component of India’s foreign policy mentioned in subsection 2.3.1 – focuses on peaceful relations and collaborative, synergistic co-development with its South Asian neighbors on the Indian subcontinent, including Bangladesh, and including cooperation in transport and logistics. A report of the Committee on External Affairs on India’s Neighbourhood First Policy during the Seventeenth Lok Sabha (House of the People or lower-house) session, published in July 2023, states that “the overarching philosophy is to ensure that our partners in the region draw benefits and values from the growth, development and rise of India and on this basis, all countries in our region work towards developing better partnerships with each other” (1.3., p. 4). The report states that the policy “underlines the renewed primacy that India seeks to attach to its neighboring countries to comprehensively upgrade and strengthen the current relationship framework and achieve the goal of lasting peace, stability, and prosperity in the region” (1.3, pp. 4-5). As mentioned in subsection 2.3.1 the Government of India has been supporting or is to support several road and rail projects in Bangladesh, including the Ashuganj River Port-Sarail-Dharkhar-Akhaura Land Port Road (a four-lane national highway project, at a cost of USD 50.58 million), four-laning of the Benapole-Jashore-Narail-Bhatiapara-Bhanga Road Project (USD 100 million),⁴⁹ four-laning of the Ramgarh-Baruerhat Road (USD 80.06 million), and the Dhaka-Tongi-Joydebpur Railway Line Project (USD 235.10 million). See section 2.9 ([Interactive Map](#)) for detailed locations.

The **National Trade Facilitation Action Plan 2020-2023 (NTFAP)** described in subsection 2.2.2 sets out a three-tiered institutional mechanism to monitor progress and guide appropriate course corrections when required. The apex body of this institutional mechanism is the National Committee on Trade Facilitation (NCTF), which is chaired by the Cabinet Secretary to the Government of India and includes representatives of all involved stakeholder agencies. The NCTF’s functions are supplemented by a Steering Committee that contains a core group of public and private stakeholders and is chaired jointly by the Revenue Secretary and Commerce Secretary. These committees are in turn supported by Working Groups that provide small ad-hoc groups of experts from relevant institutions who are assigned responsibility for furtherance of a specific trade facilitation measure or project.⁵⁰

⁴⁹ (i) Kangan Kalita, “Connectivity through India, Bangladesh, Key to India’s Development: Jaishankar”, *Times of India*, 28 May 2022 [<https://timesofindia.indiatimes.com/india/connectivity-through-myanmar-bangladesh-key-to-regions-development-jaishankar/articleshow/91860288.cms>]; (ii) “Bhanga-Benapole Section to be Six-Lane Corridor in Five Years”, *Financial Express*, 2 July 2023 [<https://thefinancialexpress.com.bd/national/bhanga-benapole-section-to-be-six-lane-corridor-in-5-years>].

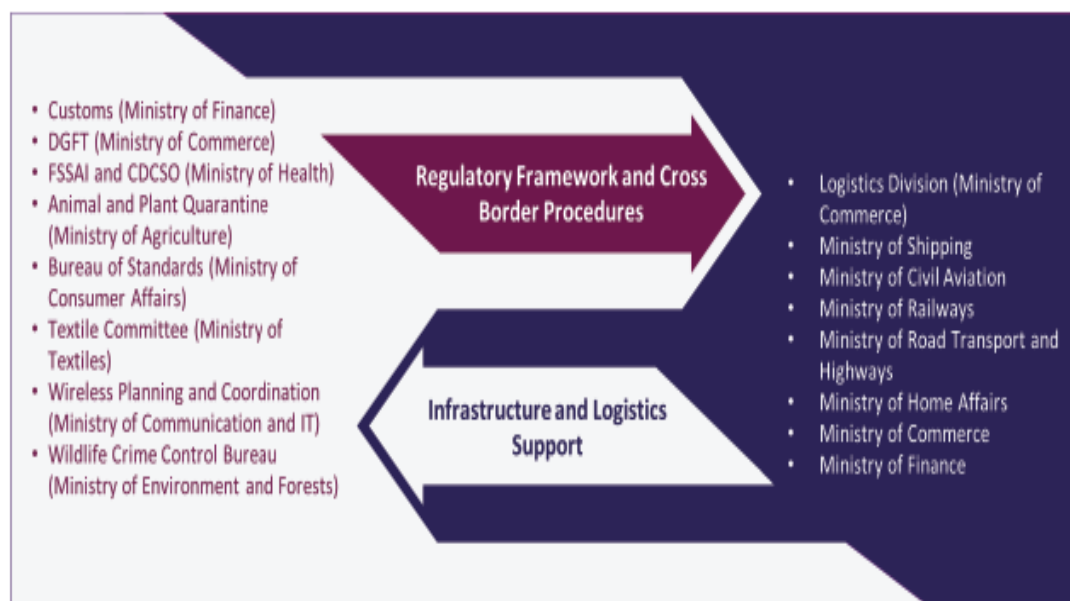
⁵⁰ While there is an established coordination mechanism for logistics in India, ADB has referred to a “silo approach to logistics” in the country, with different agencies and different requirements. Asian Development Bank, *Proposed Programmatic Approach and Policy-Based Loan for Subprogram 1, India: Strengthening Multimodal and Integrated Logistics Ecosystem*, August 2021, p. 2.

Further, the NTFAP lists stakeholder agencies involved in logistics and trade facilitation, including the following:

- (i) the **Central Board of Indirect Taxes and Customs (CBIC)**, Department of Revenue, Ministry of Finance, which among other duties, is responsible for exploring the feasibility of establishing a mechanism to enhance customs cooperation for cross-border trade at land ports, and proposing a framework to explore uniform application by neighboring governments in the alignment of working days and hours, mutual recognition of inspection, testing and certification, harmonization of standards and sanitary/phytosanitary (SPS) regulations, the development and sharing of common facilities, joint controls, and the establishment of one-stop border control;
- (ii) the **Ministry of Home Affairs (MHA)**, which also has responsibility regarding cooperation at land borders;
- (iii) the **Land Ports Authority of India (LPAI)**, which is under MHA and is responsible for designing and implementing the Land Port Community System to integrate various stakeholders at ICPs, undertaking detailed gap analysis of infrastructure and resolving issues related to logistics and infrastructure improvements at ICP border points, enhancing cross-border trade infrastructure at land borders, upgrading major ICPs with truck scanners for nonintrusive scanning, improving cargo handling efficiency at ICPs, and establishing integrated laboratories where agencies may perform most common testing procedures;
- (iv) the **Ministry of Commerce and Industry, including the Logistics Division of the Department for Promotion of Industry and Internal Trade (DPIIT)**, which is responsible for integrating the risk management systems of Customs and other participating government agencies where feasible;
- (v) the **Ministry of Road Transport and Highways (MoRTH)**, which among other things is responsible for road development for connectivity at customs ports, road development for improving last-mile connectivity, and conducting maintenance and widening of existing border approach roads; and
- (vi) other **Participating Government Agencies (PGAs)**, with various responsibilities, including integrating the risk management systems of Customs and PGAs where feasible, and digital integration of PGAs.

Figure 2-5 presents an illustrative responsibility matrix of the National Committee on Trade Facilitation.

Illustrative responsibility matrix of committee members



Source: National Committee on Trade Facilitation, *National Trade Facilitation Action Plan 2020-2023*, p. 9

Figure 2-5: Responsibility Matrix of Members of the National Committee on Trade Facilitation of India

2.7.3 Bangladesh

Main stakeholder agencies in Bangladesh with respect to logistics and trade facilitation include the following:

- (i) the **Bangladesh Land Port Authority (BLPA)**, under the Ministry of Shipping, which is an autonomous body that manages all land ports of the country;
- (ii) the **National Board of Revenue**, with responsibilities including the simplification of customs procedures and risk management;
- (iii) the **Ministry of Foreign Affairs**, which among other things has been a key agency involved in the negotiations of logistics and trade facilitation.
- (iv) the **Ministry of Roads Transport and Bridges**, with responsibilities including the development of highways and international trade corridors; and
- (v) **various other agencies** including the Bangladesh Standards and Testing Institute, the Department of Plant Quarantine, the Bangladesh Atomic Energy Commission, the Department of Livestock, and the Department of Fisheries.

2.8 Policies and Measures to Utilize Digital Technologies in Cross-Border Logistics

2.8.1 Introduction

There have been a number of notable developments in the region in terms of policies and measures utilizing digital technologies in cross-border logistics, mainly led by India at this stage, but also including initiatives by Bangladesh.

2.8.2 India

Developments in India have included the following:

- (i) The **Indian Customs Electronic Gateway (ICEGATE)** is the national portal of Indian Customs of Central Board of Indirect Taxes and Customs (CBIC). It provides e-filing services for cargo carriers and other trading partners electronically. Through ICEGATE Indian Customs offers several services, including electronic filing of the bill of entry (declaration of import goods), shipping bills (export goods declarations), e-payment of customs duties, and a free web-based common signer utility for signing customs documents. ICEGATE is internally linked with multiple partner agencies including the Reserve Bank of India (RBI), banks, the Directorate General of Foreign Trade under the Ministry of Commerce and Industry, the Directorate General of Commercial Intelligence and Statistics under the Ministry of Commerce and Industry, and the Directorate of Valuation, and various other partner government agencies involved in trade enabling faster customs clearance.⁵¹

Figure 2-6 presents a schematic showing key aspects of the ICEGATE system.



Source: <https://www.icegate.gov.in/about-us/what-icegate>

Figure 2-6: Schematic Showing Key Aspects of the ICEGATE System

- (ii) A key component of CBIC's flagship **Turant Customs Programme** is the **Faceless Customs Initiative**, which leverages technology to introduce anonymity in customs assessment. Faceless Assessment virtually connects customs assessment officers from different jurisdictions into Faceless Assessment Group(s), which reduces the need for traders to have a face-to-face interaction with customs officers for purposes of customs assessment. It provides flexibility in balancing workloads among different customs locations, and thereby increases the speed and efficiency of customs assessments, which in turn reduces dwell times.⁵²

⁵¹ See, e.g., https://old.icegate.gov.in/about_icegate.html.

⁵² <https://old.cbic.gov.in/resources/htdocs-cbec/customs/faceless-customs-10112023.pdf>.

- (iii) CBIC has launched **e-Storage and Computerized Handling of Indirect Tax Documents (eSanchit)** for paperless processing and uploading of supporting documents, to facilitate trade. The facility is being extended to participating government agencies (PGAs) to provide necessary clearances, in the form of certificates, through the document upload facility to the beneficiaries (importer and exporters).⁵³
- (iv) The **Indian Customs Single Window** (Single Window Interface for Facilitating Trade, SWIFT) allows importers and exporters to lodge their clearance documents at a single point. Required permissions from other regulatory agencies are obtained online without the trader having to approach these agencies. While a total of 44 agencies are involved with the clearance of import and export goods, nine agencies issue clearances or no objection certificates post import. Other agencies are involved in granting licenses, permits, certificates, and the like prior to import, and the automation of the granting of these licenses or permits are not in the scope of the Single Window project. SWIFT enables importers/exporters to file a common electronic integrated declaration on the ICEGATE portal. In summary, main features of the Indian Single Window include an integrated declaration, automated routing, integrated risk assessment, paperless processes, and electronic payment of fees and charges.⁵⁴
- (v) The **Unified Logistics Interface Platform (ULIP)** – an initiative under the National Logistics Policy that brings all digital data related to the transport sector into a single portal – helps manufacturers, shippers, and various other industries to streamline and optimize their logistics. About 33 systems of 7 ministries are integrated through 106 application programming interfaces (APIs) covering more than 1,600 data fields across ports, shipping lines, waterways, railways, aviation, road transport and highways, customs, and the Directorate General of Foreign Trade.⁵⁵
- (vi) The **secured logistics document exchange (SLDE) platform** provides a solution to replace the present manual process of generation, exchange, and compliance of logistics documents with a digitized, secure, and seamless document exchange system.⁵⁶ Other initiatives to increase digital efficiency include **electronic logging devices (ELDs)**; green trucking, which eases compliance burdens through an IT framework; **electronic proof of delivery (e-POD)**, which eliminates the need to carry physical delivery proof; and the **truck visibility and positioning program (TBPP)**, which facilitates the finding of return trips and reduces turnaround time.⁵⁷
- (vii) The Ministry of Commerce and Industry launched an **IT-based smart enforcement app for implementation of rules and regulations related to road-based violations by trucks**, to reduce transport and logistics costs. The app is to decrease the number of physical checks of commercial vehicles by enforcement officers, reduce the number of cash challan (i.e., documents in which an official claim is made by the police that somebody has committed a crime or traffic offence) by issuing e-challan, and increase revenue collection due to reduced human intervention.⁵⁸
- (viii) CBIC has been using an **electronic cargo tracking system (ECTS)** in the context of transit movement of goods of neighboring countries through India. It allows for electronic sealing of containers and monitoring of cargo movement with live GPS tracking and enables real-time monitoring of seal integrity and immediate interventions in the case of a breach. At

⁵³ https://www.icegate.gov.in/sites/default/files/2022-04/eSANCHIT_Process_Guide_updated.pdf.

⁵⁴ <https://www.unescap.org/sites/default/files/India-Presentation.pdf>.

⁵⁵ “Unified Logistics Interface Platform: Reimagining Indian Logistics”, *Outlook*, 11 May 2023.

⁵⁶ <https://pib.gov.in/PressReleasePage.aspx?PRID=1740023>.

⁵⁷ <https://logistics.gov.in/media/rudfrz4e/first-national-conference-on-logistics-of-states-report.pdf>.

⁵⁸ Additional description is provided at https://economictimes.indiatimes.com/industry/transportation/roadways/smart-enforcement-app-for-trucks-launched-to-reduce-logistics-costs-commin/articleshow/83578289.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.

predetermined intervals it provides real-time information on position, speed, and seal integrity with a provision to generate alerts based on preset risk parameters such as attempted tampering and diversion from specific routes, which ensures secure movement as well as providing valuable data on logistics efficiency.⁵⁹

- (ix) Mandated by the National Committee on Trade Facilitation, LPAI has been developing a **Land Port Management System (LPMS)** at its ICPs using a centralized electronic platform to facilitate end-to-end intelligent and secure exchange of information between public and private stakeholders to improve the competitive position of the land-port communities. LPMS will optimize and automate logistics-efficient processes through single submission of data, connect transport and logistics chains, provide a neutral and open electronic platform enabling intelligent and secure information exchange between and among stakeholders, and enable tracking and tracing of goods and services while also ensuring data confidentiality. The optimization of ICP or land port operations through digitalization will cater to increased cargo and passenger traffic, while also reducing the costs of ICP / land port operations through proactive management.⁶⁰
- (x) A notable recent development has been the **e-Suvidha Portal** (*suvidha* means convenience in Hindi), which is a vehicle clearance system that was developed at the initiative of West Bengal State and has been operational from 2022. It has achieved substantial reductions in vehicle waiting time at Petrapole opposite Benapole, Bangladesh. An analogous system for passengers – **Yatri Subidha** – was in the advanced planning stage during the fourth quarter of 2023.
- (xi) The National Payments Corporation of India has developed the **Unified Payments Interface (UPI)**, which is an instant payment system interface used on mobile devices that facilitates interbank peer-to-peer and person-to-merchant transactions. UPI is being rolled out in Bangladesh.
- (xii) **Additional systems** have been and are expected to be introduced by development partners, e.g., by the ADB-supported Strengthening Multimodal and Integrated Logistics Ecosystem Program; by German development cooperation through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, the main German development agency), which has been supporting the Ministry of Commerce and Industry's Logistics Division, with a focus on climate change; and by the World Bank, which has been supporting state governments in developing logistics policies and infrastructure such as MMLPs.⁶¹

2.8.3 Bangladesh

National single window and land port management initiatives in Bangladesh are notable:

- (i) Bangladesh has been implementing a **national single window** since July 2017 under the Bangladesh Regional Connectivity Project 1 supported by the World Bank. It is to reduce processing time for imports by five days from 7-15 days. However, overall physical progress of the project has lagged behind expectations.⁶²

⁵⁹ https://old.cbic.gov.in/resources/htdocs-cbec/customs/electronic-cargo-tracking-system-ects_nov.pdf.

⁶⁰ <https://lpai.gov.in/en/digital-transformation>. LPAI is now in the process of implementing land port management software at all Indian land ports; with Sabroom the LPMS will have been installed at 12 locations, and by the end of 2024 they expect to be operating the system at 23-24 land port locations. Interview with Land Ports Authority of India, 2 February 2024.

⁶¹ <https://www.adb.org/sites/default/files/project-documents/55154/55154-001-rrp-en.pdf>, paragraph 28.

⁶² <https://businesspostbd.com/front/2022-10-19/a-long-way-to-go-for-national-single-window>. World Bank documents indicate that there were some COVID-19-related delays in the implementation of the NSW under Bangladesh Regional Connectivity Project 1 (P154580) [<https://documents1.worldbank.org/curated/en/116671622811223438/pdf/Disclosable-Version-of-the-ISR-Bangladesh-Regional-Connectivity-Project-1-P154580-Sequence-No-10.pdf>].

- (ii) The Bangladesh Land Port Authority (BLPA) has been implementing a **Land Port Management System (LPMS)**, a full-fledged information management system for land ports, which is to be implemented to automate Benapole Land Port.⁶³
- (iii) Going forward, as noted in subsection 2.6.3, the World Bank-sponsored ACCESS program is supporting development of an automated border management system (ABMS). In Bangladesh, aimed at improving the processes of the land border agencies, e.g., by enabling electronic tracking of truck entry and exit, electronic queuing, smart parking, and deploying an intelligent transport system to improve traffic flows to reduce congestion.

2.9 Map for the Connectivity Improvement Projects

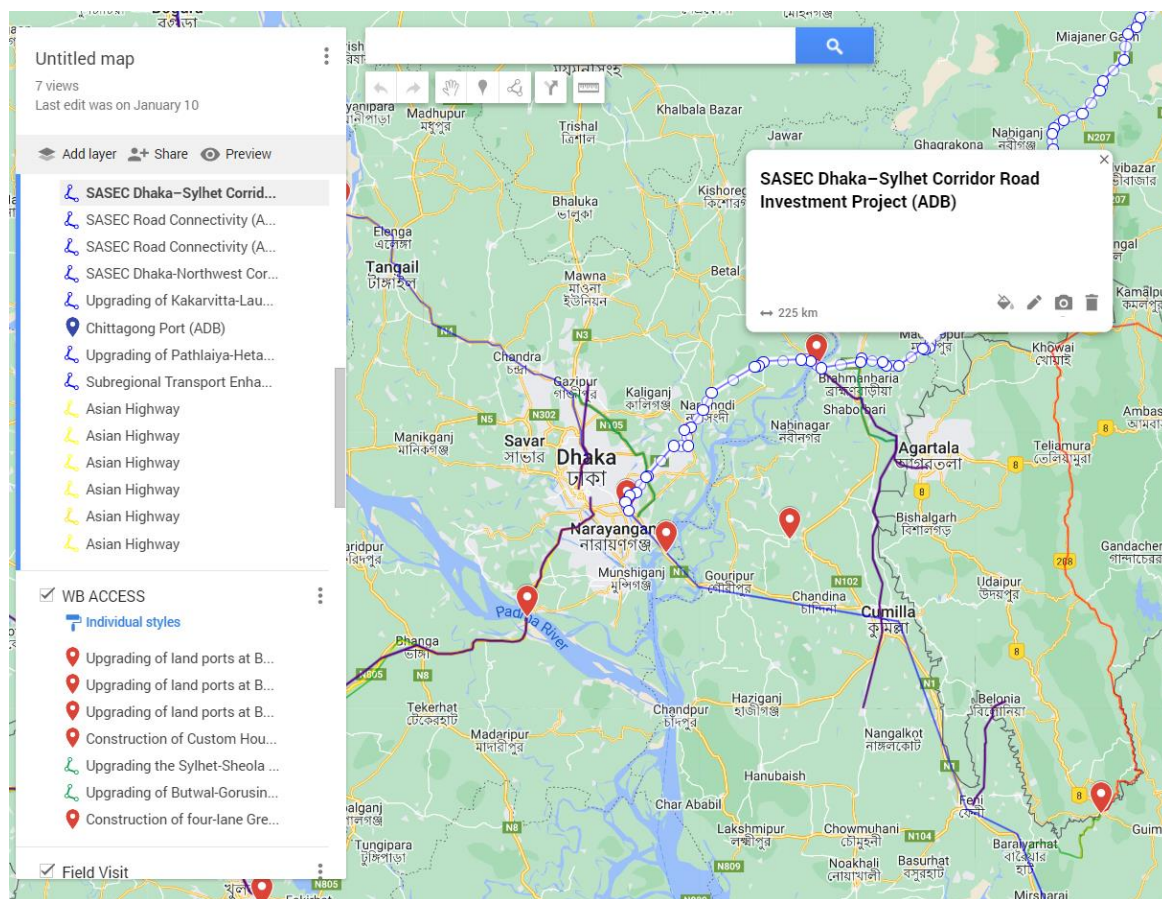
The Survey Team prepared a list and map of projects related to road connectivity in India and neighboring countries. The list and map include projects implemented by JICA, the World Bank, ADB, local national governments, and other organizations. The following information was collected and organized in the project list, with the data format expected to be a highly versatile one, such as Keyhole Markup Language (KML):

- Project Title;
- Coordinates (line/polygon), in the case of linear infrastructure such as roads
- Location (points with latitude and longitude), in the case of single point or node, such as a bridge; and
- Source of the Projects.

The map can be downloaded from:

<https://www.google.com/maps/d/edit?mid=1123nPmRiWk2s7Vli73Qabb21UsXYrwM&usp=sharing>

⁶³ <http://datasoft-bd.com/land-port-management-system/>. The World Bank's ACCESS program is to support an Electronic Automated Border Management System (e-ABMS) for Bangladesh; the details of this system have not yet been specified.



Source: This Survey based on Google My Maps

Figure 2-7: Example of a KML Map Display

Chapter 3 Current Assessment of the Targeted Corridors and the Border Operations

3.1 Introduction

Baseline information was collected and analyzed for the following items for the targeted (survey) corridors: (i) the Kolkata-Dhaka Corridor through the Petrapole-Benapole border and (ii) the Chattogram-North East India Corridor through the Sabroom-Ramgarh border. This chapter contains the following information and related discussion:

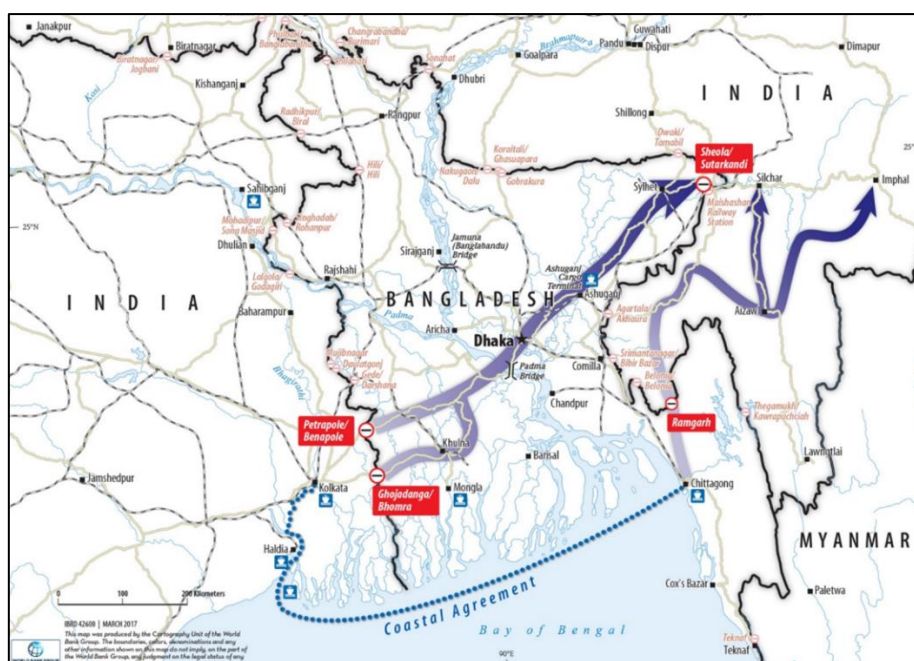
1. Analysis of the current state of transport and logistics along the corridors, including the development of a multimodal network, the connections at the borders, and infrastructure development at the integrated check posts (ICPs).
2. Analysis of customs clearance procedures, including export and import procedures of both India and Bangladesh, and the time and costs required for the procedures.
3. The overview of digital transformation (DX) and ICT applications such as e-Suvidha and electronic cargo tracking systems (ECTS), and interventions such as the Indian Customs Electronic Gateway (ICEGATE), the Automated System for Customs Data (ASYCUDA), and the Unified Interface Logistics Platform (ULIP); and
4. A methodology for road freight demand forecasting along the targeted corridors is proposed.

3.2 Analysis of the Current State of Transport and Logistics along the Targeted Corridors

3.2.1 General Situation of the Kolkata-North Eastern Region (NER) Transit

(1) A Big Picture

The general situation of the Kolkata and North Eastern Region (NER) Transit can be illustrated in the following figure. The targeted corridors are i) the Kolkata-Dhaka corridor through the Petrapole-Benapole border; and ii) the Chattogram-Northeastern India corridor through the Sabroom-Ramgarh border.



Source: World Bank, Bangladesh Regional Connectivity Project, World Bank

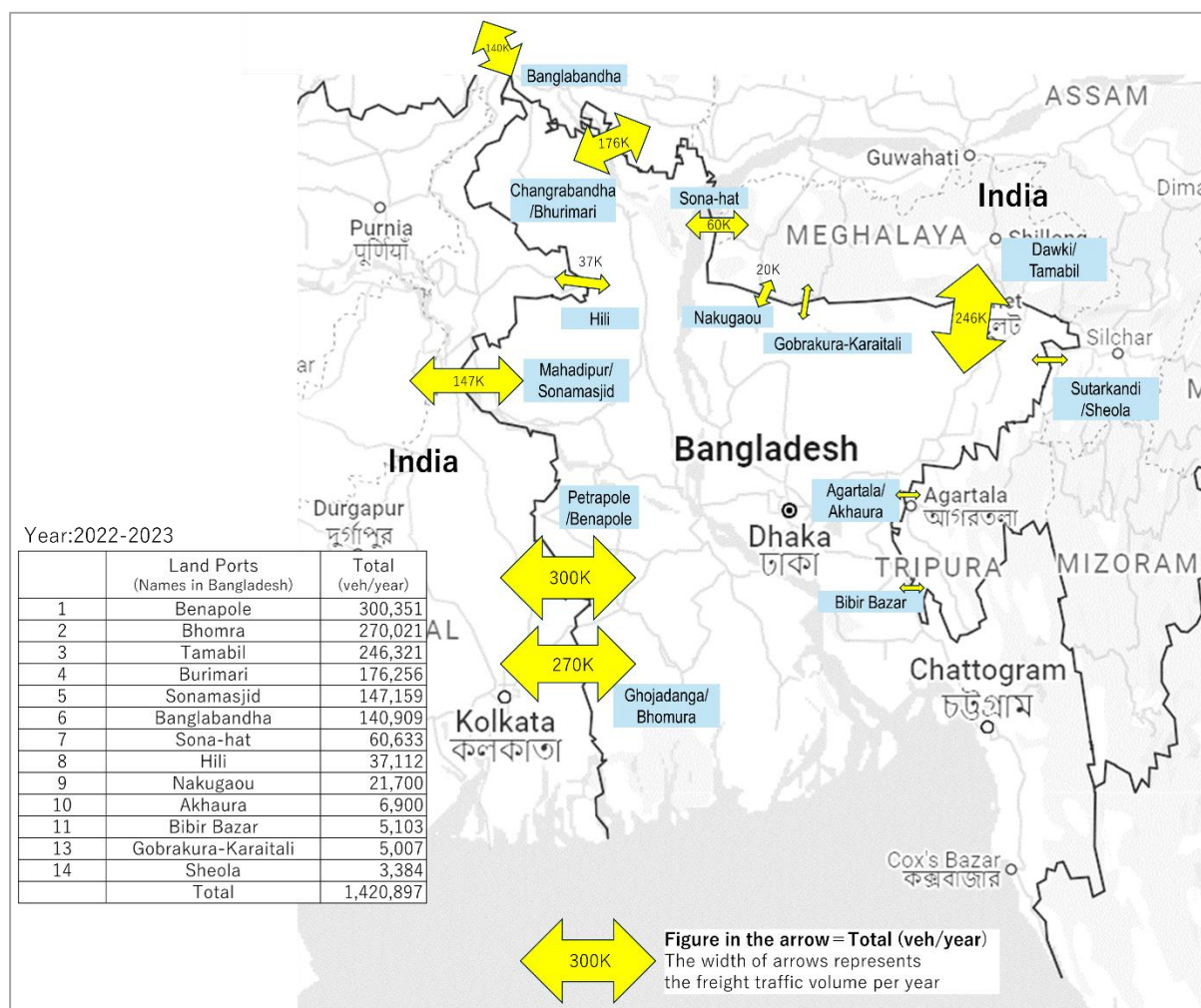
Figure 3-1: Kolkata - NER Corridor with Bangladesh Transit

This section is focusing on the two major corridors and its border crossing point in the figure, 1) Petrapole/Benapole Border along the Kolkata-Dhaka Corridor, and 2) Sabroom/Ramgarh crossing along the Kolkata – coastal delivery – Chattogram – NER Corridor.

(2) Statistics at a Glance

Quantitative Comparison among Borders

The following map depicts the comparison of the freight vehicle numbers accessing the borders between India and Bangladesh. There are 23 border crossing between the two countries and 15 land ports are active, and 14 ports have statistics.



Source: BLPA

Figure 3-2: Comparison of Freight Traffic Volumes by Borders (India-Bangladesh, 2022-23)¹

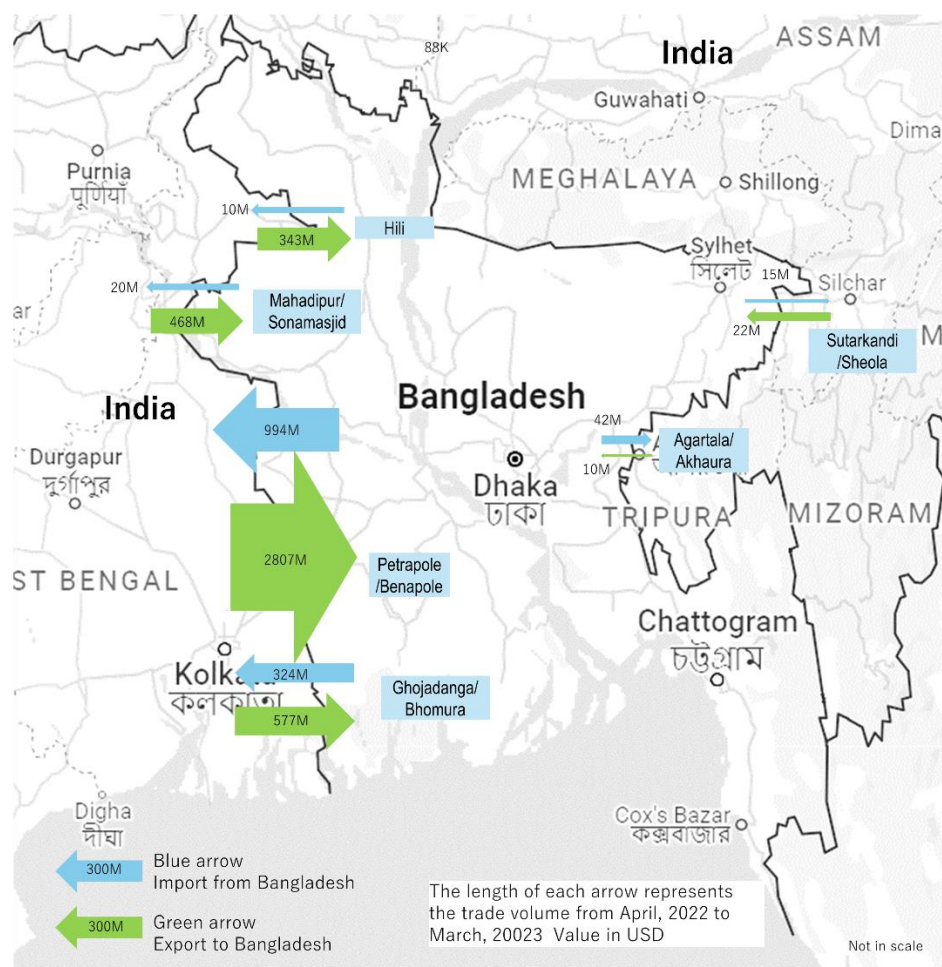
It shows that the Petrapole/Benapole is the largest border in vehicle movements, and Ghojadanga/Bhomra has similar quantities to Petrapole/Benapole. Both are located in the Kolkata-Dhaka Corridor.

¹ Srimantapur is not mentioned on the map due to lack of data

Dawki/Tamabil and Changrabandha/Bhurimari, Mahadipur/Sonamasjid, Fulbari/Banglabandha has also high volumes in freight vehicle deliveries. Dawki has large number of exports of crushed stone from India. Other border crossings at the NER are small compared to the other border crossings.

Trade Amount Comparison among Borders

The following figure shows the trade amount comparison among India-Bangladesh borders. Trade characteristics is similar to the freight amount, i.e., Petrapole /Benapole has largest trade, and India export is larger than other direction. Although the number of vehicles is high between Ghojadanga and Bhomra, the handling of industrial products is limited, resulting in a lower trade volume compared to Petrapole and Benapole. The trade in land crossing in Western Bengal and Bangladesh has large volume of trade compared to Tripura and Bangladesh.

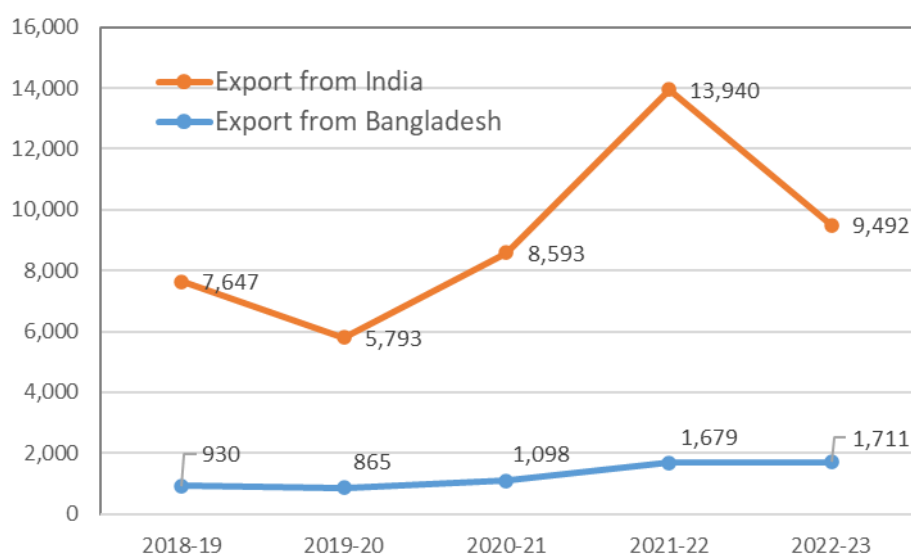


Source: Government of India, Ministry of Commerce and Industry Directorate General of Commercial Intelligence and Statistics (DGCI&S)

Figure 3-3: Comparison of Trade Volumes by Borders (India-Bangladesh, 2022-23)

Annual Trends

The following chart shows the annual changes of trade and amount of between India and Bangladesh. The directional gap of trade is large in the bilateral trade. Eight to ten times difference can be seen. Both export and import are growing, particularly growth in 2020-21 and 2021-22 was around 60% for both countries. Instead, the export from India in 2022-23 has dropped, which was due to Bangladesh's forex shortages and liquidity crunch.

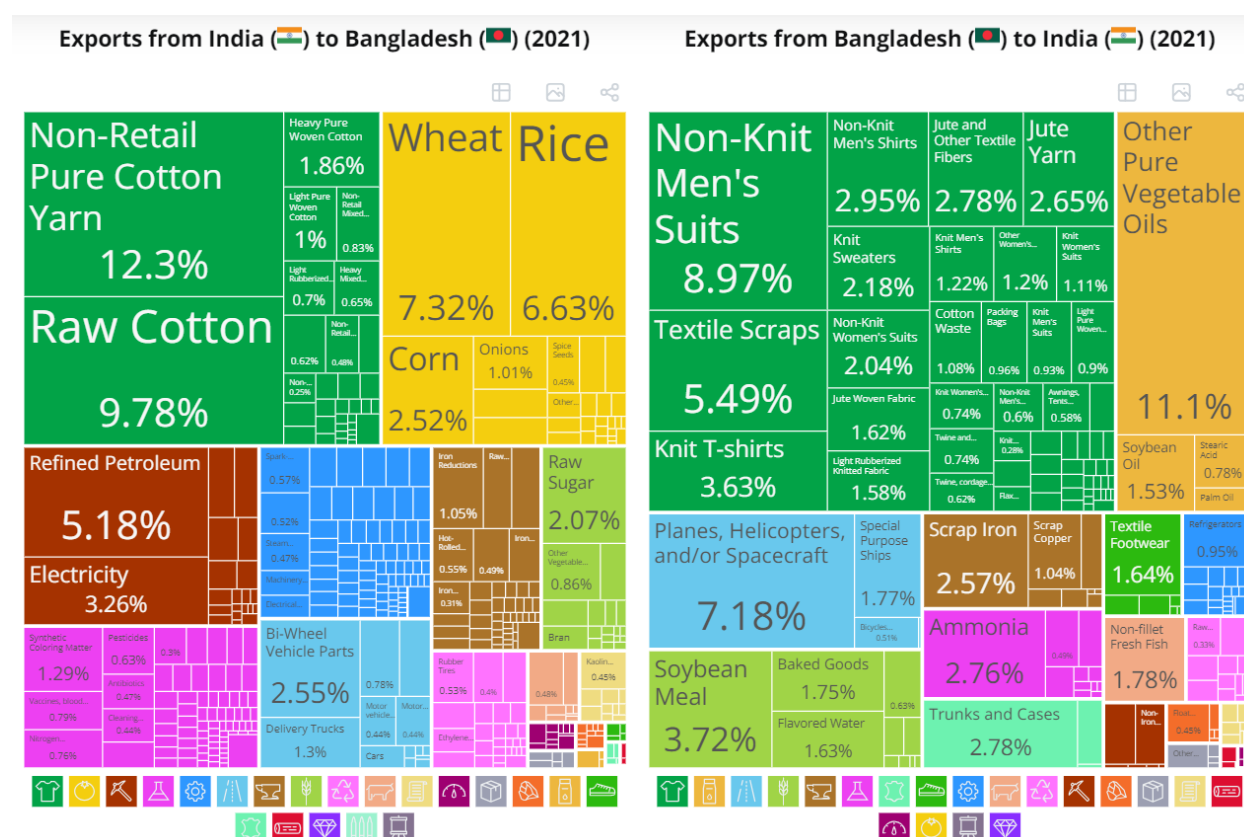


Source: Central Bank of Bangladesh

Figure 3-4: India - Bangladesh Export/Import Annual Change (million USD)

Commodities

Export and import between India and Bangladesh can be depicted as follows.



Source: <https://oec.world/en/profile/bilateral-country/ind/partner/bgd>

Figure 3-5: India - Bangladesh Trade (2021)

In 2021, India exported \$14.1B to Bangladesh. The main products exported from India to Bangladesh were Non-Retail Pure Cotton Yarn (\$1.73B), Raw Cotton (\$1.38B), and Wheat (\$1.03B). During the last 26 years the exports of India to Bangladesh have increased at an annualized rate of 10.5%, from \$1.04B in 1995 to \$14.1B in 2021.

On the other hand, Bangladesh exported \$1.72B to India. The main products exported from Bangladesh to India were Other Pure Vegetable Oils (\$191M), Non-Knit Men's Suits (\$155M), and Planes, Helicopters, and/or Spacecraft (\$124M), however, the majority is textile related. During the last 26 years the exports of Bangladesh to India have increased at an annualized rate of 12.1%, from \$88.6M in 1995 to \$1.72B in 2021.

(3) Multimodal Approach

Although this study focuses mainly on road transport, it is essential to review rail, waterborne, and marine transport, which compete with (and sometimes complement) road transport. A key objective of the Government of India is to relieve the high concentration of traffic through the Siliguri connecting the NER with the rest of India, and to develop several potential transit routes with multimodal approaches. Table 3-1 summarizes multimodal transit approaches by type of commodity.

Table 3-1: Multimodal Transit Approach by Commodity

Commodity	Mode and Issues
Transit – Heavy Bulk (Steel/Rebar/cement from Kolkata to the NER)	Waterborne transport including barges are used from Kolkata via inland waterways to Ashuganj, with delivery then by road/rail to the NER via Agartala. (3-4 days for Kolkata-Ashuganj via river transit). A detailed study is necessary to compare the railway and waterborne transport modes. Development of Ashuganj river port is underway with support from the World Bank. The increasing consciousness of green transport in India will enhance this development.
Transit/Bangladesh Containers (including LCL consignments)	(1) Kolkata-Chattogram-Sabroom/Agartala-NER Using ocean-vessel transport for Kolkata-Chattogram, there are several potential routes between Chattogram and the NER, including combinations of rail and road . (2) Use of railways after opening of dual-gauge lines, as follows: - Visakhapatnam (Vizag)-Kolkata-Petrapole-Jamuna Bridge-Dhaka-Agartala-NER - Vizag-Kolkata-Petrapole-Padma Bridge-Dhaka-Agartala-NER Broad-gauge network development in the eastern region of Bangladesh is ongoing, but development of a rail bridge at Ashuganj is the key for the east-west connection. It is funded by ADB, and Development Project Proposal (DPP) is under preparation.
Miscellaneous goods, perishable goods, and local demand between West Bengal (India) and Bangladesh	With flatbed trucks , local freight forwarders can realize quick and frequent delivery for small quantities. Implementation of the MVA, containerization, palletization, and warehouse automation are keys for improvement of these services, but the present transporters and forwarders are not strongly interested in such modernization. Cold chain delivery is not yet widely adopted in the market.

Abbreviations: ADB = Asian Development Bank, LCL = less-than-container load, MVA = Motor Vehicles Agreement, NER = North East Region, Vizag = Visakhapatnam

Source: JICA Survey Team

(4) Transport Infrastructure Development

Kolkata-Dhaka Corridor

Figure 3-6 presents an indicative map showing infrastructure development along the Kolkata-Dhaka Corridor.

The Kolkata-Dhaka Corridor is about 300 km long. The Indian section is about 80 km along the shortest section. However, the existing Indian road section is relatively congested, and it takes about 3.5 hours to pass through due to heavy mixed local traffic. The Bangladesh section is relatively smooth, wider, and well-paved compared to the Indian section at present.

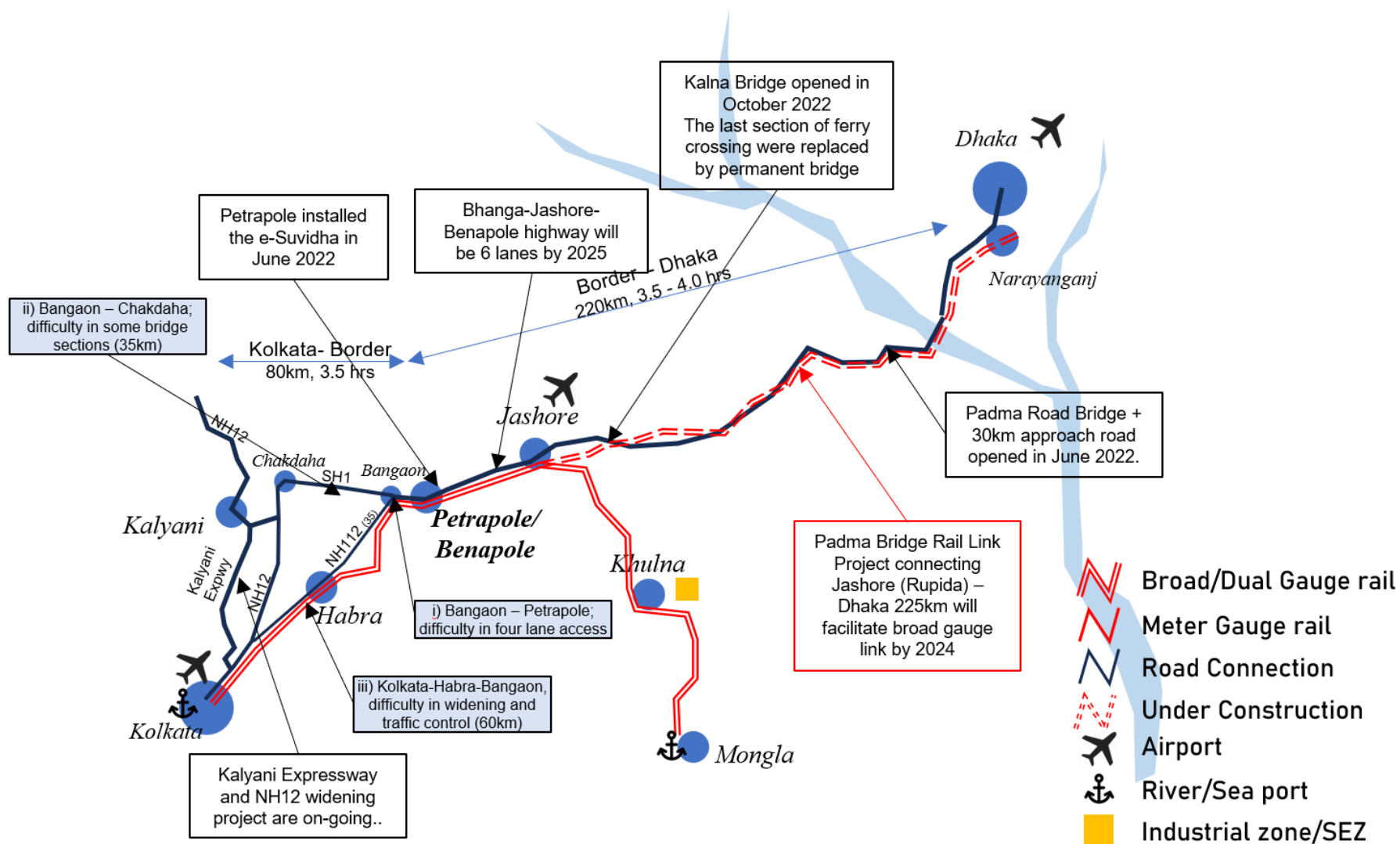
The following sections have relatively poor conditions for freight operations in cross-sectional setting (shown in blue shaded box in the Figure):

- (i) The 5-km length section between Petrapole and Bangaon has four lanes, but some parts have only two lanes and it is difficult to widen considering local land uses;
- (ii) Widening has been delayed along the 32-km section between Bangaon and Chakdaha and there is congestion in the bridge section and several transit sections traversing urbanized areas; and
- (iii) The 60-km stretch linking Kolkata-Habra-Bangaon, registered as NH 112, which was formerly NH 35, is difficult to widen because of the encroachment of dense land uses along the road and high volumes of local traffic.

However, other neighboring highway sections in India are currently undergoing major widening work. NH 12 between Kolkata and Kalyani, and another bypass corridor known as the Kalyani Expressway, are currently being widened to 6-8 lanes to avoid the severe traffic congestion along NH 112. On the Bangladesh side, the Padma Bridge with a 30-km long express highway was opened in June 2022 and has changed the traffic situation crossing the Padma River. The construction of the Kalna Bridge, which opened at about the same time, in October 2022, through JICA grant assistance, also contributed to the improved connectivity of this corridor. With the opening of the Padma and Kalna bridges, the ferry crossing section between Dhaka and Kolkata has been wiped out. Also, a Bhanga-Jashore-Benapole highway development project is ongoing and will complete a six-lane road by 2025.

Railway development also improves connectivity between Kolkata and Dhaka. While before 2023 the broad-gauge network reached up to Jashore, Khulna, and Mongla, there was no broad-gauge connection up to Dhaka. However, the Padma Bridge has been opened, and the Padma Bridge rail link project is ongoing, and Kolkata-Dhaka will be connected with broad gauge by 2024, and this will be shorter than the existing broad-gauge connection via the Bangabandhu (Jamuna) Bridge. This railway via Padma will connect Kolkata, Dhaka, and Mongla Port.

3-7



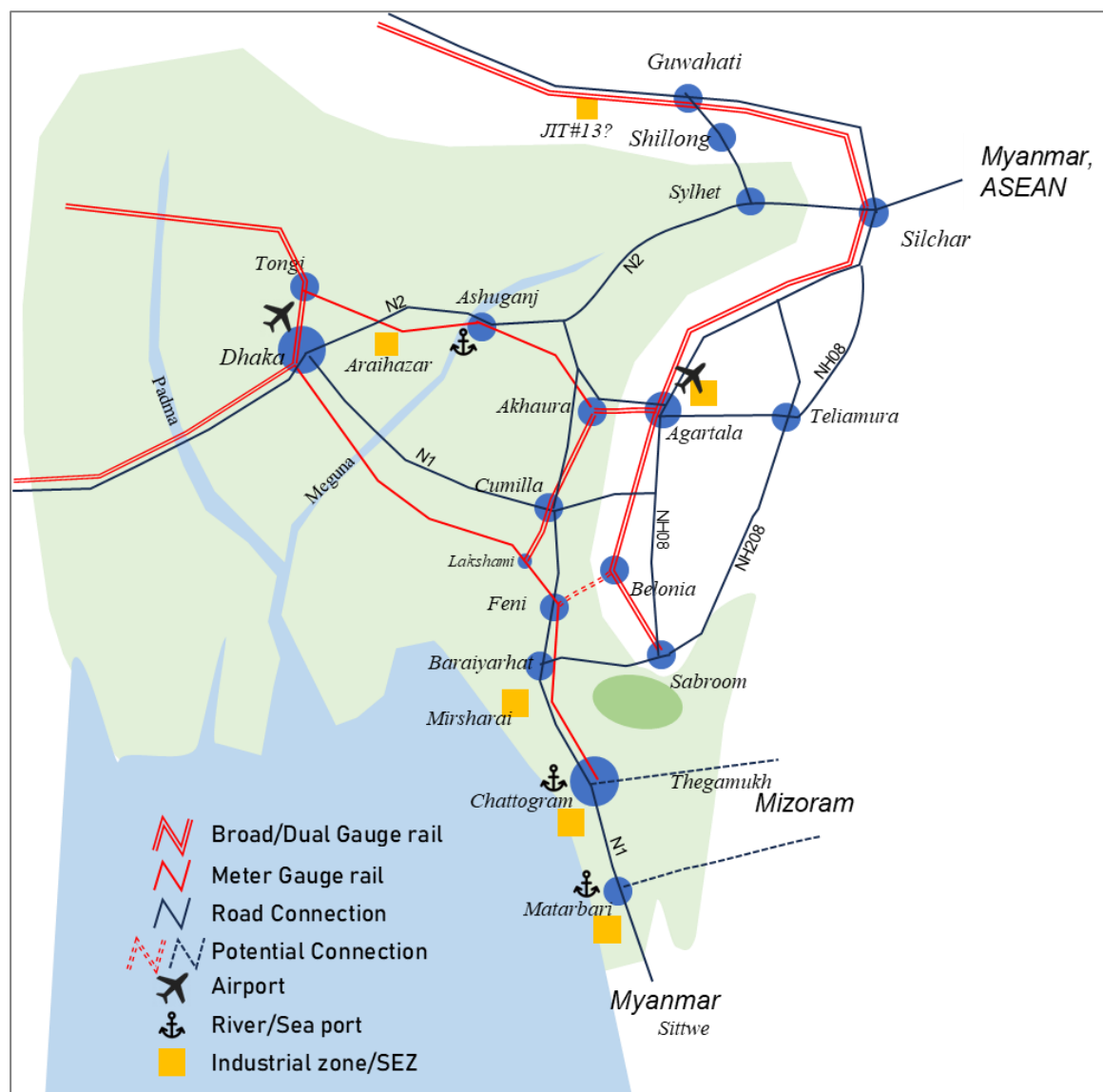
Source: JICA Survey Team

Figure 3-6: Indicative Map of the Infrastructure Development along Kolkata-Dhaka Corridor (as of Feb 2024)

Chattogram-NER Corridor (route via Sabroom and neighborhood borders)

Development of a Chattogram-NER connection and supporting multimodal transport development are ongoing. The following will explain the major improvement of the road, rail and water infrastructure.

Figure 3-7 presents an indicative map of transport infrastructure along the corridor, while the following box lists major improvements of road, rail, and waterborne transit infrastructure along the Chattogram-NER corridor.



Source: JICA Survey Team

Figure 3-7: Indicative Map of Infrastructure Development along the Chattogram-NER Corridor

Box 3-1: Major Improvements of Road, Rail, and Waterborne Transit Infrastructure along the Chattogram-NER Corridor

Road Widening / New Road Projects

- Sabroom ICP-Ramgarh-Baraiyarhat Road Link (36 km), funded by the Government of India, expected to open in summer 2026
- NH208 Sabroom-Khowai: funded by JICA yen loan, Ongoing
- Akhaura-Ashuganj road widening: Ongoing
- Purbachal Expressway (N2): Completed – a 15-km, 14-lane, a controlled-access expressway
- Chattogram-Cox's Bazar (Matarbari) road development: Ongoing

Rail projects, including Dual-Gauge and Broad-Gauge Projects

- Agartala-Sabroom rail link (Indian railway, broad gauge), already completed. Three round trips per day of passenger services. The Sabroom railway yard has a large land area and is directly connected with the Sabroom ICP.
- Akhaura-Agartala dual-gauge railway link (Gangasagar, Bangladesh-Nischintapur in Tripura, India), already completed, funded by the Government of India, and test operation on 1 November 2023 (refer to table 3-4 (3) Transit at the Agartala Railway Yard)
- Akhaura-Lakshami Junction dual-gauge railway link: 90% completed by the end of 2023
- Chattogram-Lakshami dual-gauge railway link: under discussion
- Akhaura-Ashuganj dual-gauge railway link
- Ashuganj-Tongi dual-gauge railway link, including construction of a rail bridge over the Meghna River
- Feni-Belonja railway section (under consideration in the SASEC framework; the Bangladesh Railway has undertaken a preliminary study)

River Port / Sea Port

- Ashuganj river port development, funded by the World Bank (Bangladesh Regional Waterway Transport Project 1)
- Matarbari deep sea port: JICA Loan; to be completed by 2027

Industrial Park / SEZ development

- SEZ in Sabroom
- Mirsharai Industrial Park Development: JICA's cooperation involving overseas investment and loans for environmentally friendly steel plants.
- Located east of central Dhaka (Araihazar), Bangladesh Special Economic Zone (BSEZ) – BEZA is promoting an economic zone with a total area of 190 hectares, with technical cooperation and concessional loans (yen loans and overseas investment) from JICA and its tenants including Lion (Japan, domestic chemical products) and Singer (Turkey, home appliances).
- Japan Industrial Township #13 – at Nagarbera, Assam, reported by a news media in India, however, JICA Survey Team assesses the possibility of this development is quite low and unclear.

Abbreviations: BEZA = Bangladesh Economic Zones Authority (BEZA), ICP = integrated check post, JICA = Japan International Cooperation Agency, SASEC = South Asia Economic Cooperation, SEZ = special economic zone

Source: JICA Survey Team

Dramatic Change in Transit Connectivity

Considering the various recent, ongoing, and planned improvements, the level of service (LOS) of road and rail connectivity has been and will be improved as shown in Table 3-2.

Table 3-2: Connection Level of Service along the Kolkata-Dhaka-Agartala Corridor

	Up to 2022 (past period)	2023 (present)	Up to 2025 (short term)	2028 and beyond (mid-long term)
Road (hours)				
Kolkata-Petrapole/Benapole	3.5	3.5	2.5	2.0
Petrapole-Dhaka	8.0	3.5	3.0	3.0
Dhaka-Ashuganj	6.0	4.0	3.0	3.0
Ashuganj-Akhaura/Agartala	3.0	3.0	2.0	2.0
Total hours (reference only)	(20.5)	(14.0)	(10.5)	(10.0)
Railway Gauge Integration				
Kolkata-Petrapole/Benapole	Broad	Broad	Broad	Broad
Petrapole-Tongi	Broad (via Jamuna)	Broad (via Jamuna)	Broad (via Padma)	Broad (via Padma)
Tongi-Ashuganj	Meter	Meter	Meter	after 2030?
Ashuganj-Akhaura/Agartala	Meter	Meter	Broad (Dual)	Broad (Dual)
Border crossing (hours)				
Petrapole/Benapole	1,000+	30-100	30	3
Akhaura/Agartala	250	100	100	10-
(Assumed) improvements		Padma Bridge, Purbachal Expressway, E-Suvidha on the Indian side	NH112/Kelanya Expwy, Banga - Benapole Highway, Akhaury-Ashuganj Highway+Railway, Padma rail connection, e-Suvidha share + World Bank ACCESS project	SH1, Data Exchange between India/Bangladesh

Source: Estimation by JICA Survey Team

Road connectivity was assessed in terms of transport hours along major sections. Kolkata-Petrapole will be improved gradually with the opening of new bypass highways. The Petrapole-Dhaka section was the biggest bottleneck along the corridor due to the Padma River ferry crossing, but the opening of the Padma Bridge has improved the situation dramatically. The Purbachal Expressway opening in 2022 along the Dhaka-Ashuganj section has also improved the traffic situation, and continuous improvements can be expected. Also, road widening work between Ashuganj and Akhaura is ongoing. The total transport time by road from Kolkata to Agartala in 2025 will be half of that in 2022.

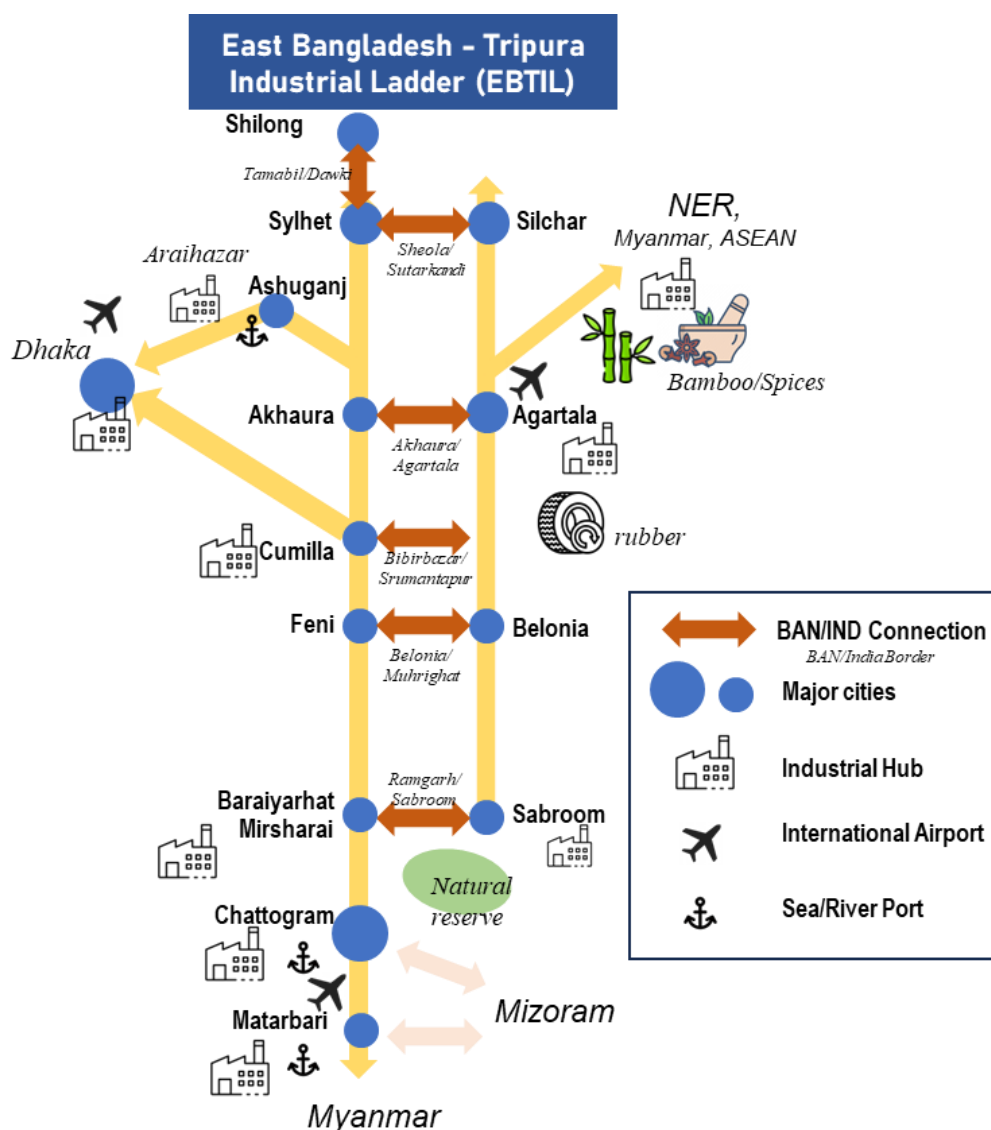
It should be noted that the road connectivity between Kolkata-Dhaka-Agartala will be affected by congestion in Dhaka City and surroundings, but circular road development in Dhaka as called for in the Bangladesh Road and Highway masterplan will reduce traffic congestion.

Regarding the rail connectivity between Kolkata-Dhaka-Agartala, the Tongi-Ashuganj connection will be the “keystone” for establishing a seamless broad-gauge connection. Broad-gauge installation of the Ashuganj Rail Bridge over the Meghna River is being considered for funding by ADB considering that the current meter-gauge bridge cannot accommodate the loads of typical broad-gauge railway traffic. It is likely that other sections will be converted to broad gauge in the near future, and the new rail installation to the Padma section will generate redundancy in the network. It should be noted that rail connectivity should also be assessed by various elements (e.g., service frequency, tractor availability, and terminal capacity), but the analysis here focuses on gauge integration.

Regarding border crossing, the improvement in operations at Petrapole with installation of e-Suvidha in 2022 has resulted in dramatic changes in crossing. If the e-Suvidha booking system can be shared with the Bangladesh side, and handling capacity improvements at Benapole are effectively implemented, current dwell times of 3-4 days at Benapole may be reduced to about one day. Moreover, implementation of customs data exchange would reduce these dwell times to than one day. In addition, implementation of the Motor Vehicles Agreement would provide additional positive impact on through-traffic operations. That said, several institutional issues remain.

Position of Sabroom in Regional Connectivity

Considering the present situation of infrastructure and industrial development, the concept of an industrial corridor (the East Bangladesh-Tripura Industrial Ladder, EBTIL) shown in Figure 3-8 can be proposed. The EBTIL would connect local industrial sites and resources in the region, and enhance industrial development in states in the NER, through developments in Tripura, Meghalaya, Assam, Chattogram, and Matarbari. This concept could also be extended to the connection to Mizoram and Myanmar if the security situation in these areas improves.



Source: JICA Survey Team

Figure 3-8: East Bangladesh-Tripura Industrial Ladder (EBTIL) Initiative

The Sabroom connection is one of the five potential links in this region. Others are outlined below.

- (i) **Agartala-Akhaura link:** This link has been operational since 2006, but export trade from India has been restricted to only 43 items, and demand seems suppressed. The railway link was inaugurated recently in November 2023, but since this dual-gauge link has not yet been directly connected with the Indian broad-gauge network, transit operations are required between meter-gauge and broad-gauge trains at the Agartala (Nischintapur) railway yard. A broad-gauge connection is under negotiation, but it would be undertaken after broad-gauge improvement of Akhaura-Ashuganj, which would carry heavy-bulk traffic from the Ashuganj river port. Agartala has a large industrial park in the eastern part of the city and accommodates industries for energy, chemical products, food and rubber, and latex threads.
- (ii) **Sabroom link:** The Sabroom railway link from Agartala is an advantage of the Sabroom connection. After proper opening of the road connection to Ramgarh, Sabroom is the nearest railway station from Chattogram and Matarbari Ports. There is a nature reserve area south of Ramgarh, which is a barrier to extending direct rail and road connections to Chattogram. Land for a special economic zone (SEZ) has been secured adjacent to the railway yard. The Mirsharai SEZ will be one of the biggest industrial developments in Bangladesh, and Sabroom is the closest city to Mirsharai. NH 208 will function as a bypass to the NER from the existing NH 8, which will maintain redundancy of access to the region.
- (iii) **Feni-Belonia Link:** The new railway connection between Agartala and Sabroom runs in parallel to NH 8, but it deviates from NH 8 at Belonia. In the past, there was a branch line for the transport of tea diverted from the Chittagong main line, which was abandoned; however, Ircan International, (Indian Railway Construction International Limited, an Indian engineering and construction corporation, specialized in transport infrastructure) and the Bangladesh Railway are considering rehabilitating the section to connect with the NER. This section has been listed as a SASEC project and would provide a railway bypass of the Gangasagar (Akhaura) to Agartala connection. Feni is close to the Mirsharai industrial park under development.
- (iv) **Cumilla:** Cumilla is connected with Srimantapur through road. The route also has the potential of inland waterway transport on Gomati river.
- (v) **Mizoram Connections:** Indian stakeholders have a strong interest in developing physical connections to and from Chattogram and Matarbari, and Mizoram. The feasibility of this connection will depend on political and security conditions as well as the challenging terrain conditions. There is a minor road between Chattogram and Rangamati, 30km east from the coast, and a river connection from Rangamati. The Bangladesh RHD is considering to start

3.2.2 Petrapole-Benapole Connection

(1) General Situation of the Petrapole-Benapole Connection

The focus of the operational assessment of the Petrapole-Benapole connection in this review is on Petrapole since the JICA Survey Team's infrastructure specialists could not observe the Benapole side on a working day.

Table 3-3 presents data on the movement of people and goods at Petrapole-Benapole.

Table 3-3: Movement of People and the Value of Imports/Exports at Petrapole-Benapole

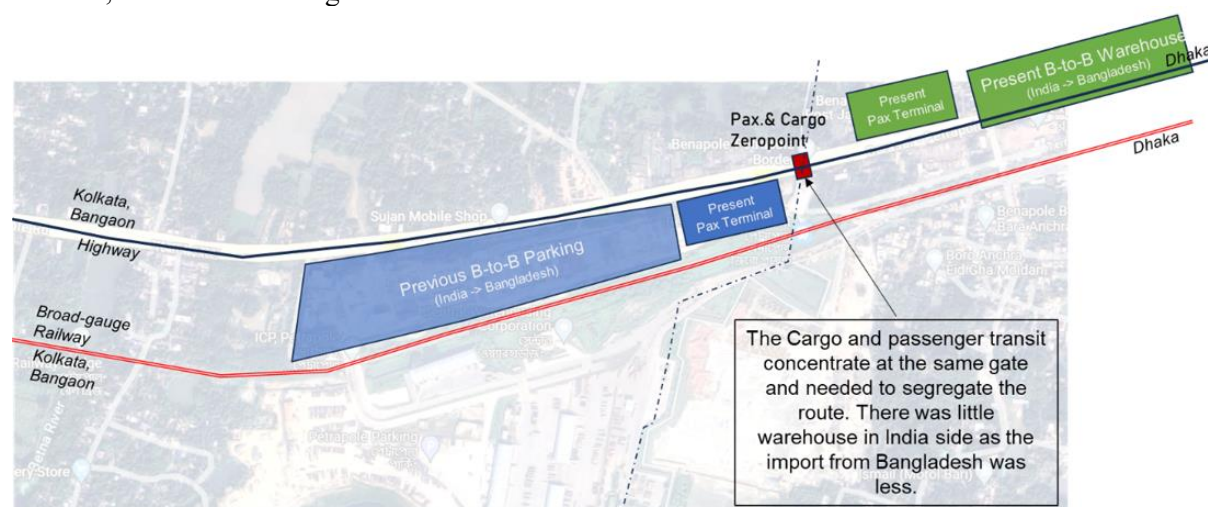
Item	2019-2020	2020-2021	2021-2022
Movement of people	2.48 million	190,000	290,000
Value of imports and exports (INR)	206 billion	157.7 billion	294 billion
Import and export (thousand tons)	1,977	2,074	1,996

Notes The figures for 2022 to 2022 were affected by the COVID-19 pandemic.

Source: Land Ports Authority of India, Bangladesh Land Port Authority

Official reports (by LPAI on the Indian side) indicate that the Petrapole-Benapole crossing was opened in 2016, but the land port itself was active before 2016 and operated by the Central Warehousing Corporation (CWC) on the Indian side. According to the BLPA report, Benapole port activities has started in 1978 by the Bangladesh Warehousing Corporation (BWC), then the newly established BLPA handed over the operation of land port in February 2002. The crossing located along the historic Jessore Highway connecting Jashore with Kolkata, and therefore local economic activity has long been significant.

Figure 3-9 shows the Petrapole-Benapole facility before 2016. Traffic demand from India to Bangladesh has exceeded that in the reverse direction. Therefore, major warehouse facilities were developed only in Bangladesh, and there was a parking facility for freight vehicles only on the Indian side. The crossing gate (the zero point) is needed to accommodate both passenger and freight traffic and has historically been congested. On the Indian side, there was an informal parking control association that managed the entry to the Bangladesh side, and the drivers of exporting trucks were forced to wait in the external parking for more than 40 days (e.g., at Kalitala Parking in Bangaon). Even after the operational handover to LPAI, this forced waiting time continued for a while.

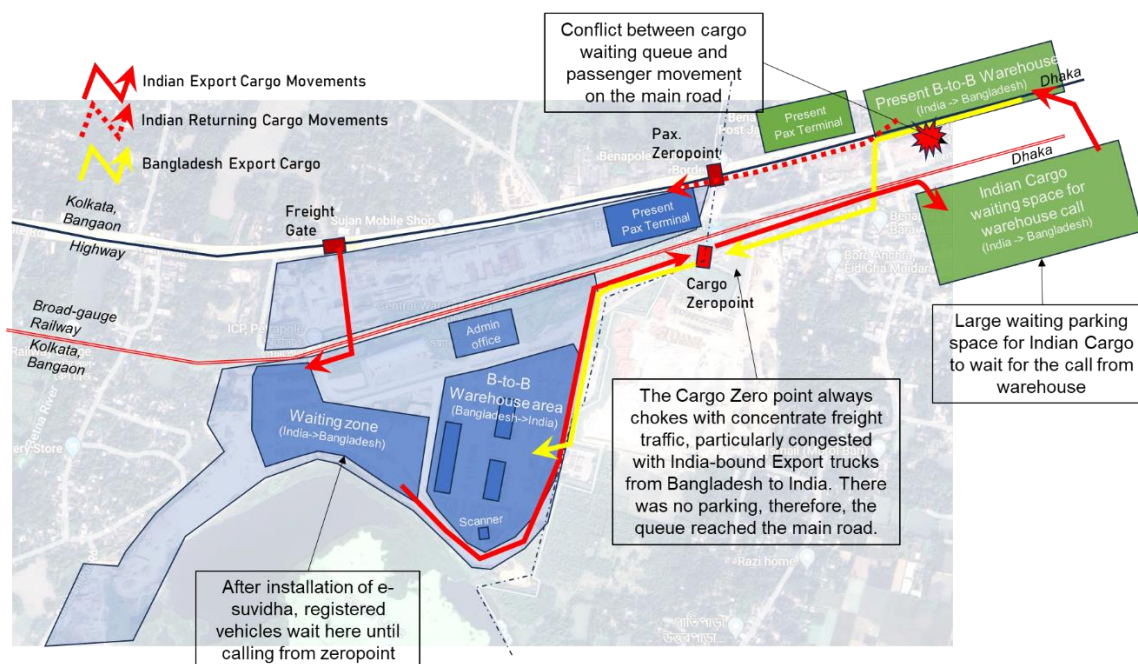


Source: JICA Survey Team

Figure 3-9: Petrapole-Benapole Cross Border Trade Facility before 2016

LPAI started facility development at Petrapole in 2016. Figure 3-10 shows the Petrapole-Benapole Cross-Border Trade Facility after 2016 (until 2023). LPAI developed large freight parking and a warehouse area south of the railway and shifted old freight parking to the southern side. Passenger and freight flows were separated by the development of the Cargo Zero Point (a one-lane gate for India-bound traffic and a one-lane gate for Bangladesh-bound traffic) and an exclusive freight gate. In June 2022, the LPAI and the Government of West Bengal installed the e-Suvidha system to substitute the function of the informal parking control association. They succeeded in achieving a well-organized flow of traffic on the Indian side.

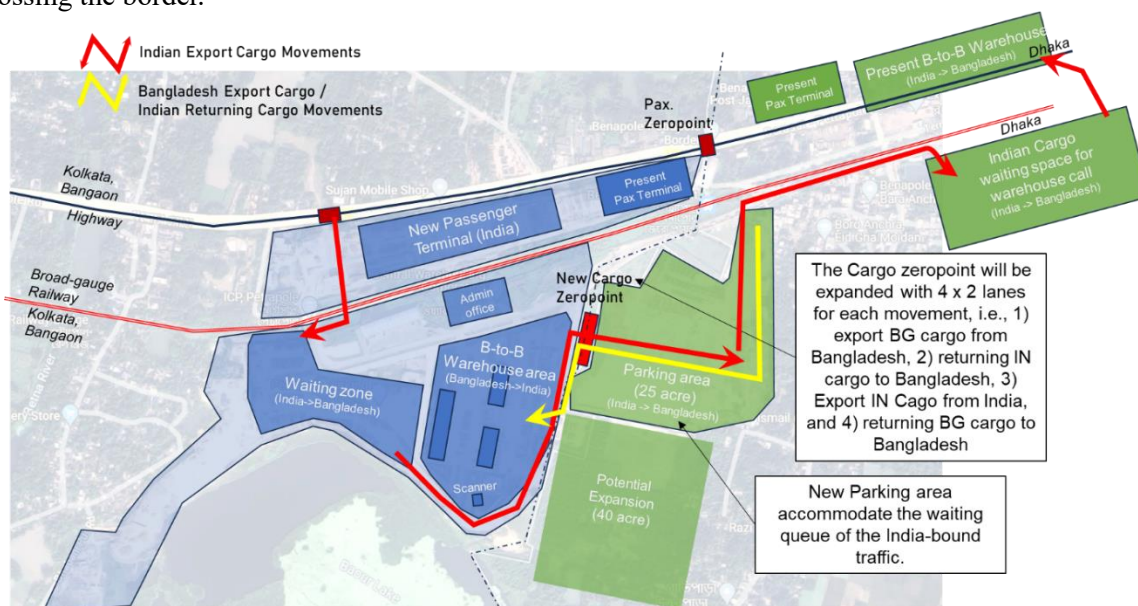
Due to the increase in freight demand, cargo gate capacity became insufficient, and congestion became apparent on the Bangladesh side, with a mix of exporting Bangladeshi trucks and returning Indian trucks. The extended queue of the trucks in the Bangladesh side made conflict with other traffic at the border.



Source: JICA Survey Team

Figure 3-10: Petrapole-Benapole Cross-Border Trade Facility After 2016 (Until 2023)

In order to raise the capacity, the border crossing facility on the site will be transformed as shown in Figure 3-11. The new 25-acre (10.12 ha) parking area in the Bangladesh side will accommodate the overflowing traffic from the street in Benapole, and an additional New Cargo Zero Point with eight lanes for each direction of traffic flow will be provided. India will develop a new passenger facility in the previous freight parking area, which will generate further immigration capacity to process people crossing the border.



Source: JICA Survey Team

Figure 3-11: Petrapole-Benapole Cross-Border Trade Facility after 2025

(2) Issues on Operation

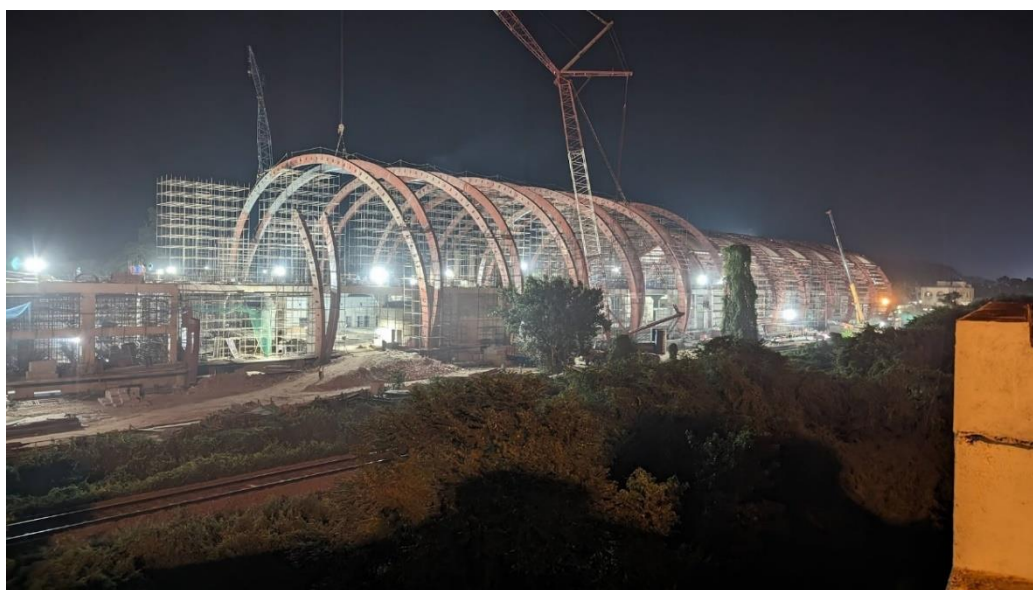
The following issues in the operation of the Petrapole and Benapole can be noted:

- High Security Concerns and its delay in Petrapole and Benapole
 - The major reason of the long queue in the Benapole side is the security check of the returning Indian cargoes. The Border Security Force (BSF, India) checks all vehicles and drivers for 15-20 minutes per vehicle due to high concerns of smugglings².
 - The strict security check by BSF India is the reason of queueing at the zero point, and larger number of the exporting India trucks compared to the Bangladesh truck is the reason the biased congestion.
 - The Indian drivers stay in the Indian Cargo waiting space (Truck Terminal for India Cargo) and warehouses in which the Bangladesh drivers and general manual labors are accessible to Indian drivers.
 - In 2022, BLPA equipped a CCTV system with 378 cameras in the whole site of the Benapole to monitor the operation. The video surveillance records are stored for 3 years on their server. The CCTV is also connected with the BLPA headquarters office in Dhaka. The officers of the Border Guard of Bangladesh (BGB) attend the monitor room to assist with the monitoring.
 - There is no full-scale X-ray scanner in the Benapole.
 - On the other hand, the Petrapole trans-loading area, warehouses, and waiting area are fully access-controlled. LPAI has a plan to develop a full-body scanner in the warehouse area.
- Weighbridges in Benapole
 - There are 5 weighbridge scales with 100-metric ton capacity in Benapole, but they are not yet connected to the border operation system, and the officers need to type vehicle numbers to examine the pre-noticed weight.
 - BLPA plans to integrate vehicle plate detection with CCTV at the weighbridges with the internal database for examining the pre-noticed weight.
- Operational capacity of Benapole and ICT experts in Benapole
 - There are 214 staffs, including 10 for director and deputy/assistant directors, 10 engineers, 54 traffic inspectors, and 89 warehouse supervisors.
 - The ICT division of the Government of Bangladesh has an expert pool for ICT implementation for the public sector, and one officer is dispatched to the BLPA Benapole to improve the operation of the transit and customs clearance procedures.
- Warehouses and its necessity under MVA
 - There are 32 warehouses on the Benapole side. Its floor area is significantly larger than India's because of the larger demand for imports from India than for traffic in the other direction. Bangladesh warehouses are old and should be renovated, although this may not be necessary until after the implementation of the MVA.
 - Although export demand from Bangladesh is increasing, the transloading warehouse on the Indian side still has a surplus area. Four warehouses are in the transloading area; one was not used for transloading operations until 2023.
- Insufficient Capacity of the Passenger Terminal in Benapole
 - The passenger terminal capacity on both sides is insufficient and old. LPAI's new terminal under development (in Petrapole) will be ready in 2024, although the capacity of the passenger terminal on the Bangladesh side will remain insufficient.

² The gold smuggling is the central issue in border security between Bangladesh and India. The smuggling cases on the Border are reported every week by the media. It is attributed to the high tax rate on gold import to India, and international illegal syndicates support behind the smuggling. The Central Government of India empowered the BSF India to expand its range of searching from 15km to 50km from the border in 2021, which represent the difficulty of the issue.

- The daily average crossing passengers is approx. 5-6,000. However, it hikes 8-10,000 during the peak period. The operation starts at 6 am, though the Bangladesh outgoing passengers queue up 2-3,000 before the opening because the Buses from Dhaka arrive at Benapole earlier than before due to the Padma bridge. The BLPA needs to revise the operation hours.
- Some Bangladesh passengers are willing to visit medical services in Kolkata; however, they need to queue with general passengers, and there are no special procedures for handicapped and seniors. India LPAI Benapole plans to provide a helicopter shuttle service for such medical demands.

Figure 3-12 presents the new passenger facility under construction at Petrapole, while Figure 3-13 presents passenger queues at Benapole, both in November 2023.



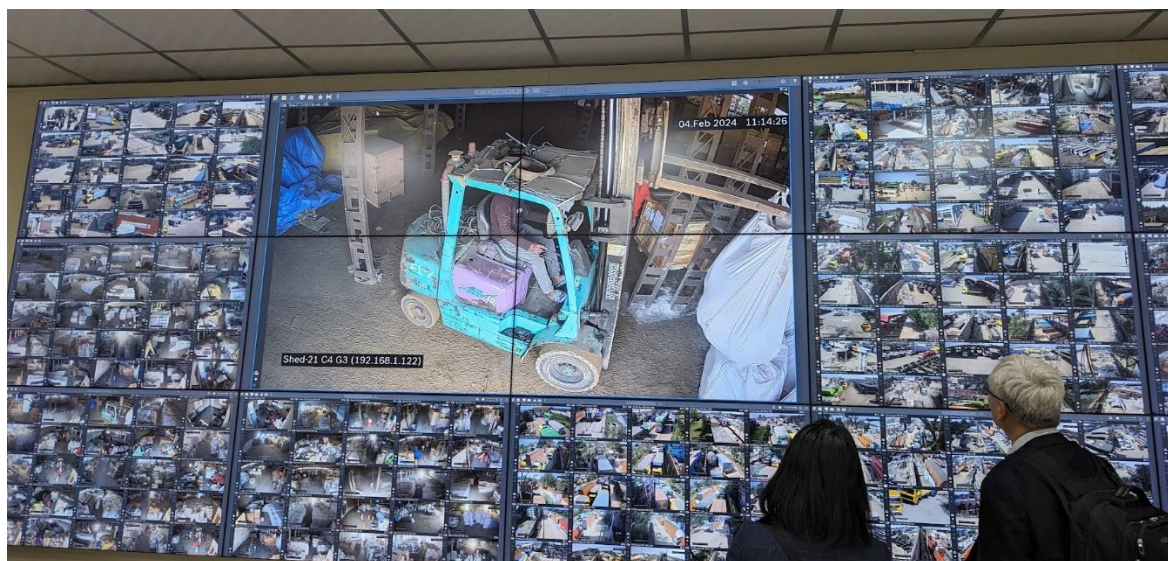
Source: JICA Survey Team

**Figure 3-12: New Passenger Facility at Petrapole
(November 2023, Under Construction, Nighttime View)**



Source: JICA Survey Team

**Figure 3-13: Passenger Queues in Front of the Border Facility at Benapole
(November 2023)**



Source: JICA Survey Team

Figure 3-14: BLPA's Monitoring Panel with 378 CCTVs at Benapole (February 2024)



Source: JICA Survey Team

Figure 3-15: Queue of Out-going Bangladesh Cargo at the Zero Point and Weighbridge (February 2024)

3.2.3 Sabroom-Ramgarh Connection

(1) General Situation of the Sabroom-Ramgarh Connection

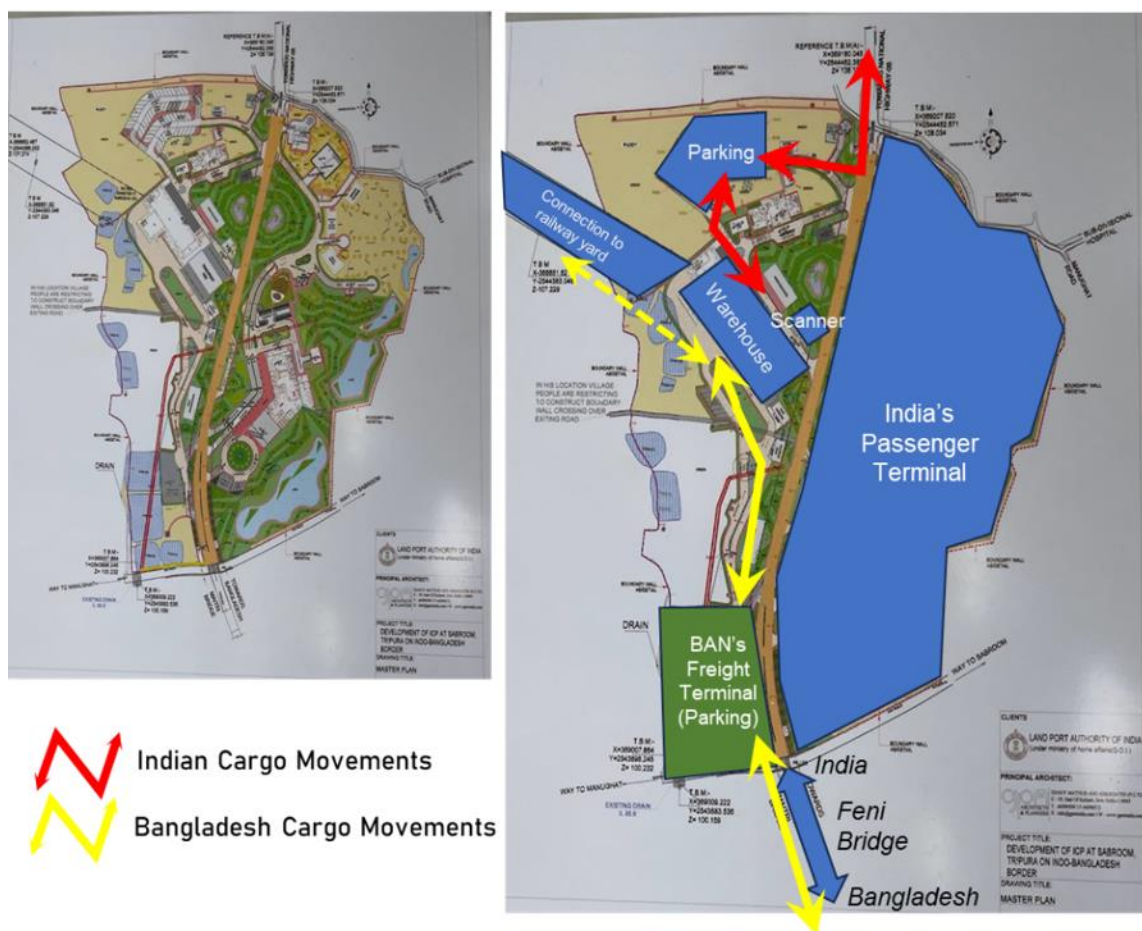
The Sabroom (India)-Ramgarh (Bangladesh) border crossing was operational until 2012, for cargo and passenger traffic, but was closed by the two countries for political reasons; the Agreement on the Use of Chattogram and Mongla Port[s] (ACMP) for the Movement of Goods to and from India between the People's Republic of Bangladesh and the Republic of India signed on 25 October 2018, reviewed in subsection 2.5.3(ii), will allow this route to be used for transit of Indian domestic cargo via Chattogram Port (however, the designation of this border as a transit route is expected to be adjusted in the future).

Although the Sabroom-Ramgarh border is not yet open³, preparations for surrounding infrastructure and facilities are underway. The Government of India financed (i) the construction of the Feni Bridge (Maitri Setu, the "Friendship Bridge", a 1.9-km section including the 150-m bridge) and (ii) the construction of the road linking Sabroom (Ramgarh)-Heako-Barayarhat (38 km). The Feni Bridge was officially inaugurated in March 2021, with opening in September 2023. National Highways and Infrastructure Development Corporation Limited (NHICDL) – a fully-owned company of the Government of India developed and maintain the bridge. The road sections linking Sabroom (Ramgarh), Heako, and Barayarhat is expected to open in the summer of 2026.⁴

The ICP facilities were under construction in November 2023. The total development area is 50 acres (20.2 ha). The masterplan of the ICP shows the location of a warehouse for "back-to-back" transshipment operations, parking for both countries, scanning facilities, and offices for cargo processing. Since land on the Ramgarh side is limited, a cargo handling facility will not be developed at Ramgarh, but rather cargo handling will be undertaken entirely on the Indian side. Figure 3-16 shows the expected freight flows in the Sabroom ICP. It should be noted that while the Bangladesh trucks with containers can enter the Sabroom railway yard directly, the connection route is not yet ready and the railway yard also seems not ready to accept containers from the ICP. Figure 3-17 shows the warehouse at the Sabroom ICP.

³ Interview with LPAI (as of 2024). However, there are some articles reporting the opening of the line. <http://www.uniindia.com/pm-modi-virtually-opens-third-land-port-in-south-tripura/east/news/3158367.html>

⁴ Interview with the representative of High Commission of India in Dhaka (as of May 2024)



Source Land Ports Authority of India and the JICA Survey Team

Figure 3-16: Sabroom Border Facility and Cargo Handling Flows



Source: JICA Survey Team

Figure 3-17: Warehouse at the Sabroom ICP (as of Nov 2023)

(2) Traffic Demand and Operations

Although the development of facilities on the Sabroom side has been proceeding, the road connection on the Bangladesh side is not expected to be completed until summer 2026, so full operation will not begin until then. DPR⁵ was prepared on the Indian side for the development of cargo facilities, and the capacity of the facility was designed assuming 300 units of imports and 150 units of exports per day. (see the traffic forecast in chapter 3.5)

As for actual demand, to date, there have been almost no local imports/exports from Ramgarh to the North Eastern provinces of India due to the lack of bilateral trade over the past 10+ years, and only transit shipments from India to Kolkata (through Bangladesh) will be transported at this border for a while. It is unclear whether this “transit-oriented” operation will require Bangladesh Land Port Authority (BLPA) / Bangladesh Customs operations at Ramgarh.⁶

(3) Transit Operations at Sabroom and Neighboring ICPs

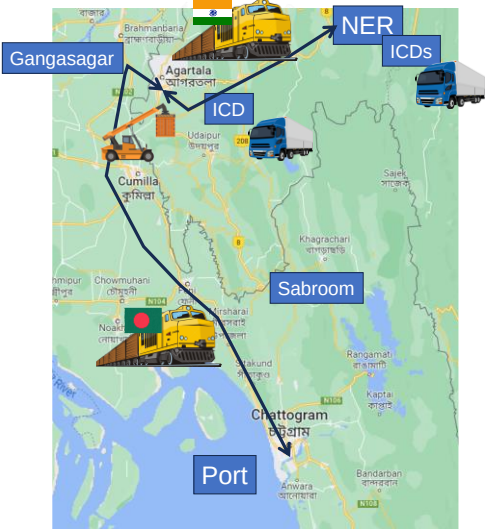
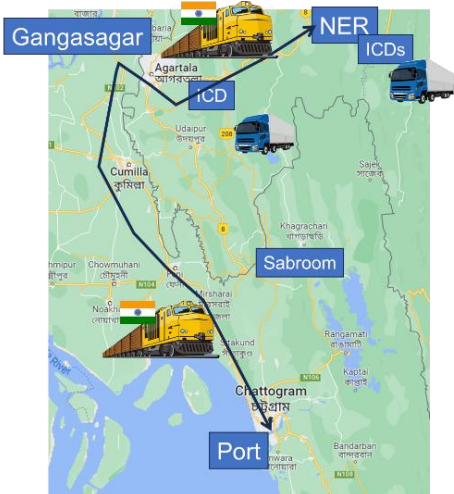
As mentioned, the Sabroom ICP will soon be ready, but it seems that the scope of transit operations has not been well defined and shared with stakeholders. The JICA Survey Team prepared five options for transit operations at the Sabroom ICP and neighbor ICPs, as shown in Table 3-4.

⁵ Common name for feasibility studies in India; abbreviation for Detailed Project Report.

⁶ See section 2.6.3. There is also the impact of the World Bank's pilot implementation of Co-Location at the Sabroom-Ramgarh border.

Table 3-4: Expected Transit Operations from Chattogram to NER

Route	Operational Options for Transit
	(1) Devanning (unload cargo from containers) at the Sabroom ICP - Bangladesh trailers will pick up containers with ECTS at Chattogram Port; there will be no customs charges, just transit fees. - Bangladesh trailers will carry the cargo to the Sabroom border, without Bangladesh Customs/BLPA checks. - The cargo will be put into the ICP warehouse, the ECTS will be unlocked, and the container(s) will be devanned and the freight will be transferred into Indian trucks. - This operation can be started in 2024, after opening of the Ramgarh-Baraiyarhat road section. - This route will be competitive relative to the Agartala-Akhaura corridor and other connections. - Development of NH 208 will be essential to secure road network redundancy from Sabroom to the NER. - After the MVA is implemented, this operation will not be continued but would be shifted to Option 5
	(2) Transit at the Sabroom Railway Yard - Bangladesh trailers will pick up containers with ECTS at Chattogram Port; there will be no customs charges, just transit fees. - Bangladesh trailers will carry the containers to the Sabroom border, pass the ICP warehouse, go into the railway yard, and transfer to Indian Railways. - The cargo will be delivered to ICDs in the NER, the ECTS will be unlocked, and there will be further movement by trucks. - This operation can be started in 2024, after opening of the Ramgarh-Baraiyarhat road section. - An issue is that the Sabroom rail yard is not connected to the existing Sabroom ICP. LPAI has indicated that the land has already been procured and the railway yard should be controlled as a customs-bonded site. - This option will compete with the Option 3, transit at the Agartala railway yard.

Route	Operational Options for Transit
	(3) Transit at the Agartala Railway Yard - Bangladesh trains will bring the transit containers with ECTS to the Gangasagar-Agartala link. - The containers will be transferred to Indian Railways at the Agartala railway depot. - The cargo will be delivered to ICDs in the NER, the ECTS will be unlocked, and there the cargo will be delivered to customers. - An issue is that the Bangladesh Railway's Dhaka-Chattogram section has high traffic volumes and therefore it will be necessary to expand the capacity of the section to accommodate Indian transit demand.
	(4) Direct Railway Delivery - This option can be implemented after installation of dual gauge between Chattogram and Akhaura. - Indian broad-gauge trains will bring the containers with ECTS from Chattogram. - The cargo will be delivered to ICDs in the NER, the ECTS will be unlocked, and there will be further movement by trucks. - An issue is that while dual-gauge improvement of the Akhaura-Laksham is only 90% ready, Laksham-Chattogram dual-gauge improvements have not yet started.
	(5) Direct Delivery by Truck after Implementation of the MVA - After the MVA is implemented, Indian trailers will bring containers with ECTS from Chattogram directly. - The cargo will be delivered to ICDs in the NER, the ECTS will be unlocked, and there will be further movement by trucks. - This option has competitiveness relative to the Agartala-Akhaura corridor and other connections. - NH 208 will be key to secure road network redundancy from Sabroom to the NER.

Abbreviations: BLPA = Bangladesh Land Ports Authority, ECTS = electronic cargo tracking system, ICD = inland container depot. MVA = Motor Vehicles Agreement, NER = North Eastern Region

Source: JICA Survey Team (Google Map)

The following conclusions may be stated:

- Road-based freight transit through Sabroom will be a way to realize cargo transit between NER and the rest of India, but railway connections will compete in the case of container-based transit cargo.
- Local export/import demand between Bangladesh and Tripura in the NER should be enhanced, particularly through industrial integration of Tripura and the Mirsharai industrial park in Bangladesh.
- Logistics connectivity of the NER through the Siliguri route is costly and fragile. Several alternatives with multimodal approaches should be considered.
- NH 208 development will be important for securing redundancy of the present NH 8 route.

3.2.4 Transit through the Agartala-Akhaura Corridor

(1) Statistics of Agartala-Akhaura Trade

The following table shows the trade statistics at Agartala (India).

Table 3-5: Trade Statistics at Agartala (Akhaura)

Trade Statistics of ICP Agartala										
Year	TRADE				No. of Vehicles			Passengers		
	Imports (cr.)		Exports (cr.)		Import	Export	Total	Incoming	Outgoing	Total
	Value	Qty (in MT)	Value	Qty (in MT)						
2019-2020	585.54	171,846	0.374	38.34	13,366	5	13,371	172,738	155,415	328,153
2020-2021	580.43	144,427	0.93	88.64	11,135	11	11,146	3,755	4,744	8,499
2021-2022	648.58	102,501	195.43	82,541.1	9,561	3,762	13,323	32,778	33,339	66,117
2022-2023	340.9	57,434	130.87	36,845.7	5,677	1,672	7,349	168,774	147,674	316,448
2023-24 (upto Oct. 2023)	115.87	26,075.8	1.892	17,508.4	2,552	743	3,295	118,371	97,690	216,061

Source: State Government of Tripura, Dept. of Industries and Commerce

The major commodities for Import from Bangladesh are fresh fish, food item, edible oil, cement, household plastic, cotton waste, stone, dry fish, and major export commodities are stone, wheat, ginger, onion, dry fish.

The following are the value by commodity in trades between Tripura and Bangladesh. Tripura has six land crossing ports, and Agartala/Akhaura port shares 80% in Import and 60% in Export.

Table 3-6: Trade Values Between Tripura and Bangladesh

Import Commodity (Bangladesh -> Tripura)	Total Value (Rs. In Cr.)	Export Commodity (Tripura -> Bangladesh)	Total Value (Rs. In Cr.)
Variety of fish – small fish	267.03	Wheat	116.5
LPG	107.96	Seeds of cumin	1.11
Cement	106.42	Agarbati	0.94
M.S Rod	19.44	Citrus fruits	0.92
Food items	18.11	Onion	0.5
Steel Sheet	16.75	Maize	0.28
PVC Pipes/ Tube/Plastic items	13.5	Vegetable Seeds	0.28
Flavor Drinks	12.17	Crushed stone (Aggregates)	0.25
Readymade Garments	4.33	Wood apple	0.2
Melamine	2.71	Spice powder	0.12
Other commodities	68.3	Other commodities	0.27
Total	636.72	Total	121.37

Source: State Government of Tripura, Dept. of Industries and Commerce

The statistics above suggest;

- In value wise, the import value from Bangladesh is much larger than export value from Tripura. However, in quantity (weight) wise, the difference comes smaller. This is due to the high demand of the heavy commodities “Aggregates (Crushed stones)” in Bangladesh.
- Exports from India increased dramatically in FY 2021-22 due to deregulation of the commodity export in 2019 and a delayed corresponded actions in India, however, the export volume comes less in FY2022-23.
- The passenger volumes recovered the amount of previous COVID-19 in FY2022-23

(2) Export Regulation at Agartala

There is a special trade restriction in Agartala/Akhaura land port, which has been applied since 2012. This regulation is called “the 43 items”, however, the number of the items are more than 43 in the beginning. It is agreed among the Government of State of Tripura and Government of Bangladesh, and it is unclear about the background of the regulation. The restriction is not specified with the HS code, therefore, it is irregularly applied in commodity-wise.

Allowed items from Agartala to Bangladesh (specified in 2012)	
1. Importable goods:	
a) All products produced and processed in Bhutan (except for yarn and potato)	
b) Cattle, fish pawns, fresh fruits, plants, seeds, rice, wheat, stones (stones and boulders), coal, chemical fertilizers, china clay, wood, timber, limestones, onion, pepper, garlic, ginger, ball clay, Quartz, dried fish, satkara (Citrus macroptera, type of citrus fruit), incense sticks, cumin, rubber (raw), maize, stones boulder, soybean seeds, bamboo products, arjun flower (broom), betel leaf, CNG spare parts, cashew nuts, paper, sugar, generator, broken glasses, chocolate, baby wiper, confectionery products, bitumen, betel leaf, tomato, methi (fenugreek seeds), dried tamarind, dried plum, fly ash, all kinds of mustard cake, fire clay, thin clay, marble chips, sesame, mustard, betel nut, scrap and waste (iron/steel), and granite slabs.	
2. Exportable products:	
All products.	

Source: State Government of Tripura, Dept. of Industries and Commerce

The Government of Tripura State and the Government of Bangladesh has discussed for lifting of the regulation. The following table show the present regulated items with allowed items ever. There are 13 regulated products and items at present (in Orange shaded items), however, applicable HS codes are not specified, which is still reason of the irregular operation. The green shaded items are lifted from the regulation in 2019.

Table 3-7: Present Restricted Items in Export from Agartala

PEEFERENCE LIST-I		
Sl.no	Items proposed	Present status
1	Rubber (all products)	Only Rubber (Raw) allowed
2	Bamboo products (including sticks for agarbati)	Allowed
3	Tea	Still not allowed
4	Cashew nut	*Allowed
5	Arjun flower (broom)	Allowed
6	Readymade Garments including handloom products	Still not allowed
7	Spare parts of car	Still not allowed
8	Electric & electronic items (including home appliances)	Still not allowed
9	Bicycle	Still not allowed
10	Two wheelers & auto mobile (three, four & multi wheeler)	Still not allowed
PEEFERENCE LIST-II		
1	Cosmetics	Still not allowed
2	Old car	Still not allowed
3	CNGs	Allowed
4	Paper	*Allowed
5	Sugar	*Allowed
6	Marbel stone	Still not allowed

PEEFERENCE LIST-I		
Sl.no	Items proposed	Present status
7	Generator	*Allowed
8	Broken glass	*Allowed
9	Chocolate	*Allowed
10	Soya Bean	Soya bean seed allowed
11	Steel & Steel products,	Still not allowed
12	Baby wiper	*Allowed
13	Confection	*Allowed
14	Salt	Still not allowed
15	Maize	Allowed
16	Bitumen	*Allowed
17	Stone Bolder.	Allowed
* indicate new 9 (nine) items allowed from 2. December.2019 by Govt. of Bangladesh.		

Source: State Government of Tripura, Dept. of Industries and Commerce

Influence to the Local Industries

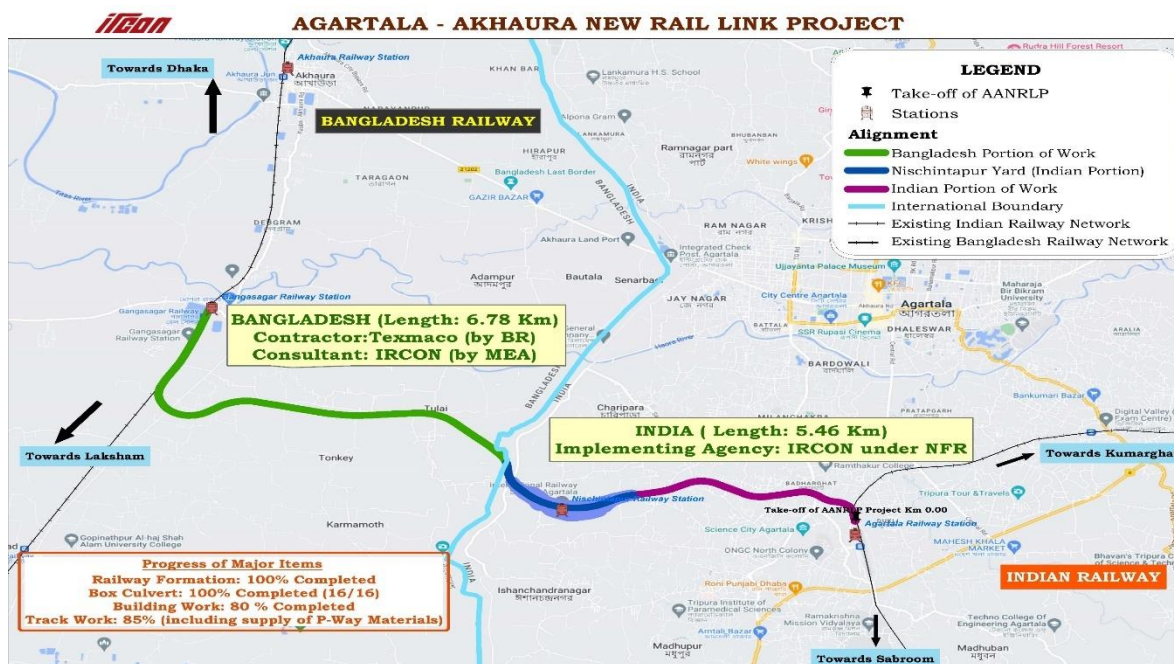
Tripura ranks second in India (Kerala on southwestern India ranks first) in the production of natural rubber and related processed products (e.g., latex yarn for garments), but the price of the product is not competitive with Thai and Malaysian products. Therefore, there is little or no demand for these products in Bangladesh, and accordingly they are brought to Gujarat and Kolkata, where the textile industry is flourishing in India. However, due to the above restrictions since 2012, transit through Bangladesh is not allowed, therefore the goods must be transported through the Siliguri Corridor to make a long detour rather than being transported over the direct transit route over Bangladesh. It increases transport distance and associated transport and logistics costs (high inventory costs in addition to high transport costs) making the Tripura significantly less competitive to other rubber production areas in terms of price.

(3) Railway Connection

Figure 3-18 shows the railway connection of Bangladesh dual gauge and Indian broad gauge at Agartala, while Figure 3-19 presents a drawing of Nischintapur Yard and Figure 3-20 shows the zero point (boundary).

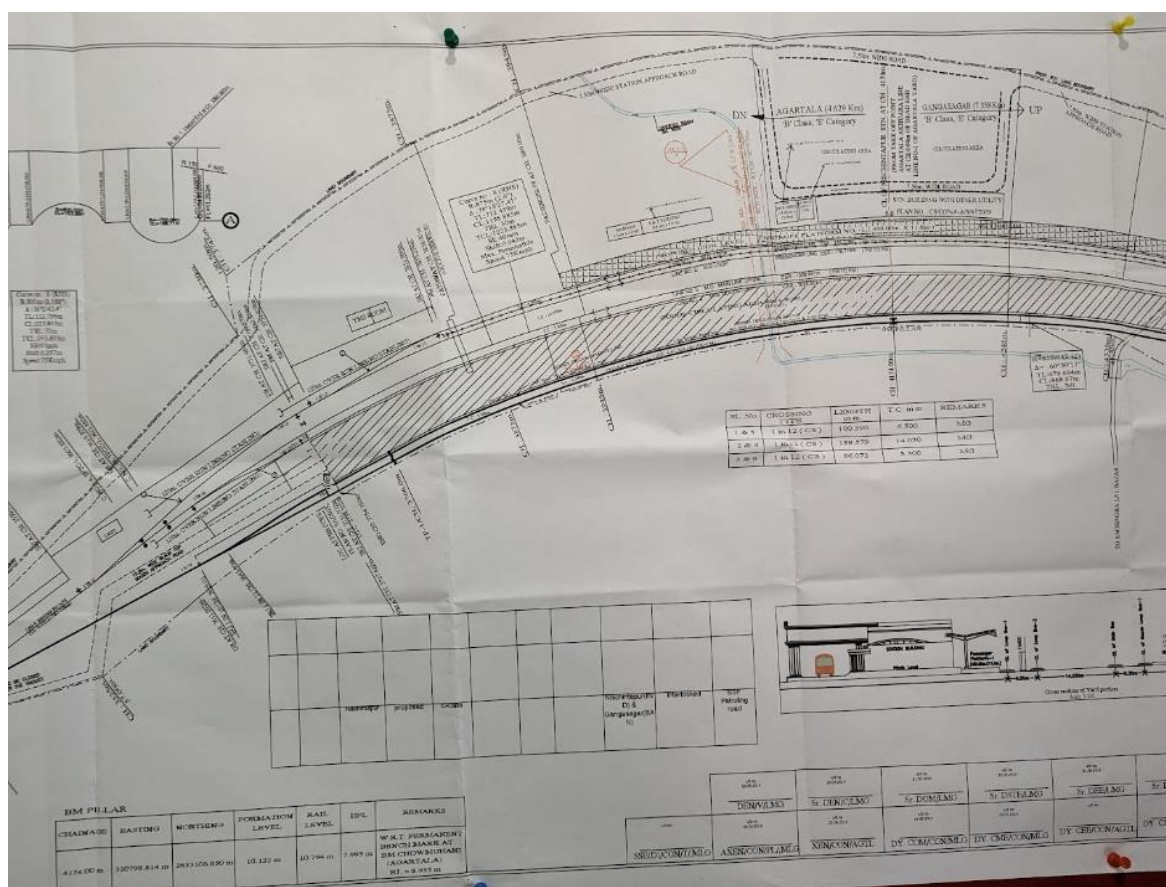
Key points follow:

- (i) About 90% of the Akhaura-Laksham section has been converted into dual gauge.
- (ii) The Bangladesh section (6.78 km, single track) is being undertaken by the Bangladesh Railway, with engineering supervision by Ircon. Civil work has completed but the trackwork has been completed with meter gauge only, with 100% readiness of the installation of the extra third rail. The first Bangladesh meter-gauge train was operated on 1 November 2023 and entered into the Nischintapur yard. The station at Gangasagar had not yet been completed as of November 2023.
- (iii) The connecting point at the boundary line between the two countries is called the zero point.
- (iv) Nischintapur yard has five railway lines. One dual gauge line connects with Bangladesh but the extra third rail has not yet been installed; it is expected to be used for passenger services. Two meter-gauge lines for freight services connected with Bangladesh network, and two broad-gauge lines connected to the Indian Railways network, are to be used for cargo transit. There is freight handling space for top loaders. Nischintapur passenger station is also called the International Railway Station and can accommodate an immigration facility
- (v) The connection on the Indian side is an elevated section. Civil works are still ongoing but can be completed by early 2024.



Source Ircon International

Figure 3-18: The Connection of Bangladesh Dual Gauge and Indian Broad Gauge at Agartala



Source: Ircon International and JICA Survey Team

Figure 3-19: Drawing of the Nischintapur Yard



Source: JICA Survey Team

**Figure 3-20: Track at the Zero Point (Boundary),
Dual Gauge with Readiness for Extra Rail Installation**

Road Connection and ICP Facilities

Regarding the current road connection at Akhaura-Agartala, the 4.4-km road section on the Akhaura (Bangladesh) side is poor due to encroachment and the single-lane width of the road, which will not allow large trucks to enter the Akhaura freight handling area. However, it is planned to be refurbished with ADB funds. The Agartala ICP is 28.94 acres (11.71 ha). Information on the major trade commodities handled follows:

- (i) Aggregate and sand from Agartala handled by Indian dump trucks is a major commodity handled. The Akhaura site has special receiving facilities with backhoes. (See Figure 3-21.)
- (ii) Wheat from Agartala (INR 116.5 crore per year in 2022-23) was the top export from India, but export commodities from Tripura to Bangladesh have been regulated since 2012 and export activities are therefore suppressed.
- (iii) Fish from Akhaura (INR 267.03 crore per year in 2022-23) was the largest category of perishable goods. While there is a special room with temperature control (Figure 3-22), avoiding direct sunlight, animal quarantine personnel is limited on the Agartala (India) side and the import process in India takes one day.



Source JICA Survey Team

Figure 3-21: Aggregate Receiving Sites on the Akhaura (Bangladesh) Side



Source: JICA Survey Team

Figure 3-22: Cold Chamber (temperature control room) in Agartala

The passenger terminal on the Akhaura (Bangladesh) side is small and old, and it needs to be rehabilitated and/or expanded. There is no segregation between incoming and outgoing flows in the immigration section.

3.2.5 Other Issues related to the Logistics Infrastructure

(1) BLPA's Proposals for Border Facility Improvement

Based on the observations of operations of the Bangladesh Land Port Authority (BLPA) and interviews conducted with BLPA staff by the JICA Survey Team, it is evident that the Authority could benefit from increased capacity in border management, facility development, and budgeting skills, which currently lag those of LPAI, their counterparts in India. BLPA had already submitted a proposal for assistance to the Embassy of Japan in July 2023, in various technical fields of land port operation, including (i) development of a master plan for development of all their border facilities; (ii) development of standard operating procedures for border operation; and (iii) a grant or loan for the border infrastructure, including installation of water/sewage improvements, and electrical power supply. BLPA stressed that these requests do not overlap with projects supported by other development partners such as the World Bank and ADB. The following chart summarized the initial assessment of proposals by JICA Survey Team.

Table 3-8: BLPA's proposals for Border Facility Improvement

Items	Assessment by JICA Survey Team
(1) Technical assistance for BLPA facility development strategic masterplan for their 24 land ports (target year 2041)	It proposes the necessity of strategic masterplan for efficient development of 24 land ports. It may require demand projection with future institutional changes including MVA and NSW, integration with customs and BGB, and India LPAI's activities. It does not mention clearly the present situation of the issues and shortages of the present operation.
(2) Green energy system installation; requesting installation of the solar panel and its energy management	It fits to the national strategy of BLPA development "Clean Port, Green Port". There is no specific idea for the prioritization and selection of the land port, specification of the dimension and qualification of the facility, issues and problems of the present facilities, etc. BLPA mentioned that they can provide the masterplan document, however, the JICA Survey Team has not yet received it.
(3) Clean water supply, sanitation and waste management system in the selected land ports	
(4) Capacity building for improvement of service delivery to the land ports stakeholders for enhancing transboundary activities through the land ports	The request covers operation manual development, training of BLPA staffs including all related stakeholders, and knowledge management system, however, it is not specifying name of stakeholders, coordinating mechanism with the stakeholders.

Source: JICA Survey Team

According to the JICA Survey Team's observation of border crossing, it is apparent that the operation capacity of BLPA's land port and level of quality of hard infrastructures are much lower than Indian LPAI and systems, as reported above in this section. The BLPA's investment demand for facilities and physical infrastructures should be justified with proper analysis with the masterplan, and utilized with proper SOP harmonized with other stakeholders including Customs, BGB and LPAI India.

(2) SEZ and Its Logistics Functions

BSEZ Practice for Behind the Border Clearing

The Bangladesh Special Economic Zone (BSEZ) in Araiazar is located about 32 km east of Dhaka and is being implemented as a PPP project. Sumitomo Corporation, BEZA, and JICA have invested in BSEZ Co. which is the operator of the SEZ itself, and the Bangladesh government developed the land and basic infrastructure with JICA funds. The first phase of construction (190 Ha) has completed in 2022, and tenants have already begun moving in, including Lion Corporation (domestic products and chemicals, Japan), and Singer (home appliances, Turkey), etc. Singer expects to start operations in the second quarter of 2024.

BSEZ is a pioneer in Bangladesh's own industrial diversification, and it is aiming to attract companies other than those in the garment industry and export their products to overseas market. On the other hand,

in hearings with Sumitomo Corporation and BSEZ, it was found that the companies moving into the BSEZ are targeting Bangladesh's large population and emerging market, not exports to overseas and India, the North Eastern states of India, or neighboring countries. Also, they envision procurement of raw materials from abroad at the Chattogram port, and do not envision land transportation from India.

A logistics center is planned for the northern corner of the BSEZ. After the construction is completed, import cargo will be brought in from Chattogram Port in bonded status, and customs clearance will be conducted at this logistics center. This is due to congestion at Chattogram Port and delays in customs clearance.

Such customs clearance at off-border facilities is already in place at Dhaka ICD, and rail cargo imported from India via broad gauge rail is cleared at Dhaka ICD.

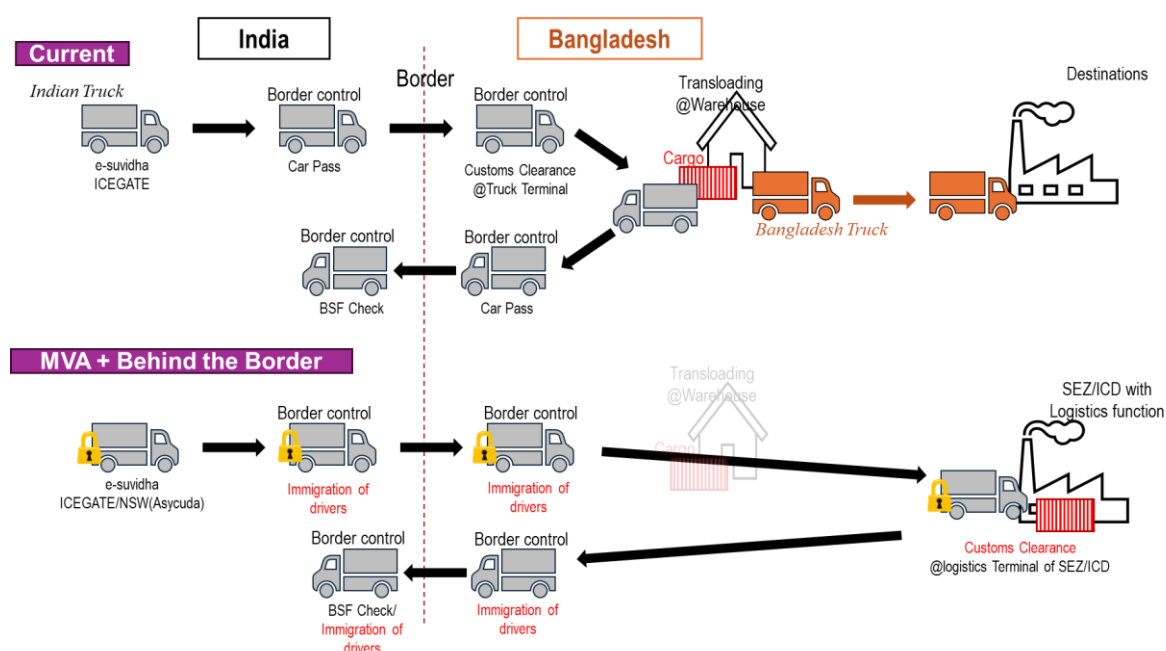
The Mirsharai Industrial Zone (BSMSN⁷) in close proximity to the suburbs is also envisioned to have sufficient logistics area, and off-border customs clearance processing may continue to expand. There are 97 planned Economic Zones (EZ) in Bangladesh, and implementation of the MVA may lead to an expansion of off-border customs clearance operations within the EZs as imports from India are brought in under bonded conditions.

MVA, SEZ and Behind the Border

Referring to the BSEZ practice for the logistic facility for custom clearing and ICDs in Dhaka, it is inevitable that the border crossing procedures of freight and the need for border facilities will be affected by the MVA that is envisioned for implementation.

The following chart depict simplified procedure of the delivery movement from India to Bangladesh for general caroes. The current setting, showing in the top of the drawing, present the entering movement into the border from left to right. Initially, an Indian truck register its entry via e-suvridha and ICEGATE, then receive the car-pass at the border control, cross the border, wait for call from warehouses at truck terminal, unload its cargo at the warehouse, then return to India. In parallel, after the customs checking, the Bangladesh trucks pick-up the cargo, and deliver to the destination.

⁷ Bangabandhu Sheikh Mujib Shilpa Nagar (BSMSN) site is located 200 kilometers (km) from Dhaka, 60 km from Chattogram, 70 km from Chattogram Port. Its whole site covers 13,600 Ha for development, 70 times larger than the BSEZ site. JICA signed a loan agreement with BSRM Steels Limited (BSRMSL) of the People's Republic of Bangladesh for private sector investment finance of USD 50 million to fund the construction of an environmentally friendly steel plant, planned by BSRMSL in Mirsharai Industrial zone (BSMSN), Chattogram District. The project will be co-financed by the Export-Import Bank of India and Standard Chartered Bank, among other institutions. BSRM Steel Limited (BSRMSL) is the leading steel manufacturing company and one of the prominent corporate houses in Bangladesh.



Source: JICA Survey Team

Figure 3-23: Before / After with MVA and SEZ

After the implementation of MVA, the Indian trucks can enter Bangladesh directly and deliver the cargo without transloading operation at the warehouse. ECTS may be required for each truck to keep the custom bonded status of the cargo. Custom clearing functions will be facilitated in the SEZs and ICDs close to the destination and handle the final observation. The drivers have to pass the immigration at the border.

JICA Survey Team expects this MVA-based direct operation (door-to-door operation) will not be applied to all deliveries. Transit demand destined to NER will use the direct delivery. Bangladesh freight owners may continue to use the local logistic operators. However, some part of the warehouse, manual labors and custom clearing function in the border would be rationalized.

3.3 Details of Customs Clearance Procedures

3.3.1 Clearance Procedures for Goods Imported to and Exported from India

The Indian Customs Act 1962⁸ provides rules and regulations for import procedures (Section 46), export procedures (Section 50), and transit procedures (Section 53). Customs duties and related levies and taxes are regulated under the Customs Tariff Act 1975.

The Foreign Trade Policy of 2023 published by the Ministry of Commerce and Industry, Department of Commerce, elaborates the rules and guidelines of various different government agencies in one booklet and makes it easy for traders to work together within the government trade policy.

The procedure for clearance of imported/exported goods starts from registration of data into the Indian Customs EDI (electronic data interchange) Gateway (ICEGATE). Importers, exporters, and customs brokers (Clearing House, CH) enter the data and register the required documents in PDF format into the ICEGATE system.

⁸ Indian Customs Act 1962, Customs Tariff Act 1975 [<https://taxinformation.cbic.gov.in/content-page/explore-act>].

Steps in the clearance procedures include the following:

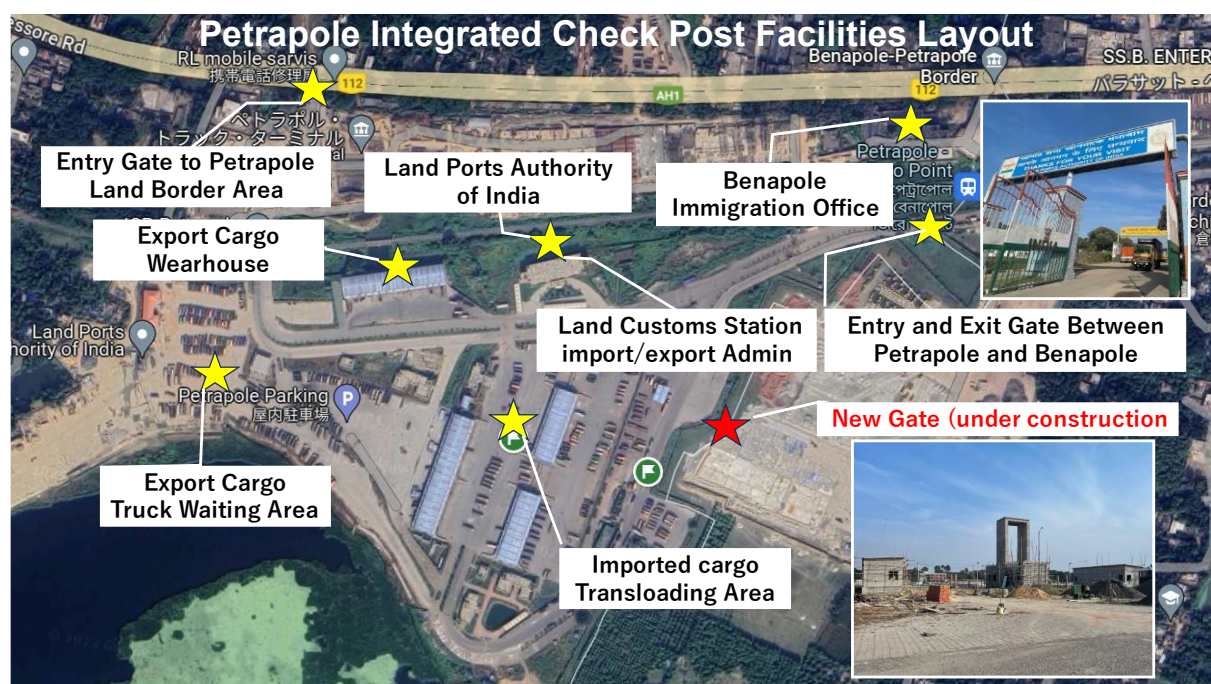
1. Registration of the documents in ICEGATE;
2. Duty payment for imported goods;
3. Submittal of declarations to customs with import general manifest (IGM) number;
4. Transmittal of ICEGATE data to the Customs EDI system;
5. Use of the Customs Risk Management System application;
6. Verification of documents and physical examination, if required; and
7. Issuance of release permit by Customs.

Regarding import clearance procedures, the Central Board of Indirect Taxes and Customs (CBIC) applies a self-assessment system for imported goods. Therefore, after all the required documents are registered, the CH pays customs duties and taxes in advance of submitting the declaration(s) to Customs through ICEGATE, which keeps the registered documents for up to 30 days and provides pre-clearance functions for import/export procedures.

ICEGATE is an Indian National Single Window System, and therefore if any license or permit is required for certain imported or exported goods, it is automatically directed to concerned government offices for such procedures. The license information is given by the system to attach to the declaration.

3.3.2 Procedures at the Petrapole ICP

Figure 3-24 shows the layout of the Petrapole Integrated Check Post (ICP) cargo clearance facilities. Entry and exit gates between India and Bangladesh have only one lane for each direction. However, a new gate is under construction, which will provide two lanes for each direction.



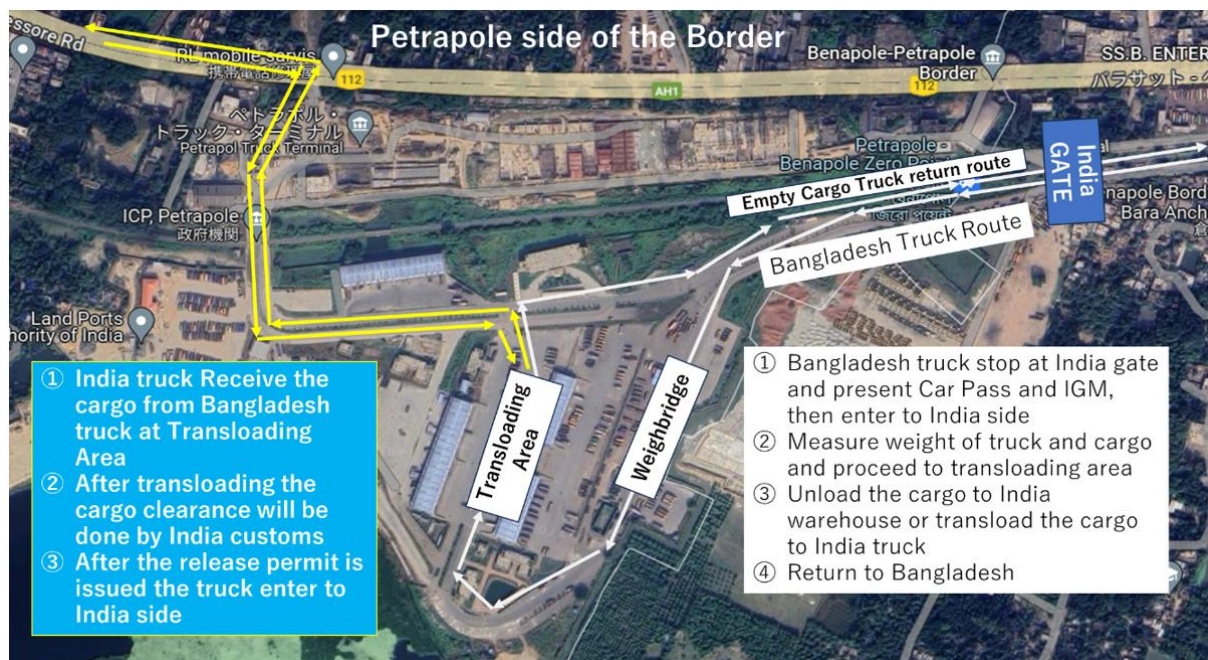
Source: JICA Survey Team (Google Map)

Figure 3-24: Layout of the Petrapole ICP Facilities

(1) Import Cargo Handling Procedure (Bangladesh to India)

Entry Gate Operation

The import cargo clearance procedure at the Petrapole ICP starts at the India Entry Gate. Figure 3-25 shows the handling flow of trucks. The white arrows and white box show the procedures for loaded trucks from Bangladesh. (The yellow arrows and blue box present the steps for Indian trucks engaged in pickup operations.)



Source: JICA Survey Team (Google Map)

Figure 3-25: Truck Movement Flow in Petrapole (Import to India)

For the movement of Bangladesh trucks, a “Car Pass” is a key document to manage Bangladesh trucks and drivers on Indian territory. The detailed procedures with the Car Pass follow:

- After import shipments to India arrive at the Bangladesh side (Benapole) and export formalities are completed, the Bangladesh border official (representative of the customs broker) prepares the necessary border crossing documents (car-pass, cargo manifest) at the border zero point and submits them to the Indian border official.
- After approval, Indian Customs delivers three copies of the submitted car-pass to the border official and the Bangladesh border official returns to Bangladesh.
- Bangladesh Customs keeps one copy of the car pass and the Bangladeshi driver takes the other two car passes to the Indian entry gate.
- When a truck arrives at the India entry gate from Bangladesh, a “Car Pass” is submitted to the border entry gate and an IGM number is issued.
- The truck then goes to assigned warehouse, transloads its cargo to an Indian truck, confirms the number of goods against the invoice, packing list, and the like, and prepares a physical examination report.
- With this examination report and IGM number, the CH Agent can submit a declaration to the Petrapole ICP.
- Up to this declaration action, the responsibility for handling the document is up to the CH Agent and logistics company.

Transloading with Manual Labor

Truck cargo transloading is basically done by manual labor. For transloading purposes a gang (team) consists of three to five persons and sometimes more. One truck full of cargo can be transloaded within 1-2 hours.

The transloading labor union insists on using manual labor and opposes installation of forklifts, conveyor belts⁹, or other automation machinery. The cargoes are basically neither containerized nor palletized.



The photograph of transloading on the right shows:

- The difference in the capacity of trucks, with Indian trucks generally larger than Bangladesh ones, and transloading may require multiple Bangladesh trucks per one India truck.
- Direct “back-to-back” (transshipment) operations without use of a warehouse prevails on the site, which may generate the unnecessary exchanges between foreign drivers and local manual laborers.
- The Indian trucks seem to be container trailers with tractor, but in fact are rigid trucks with modified containers.
- The trade cargoes that go through the Petrapole/Benapole border are only goods traded between Bangladesh and India. No cargo goes to or comes from the third countries.

Import Entry Processing Observation

An import declaration is made through ICEGATE to the Customs EDI system. The declaration registration data can be kept in the system for a maximum of 30 days. This means that declaration preparation can be started 30 days in advance. This is the same effect of pre-arrival declarations.

India Time Release Study 2023 Report 4.1.1 on Pre-arrival Processing and Timely Filing of the Bill of Entry explains as follows:

It is intuitively obvious that initiation of the cargo clearance process through advance or timely filing of bills of entry would allow for completion of as much of regulatory checks as possible even before the arrival of the cargo and result in reduction in the time taken in cargo clearance upon the physical arrival at the Customs ports. Customs Act, 1962, contained enabling provisions for pre-arrival processing even before the same was included as a TFA [Trade Facilitation Agreement] commitment.

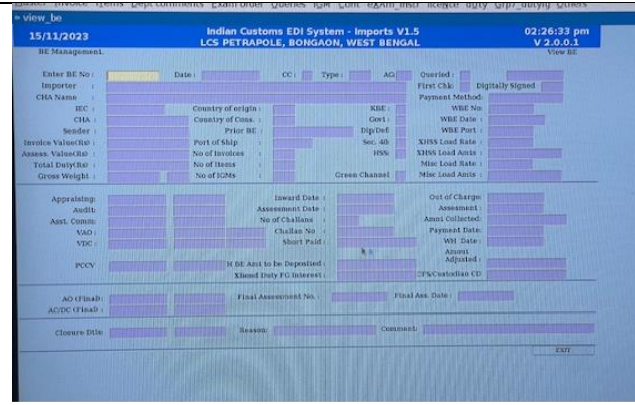
As noted, a self-assessment system is implemented in Indian Customs. Import declaration and duty payment has been made before final submission of declaration to ICEGATE. When the declaration is made to ICEGATE, the clearance-related data is transmitted to the Indian Customs EDI [clearance processing] System. This submission of the declaration will be done after IGM number and Car Pass number is uploaded to ICEGATE. This timing is same as for cargo transloading from the Bangladesh truck to the Indian truck. Examination of the import cargo examination will be conducted after transloading the cargo to the Indian truck, if required.

⁹ One set of conveyor belts are already being used for loading and unloading activities in the warehouse and further 5 conveyor belts are being constructed to accommodate transloading activities.

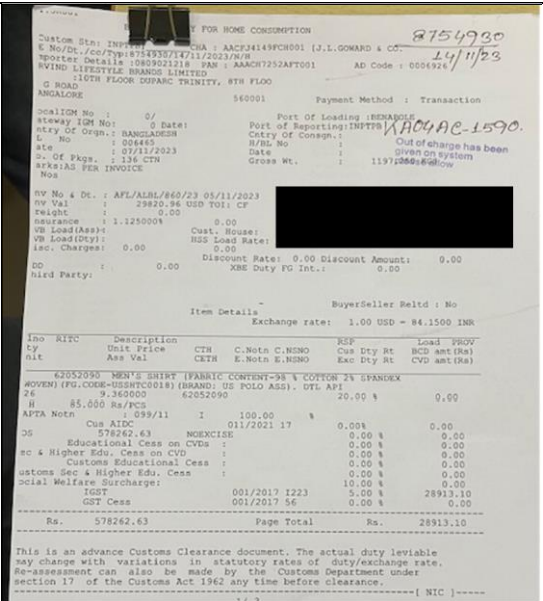
The clearance procedure and document submission are done in PDF format in advance, and therefore basically no printed documents are required for the clearance process. However, the JICA Survey Team observed printed documents being used to obtain signatures from by certain customs offices. This is because physical examination requires document check against the goods actually arrived at the border. Printed document is handy and easy to check on the spot of examination area.

Among the border clearance procedures, the car pass document, the export manifest, and IGM number procedures are manually processed. Computerization is expected to replace these steps in the future.

The following photographs show the Customs EDI system screen and other live documents from the days the JICA Survey Team visited.



Indian Customs EDI System Screen:
Once the IGM number entered, all related information appears on the screen



It is said that clearance can be processed without paper, but for the convenience of the CH Agent and stakeholders a set of printouts is prepared.
(It is understood that Customs puts its signature on this document, presumably for checking purposes. One may ask why a signature is necessary? Is it really for the CH Agent only?)

CERTIFICATE OF ORIGIN (SOUTH ASIAN FREE TRADE AREA) DT
Reference No. **EPB/DHK/213039**
SOUTH ASIAN FREE TRADE AREA (SAFTA)
(combined declaration and certificate)
Issued in **BANGLADESH** (country)
see notes overlaid

2. Goods consigned to Consignee's name, address
see notes overlaid

3. Means of Transport and route
(as far as known) BY TRUCK
BENAPOLE, BANGLADESH TO PETRAPOLE, INDIA
CONSIGNMENT NOTE NO: 006465
DATE: 07.11.2023

4. For Official use

5. HS code	6. Marks and numbers of packages	7. Number and kind of packages : description of goods	8. Origin criteria (see notes overlaid)	9. Gross Weight or other quantity	10. Number and date of invoices	11. Ex. value in US \$
62052000	BRAND: US POLO ASS.	136 CTNS. MEN'S SHIRT AZD REPORT NO: 1002125048 1002086836 DETAILS DESCRIPTION OF GOODS AS PER COMMERCIAL INVOICE. L/C NO: 069262310000132 DATE: 27.09.2023 EXP NO: 2486-074022-2023 DATE: 05.11.2023	PCS GIL	3,186	AT/ALH/869/23 DATE: 05.11.2023 (THREE THOUSAND ONE HUNDRED EIGHTY SIX AND ONE HUNDRED TWENTY NINE THOUSAND NINE HUNDRED TWENTY AND ONE HUNDRED SIXTY SIX ONLY).	US\$ 29,820.96

12. Declaration by the exporter:
The undersigned hereby declares that the above details and statements are correct; that all the goods were produced in **BANGLADESH** (country)
and that they comply with the origin requirements specified for those goods in SAFTA for goods exported to **INDIA** (importing country)
AKH FASHIONS LTD.
(importing company)
DHKA: 07.11.2023
MD. ABUL KASHEM
DE. MANAGED DIRECTOR
Place and date, signature of authorized signatory

13. Certificate
It is hereby certified on the basis of control carried out, that the declaration by the exporter is correct.
Md. Mahbub Hossain
Research Officer
Export Promotion Bureau
Dhaka.
08 NOV 2023
Place and date, signature and stamp of certifying authority

Rules of Origin Certificate (Original)

DECLARATION DT
Page 1 of 1
EX 1
1. Name
2. Address
3. City
4. Country of origin
5. Country of export
6. Country of destination
7. Date of declaration
8. Date of export
9. Date of arrival
10. Date of departure
11. Date of return
12. Date of re-export
13. Date of re-import
14. Date of re-export
15. Date of re-import
16. Date of re-export
17. Date of re-import
18. Date of re-export
19. Date of re-import
20. Date of re-export
21. Date of re-import
22. Date of re-export
23. Date of re-import
24. Date of re-export
25. Date of re-import
26. Date of re-export
27. Date of re-import
28. Date of re-export
29. Date of re-import
30. Date of re-export
31. Date of re-import
32. Date of re-export
33. Date of re-import
34. Date of re-export
35. Date of re-import
36. Date of re-export
37. Date of re-import
38. Date of re-export
39. Date of re-import
40. Date of re-export
41. Date of re-import
42. Date of re-export
43. Date of re-import
44. Date of re-export
45. Date of re-import
46. Date of re-export
47. Date of re-import
48. Date of re-export
49. Date of re-import
50. Date of re-export
51. Date of re-import
52. Date of re-export
53. Date of re-import
54. Date of re-export
55. Date of re-import
56. Date of re-export
57. Date of re-import
58. Date of re-export
59. Date of re-import
60. Date of re-export
61. Date of re-import
62. Date of re-export
63. Date of re-import
64. Date of re-export
65. Date of re-import
66. Date of re-export
67. Date of re-import
68. Date of re-export
69. Date of re-import
70. Date of re-export
71. Date of re-import
72. Date of re-export
73. Date of re-import
74. Date of re-export
75. Date of re-import
76. Date of re-export
77. Date of re-import
78. Date of re-export
79. Date of re-import
80. Date of re-export
81. Date of re-import
82. Date of re-export
83. Date of re-import
84. Date of re-export
85. Date of re-import
86. Date of re-export
87. Date of re-import
88. Date of re-export
89. Date of re-import
90. Date of re-export
91. Date of re-import
92. Date of re-export
93. Date of re-import
94. Date of re-export
95. Date of re-import
96. Date of re-export
97. Date of re-import
98. Date of re-export
99. Date of re-import
100. Date of re-export

1. Name
2. Address
3. City
4. Country of origin
5. Country of export
6. Country of destination
7. Date of declaration
8. Date of export
9. Date of arrival
10. Date of departure
11. Date of return
12. Date of re-export
13. Date of re-import
14. Date of re-export
15. Date of re-import
16. Date of re-export
17. Date of re-import
18. Date of re-export
19. Date of re-import
20. Date of re-export
21. Date of re-import
22. Date of re-export
23. Date of re-import
24. Date of re-export
25. Date of re-import
26. Date of re-export
27. Date of re-import
28. Date of re-export
29. Date of re-import
30. Date of re-export
31. Date of re-import
32. Date of re-export
33. Date of re-import
34. Date of re-export
35. Date of re-import
36. Date of re-export
37. Date of re-import
38. Date of re-export
39. Date of re-import
40. Date of re-export
41. Date of re-import
42. Date of re-export
43. Date of re-import
44. Date of re-export
45. Date of re-import
46. Date of re-export
47. Date of re-import
48. Date of re-export
49. Date of re-import
50. Date of re-export
51. Date of re-import
52. Date of re-export
53. Date of re-import
54. Date of re-export
55. Date of re-import
56. Date of re-export
57. Date of re-import
58. Date of re-export
59. Date of re-import
60. Date of re-export
61. Date of re-import
62. Date of re-export
63. Date of re-import
64. Date of re-export
65. Date of re-import
66. Date of re-export
67. Date of re-import
68. Date of re-export
69. Date of re-import
70. Date of re-export
71. Date of re-import
72. Date of re-export
73. Date of re-import
74. Date of re-export
75. Date of re-import
76. Date of re-export
77. Date of re-import
78. Date of re-export
79. Date of re-import
80. Date of re-export
81. Date of re-import
82. Date of re-export
83. Date of re-import
84. Date of re-export
85. Date of re-import
86. Date of re-export
87. Date of re-import
88. Date of re-export
89. Date of re-import
90. Date of re-export
91. Date of re-import
92. Date of re-export
93. Date of re-import
94. Date of re-export
95. Date of re-import
96. Date of re-export
97. Date of re-import
98. Date of re-export
99. Date of re-import
100. Date of re-export

Printout of ASYCUDA export declaration at Benapole (Bangladesh). Usually export declaration data is not shared by the exporter, but at this land port Bangladesh export data is shared by the CH Agent.

M/S SAKIB SHAWON TRANSPORT AGENCY
BENAPOLE, JESSORE, BANGLADESH
Carrying Contractor & Commission Agent Whole Bangladesh

AT OWNER RISK
INSURANCE
The undersigned hereby declares that the above details and statements are correct; that all the goods were produced in **BANGLADESH** (country)
and that they comply with the origin requirements specified for those goods in SAFTA for goods exported to **INDIA** (importing country)
AKH FASHIONS LTD.
(importing company)
DHKA: 07.11.2023
MD. ABUL KASHEM
DE. MANAGED DIRECTOR
Place and date, signature of authorized signatory

CONSIGNMENT NOTE
NO. 006465
DATE: 07.11.2023

Package	Description (see to contract)	Quantity	Weight	Rate	Amount To Pay Paid
136 CTNS	MEN'S SHIRT HSCODE: 62052000 INVOICE NO: AT/ALH/869/23 DT: 05.11.2023 L/C NO: 069262310000132 DT: 27.09.2023 EXP NO: 2486-074022-23 DT: 05.11.23	NET WT. 925.25 KG GROSS WT. 1197.25 KG	Hand STITCH RICHOL TOTAL	CPT PETRAPOLE	

Signature of the transport Operator

Consignment notes for a Bangladesh declaration

COMMERCIAL INVOICE DT
Page 1 of 1
EX 1
1. Name
2. Address
3. City
4. Country of origin
5. Country of export
6. Country of destination
7. Date of declaration
8. Date of export
9. Date of arrival
10. Date of departure
11. Date of return
12. Date of re-export
13. Date of re-import
14. Date of re-export
15. Date of re-import
16. Date of re-export
17. Date of re-import
18. Date of re-export
19. Date of re-import
20. Date of re-export
21. Date of re-import
22. Date of re-export
23. Date of re-import
24. Date of re-export
25. Date of re-import
26. Date of re-export
27. Date of re-import
28. Date of re-export
29. Date of re-import
30. Date of re-export
31. Date of re-import
32. Date of re-export
33. Date of re-import
34. Date of re-export
35. Date of re-import
36. Date of re-export
37. Date of re-import
38. Date of re-export
39. Date of re-import
40. Date of re-export
41. Date of re-import
42. Date of re-export
43. Date of re-import
44. Date of re-export
45. Date of re-import
46. Date of re-export
47. Date of re-import
48. Date of re-export
49. Date of re-import
50. Date of re-export
51. Date of re-import
52. Date of re-export
53. Date of re-import
54. Date of re-export
55. Date of re-import
56. Date of re-export
57. Date of re-import
58. Date of re-export
59. Date of re-import
60. Date of re-export
61. Date of re-import
62. Date of re-export
63. Date of re-import
64. Date of re-export
65. Date of re-import
66. Date of re-export
67. Date of re-import
68. Date of re-export
69. Date of re-import
70. Date of re-export
71. Date of re-import
72. Date of re-export
73. Date of re-import
74. Date of re-export
75. Date of re-import
76. Date of re-export
77. Date of re-import
78. Date of re-export
79. Date of re-import
80. Date of re-export
81. Date of re-import
82. Date of re-export
83. Date of re-import
84. Date of re-export
85. Date of re-import
86. Date of re-export
87. Date of re-import
88. Date of re-export
89. Date of re-import
90. Date of re-export
91. Date of re-import
92. Date of re-export
93. Date of re-import
94. Date of re-export
95. Date of re-import
96. Date of re-export
97. Date of re-import
98. Date of re-export
99. Date of re-import
100. Date of re-export

1. Name
2. Address
3. City
4. Country of origin
5. Country of export
6. Country of destination
7. Date of declaration
8. Date of export
9. Date of arrival
10. Date of departure
11. Date of return
12. Date of re-export
13. Date of re-import
14. Date of re-export
15. Date of re-import
16. Date of re-export
17. Date of re-import
18. Date of re-export
19. Date of re-import
20. Date of re-export
21. Date of re-import
22. Date of re-export
23. Date of re-import
24. Date of re-export
25. Date of re-import
26. Date of re-export
27. Date of re-import
28. Date of re-export
29. Date of re-import
30. Date of re-export
31. Date of re-import
32. Date of re-export
33. Date of re-import
34. Date of re-export
35. Date of re-import
36. Date of re-export
37. Date of re-import
38. Date of re-export
39. Date of re-import
40. Date of re-export
41. Date of re-import
42. Date of re-export
43. Date of re-import
44. Date of re-export
45. Date of re-import
46. Date of re-export
47. Date of re-import
48. Date of re-export
49. Date of re-import
50. Date of re-export
51. Date of re-import
52. Date of re-export
53. Date of re-import
54. Date of re-export
55. Date of re-import
56. Date of re-export
57. Date of re-import
58. Date of re-export
59. Date of re-import
60. Date of re-export
61. Date of re-import
62. Date of re-export
63. Date of re-import
64. Date of re-export
65. Date of re-import
66. Date of re-export
67. Date of re-import
68. Date of re-export
69. Date of re-import
70. Date of re-export
71. Date of re-import
72. Date of re-export
73. Date of re-import
74. Date of re-export
75. Date of re-import
76. Date of re-export
77. Date of re-import
78. Date of re-export
79. Date of re-import
80. Date of re-export
81. Date of re-import
82. Date of re-export
83. Date of re-import
84. Date of re-export
85. Date of re-import
86. Date of re-export
87. Date of re-import
88. Date of re-export
89. Date of re-import
90. Date of re-export
91. Date of re-import
92. Date of re-export
93. Date of re-import
94. Date of re-export
95. Date of re-import
96. Date of re-export
97. Date of re-import
98. Date of re-export
99. Date of re-import
100. Date of re-export

A commercial invoice of an exporter

There are other document copies included for declaration, including:

- Packing list
- Test Report
- Annexure for IGM/Import report entry
- Export Manifest
- Import Report
- Consignment Note

(2) Export Cargo Handling Procedure (India to Bangladesh)

Export Entry Processing Observations

The typical export process comprises three stages:

- the pre-arrival stage, which begins with the filing of the shipping bill and generally involves the concurrent movement of cargo from the factory to the Customs port;
- the regulatory clearance stage at the Customs port, after arrival of the cargo until grant the Let Export Order (LEO) by Customs; and
- the post-regulatory clearance stage, which involves the movement of cargo within the port premises until the point of final departure.

The export cargo clearance preparation starts when CHA or the exporter makes an e-Suvidha pre-booking of a parking slot at the ICP. After the export cargo truck is allowed to enter the parking area in the ICP, the export entry is submitted to Customs through ICEGATE and the clearance-related data is transmitted to the Indian Customs EDI System and is processed.



Export Processing Office

Export clearance processing documents have been observed as follows:

- Invoice
- Packing List
- Bill of Lading
- Letter of Credit
- Certificate of Origin

It was explained that the export declaration process is simple and smooth. A customs officer at the ICP stated that the clearance of perishable goods it takes only 30 minutes for customs processing.

Shipping Bill Checklist	Entering the Shipping Bill Number in the EDI system; the time stamp of the process flow is provided by the system

3.3.3 Customs Clearance Procedures of Bangladesh

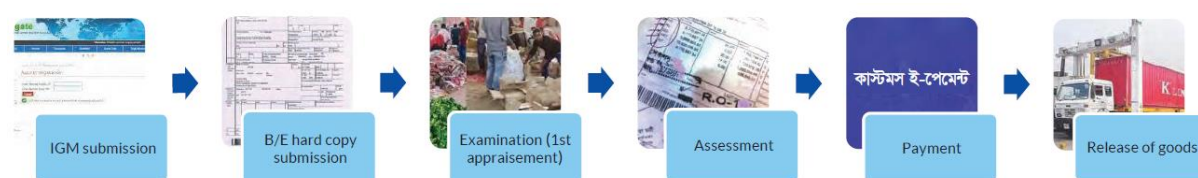
While the previous section 3.3.2 described the customs clearance procedures on the Indian side, this section describes the customs clearance procedures on the Bangladeshi side.

(1) Import Clearance Procedures

Import Clearance procedures and steps were set put in the Time Release Study 2022 Report as follows:

1. IGM Submission
2. Submission of hard copy of the bill of exchange (B/E)
3. Examination (first appraisal)
4. Assessment
5. Payment
6. Release of goods

Figure 3-26 shows the major steps for import clearance for Bangladesh.



Source: JICA Survey Team

Figure 3-26: Major Steps for Import Clearance for Bangladesh

(2) Import Declaration¹⁰

Import declaration requirements and steps for Bangladesh are explained in the Bangladesh Trade Portal. All goods imported into Bangladesh must be declared and duty is payable on them unless they are covered by an exemption or a suspension. A declaration is made by submitting a duly completed and signed form together with the following minimum supporting documents:

- A commercial invoice or contract of sale document from the supplier of the goods;
- Transport documents such as the Bill of Lading or Airwaybill;
- Packing List (if available);
- Certificate of Origin, which should be supplied by the exporter; and
- Any import licenses or permits obtained from other ministries depending on the type of goods being imported.

Declarations can be submitted at a regional customs office. A declaration must be submitted within 15 days of the date of lodgment with Customs of the transport documents (e.g., the manifest) notifying Customs of the arrival of the cargo.

Advance Declaration

A pre-arrival customs declaration can be submitted to facilitate the process of clearing imports. This declaration can be submitted done within seven working days of the date of arrival of the goods following the same procedures as a normal declaration. Duties can be paid at the time of arrival of the goods.

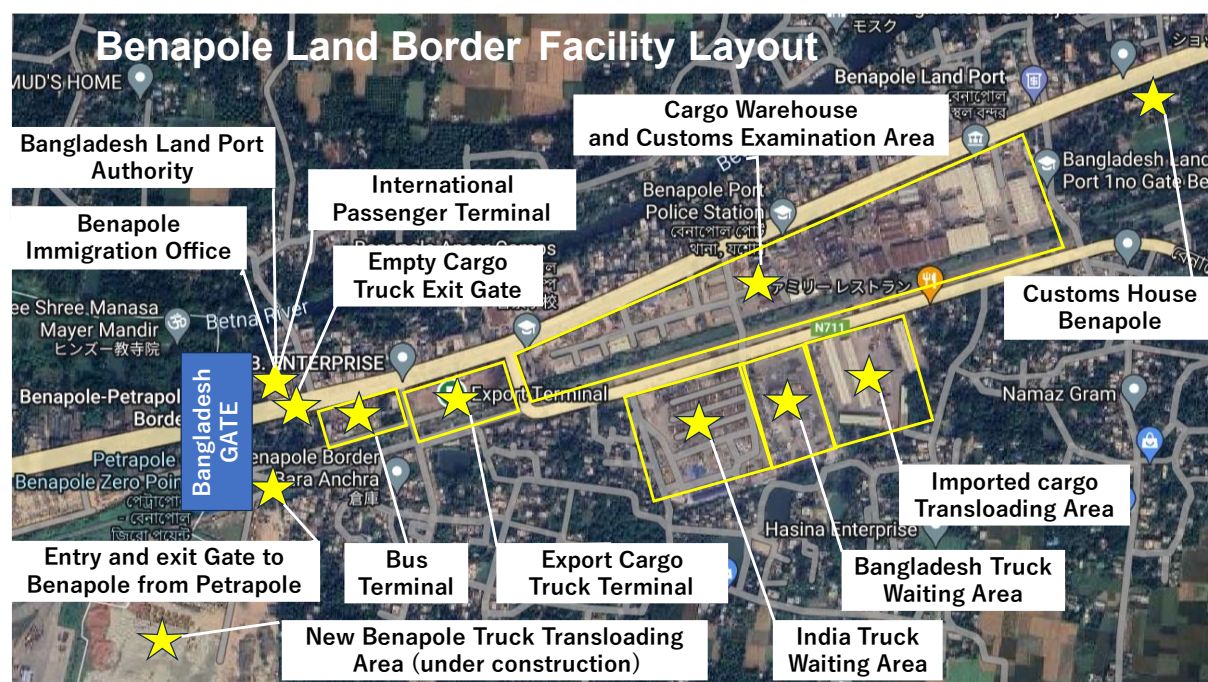
¹⁰ https://www.bangladeshtradeportal.gov.bd/index.php?r=site/display&id=104#import_declare.

(3) Procedures at Benapole Land Port

Benapole Land Port is the largest land port and customs house in Bangladesh, and the second-largest customs station in the country in terms of total import volume and revenue collection. The port processes 300-350 trucks per day but comparing to the capacity of Petrapole, the port could conceivably process 750 trucks per day if the necessary infrastructure and automation were provided.

Benapole Customs handles about 25% of Bangladesh import cargoes from India and 50% of export cargoes to India.

Figure 3-27 shows the layout of the Petrapole Integrated Check Post (ICP) cargo clearance facilities.



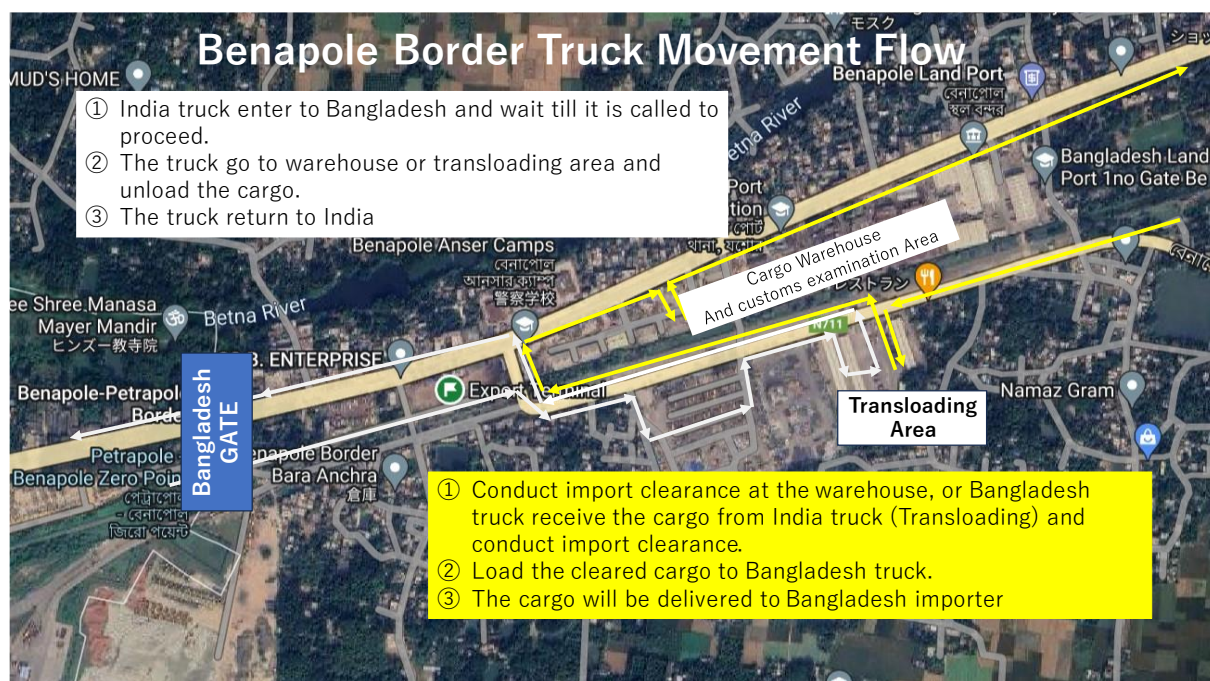
Source: JICA Survey Team (Google Map)

Figure 3-27: Layout of the Benapole Land Port

(4) Import Cargo Handling Procedure (from India to Bangladesh)

Entry Gate Operation

The import cargo clearance procedure at the Benapole starts at the Bangladesh Entry Gate. Figure 3-28 shows the movement flow of trucks. The white arrows and white box show the flow and procedures for loaded trucks from India. The yellow arrows and yellow box present the truck flows and steps of Bangladesh trucks engaged in cargo pickup operations from the warehouse.



Source: JICA Survey Team (Google Map)

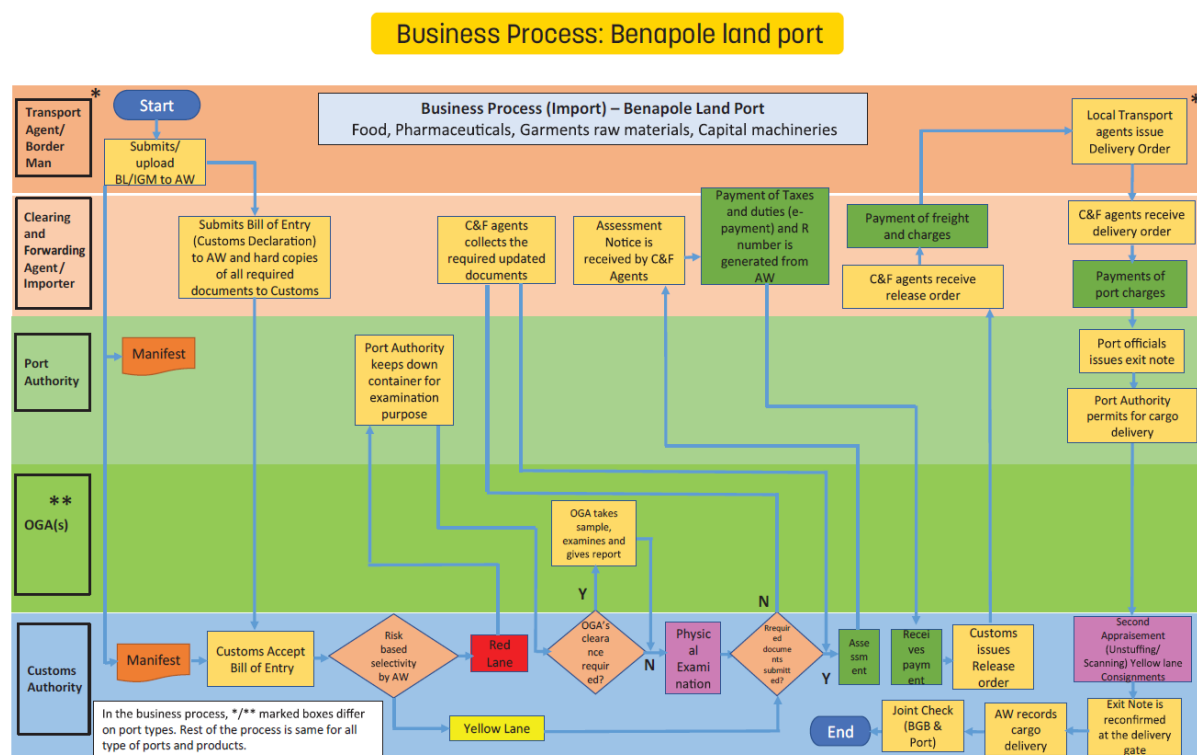
Figure 3-28: Truck Movement Flow in Benapole (Import to Bangladesh)

The Benapole import cargo clearance process is explained in detail in the Bangladesh TRS Report of 2022 as shown in Table 3-9. There are 28 steps. Figure 3-29 shows the truck travel routes and work of the Benapole Land Port.

Table 3-9: Benapole Customs House Import Clearance Process

Steps	Activities
1.	The import cargo arrives at the Indian side (Petrapole) and Indian borderman (broker's representative) comes to the zero point (known as 'no man's land') along with necessary documents (CARPASS, manifest, shipping bill, etc.) and hands it over to the Bangladeshi border man.
2.	After endorsing, Bangladesh Customs returns three copies of the submitted car pass to the border man to send it to India.
3.	Indian Customs keeps one copy of the car passes, and the Indian driver is allowed to enter Bangladesh along with the rest of the two car passes.
4.	Indian truck enters Bangladesh through the entry point. The driver submits the CARPASS to the Customs at the Tong House. Customs registers CARPASS data in Bangladesh Customs Office Management (BCOM) software and attaches a barcode sticker on the CARPASS.
5.	Customs inputs manifest data to the ASYCUDAWorld System.
6.	Vehicles are marked for weighing. Before weighing, vehicles with selective goods are brought for scanning under BCH risk management protocol.
7.	Cargo-loaded trucks proceed to the Truck Terminal of India (TTI) in Bangladesh, where the port authority provides shed posting.
8.	After unloading goods to the pre-designated sheds, Indian trucks leave Bangladesh.
9.	Customs brokers collect manifests from the BCH manifest branch.
10.	After collecting manifest, Customs brokers submit manual B/Es to Customs for initial approval to proceed further.
11.	Customs brokers submit initially approved B/Es to Direct Trader Input (DTI) clerks.
12.	DTI clerks input data into the ASYCUDAWorld System and provide a printed copy (in a file) to Customs brokers.
13.	Step 13: Customs brokers submit files to the ASYCUDA-designated ARO (Assessment) for assessment (if Yellow) or for examination referral (if Red).
14.	Step 14: After checking the file and supporting documents, ARO (assessment) signs and returns the file to the Customs broker either with an assessment proposal (if Yellow) or with a proposal for examination (if Red).
15.	Customs brokers submit the file to RO (assessment). After checking and verification of the documents, RO (assessment) marks the file for examination (if system generated RED or manually selected under risk management) to RO/AC/DC (Examination) according to the types of goods declaration or initiate the procedure of assessment the B/E (if Yellow). For Red -lane B/E, follow Step 16-28; for Yellow-lane B/E, follow Step 21-28.
16.	RO/AC/DC (examination) assigns an ARO for examination.
17.	Customs broker submits the file to the assigned ARO (examination).
18.	ARO examines the consignment and collects samples for further examination, if required. OGA examination takes place either simultaneously or sequentially.
19.	ARO (examination) prepares the examination report and marks to the RO (examination).
20.	RO/AC/DC (examination) approves the examination report and refers the file to RO (assessment).
21.	Customs broker submits the file to RO (assessment). RO (assessment) marks the file to ARO (assessment) for the assessment proposal. After verifying the file and supporting documents, ARO makes an assessment proposal to RO, AC/DC, and JC/ADC/Commissioner (if required) for approval. This step is the same for both RED and YELLOW lane B/Es.
22.	RO/AC/DC/JC/ADC/Commissioner approves the assessment proposal with or without further observation. After finishing the assessment or required amendment as per the assessment proposal of the B/E, RO issues an assessment notice for payment.
23.	Importer or Customs broker (on behalf of the importer) pays duty and taxes at the Bank (Cash or electronic).
24.	Customs broker collects release order from Customs treasury branch.
25.	Customs broker submits paid assessment notice and release order to the Deputy Traffic Manager (DTM) of the port authority.
26.	Importer or Customs broker (on behalf of the importer) pays port dues and receives loading order and gate pass.
27.	Customs broker submits gate pass and loading order to the Shed-in-charge, loads the truck, and exits the shed.
28.	After the verification of documents at Customs Gate Control-9 (CGC-9) or BASHKAL gate (final exit), the truck gets finally released.

Source: TRS Report 2022



Source: Time Release Study Report, 2022

Figure 3-29: Business Process at Benapole Land Port

(5) Benapole Customs House Export Clearance Process

Export cargo processing is less complicated than the import processes. It consists primarily of Customs assessment; payment of any assessment; Customs examination and customs and BLPA release procedures and export. The main steps involved are:

- Submission of export documentation by the Agent;
- Customs assessment;
- Payment of applicable fees;
- Customs examination- completed during transfer of cargo from Bangladesh trucks to Indian Trucks;
- Issuance of car pass, gate pass and release order;
- Recording of Export General Manifest information in ledgers maintained by Customs and BLPA; and
- Customs verification of document and subsequent export.

Export processing involves 42 discrete steps for normal processing with an additional 10 steps needed to correct any errors.

(6) Chattogram Customs House (Sea Port) Clearance Process

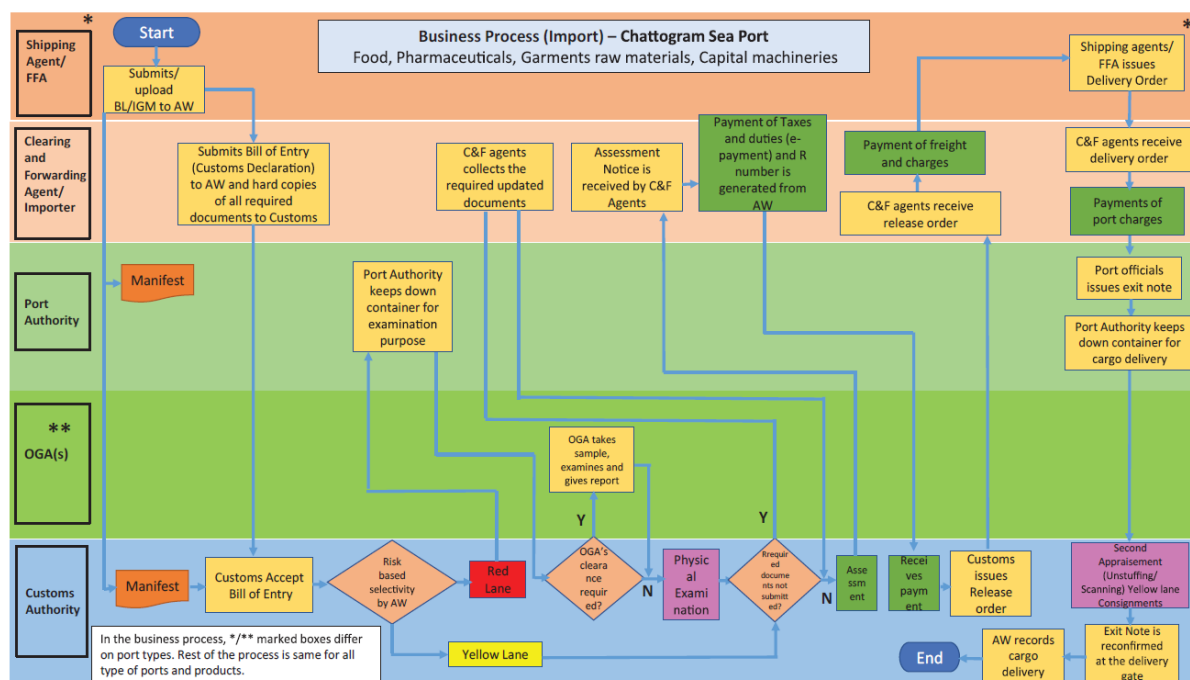
The Chattogram Customs House clearance process is also described in the TRS Report of 2022. There are 32 steps in the process, as shown in Table 3-10. Steps 6 to 20 are only required in the case of a first appraisement (assessment). In case of a second appraisement, the ARO does the assessment after the start of steps 5 and step 22. Figure 3-30 shows the business process of Chattogram (Sea) Port.

Table 3-10: Chattogram Customs House Clearance Process

Steps	Activities
1.	Manifest (IGM) submission in ASYCUDA by shipping agent.
2.	Customs validate the IGM information in ASYCUDA.
3.	Customs broker submits B/Es in the ASYCUDA system online.
4.	Ship arrives at port and container discharged by port authority
5.	Customs broker submits hard copy of the bill of entry and other documents to ARO for assessment
6.	ARO marks the file/folder to RO for examination (When first appraisalment/sample collection requires.)
7.	RO marks the file/folder to jetty for examination/sample collection and gives the file/folder to Customs broker.
8.	Customs broker obtains the location of the goods from the port authority and gives indent for examination/sample collection.
9.	Customs broker submits the documents to the AC/DC of examination zone.
10.	AC/DC assigns examination officer (ARO).
11.	Customs broker submits documents to the examination officer and verbally receives examination time.
12.	Nominated examination officer undertakes the examination/sample collection.
13.	Inspection/sample collection by the OGA (simultaneously)
14.	Customs broker receives the examination report.
15.	Customs broker submits documents with examination report to AC/DC of assessment section.
16.	AC/DC marks the file and sends it to RO.
17.	RO marks the file and sends it to the designated ARO.
18.	ARO checks the document and does the assessment or sends it to RO, if required.
19.	RO sends the file to AC/DC and above if required.
20.	ARO received the file from RO.
21.	ARO execute the instruction of higher authority and does the assessment.
22.	RO approves assessment and assessment notice being printed.
23.	Customs broker submits the documents at the out-pass section.
24.	Importer/Customs broker pays the duty and taxes.
25.	Customs broker collects delivery orders from the shipping agent.
26.	Importer/ Customs broker pays port dues and gives indent to the port authority for cargo release.
27.	Local vehicle enters the port and cargo-loading in the truck starts.
28.	Customs examines/scan the cargo at delivery stage (when second appraisalment is required)
29.	Customs gives clearance for delivery (when second appraisalment required)
30.	Customs broker agent submits the documents at delivery gate of port.
31.	Port authority provides clearance for delivery.
32.	The cargo exits the port area.

Source: Time Release Study, 2022

Business Process: Chattogram seaport



Source: Bangladesh Time Release Study Report 2022

Figure 3-30: The Business Process of Chattogram Port

3.3.4 Time Release Study Result

Time release studies have been conducted in India and Bangladesh, following the Time Release Study (TRS) Guidelines published by the World Customs Organization in 2018. The survey results are open to the public on the website shown in the footnote.¹¹ (Note: The table/figure reference numbers for these survey results presented in this section are those of the original documents). Publication of these results follow the recommendation of the Trade Facilitation Agreement of the World Trade Organization, which in Article 7.6 requires transparency of this information.

(1) Analysis of India TRS 2023 focusing on Petrapole ICP

The India National TRS of 2023 reports the results for four port categories collectively: (i) seaports, (ii) air cargo complexes (ACCS), inland container depots (ICDs), and integrated check posts (ICPs). Therefore port/border specific analysis is limited in the report, particularly for Kolkata Seaport and Petrapole ICP, which are especially relevant to this JICA survey. Especially relevant parts of this study have been extracted and are shown on the following pages.

¹¹ India: <https://old.cbic.gov.in/resources/htdocs-cbec/implmntin-trade-facilitation/national-time-release-study15062023.pdf>;
Bangladesh: https://nbr.gov.bd/uploads/publications/TRS_2022.pdf

Table 3-11: Time Release Study Conducted Customs Ports**Geographical coverage:** The 15 Customs ports spread over 9 different States are:

Seaports	(i) Jawaharlal Nehru Custom House (JNCH), also referred to as Nhava Sheva, (ii) Mundra, (iii) Kolkata, (iv) Chennai;
Air Cargo Complexes (ACCs)	(v) Ahmedabad, (vi) Bengaluru, (vii) Chennai, (viii) Delhi, (ix) Hyderabad, (x) Mumbai;
Inland Container Depot (ICDs)	(xi) Ludhiana, (xii) Tughlakabad, Delhi, (xiii) Whitefield, Bengaluru;
Integrated Check Posts (ICPs)	(xiv) Petrapole, West Bengal on India-Bangladesh border, (xv) Raxaul, Bihar on India-Nepal border.

Source: Indian National Time Release Study, 2023

Import Average Release Time (ART) and Export ART are reported as in the Table 3-12.

Table 3-12: Import Release Time and Distance Travelled towards NTFAP Targets
Table A.2: Import Release Time and Distance travelled towards NTFAP Targets

	Import ART			Distance travelled towards NTFAP targets		
	2023	2022	2021	2023	2022	2021
Seaports						
Chennai	86:39	93:07	102:46	80%	78%	54%
Kolkata	126:15	144:23	144:45	38%	23%	20%
Mundra	71:14	106:56	137:58	91%	69%	35%
Nhava Sheva	83:44	88:23	100:08	79%	80%	65%
ICDs						
Ludhiana	85:30	76:02	141:43	80%	88%	48%
Tughlakabad	70:01	91:04	98:38	92%	77%	69%
Whitefield	70:12	88:08	89:03	91%	64%	79%
ACCs						
Ahmedabad	47:34	51:12	68:29	71%	69%	54%
Bengaluru	45:50	54:55	57:15	82%	74%	65%
Chennai	43:28	43:26	52:25	84%	84%	63%
Delhi	43:17	42:32	54:56	75%	80%	61%
Hyderabad	35:49	64:11	77:21	94%	70%	47%
Mumbai	45:34	54:37	66:46	79%	68%	55%
ICPs						
Petrapole	40:15	31:18	24:24	100%	100%	100%
Raxaul	16:26	8:21	5:59	100%	100%	100%

Table A.4: Export ART

Port	Export ART		Filing of SB to Arrival		Arrival to LEO		LEO to Departure	
	2023	2022	2023	2022	2023	2022	2023	2022
Seaports								
Chennai	193:22	181:38	27:25	59:00	23:54	20:38	169:28	162:06
Kolkata	176:53	187:02	49:13	52:10	25:14	24:13	151:39	162:49
Mundra	194:24	202:49	37:02	47:48	18:05	26:39	176:18	176:25
Nhava Sheva	165:46	186:34	35:22	34:41	19:09	33:02	146:37	153:32
ICDs								
Ludhiana	74:25	97:54	13:55	25:18	15:36	24:24	58:48	73:33
Tughlakabad	160:52	196:21	40:19	48:45	32:20	42:58	128:32	153:41
Whitefield	107:45	190:17	14:47	65:23	40:52	87:12	66:52	134:42
ACCs								
Ahmedabad	22:45	73:26	19:08	19:46	5:30	6:30	17:15	73:08
Bengaluru	29:14	30:05	11:26	12:09	2:51	2:05	26:23	28:06
Chennai	17:27	23:25	25:28	27:17	2:06	1:27	15:20	22:10
Delhi	30:32	37:33	17:15	18:24	5:38	5:57	24:53	31:47
Hyderabad	20:42	25:30	13:13	43:56	2:14	11:17	18:27	25:17
Mumbai	33:34	30:38	21:06	33:13	2:57	2:25	30:37	29:36
ICPs								
Petrapole	14:06	50:59	NA	NA	6:51	26:36	7:14	24:56
Raxaul	9:24	10:15	NA	NA	3:13	3:55	6:10	8:11

Source: Indian National Time Release Study, 2023

Import Average Release Times at Petrapole

Table 3-12 extracted from the India National TRS of 2023 indicates the **Import Average Release Times** in 2021, 2022, and 2023. It can be observed that the clearance time has been increasing year by year albeit slowly. Further research on the reasons behind annual variations is required.

Table 3-13: Import ART at Petrapole

Table A.2: Import Release Time and Distance travelled towards NTFAP Targets

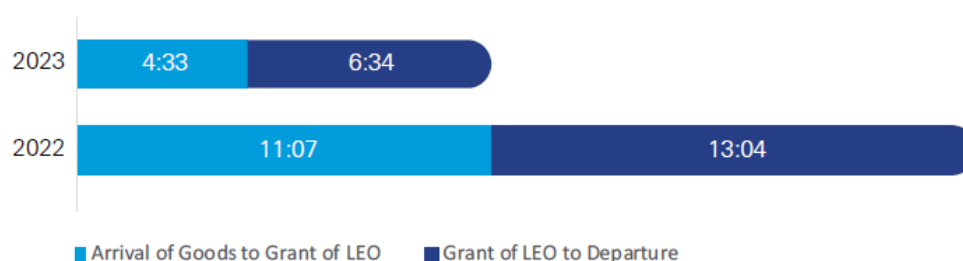
Import ART				Distance travelled towards NTFAP targets		
	2023	2022	2021	2023	2022	2021
Petrapole	40:15	31:18	24:24	100%	100%	100%

Source: Indian National Time Release Study, 2023

Export Average Release Times at Petrapole

Regarding exports, Chart 10: Export Release Time at ICPs is presented. The light blue part shows “Arrival of goods to the border parking to Grant of LEO” and the dark blue part shows time of “Grant of LEO to Departure” of the truck from the border. The chart shows significant improvement in terms of time shortened.

Chart 10: Export Release Time at ICPs



Source: Indian National Time Release Study, 2023

Figure 3-31: Export Release Time at Petrapole ICP

Stage-wise export release times at Petrapole – shown in Table 3-14 in the original document – indicates significant improvement, which was due to introduction of the e-Suvidha system, which allowed pre-booking of parking slots at the border, reducing clearance times.

Table 3-14: Stage-wise Export Release Time at ICP Petrapole

Table 39: Stage-wise Export Release at ICP Petrapole

	Arrival to LEO (hour: minute)		LEO to Departure (hour: minute)		LEO to Export Parking (hour: minute)		Export Parking to Departure (hour: minute)	
	2023	2022	2023	2022	2023	2022	2023	2022
Petrapole	6:51	26:36	7:14	24:56	2:13	NA	5:56	NA

Source: Indian National Time Release Study (NTRS), 2023

(2) Analysis of Bangladesh Time Release Study 2022 Reports

Summary

Bangladesh Time Release Study 2022 reports results from surveys conducted in 2022 at three major ports of Bangladesh: Chattogram, Benapole, and Dhaka Airport.

The executive summary reports the result of TRS as follows:

Data collection was carried out during 22–26 May 2022. A total of 1209 bill of entries (B/Es) were taken as sample: 248 B/Es at Benapole, 602 B/Es at Chattogram, and 359 B/Es at Dhaka. Results show that, for Benapole, the average time required to complete the import clearance process is 10 days 8 hours 11 minutes. In contrast, the corresponding time for Chattogram and Dhaka is 11 days 6 hours 23 minutes, and 7 days 11 hours 19 minutes, respectively. Analysis of Chattogram data indicates that availing pre-arrival processing (PAP) significantly reduces the clearance time; importers can cut the overall release time by 57%.

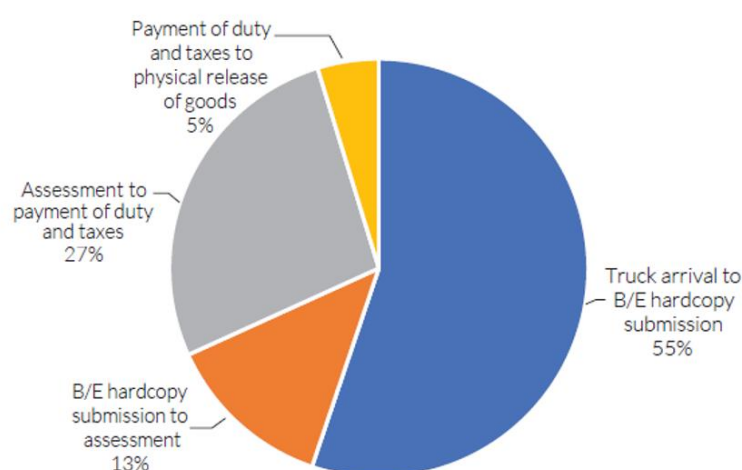
Benapole Land Border TRS Results

The Bangladesh TRS Report provided an interesting analysis of the data collected. Table 3-15 – again extracted from the report – shows process-wise clearance time analysis. The Category “All” shows the average of five stages, as does Figure 3-32 extracted from the report. shows its shares clearly. It is significant that more than 10 days required on average for the clearance of goods.

Table 3-15: Process-Wise Time Taken for Major Steps of Clearance Process- Benapole

Category	Truck arrival to B/E hardcopy submission	B/E hardcopy submission to assessment	Assessment to payment of duty and taxes	Payment of duty and taxes to physical release of goods	ART (arrival of truck to physical release of goods)	No. of samples
All	5d 22h 28m	1d 7h 03m	2d 15h 31m	0d 11h 7m	10d 8h 11m	248
RED	6d 14h 34m	3d 19h 28m	1d 5h 15m	0d 8h 59m	12d 0h 18m	76
YELLOW	5d 15h 21m	0d 4h 21m	3d 6h 40m	0d 12h 4m	9d 14h 27m	172

Source: Bangladesh Time Release Study Report, 2022



Source: Bangladesh Time Release Study Report, 2022

Figure 3-32: Share of Time Across Major Stages of Import Clearance - Benapole

The report presents an activity-wise analysis of the time required for customs clearance, as shown in Table 3-16 in the original source document.

Table 3-16: Time Taken by Customs - Benapole

Table 3.8 Time taken (in days-hours-minutes) by Customs - Benapole

Activities	Average time	Minimum time	Maximum time	No. of samples
Scanning ³	5m	2m	1h 3m	125
Manual B/E approval	40m	0m	1d 1h	248
Document marking Time by RO (assessment) for examination	25m	1m	19h 10m	76
Examination	1d 3h 19m	15m	8d 18h 50m	76
Assessment	9h 10m	0m	6d 0h 48m	248
Issuance of Customs release order after duty and tax payment	1h 50m	1m	3d 21h 24m	248
Exit gate	38m	1m	4h 39m	248

Source: TRS 2022 Survey.

³Scanning is not mandatory for all consignments.

Source: Bangladesh Time Release Study Report, 2022

Source: Bangladesh Time Release Study Report, 2022 extracted from the original source document shows the time taken by importers and customs brokers., which are taking considerable time for certain activities. For example, it is taking more than one day for manifest submission, manifest withdrawal (the meaning of which needs to be clarified), file submission to the assessment group, and the payment of duty and taxes. It is necessary to investigate why these activities are taking such a long time.

Table 3-17: Time Taken by Importers and Customs Brokers - Benapole

Table 3.11 Time taken (in days-hours-minutes) by importers and Customs brokers - Benapole

Activities	Average time	Minimum time	Maximum time	No. of samples
Manifest submission in the ASYCUDAWorld ⁴	1d 5h 57m	1m	10d 13h 41m	231
Manifest withdrawal time	3d 14h 50m	0m	28d 20h 13m	243
Manual B/E submission	11m	0m	7h 1m	248
B/E submission in the ASYCUDAWorld ⁵	10h 5m	0m	12d 4h 36m	247
Hardcopy submission to Customs (RED)	14h 20m	1m	9d 22h 25m	76
File transfer time (after marking examination)	9h 16m	2m	6d 22h 2m	76
File submission to assessment group (after examination)	1d 10h 31m	1m	9d 23h 40m	76
Payment of duty and taxes	2d 15h 31m	10m	22d 0h 1m	248
Documents submission to the port authority for goods delivery	5h 15m	1m	2d 21h 44m	248
Documents submission to Customs during exit	57m	0m	23h 47m	248

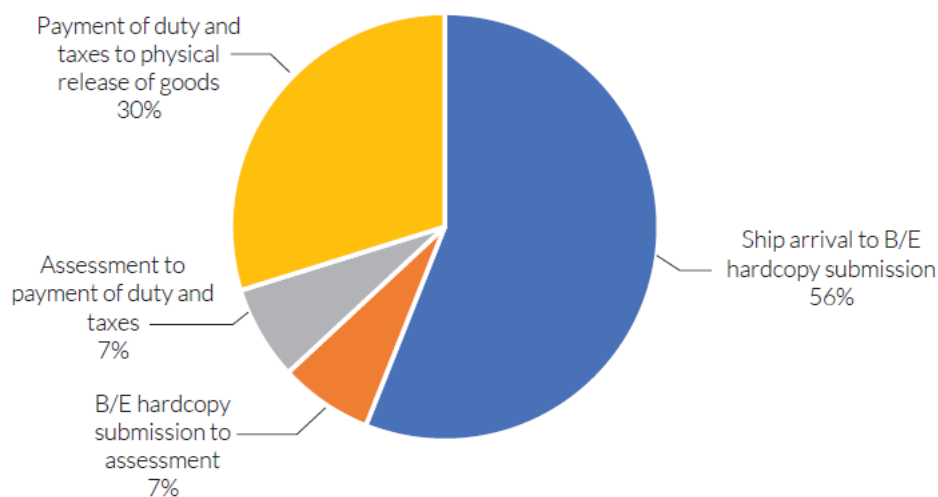
Source: TRS 2022 Survey.

Source: Bangladesh Time Release Study Report, 2022

Chattogram Port TRS Results

The TRS results for Chattogram Port were shown with pie charts, such as Figure 3-33 (again extracted from the original source document), which shows shares of time across major stages of import clearance. The figure shows that after ships arrive at the port to submit hardcopies more than half of the time of clearance is taken.

Figure 4.4 Share of time (% of ART) across major stages of import clearance for post-arrival processing - Chattogram



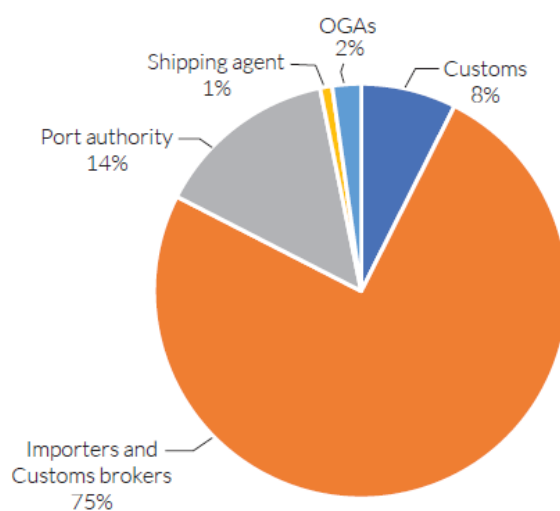
Source: TRS 2022 Survey.

Source: Bangladesh Time Release Study Report, 2022

Figure 3-33: Share of Time Across Major Stages of Import Clearance for Post-Arrival Processing - Chattogram

Figure 3-34 (extracted) shows stakeholder wise share of time, with importers and customs brokers taking 75% of the total time for the clearance of the goods.

Figure 4.7 Stakeholder wise share of time - Chattogram



Source: TRS 2022 Survey.

Source: Bangladesh Time Release Study Report, 2022

Figure 3-34: Stakeholder Wise Share of Time - Chattogram

Table 3-18 shows the time taken at various stages of customs clearance. Particularly assessment (yellow lane) is taking 21 hours 6 minutes on average with a sample size of 575. Further analysis is required.

Table 3-18: Time Taken by Customs - Chattogram

Table 4.11 Time taken (in days-hours-minutes) by Customs - Chattogram

Activities	Average release time	Minimum time	Maximum time	Number of samples
Hard copy submission to jetty marking (RED lane and sample collection) ⁵	55m	0m	1d 1h 15m	83
Examination/sample collection	14h 34m	55m	4d 2h 45m	83
Testing (CCH Chemical Lab)	22h 26m	47m	5d 3h 10m	39
Assessment (YELLOW lane)	21h 6m	3m	20d 0h 29m	575
Assessment (RED lane)	1d 8h 22m	20m	7d 1h 40m	27
RED/Lock/Block exemption	8h 23m	11m	1d 18h 44m	9
Second appraisalment (YELLOW lane)	30m	2m	12h 49m	538
Scanning (on-chassis-delivery)	13m	2m	50m	41
Gate verification	4m	0m	2h 3m	602

Source: TRS 2022 Survey.

Source: Bangladesh Time Release Study Report, 2022

3.3.5 Procedural Costs

(1) India

Summary

India's customs and related duties and fees are shown in the CBIC website. The information is drawn from various articles in the customs law.

The following compilation from the “cogoport” website lists different type of duties and fees. 1% customs handling fee is collected.

Table 3-19: Customs duties in India and other import-related charges

Customs duties in India and other import-related charges

TYPE	RATE	APPLICABLE ON
Basic Customs Duty (BCD)	0% to 100%	All imports
Countervailing Duty (CVD)	0%, 6%, 12%	Goods that are subsidised in the country of export
Anti-dumping Duty (ADD)	As notified	Goods imported at a lower value than their market price (steel products, chemicals)
Social Welfare Surcharge (SWS)	10%	All imports except those that are declared exempt (chewing gum, wheat, walnuts)
Safeguard Duty	As notified	High import volume goods that are considered a threat to local producers
Protective Duty	As notified	Imported goods deemed a threat to the local industry
National Calamity Contingent Duty (NCCD)	As specified in the Seventh Schedule	Goods in the Seventh Schedule to the Finance Act (tobacco products, fuels, cars)
Integrated GST (IGST)	5%, 12%, 18%, 28%	All imports
Compensation Cess	Per product type	Notified goods (tobacco products, cars, fuels)
Customs Handling Fee	1%	All imports
Agriculture Infrastructure and Development Cess (AIDC)	1.5% to 100%	29 notified products (gold, silver, alcohol, apples, pulses)

Source : <https://www.cogoport.com/en-IN/blogs/import-duties-in-india-what-it-costs-to-clear-your-goods>

How Import Duties Are Calculated

Import duties are calculated as a percentage of the assessable value of the imported goods. If the goods are imported under the Cost, Insurance, and Freight (CIF) Incoterms, assessable value is CIF plus customs handling fee (of 1%). The CIF value is estimated by adding the cost or invoice value of the goods and the insurance and freight costs.

An example of the calculation of total duties due on an import consignment shipped under CIF and on which basic customs duty, social welfare surcharges and the India Goods and Services Tax is applied follows.

Table 3-20: Example of Calculation of Total Duty Amount for Imported Goods
Calculation of import duty

SERIAL NO.	TYPE OF DUTY	RATE	CALCULATION	VALUE
A	Assessable value of the goods		CIF + 1% customs handling fee)	INR500
B	Basic Customs Duty	30%		INR150
C	Social Welfare Surcharge	10%	B x 10 / 100	INR15
D	IGST	18%	(A + B + C) x 18 / 100	INR119.70
E	Total duty applicable		B + C + D	INR284.70
	Total amount		A + E	INR784.70

Source: <https://www.cogoport.com/en-IN/blogs/import-duties-in-india-what-it-costs-to-clear-your-goods>

Logistic Costs in India

Logistic costs in India were reported as 8.35% of gross domestic product (GDP)¹² in a 2022 study by the New Delhi-based National Council of Applied Economic Research (NCAER) commissioned by the Logistics Division of the Ministry of Commerce and Industry.

Regarding the Indian side of Petrapole, in September 2022 the Hindu Business Line that the average daily cost incurred by a truck due to detention was in the INR 1,500-2,000 (USD 18-24), although the introduction of the e-Suvidha system was addressing the issue. Exporters were reportedly able to make online slot bookings for INR 10,000 (USD 120) for loaded trucks and 5,000 (USD 60) for chassis vehicles or unloaded trucks. This service was currently open for exports of all kinds through Petrapole except for perishable goods.

Interviews with customs officers at Petrapole showed that there is no customs clearance cost such as clearance fee or examination fees at Petrapole.

Other logistics costs at the border include transloading costs, border user fees, and truck parking fee. Clearing agents would not disclose customs brokerage fees at the border, although some indicated that is in the range of 1%-1.5% of cost and freight (C&F) value.

The JETRO India Logistics Status Study, February 2022

The Japan External Trade Organization (JETRO) conducted an India Logistics Status Study, which was published in February 2022. The study found a general trend toward shorter inland distances – it concluded that transport via highways is quicker and offer relatively low logistics costs for exports compared to transport via rail.

¹² <https://infra.economictimes.indiatimes.com/news/logistics/indias-logistic-costs-average-8-35-says-ncaer-study/91218826>.

For example, from Delhi to the Petrapole ICP, the distance by truck is 1,630 km and it takes 20-27 days for the trip, with a logistics cost of INR 192,000-275,000 (USD 2,300-3,300) per TEU, while the distance by rail is 1,530 km and it takes 20-27 days, the same as by truck, with a logistics cost of INR 175,000-250,000 (USD 2,100-3,000) per TEU. From Kolkata to the Petrapole ICP the distance by truck is 90 km and it takes 15-20 days, with a logistics cost of INR 94,000-160,000 (USD 1,130-1,920) per TEU.

(2) Bangladesh

Overview

Regarding logistics cost in Bangladesh, *The Daily Star* newspaper reported that congestion on roads and at seaports, high logistics costs, inadequate infrastructure, one-sided logistics service markets, and fragmented governance hamper manufacturing and freight, with consequent adverse effect on Bangladesh's competitive edge and putting the country's robust growth path at risk.

A report by Mordor Intelligence found that logistics costs in Bangladesh are high in most sectors, ranging from 4.5% to 47.9% of total sales value. This report attributed the high costs to inefficiencies in the system, low truck utilization (35% are empty return trips), high levels of road and port congestion, and limited competition among transport modes.

Bangladesh Fees and Charges

The National Board of Revenue website indicates that there are various types of fees and charges that relate to trade activities, both imports and exports. However, these fees and charges are not imposed or collected by a single agency, but fall under the jurisdiction of different border agencies involved in trade-related activities, including Customs but also including other agencies.¹³

Fees and Charges by Customs

Various fees and charges imposed by Customs on or in connection with importation or exportation include:

- 1) Document processing fees (for automated customs assessment);
- 2) Pre-shipment inspection services charge (in case of goods imported under Pre-shipment Inspection System), imposed under Section 25C of the Customs Act, 1969, at a rate of 1% of the value of goods;
- 3) Merchant overtime charges (in case of overtime work by customs officials);
- 4) Container scanning charges;
- 5) Transshipment fees imposed under Section 125 of the Customs Act, 1969;
- 6) Customs fees on transshipment under the Inland Waterways Protocol between India and Bangladesh;
- 7) Fees to document copies, which are imposed under Section 204 of the Customs Act, 1969;
- 8) fees to supplying customs information, which are imposed under Section 204A of the Customs Act, 1969;
- 9) Fees for the amendment of documents, which are imposed under Section 205 of the Customs Act, 1969; and
- 10) fees for amendment of errors and the like, which are imposed under Section 206 of the Customs Act, 1969.

¹³ http://bangladeshcustoms.gov.bd/trade_info/fees_charges.

3.4 DX and ICT Applications

3.4.1 Land Port Management System in India

Digital transformation (DX) initiatives for cross-border transport between India and Bangladesh are being developed by the Land Ports Authority of India and the Bangladesh Land Port Authority.

LPAI has indicated that it will promote the following seven key features for DX for ICPs, through its Land Port Management System (LPMS).

1. **Registration:** a single registration request for all stakeholders, with document upload, alert, and communication features;
2. **Slot Management:** Advance planning for booking of ICT slots on the basis of availability, and vehicle dwell time forecasts;
3. **Gate Operations:** A feature to capture shipment details, transport details, and gate in/out transactions, and provisions for integrating the use of full body truck scanners;
4. **Business:** Data analytics and visibility on business intelligence (BI) dashboards for all stakeholders, and recording of shipment details for cargo/container management;
5. **Customs Filing:** Provisions to create shipping bills and bill of entry (BOE) files with an auto-submit feature to the customs system, online filing of customs clearance and export-import (EXIM) manifest with accuracy as per the ICEGATE format;
6. **Resources:** Optimized resource management using yard and warehouse management modules; and
7. **Unified Payment:** Single payment window on PCS (a prepaid credit card) for payment of customs duties as well as cargo terminal charges for parking, weighing, and the like.

The above seven key features are ongoing, and e-Suvidha will play a major role in the DX of Indian Customs.

3.4.2 e-Suvidha Operation

The e-Suvidha platform is a reservation system for border clearance slots that introduced in July 2022 by the Government of West Bengal in coordination with LPAI, Indian Customs (CBIC), and the Border Security Force (BSF).

Reservation slots are currently daily and only available for exports from India to Bangladesh. All bookings can be made through the website (the e-Suvidha Portal). Indian exporters use e-Suvidha to make gate bookings, trucks show the QR code printed on the reservation form at the gate, and the driver's license and vehicle license plate information are verified, and if they match, the truck can smoothly pass through the gate. Before the introduction of this system, trucks reportedly had to wait more than 40 days to cross, but after introduction of this system, this waiting time was reduced to about one day.

Currently, e-Suvidha is operational in several ICPs in West Bengal. When the survey team confirmed with LPAI in February 2024, they said that they plan to expand its use to 5 to 6 ICPs by the end of 2024.

The e-Suvidha platform is only permitted to be used by Indian exporters, and registration requires an Importer-Exporter Code (IEC), which is issued by the Directorate General of Foreign Trade (DGFT). Once user registration is complete, the exporter will reserve a date for arrival at the gate. The operation screen is shown in Figure 3-35. The exporter selects goods and specifies the available reservation date.

The registered booking becomes valid after payment of the fee, and a reservation form (Suvidha Pass, shown in Figure 3-36) is issued after registration of the driver's name, driver's license, and vehicle number.

Select Options

Name of the Goods *

OTHERS

SELECT

TRAILER OF CKD/SKD VEHICLES

STONE CHIPS

RICE

COTTON

OTHERS

Calendar Grid:

					Fri	Sat	Sun
						2	3
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	

Source: e-Suvidha User Manual

Figure 3-35: ICEGATE Reservation Screen by e-Suvidha

"Suvidha"
Vehicles Facilitation System
Government of West Bengal

Vehicle Facilitation Pass

Exporter :	Exporter Name
Type of Goods :	RICE
Vehicle Number :	Vehicle01
Driver :	MR. LAL (Mobile : 952665506)
Importer :	TEST
Shipping bill number :	43434434
Tentative Arrival Date :	2022-07-13
Payment Status :	Successful
Payment Reference Number :	RCE2207121455122513

Driving License of the driver

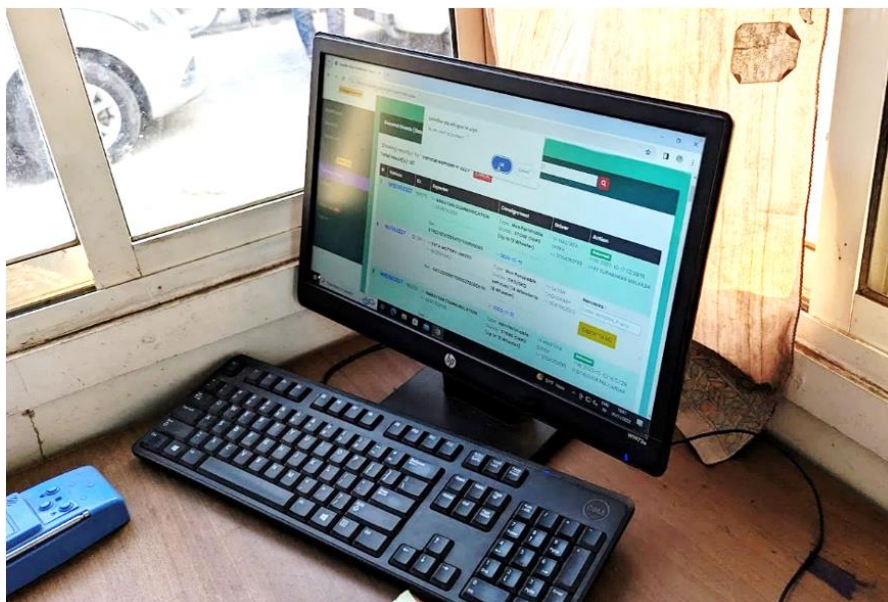
This pass is valid for 2022-07-12, 2022-07-13 & 2022-07-14

System Generated Suvidha Vehicle Facilitation Pass, Generated from <https://suvidha.wb.gov.in>
Helpline Number - +91-7602601062

Source: e-Suvidha User Manual

Figure 3-36: Suvidha Pass

During the JICA Survey Team's first inspection visit to the Petrapole ICP, the team observed that a video camera installed at the gate automatically reads the vehicle number, and using that number, the e-Suvidha system automatically sends the driver's name, vehicle number, and export goods to the gate clerk's PC (see Figure 3-37).



Source: JICA Suvey Team

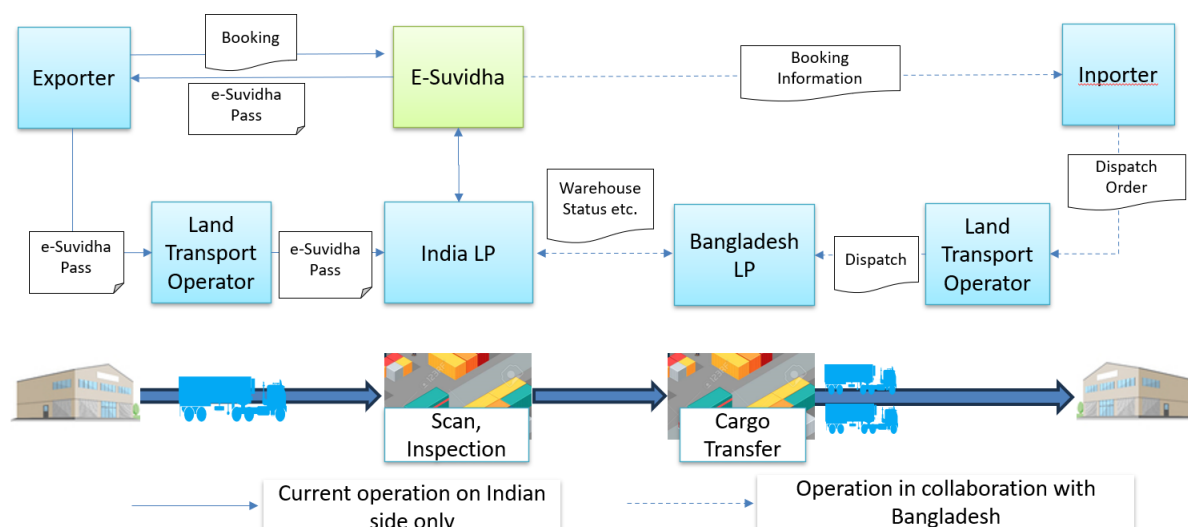
Figure 3-37: e-Suvidha Screen Installed at the Gate of the Petrapole ICP

As mentioned, e-Suvidha has made export operations on the Indian side highly efficient. However, currently the e-Suvidha system and its information are operated only on the Indian side, and there is no mutual use with Bangladesh. LPAI indicated to the team that it is positive about providing e-Suvidha to Bangladesh, and the BLPA also indicated that it is positive about using e-Suvidha to exchange information, reduce documents, and promote DX.

Figure 3-38 shows how e-Suvidha can be used in Bangladesh. While the e-Suvidha system is currently operated by West Bengal, it will not be necessary to introduce the same system in Bangladesh. Since export information on the Indian side directly translates into import information on the Bangladesh side, the operation of the Bangladesh Land Port could be made more efficient by creating an environment in which information from e-Suvidha can be used on the Bangladesh side as well.

Importers on the Bangladesh side and BLPA would access e-Suvidha, obtain cargo arrival information, and make appropriate vehicle allocations to the Land Port.

In the future, more efficient operation of the Land Port would be possible if information on vehicles on the Bangladesh side and congestion at warehouses on both sides could be registered in e-Suvidha. At present, since a high percentage of exports are from India to Bangladesh, there is no problem in operating e-Suvidha only for exports from India, but when exports from Bangladesh increase in the future, it will be necessary to consider operating e-Suvidha for Bangladeshi exports.

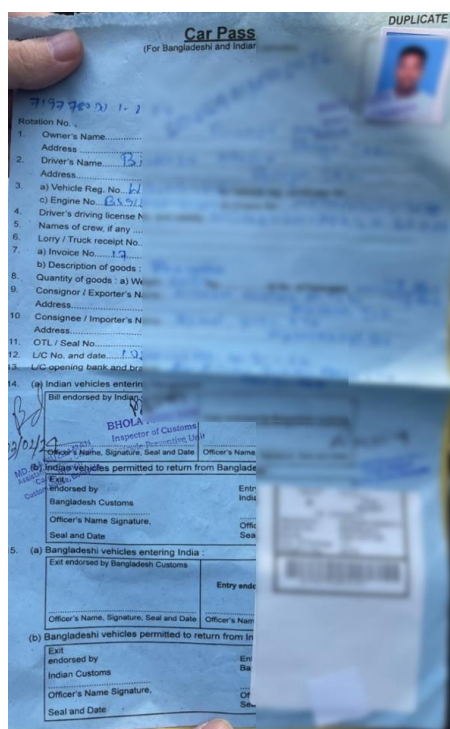


Source: JICA Survey Team

Figure 3-38: e-Suvidha Current Operation and Future Operation

Both countries are proactive in operating e-Suvidha and sharing information between the two countries. e-Suvidha is a system that has already been built on the Indian side and is in the operational stage, and there are not many issues to overcome in realizing operation between the two countries, so it was excluded from the proposal in the project sheet.

However, a three-copy paper-based document called CAR Pass is used when logistics vehicles enter the border between India and Bangladesh. CAR Pass authentication is performed by recording vehicle registration number, owner, driver's name and address, driver's license information, driver information, vehicle information, etc. The project sheet proposes digitizing the CAR Pass in order to improve the efficiency of immigration screening when MVA is introduced in the future.



Source: JICA Survey Team

Figure 3-39: CAR Pass operated using 3-copy paper

3.4.3 ECTS Operation in India

An electronic cargo tracking system (ECTS) is an electronic seal that tracks the movement of cargo. It uses a combination of global navigation satellite system (GNSS), radio frequency identification (RFID), and the Global System for Mobile Communications (GSM) technologies to track the location of cargo. ECTS also provides alerts and notifications in case of any deviations or abnormal opening/closing of a container.

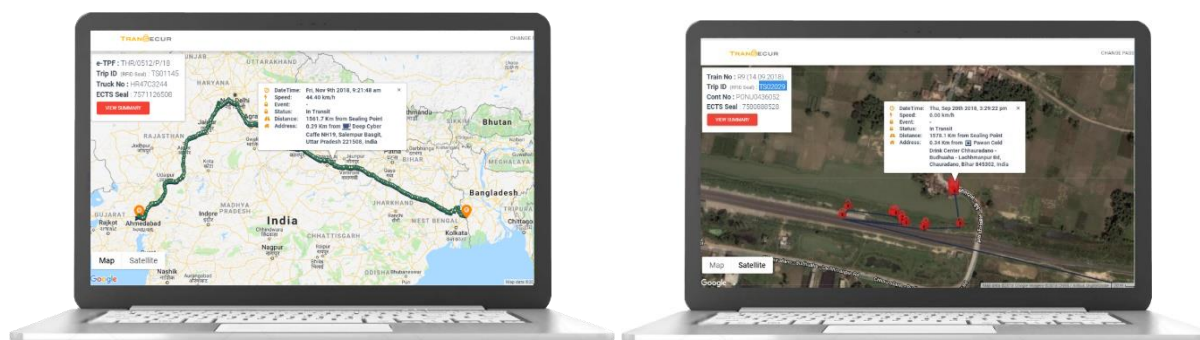
The ECTS device used in the region has been developed and is sold by a Chinese company (Shenzhen Joint Technology Co., Ltd.). TRANSECUR, an Indian company, manufactures this device in India. TRANSECUR is the only provider of ECTS services in India. Examples of cargo seals with ECTS are shown in Figure 3-40.



Source: Website of Shenzhen Joint Technology Co., Ltd.

Figure 3-40: Examples of Cargo Seals with ECTS

ECTS is effective in managing cargo transport between third countries via India. The Ministry of Finance, India, has recognized the effectiveness of ECTS and has produced leaflets to promote its use. The leaflet shows that customs and transit times can be streamlined by using ECTS for shipping from Kolkata Port to Nepal through India (see Figure 3-41).

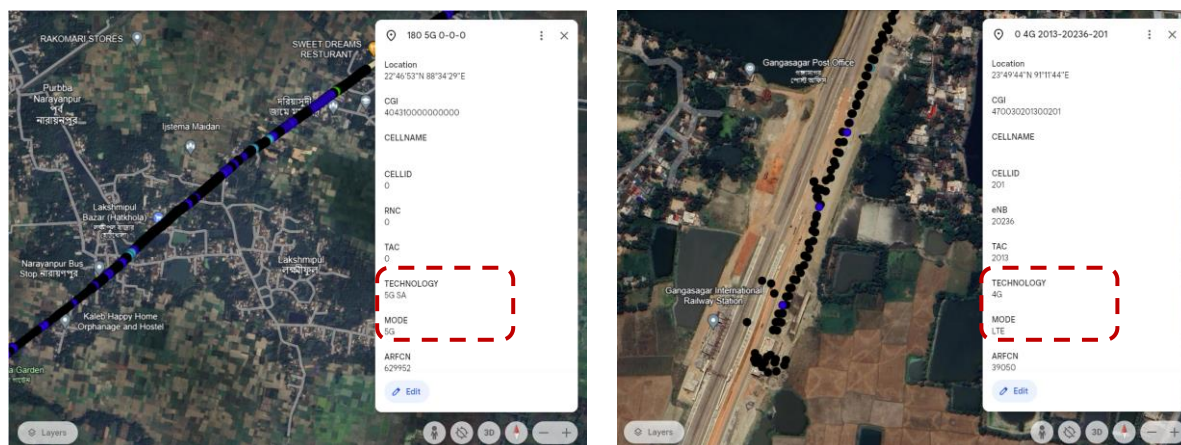


Source: TRANSECUR website (<https://www.transecur.com/>)

Figure 3-41: Location Tracking (left) and Transshipment at Railway Stations (right)

On the other hand, an issue with ECTS has been the relatively high usage fee. The fee charged for one unit for transport from Kolkata to Nepal is INR 3,300 (USD 40). In an interview with PDP Group (an Indian logistics company) it was stated that companies other than TRANSECUR should be able to provide the ECTS service to reduce costs through price competition.

ETCS sends monitoring data to the management server via the mobile phone network. Therefore, the area(s) where ECTS is used must be covered by mobile phone network services. The survey team measured the service level of mobile phone networks while traveling from Kolkata to Petrapole, from Agartala to Sabroom, and from Agartala to Dhaka. The team found that 4G (Long Term Evolution, LTE) services were available along major national highways in India and Bangladesh. In addition to 4G (LTE), 5G services are provided in urban areas in India. Figure 3-42 shows some examples of the observation results. The picture on the left shows the 5G service status along NH 112 from Kolkata to Petrapole in India, while the picture on the right shows 4G (LTE) service near Gangasagar Station in Bangladesh. There are no problems using ETCS within India and Bangladesh.



Source: Created by the JICA Survey Team using G-Net Track Pro

Figure 3-42: Mobile Phone Network Service Level

3.4.4 CCTV Surveillance System in Benapole

BLPA has installed 378 CCTV cameras at various locations at Benapole border facility. This CCTV surveillance system will be operational from 2022, and the captured data will be stored for three years. CCTV images can be monitored not only from the Benapole office but also from the BLPA director's office in Dhaka.

The purpose of CCTV installation is to record video to prevent fraud. Image analysis technology such as deciphering vehicle numbers, counting the number of passing vehicles, and AI monitoring has not been introduced.



Source: JICA Survey Team

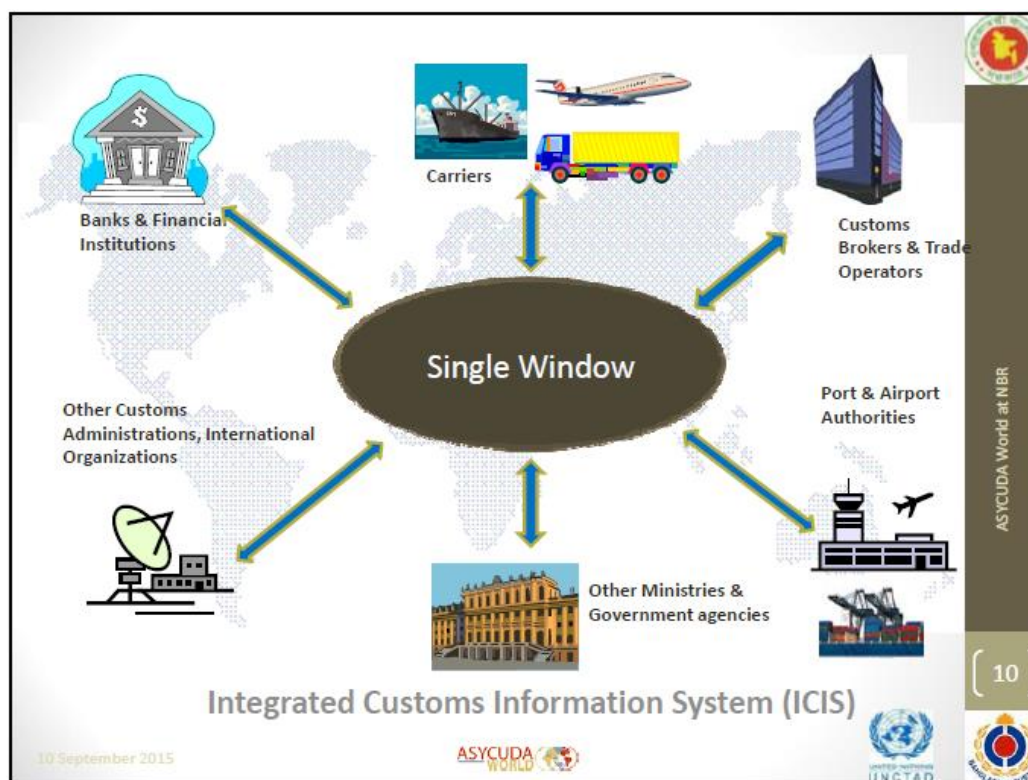
Figure 3-43: CCTV Surveillance System in Benapole

3.4.5 Other Interventions

The Indian Customs Electronic Gateway (ICEGATE), the Automated System for Customs Data (ASYCUDA), and the Unified Logistics Interface Platform (ULIP) are important systems in cross-border logistics between India and Bangladesh.

India's ICEGATE and the ASYCUDA system used in Bangladesh are equivalent to Japan's Nippon Automated Cargo and Ports Consolidated System (NACCS), which has been introduced as a DX system for customs procedures. ICEGATE allows electronic declarations of many documents required for customs clearance and is a portal site for the Indian Customs EDI System (ICES). In addition to e-filing, ICEGATE also provides for e-payment of the Central Excise and Service Tax, on-line registration for Intellectual Property Rights (IPR), document tracking status at Customs EDI, and other features. ICEGATE is a proprietary system developed by the Central Board of Indirect Taxes and Customs (CBIC), and the system configuration has not been made public.

In contrast, ASYCUDA is a computerized customs control system developed by the United Nations Conference on Trade and Development (UNCTAD) and is provided to 90 countries around the world. The version of ASYCUDA, called ASYCUDA World, is used in Bangladesh, where it is operated at the Customs Data Center in Dhaka. Bangladesh's National Board of Revenue (NBR) is responsible for the development and enhancement of ASYCUDA in the country. NBR aims to build an Integrated Customs Information System (ICIS) using ASYCUDA as the core, connecting to customs and related external agencies. Figure 3-44 is a conceptual diagram of ICIS with ASYCUDA at its core, shown by NBR.



Source: ASYCUDA World Operations in Bangladesh

<https://www.sasec.asia/uploads/events/2015/subregional-asyculdaworld-workshop/2-bangladesh-technical.pdf>

Figure 3-44: Conceptual Diagram of ICIS with ASYCUDA

If a bilateral connection between ICEGATE and ASYCUDA is realized, the preparation of customs documents would be simplified, contributing to a reduction in labor for users and customs officials.

Although there are many issues to overcome in realizing One-Stop Border Post (OSBP), it is expected to have significant effects when its future introduction is being considered.

At present, no efforts are being made to connect ICEGATE and ASYCUDA, but NBR of Bangladesh has pointed to the need to digitize documents and reduce paperwork. On the other hand, CBIC of India has not indicated support for linking these two systems in view of differences in risk management and various import and export requirements for the two countries.

The Unified Logistics Interface Platform (ULIP), as part of the National Logistics Policy (NLP), is a promising initiative in the logistics sector that aims to increase the ease of doing business in the logistics sector by simplifying logistics processes, improving efficiency, increasing transparency and visibility, and reducing logistics costs and time.

As of November 2023, 35 systems from eight Indian ministries had been integrated into ULIP, with over 1,800 data fields available through 113 application programming interfaces (APIs). Table 3-21 shows an overview of the systems connected to each government agency. Data obtained through the ULIP includes vehicle license plate and vehicle information, driver's license information, container information from the Terminal Operating System (TOS), and export/import cargo manifests from ICEGATE.

Table 3-21: Accessible Data Through the ULIP

Name of the Ministry / Department	Systems integrated with ULIP platform
Ministry of Ports, Shipping and Waterways	PORT Community System (PCS)
	Terminal Operating System (TOS)
	Inland Waterways Authority of India
Ministry of Civil Aviation	Air Cargo Message Exchange System (ACMES)
	Air Cargo Community System (ACCS)
	AAI Cargo Logistics and Allied Services
Ministry of Road Transport and Highways	VAHAN : Vehicle Registration
	SARATHI : Driver's Licence
	FASTag : Like Japanese ETC
Ministry of Commerce and Industry	Director General of Foreign Trade (DGFT)
	PM GATISHAKTI : National Master Plan for Multi-modal Connectivity
Ministry of Railway	Freight Operations Information System (FOIS)
Ministry of Finance	ICEGATE
	E-Waybill
Ministry of Electronics & Information Technology (MeitY)	Digilocker
National Industrial Corridor Development Corporation (NICDC)	Logistics Data Bank (LDB)
Ministry of Consumer Affairs, Food and Public Distribution	Food Corporation of India (FCI)

Source: ULIP website (<https://goulip.in/home>) with comments added by the JICA Survey Team

Currently, access to ULIP is not allowed from other countries including from Bangladesh. Institutions wishing to use the ULIP are to present a case showing how they would utilize the ULIP, obtain consent to use it, and sign a nondisclosure agreement or NDA.

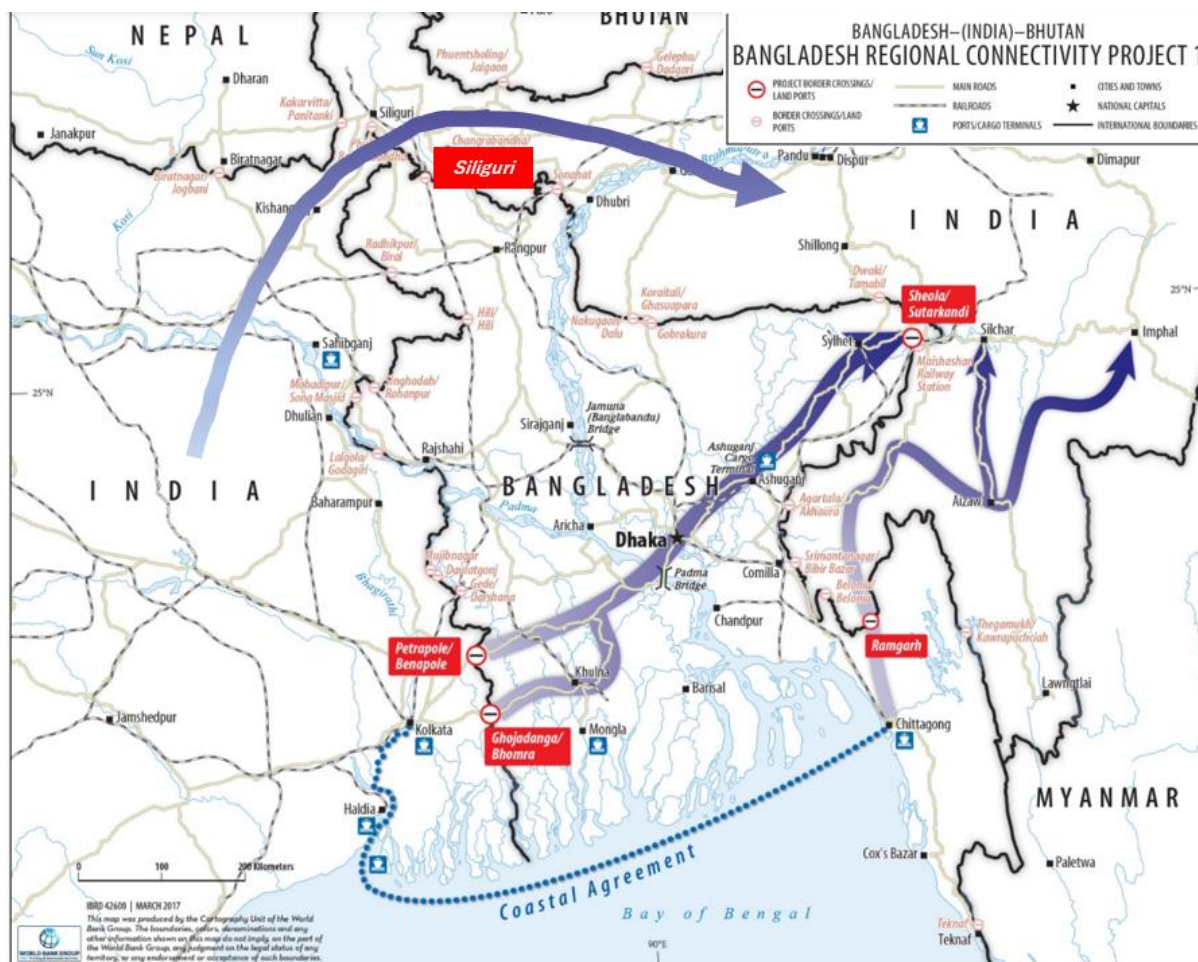
3.5 Demand Forecast

3.5.1 Background and Overview

(1) A Big Picture for Demand Forecast

A demand forecast will be prepared for (i) Petrapole (India) and Benapole (Bangladesh) along the Kolkata-Dhaka Corridor, and (ii) Sabroom (India) and Ramgarh (Bangladesh) as well as (iii) Agartala and Akhaura between the North Eastern Region (NER) of India and Bangladesh. The focus will be freight demand for road transport, with consideration of the development of other modes.

The Petrapole and Benapole section will be influenced by the recent major improvement of road connection, particularly for the Padma Bridge and its access road, and other bypass road improvements on the Indian side. As shown in the Figure 3-45, Siliguri Pass is the only existing connecting surface corridor between NER and rest of the India without passing through the Bangladesh territory. India expects the transit corridors through Bangladesh may alternate the Siliguri Pass and its demand will be shifted to the Kolkata-Dhaka Corridor.



Source: World Bank, Bangladesh Regional Connectivity Project, World Bank, with editing by the JICA Survey Team

Figure 3-45: Kolkata-Chattogram-India NER Corridor

The connection of Sabroom with Chattogram Port makes this route the shortest link from India's NER to a seaport, which offers the potential for the route to play an important role in the regional and international logistics network and has a significant impact on future traffic from Chattogram to the NER along the corridor. From a broad geographic perspective, the corridor not only provides a linkage to the seaport for the landlocked NER, but also an alternative to the existing Siliguri Corridor in addition

to the Kolkata-Dhaka-Agartala Corridor. It will function as a new sea-road route connecting the NER with the rest of India via the Kolkata-Chattogram-India NER Corridor.

(2) Macro-scopic Trend of Trade between India and Bangladesh.

The South Asia Region continues to achieve strong economic growth, with gross domestic product (GDP) increasing at an average annual growth rate of 5.4% between 2010 and 2022 according to World Bank data. India – with a population of about 1.4 billion, and Bangladesh – with a population of about 170 million – have higher growth rates than the South Asia average, and are drivers of the region's economy, as shown below.

Table 3-22: Socioeconomic Indicators of the Target (Survey) Countries

Major Socioeconomic Indicators	India	NER only	Bangladesh
Total population (in millions, 2022)	1,417.2	51.13	171.2
GDP (USD billion, 2022)	3,385.1	90.89	460.2
GDP average annual real growth rate (2010-2022)	5.6 %	14.36%	6.5 %
GDP per capita (USD, 2022)	2,389	1,778	2,688

Source: JICA Survey Team, based on World Bank's *World Development Indicators*
[<https://databank.worldbank.org/source/world-development-indicators>]

The following table shows the overall share of bilateral exports and imports between India and Bangladesh, which suggests that the cross-border trade accounts for a low share of total trade for the two countries; thus, there is significant development potential.

Table 3-23: Bilateral Trade as a Percentage of Total Trade (2022)

Item	Bilateral Trade as a Percentage of Total Trade	
	India	Bangladesh
Exports	3.1%	3.6%
Imports	0.3%	16.0%

Source: JICA Survey Team, calculated based on the Trade Statistics Database of the International Monetary Fund

(3) Baseline Traffic Data

Baseline traffic data is collected from JICA Survey Team's site visits (for traffic at ICPs) as well as desktop research (for traffic on target corridors).

The JICA Survey Team visited the Petrapole-Benapole ICP, Sabroom ICP, Agartala ICP and connecting roads during the field mission. Passenger crossing at Sabroom only restarted on 15 November 2023 (after being closed for more than a decade), while the freight-related ICP facilities were still under construction in November 2023.

For the Petrapole ICP, as per the information board displayed in the LPAI Office, daily traffic was about 550 cargo vehicles at the end of October 2023, as shown in Figure 3-46.

LAND PORTS AUTHORITY OF INDIA ICP. PETRAPOLE

DATE → 31-10-2023 (TUES DAY)

CARGO VEHICLE			PASSENGER DETAILS		
EXPORT	IMPORT	TOTAL	OUTGOING	INCOMING	TOTAL
361	184	545	1875 532	3158	5033

DATE → 30-10-2023 (MONDAY)

CARGO VEHICLE			PASSENGER DETAILS		
EXPORT	IMPORT	TOTAL	OUTGOING	INCOMING	TOTAL
375	179	554	3440 737	5003	8443

Source: JICA Survey Team

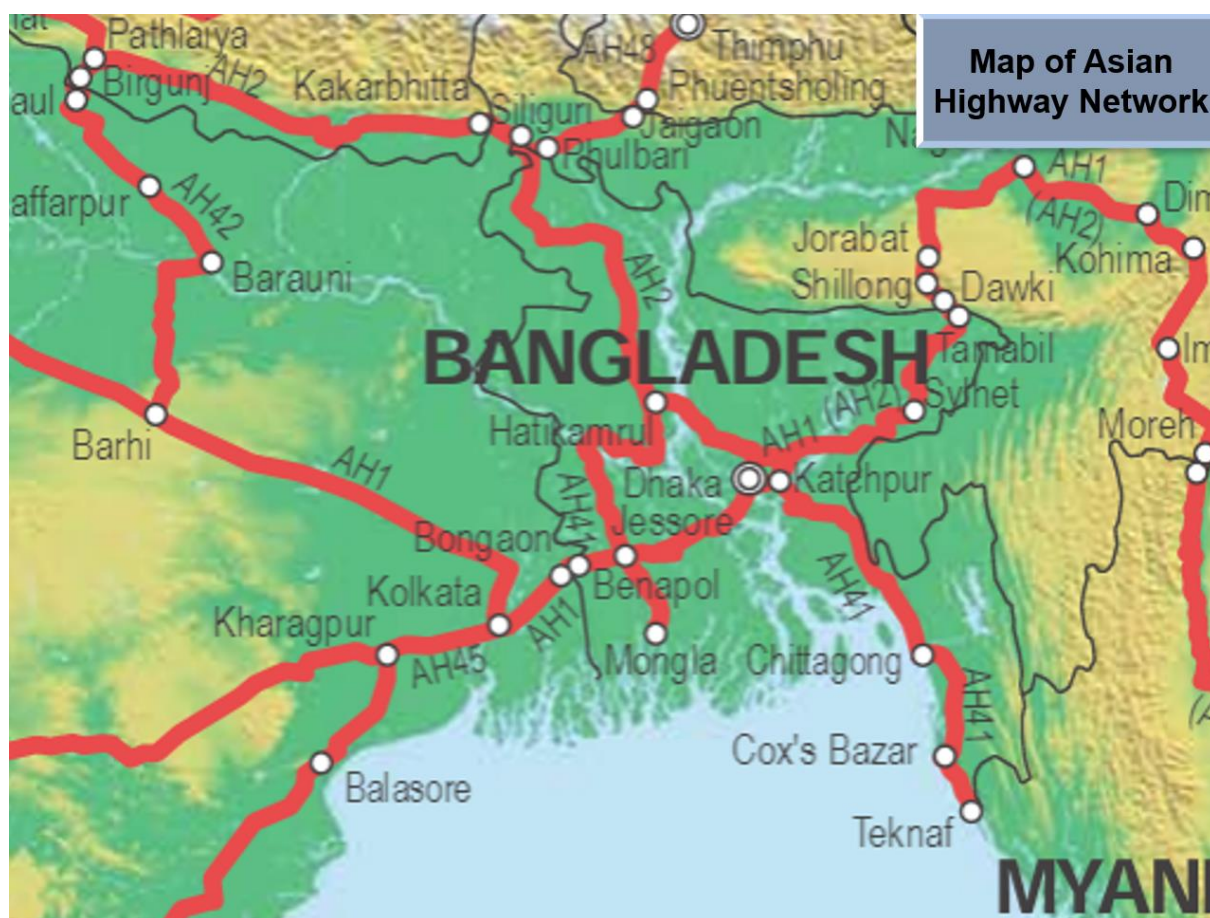
Figure 3-46: Baseline Traffic Data for the Petrapole ICP

For Agartala ICP, according to the ICP staff, that from April to October 2023, there were 26,075.8 metric tons of imports, valued at INR 15.87 crore, while exports totaled only 1,750.84 metric tons (mainly stone, limestone), valued at INR 1,892 crore; the total number of incoming freight vehicles was 2,552, with 742 outgoing vehicles. Passenger traffic is about 30,000 person per month. The incoming passengers from April to October 2023 totaled 118,371, while outgoing passengers totaled 97,690. 70-80% of the passengers are Bangladeshi and 60% are coming for medical reasons.¹⁴

For baseline road traffic data, it is collected from the Asian Highway Database¹⁵, which is published by the Economic and Social Commission for Asia and the Pacific (ESCAP). Highway conditions and its traffic volume in terms of AADT by vehicle types for various highway sections are available from the Database. Below map shows the Asian Highway network that relevant to the target corridors. The Kolkata-Dhaka Corridor is part of AH1, though the relevant sections have their domestic route names.

¹⁴ The value is referenced from the interview with Agartala ICP Customs.

¹⁵ <https://www.unescap.org/resources/asian-highway-database>



Source: UNESCAP, *Asian highway route map*, <https://www.unescap.org/resources/asian-highway-route-map>

Figure 3-47: Map of Asian Highway Network

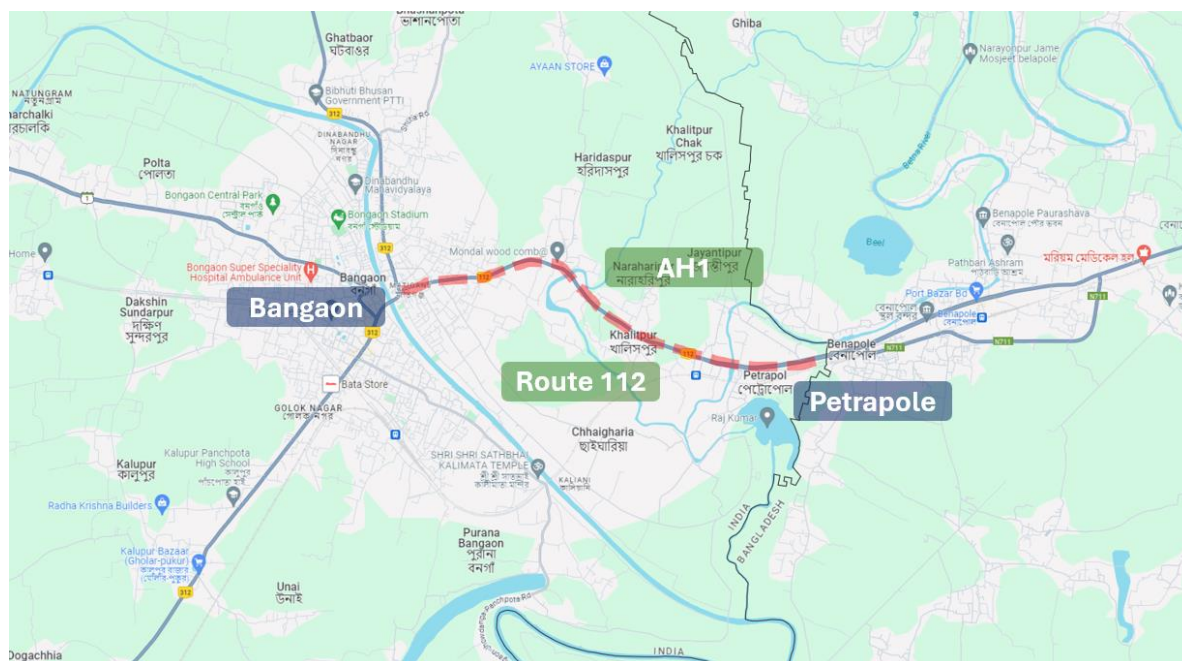
JICA Survey Team identified below sections are highly relevant to this study.

Table 3-24: Relevant Asian Highway Sections

Section No.	Country	Location	Asian Highway No.	National Route No.	Year of Traffic Update
1	India	Petrapole - Bangaon	AH1	Route 112	2019
2	Bangladesh	Benapole - Jashore	AH1	Route N706	2017
3	India	Siliguri	AH2	Route 327	2019

Source: JICA Survey Team

Section 1 is from Petrapole to Bangaon in the India territory; it is Route 112 in the India national road network. The map of the road section is below, with the section colored in red, the major cities colored in Blue, and the Asian Highway and domestic route No. in green. In the Asian Highway Database, the traffic data of this section is dated in 2019.



Source: JICA Survey Team (Google Map)

Figure 3-48: Section of AH1 from Petrapole to Bangaon

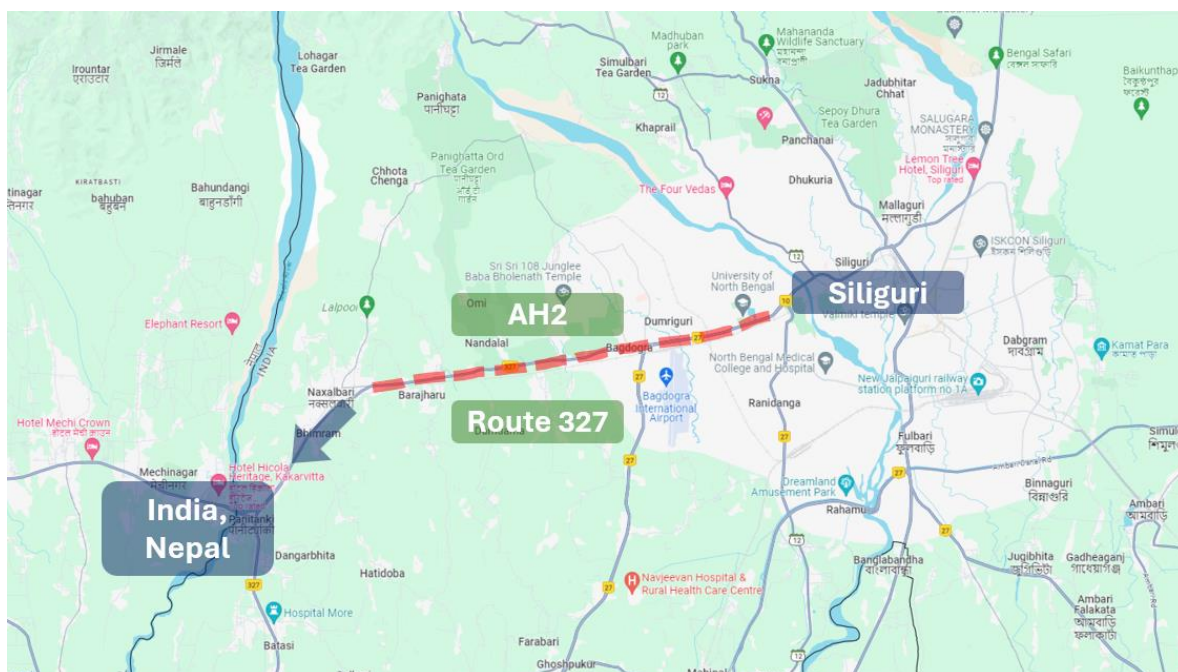
Section 2 is from Benapole to Jashore in the Bangladesh territory, it is Route N706 in the Bangladesh national road network, as shown in Figure 3-49. In the Asian Highway Database, the traffic data of this section is dated in 2017.



Source: JICA Survey Team (Google Map)

Figure 3-49: Section of AH1 from Benapole to Jashore

Not like Section 1 and 2 along the Kolkata-Dhaka Corridor, Section 3 is located in the Siliguri Corridor. It is part of AH2 and the traffic data of 2019 is available from the Asian Highway Database. This section is relevant as traffic diversion from Siliguri Corridor to Kolkata-Dhaka Corridor is expected.



Source: JICA Survey Team (Google Map)

Figure 3-50: Section of AH2 at Siliguri Corridor

Based on the Asian Highway Database, AADT traffic data in terms of vehicle types are summarized in the table below.

Table 3-25: AADT of Relevant Asian Highway Sections

Section	Year	Passenger Car	Pick-up	Bus	Truck	Trailer	Motorcycle	Others	NMV
1 Petrapole	2019	4,164	-	203	1,012	137	2,536	667	9,436
2 Benapole	2017	487	131	992	2,471	-	648	841	1,180
3 Siliguri	2019	1,683	102	340	474	144	3,631	158	2,677

Source: Compiled by JICA Survey Team, based on UNESCAP's Asian Highway Database

The number of freight trucks in India (#1 Petrapole) and Bangladesh (#2 Benapole) is very different, though they are delivering the same amount of import and export. This is due to the size of the truck in general in those countries, i.e., medium cargos with 10-15 tons loading capacity, 3-4 axles are popular in India, on the other hand, small cargos with 4-5 tons and 2 axles are popular¹⁶ in Bangladesh. Trailers are not popular in Bangladesh (along Benapole corridor).

It is noted that the Bangladesh has large number of buses at the section, including international passengers as well as labors in the border facilities. On the other hand, the numbers of buses in India side are limited. Instead of bus, passenger cars, motorcycles and NMVs are larger in India.

The freight traffic volume on the Siliguri Corridor (#3) is smaller than that of Petrapole. This is due to the size of the local economy and less connectivity of NER to other India regions.

Other than the abovementioned baseline traffic data, there is limited reliable and consistent data on current traffic volumes and composition along the target corridors, especially at the border crossings. It should be noted that road traffic collected was counted before COVID (in 2017 and 2019), and before the installation of the e-Suvidha control in Petrapole and the Padma Bridge.

¹⁶ This may be due to the capacity of ferry at the Padma crossing, and it may change after the installation of Padma crossing.

(4) General Transport Cost Comparison between Corridors

The Kolkata-Dhaka Corridor is part of the Kolkata-Dhaka-Agartala Corridor. Freight transport along the corridor is mostly generated by logistics demand between India's NER and the rest of India. Currently, the Siliguri Corridor is used to meet this demand. The Kolkata-Dhaka-Agartala Corridor will be a competitive alternative to the existing Siliguri Corridor, which can be justified by considerable savings in generalized costs, including time costs and charges for transportation. In Table 3-26 and Table 3-27, the generalized cost of road freight transport along the two corridors is compared for bulk and container cargo, respectively.

Table 3-26: Comparison of Generalized Cost for Bulk Cargo from Kolkata to Agartala

For the Kolkata-Dhaka-Agartala Corridor				
Origin to Destination	Distance (km)	Time (Day)	Cost (INR / BDT)	Equivalent Cost in USD
Kolkata to Petrapole ICP	80	1	20,000 INR	240.00
Charges for E-Suvidha			10,000 INR	120.00
Expenses at Petrapole (e.g., weighing charges)			2,000 INR	24.00
Other driver expenses (e.g., food.)			1,500 INR	18.00
Total Cost of the Indian truck at Petrapole before Entering Benapole			33,500 INR	402.00
Detention cost at Benapole for the Indian truck		2	3,000 BDT	27.30
Loading unloading at Benapole for two trucks			12,000 BDT	109.20
Port charges at Benapole			10,000 BDT	91.00
Charges at Benapole			25,000 BDT	230.00
Benapole to Akhaura (assuming the load is transhipped to 2-axle trucks @ BDT 15,000 per truck from Benapole to Dhaka and BDT 30,000 from Dhaka to Akhaura)	325	2	90,000 BDT	819.00
Port charges at Akhaura			4,000 BDT	36.40
Other driver expenses (e.g., food)			2,000 BDT	18.20
Total Cost from Dhaka to Akhaura			96,000 BDT	873.60
Akhaura to Agartala ICP	1	1		
Charges at the Agartala ICP including weighing, parking charges, and the like			2,000 BDT	24.00
Transshipment costs at Agartala			4,000 BDT	48.00
Agartala ICP to Agartala Market	10		6,000 BDT	72.00
Total Cost			12,000 BDT	144.00
Grand Total (A)		6 days and 415 km		1,647.10
For the Siliguri Corridor				
Grand Total (B)		3-4 days and 1,550 km		1,800.00
Comparison of the cost (A) – (B), ratio of the cost difference to (B)				152.90 (8.5%)

Note: The estimation is for transporting 33 tons of bulk cargo from Kolkata to Agartala.

Source: JICA Survey Team and CUTS International

Table 3-27: Comparison of Generalized Cost for Container Cargo from Kolkata to Agartala

For the Kolkata-Dhaka-Agartala Corridor				
Origin to Destination	Distance (km)	Time (Day)	Cost (INR / BDT)	Equivalent Cost in USD
Kolkata to Petrapole ICP	80	1	50,000 INR	600.00
Charges for E-Suvidha		1	10,000 INR	120.00
Expenses at Petrapole (e.g., weighing charges)			2,000 INR	24.00
Other driver expenses (e.g., food)			1,500 INR	18.00
Total cost of the Indian truck at Petrapole before entering Benapole			63,500 INR	762.00
Loading unloading at Benapole for two trucks		1	12,000 BDT	109.20
Detention cost at Benapole for the Indian truck		2	3,000 BDT	27.30
Port charges at Benapole			10,000 BDT	91.00
Charges at Benapole			25,000 BDT	227.50
Benapole to Akhaura (assuming the load is transhipped on to 2-axle trucks @BDT 15,000 per truck from Benapole to Dhaka and BDT 30,000 from Dhaka to Akhaura)	325	2	90,000 BDT	819.00
Port charges at Akhaura			4,000 BDT	36.40
Other driver expenses (food etc.)			2,000 BDT	18.20
Total cost from Dhaka to Akhaura			96,000 BDT	873.60
Akhaura to Agartala ICP	1	1		
Charges at the Agartala ICP including weighing, parking charges, and the like			2,000 BDT	24.00
Transshipment cost at Agartala			4,000 BDT	48.00
Agartala ICP to Agartala market			6,000 BDT	72.00
Total cost from Akhaura to Agartala market			12,000 BDT	144.00
Grand Total (A)		6 Days and 415 Kms		2007.10
For Siliguri Corridor				
Grand Total (B)		7-10 days and 1,550 Kms		2,400.00
Comparison of the cost (A) – (B) (USD), ratio of the cost difference to (B)				392.90 (16.4%)

Note: The estimation is for transporting a 20-foot container weighing 28 tons from Kolkata to Agartala.

Source: JICA Survey Team and CUTS International

Based on the comparison, it is clear that the Kolkata-Dhaka-Agartala Corridor has a 10-20% lower generalized cost compared to the Siliguri Pass when transporting cargo to India's NER, especially for containerized cargo.

(5) Review of Existing Demand Projections

There have been several previous studies and reports that have attempted to forecast demand along the corridors, using different methodologies, assumptions, and scenarios. A review of two relevant studies follows.

The World Bank conducted a study in 2019 that presented freight demand projections for Bangladesh, including potential volumes of border trade. The study report – titled *Moving Forward Connectivity and Logistics to Sustain Bangladesh's Success* – used a freight origin-destination synthesis (FODS) model to estimate current and future freight flows between districts in Bangladesh and between Bangladesh and neighboring countries. The model uses data from various sources, such as surveys of freight forwarders, trade statistics, transport costs, distance data, and surveys of economic activity. Three scenarios were considered for forecasting freight demand to 2030: (i) a baseline scenario that assumes no change in policies or infrastructure; (ii) a policy scenario that assumes the implementation of various logistics policies to improve efficiency and reduce costs; and (iii) an infrastructure scenario that assumes the development of new transport infrastructure, such as roads, bridges, and ports. The study states that

cross-border trade accounts for about 15% of total freight demand in Bangladesh, and improving logistics policies and infrastructure would increase cross-border trade by 25-35% by 2030, compared with to baseline scenario.

Another World Bank study – titled *Bridging Bangladesh and India: Cross-Border Trade and the Motor Vehicles Agreement*, which was published in March 2021 – focused on cross-border trade between Bangladesh and India with special attention paid to the BBIN MVA. The study adopted a spatial general equilibrium model, with road network travel time calculated using GPS data, to measure changes in economic outcomes given changes in trade costs across regions. Three scenarios were examined: (i) an inefficient MVA, which assumed border crossing time of 55 hours at each of the six border posts; (ii) an efficient MVA with 10 hours at the border; and (iii) full integration, which assumed complete integration of Bangladesh and India with no restrictions on foreign truck movements. The study estimates that the MVA would increase national real incomes by 3.5% in Bangladesh and 1.4% in India under the inefficient MVA scenario, and by 11.3% in Bangladesh and 5.6% in India under the efficient MVA scenario¹⁷.

Based on this review, the JICA Survey Team identified the limitation of existing freight demand projections and forecasts:

- First, most of the projections and forecasts are based on socioeconomic models, such as spatial general equilibrium model or gravity models (based on GDP, population, distance, and trade costs), which are often used in such studies, rather than transport forecasting models (based on traffic survey data). The projected output is for the general trade, income, and welfare of a region or country, rather than the freight demand along a corridor.
- Second, the results of these projections and forecasts vary considerably. Some of these projections were based on outdated data, unrealistic assumptions, or limited scope, which limits their validity and applicability for the target corridors.
- Third, the scope of these studies is either at the national level or the international level. There are no specific projections or forecasts for the target corridors. In addition, there is a lack of a multimodal network perspective in the projections/forecasts, especially since significant hard infrastructure development of various modes was observed by the JICA Survey Team during its first field mission.

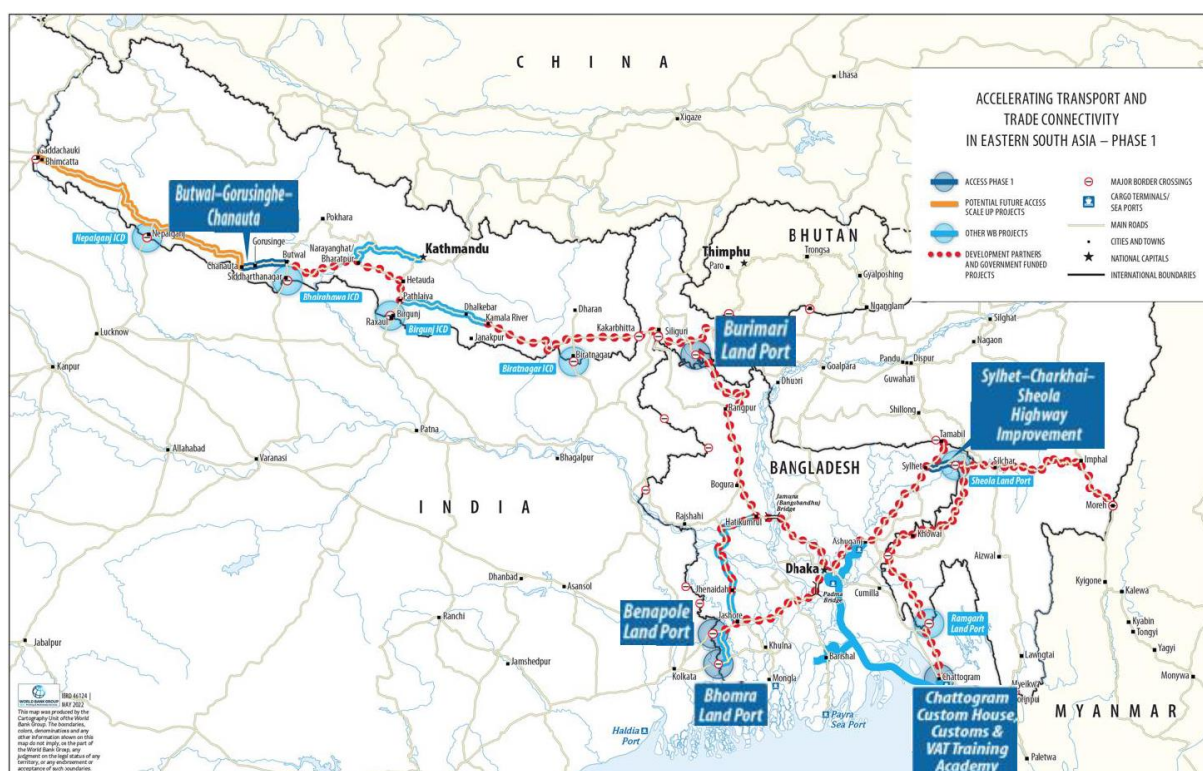
Therefore, there is a need to build a straightforward projection for the corridors with the most up-to-date information on infrastructure development as well as the considerations on MVA implementation.

(6) Connectivity and Infrastructure Development along the Corridors

The JICA Survey Team's field missions offered a great opportunity to collect the most up-to-date information on road and rail connectivity and infrastructure development along the corridors. Future freight demand is greatly affected by connectivity and infrastructure development along the corridors, which determines the accessibility, capacity, quality, and safety of transport services. Despite gaps and bottlenecks in existing connectivity and infrastructure, such as poor road conditions, inadequate border facilities, congestion and delays, and the lack of multimodal options, the JICA Survey Team observed ongoing improvements in road and rail infrastructure. The details on multimodal network development and the connections at the ICPs are presented in Section 3.2. Therefore, there is a need to assess current and planned connectivity and infrastructure development along the corridors and evaluate their impact on the demand forecast.

¹⁷ Other studies reviewed include: (i) JICA's Data Collection Survey on Cross-Border Maritime Traffic in South Asia (2016), (ii) the Asian Confluence Study Assessing Connectivity between Northeast India and Bangladesh: Toward a Prosperous Bay of Bengal Region (2023), and (iii) ADB's TA-9408 on Updating the Road Master Plan in Bangladesh (2024), implemented by RHD and final report is expected in May, 2024.

Ongoing developments will be implemented in a phased manner. A long list of transport infrastructure projects is available, including those supported by different international development partners. For example, Figure 3-51: Phase 1 of the World Bank's ACCESS Project illustrates projects included in Phase 1 of the World Bank's ACCESS Project, including the connectivity improvement, the development of Electronic Automated Border Management Systems (e-ABMS) in Bangladesh and Nepal, and the upgrading of land ports and customs infrastructure. In the following freight demand forecast, a shortlist of high-relevance projects will be extracted from a long list based on the multimodal network perspective and organized into the roadmaps for the target corridors.



Source: World Bank, *Accelerating Transport and Trade Connectivity in Eastern South Asia*, MPA (P176549), 2022

Figure 3-51: Phase 1 of the World Bank's ACCESS Project⁷³

(7) Multimodal Networks and Commodity-Mode Relationships

Development of the multimodal transport network, including road, rail, and water modes, is ongoing, as indicated in the map shown above. Based on this multimodal network, as well as interviews conducted during the field mission, the JICA Survey Team formulated five patterns (see Table 3-3) for trade and transit operations of the Sabroom ICP based on different trade routes, modes, and commodities.

The potential patterns imply that containerized cargo from Chattogram Port will be the main commodity type to be carried. Containers can be transported by road and railway, either using routes in India or Bangladesh, or a combination of the two. There is less local demand for containerized cargo considering social and economic development near Sabroom and the ICP will mainly function as a transit center along the corridor. Road-based freight transit in Sabroom will be a way to realize cargo transit in the near future, and railway connections when complete, will play a more important role for the transit of containerized cargo, as discussed in the following roadmap section.

Logistics demand between India's NER and the rest of India will be distributed to various transport modes, including road, railway, and inland water transport. Each mode has advantages for transporting different types of commodities. For example, the railway network is suitable for the movement of containers between (sea) ports and land borders, while the inland waterway network provides an

alternative to the road and rail network for heavy bulk. Table 3-1 shows detailed routes for different commodities. Based on this assessment, the linkage between commodity type and the transport modes between Kolkata and India's NER is summarized in Table 3-28.

Table 3-28: Linkages between Commodity Types and Transport Modes

Commodity Type	Transport Mode
Bulk / Heavy bulk	Waterborne transport (barges) will be used from Kolkata via inland waterway to Ashuganj, followed by delivery by road/rail to India's NER via Agartala.
Containers	Containers can be transported by the Kolkata-Petrapole-Padma Bridge-Dhaka-Agartala-India NER railway route.
Miscellaneous goods, local goods	Flatbed trucks and local freight forwarders are suitable for the quick and frequent and low-quantity deliveries.

Note: Please refer to Table 3-1 for details.

Source: JICA Survey Team

With the development of a multimodal network, logistics related to bulk and containerized commodities between India's NER and the rest of India will mainly use the railway and inland water transport modes, leaving the survey target Kolkata-Dhaka Corridor to handle road freight demand (which is the focus of the demand forecast) at a relatively local level. The multimodal network will have a substantial impact on the total trade volume between the BBIN countries.

(8) Improvement of the Enabling Environment for Trade Facilitation

Freight demand along the corridors is highly dependent on the trade facilitation enabling environment, which includes the policy, regulatory, institutional, and operational aspects that affect the efficiency and cost of cross-border trade. Despite the uncertainties and risks, the improvement of the enabling environment such as political stability, bilateral relations, the implementation of trade agreements, the harmonization of standards and procedures, the adoption of new technologies, the introduction of MVA, etc., would enhance the trade potential and competitiveness of the corridors, thus have significant implications for the demand forecast.

3.5.2 Methodology for the Demand Forecast

Based on the background, a **macroscopic roadmap-based approach** will be adopted for the road freight demand forecast for the target corridors. It will be essential to examine the logistics demand of the targeted corridors from a **macroscopic point of view**, since the development of the corridors will have significant impacts on trade between India's NER and the rest of India, and bilateral and international trade with Bangladesh and third countries. A phased implementation plan of the multimodal network, i.e., a **roadmap** is proposed based on the priority and the ease of implementation of the relevant projects, which will reflect observations from the JICA Survey Team's first field mission.

The freight demand projection for the target corridors includes 4 steps:

1. Based on the **baseline traffic data** of the road sections as well as the traffic at the borders;
2. Assume the **freight traffic growth rate** considering the improvement of connectivity infrastructure indicated by the **roadmap**;
3. The **traffic diversion** from Siliguri Corridor to the target corridors;
4. **Projection Scenarios** on MVA implementation, including inefficient and efficient MVA scenario, are considered, with reference to the World Bank study of Bridging Bangladesh and India: Cross-Border Trade and the Motor Vehicles Agreement. The positive impact on traffic from the improvement of **soft infrastructure**, including institutional and capacity improvement is not considered in the projection from the conservative point of view. This also considers the possible traffic shift from road to other modes as discussed in the development of **multimodal network**.

The 4 steps are specified in the following section.

3.5.3 Demand Forecast

(1) Kolkata-Dhaka Corridor

Step 1: Baseline Traffic

For the freight demand projection of the Kolkata-Dhaka Corridor, the traffic of Truck type is focused. Daily truck no. of Section 1 (Petrapole – Bangaon) is about 1,000, while Section 2 (Benapole – Jashore) is about 2.5 times of it¹⁸. Jashore is a city 40km away from the cross-border point, and this section traffic covers the traffic from important branches such as R780, Z7551. Bangaon is just 5km from the border point, and the traffic on this section is mainly heading for Petrapole ICP. Therefore, JICA Survey Team considers the traffic of Section 1 as more representative for the cross-border freight traffic along the corridor and will use it as the baseline for traffic projection.

Step 2: Roadmap and Freight Traffic Growth Rate

To accommodate freight growth, road transport infrastructure development along the Kolkata-Dhaka Corridor is examined in detail, and a roadmap in terms of travel hours developed accordingly. Currently, the existing Indian road sections along the corridor are relatively congested, including the section between Petrapole and Bangaon, the section between Bangaon and Chakdaha, and Kolkata-Habra-Bangaon.

Key road infrastructure projects along the corridor were shown in Figure 3-1. The improvements in road infrastructure include upgrading of NH 12 between Kolkata and Kalyani (ongoing), widening of the Bhanga-Jashore-Benapole highway (with completion planned in 2025), and the Padma Bridge that opened in June 2022. Table 3-2 estimated the level of service (LOS) of road connections, considering these improvements. Based on that, travel time in hours along the Kolkata-Dhaka-Agartala Corridor are extracted in Table 3-29.

**Table 3-29: Travel Time in Hours by Road Section
along the Kolkata-Dhaka-Agartala Corridor**

Road sections and travel hours	Up to 2022 (past period)	2023 (present)	Up to 2025 (short term)	To 2028 and Beyond (mid-long term)
Kolkata-Petrapole/Benapole	3.5	3.5	2.5	2.0
Petrapole-Dhaka	8.0	3.5	3.0	3.0
Dhaka-Ashuganj	6.0	4.0	3.0	3.0
Ashuganj-Akhaura/Agartala	3.0	3.0	2.0	2.0
Total hours (reference only)	(20.5)	(14.0)	(10.5)	(10.0)

Source: JICA Survey Team

This is a road travel-hour based roadmap, estimated based on ongoing and planned road infrastructure development. From 2022 to 2023, total travel hours were reduced from 20.5 to 14.0. If the road improvement works are implemented as planned, future travel hours can be further reduced. Total road transport hours from Kolkata to Agartala in 2028 can be half of that in 2022. The major road infrastructure bottlenecks along the Kolkata-Dhaka Corridor will be removed gradually as indicated by the roadmap. In a few years, well-developed road connectivity can be anticipated, making the corridor a competitive alternative to the existing Siliguri Corridor.

The improvement of connectivity infrastructure will have a positive impact on the freight traffic of the corridor. Considering the implementation time schedule, an additional 5% annual growth rate of freight traffic is assumed during 2025-2028, in addition to the 5% base annual growth rate.

¹⁸ As explained earlier, the difference of freight vehicle volume may due to the difference of vehicle load and axle capacity.

Step 3: Traffic Diversion

The corridor will still function as a main route to India's NER in the future. It is assumed that 70% of the freight traffic will continue to use the corridor, while 20% will be diverted to the Kolkata-Dhaka Corridor when road improvement projects along the corridor are completed in 2030 (it is assumed that the remaining 10% will use the Kolkata-Chottagram-Sabroom Corridor, as discussed in the following section). From the baseline traffic, it is noted that in 2019, daily truck traffic along a typical section of the Siliguri Corridor is about 500.

Step 4: Projection Scenario and Result

JICA Survey Team assumed two projection scenarios, namely the inefficient and efficient MVA scenario. The traffic growth rate for different scenarios refers to the World Bank study of Bridging Bangladesh and India: Cross-Border Trade and the Motor Vehicles Agreement (a detailed review is available in 3.5.1). It is assumed that for the inefficient MVA scenario, the added traffic growth rate is 3%; for the efficient MVA scenario, the added traffic growth rate is 10%. The MVA effect start year is set from 2029.

The Table below summarizes the traffic growth rate, which is followed by the demand projection calculations.

Table 3-30: Projection Scenario and Traffic Growth Rate

Growth Rate	Before 2024	2024	2025	2026	2027	2028	2029	2030
Natural growth rate	5%	5%	5%	5%	5%	5%	5%	5%
Addition by connectivity improvement	-	-	5%	5%	5%	5%	-	-
Addition by MVA - inefficient scenario	-	-	-	-	-	-	3%	3%
Addition by MVA - efficient scenario	-	-	-	-	-	-	10%	10%
Sum - inefficient MVA scenario	5%	5%	10%	10%	10%	10%	8%	8%
Sum - efficient MVA scenario	5%	5%	10%	10%	10%	10%	15%	15%

Source: JICA Survey Team

The traffic projection includes the traffic natural growth (growth rate is assumed to be 5%), the additional growth rate from the connectivity improvement (5% for 2025-2028), and the additional growth rate from MVA implementation (which is 3% for inefficient scenario and 10% for efficient scenario). With the traffic diversion (mainly from the Siliguri Corridor) considered, the traffic projection till 2030 is calculated in the table below.

Table 3-31: Traffic Projection for Kolkata-Dhaka Corridor

Item	Passenger Car	Truck	Trailer
2019 baseline	4,164	1,012	137
Inefficient MVA scenario	2030	9,076	2,206
	2030 Diverted	-	207
	2030 Total	9,076	2,412
Efficient MVA scenario	2030	10,290	2,501
	2030 Diverted	-	234
	2030 Total	10,290	2,735

Source: JICA Survey Team

Truck volume will reach 2,200 in 2030 for inefficient MVA scenario and 2,500 for efficient MVA scenario. For trailers, it will be 300 and 340 respectively. The diverted freight traffic is estimated to be about 200 trucks and 70 trailers in 2030, making the total cross-border freight truck of the corridor at 2,800 per day for inefficient MVA scenario and 3,200 for efficient MVA scenario. It is expected that after 2030, the freight demand of the Kolkata- Dhaka Corridor will increase at the same pace with local social and economic development.

For the freight traffic at the ICP, LPAI has indicated that the Petrapole ICP will be able to accommodate up to 1,500 vehicles (1,050 export vehicles and 450 import vehicles) per day. Therefore, road freight traffic volumes at the ICP may be expected to reach 1,500 in 2030 (implying a 15% annual growth rate from 2023 to 2030). After 2030, the ICP freight volumes may be assumed to grow at the same rate as the local GDP and population.

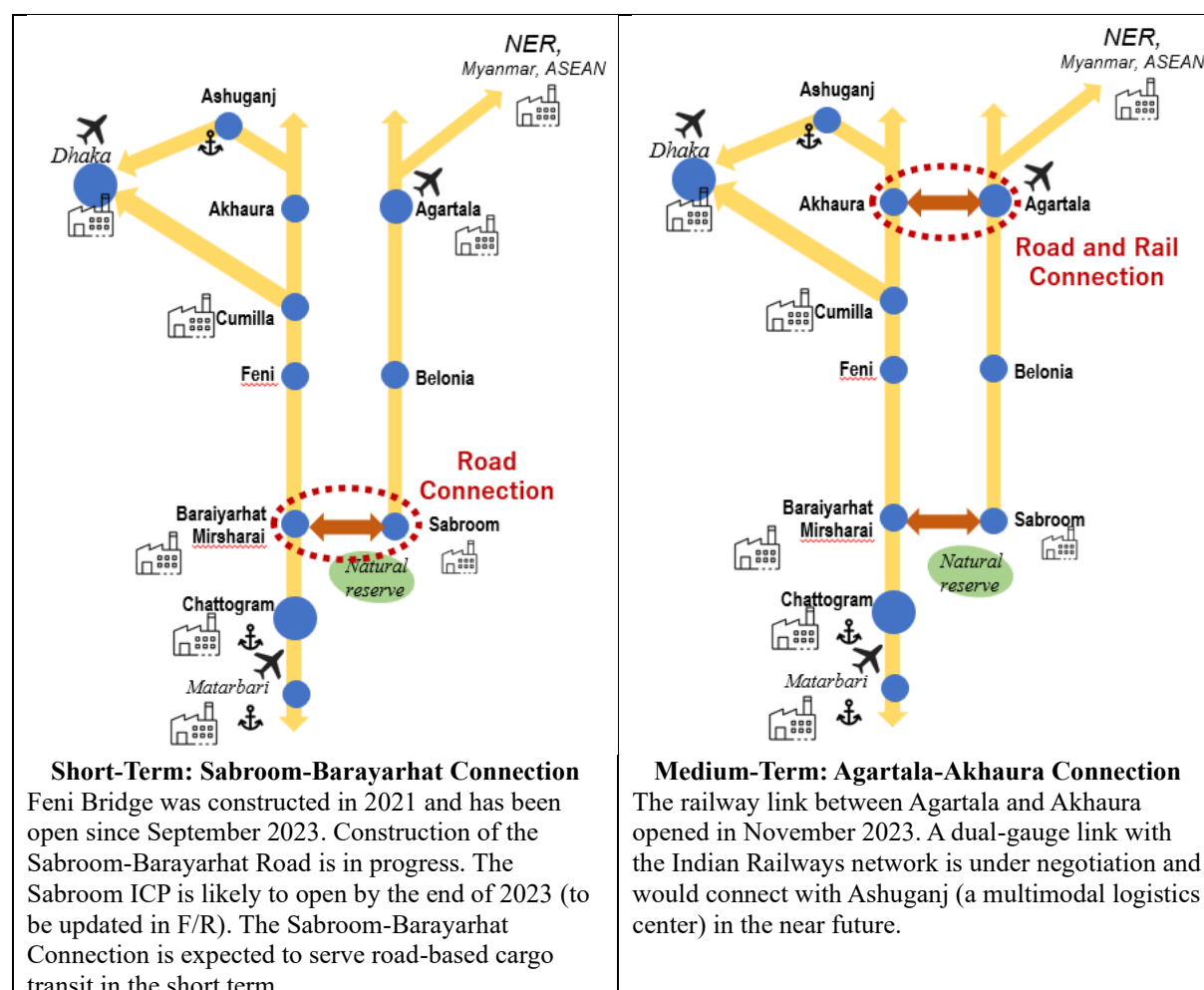
(2) Demand Forecast for Sabroom Connection

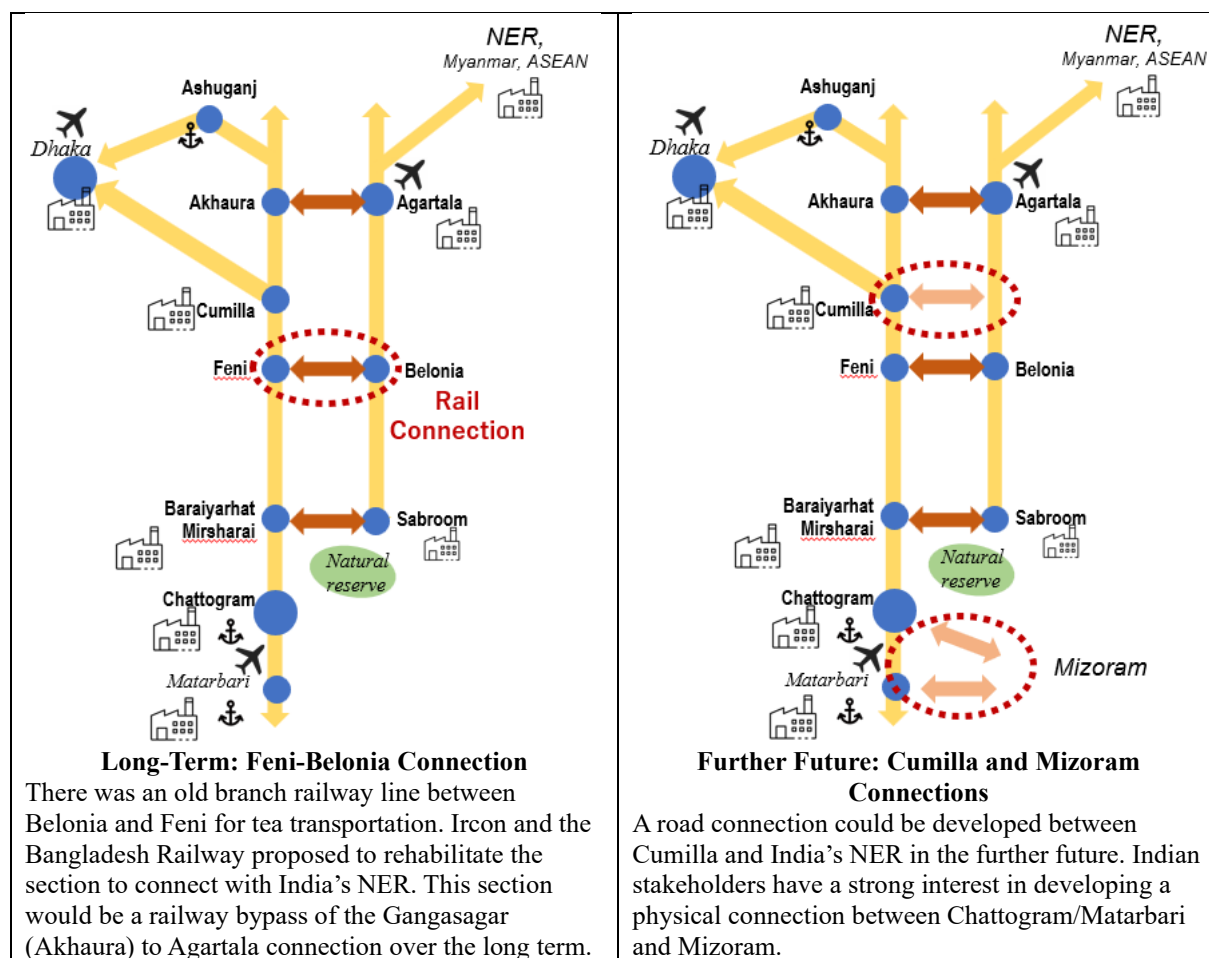
Step 1: Baseline Traffic

Currently, there is no existing traffic for the Sabroom connection. The demand projection will consider the traffic diversion only. However, to facilitate the understanding of the future traffic, JICA Survey Team developed the roadmap of the corridor, as introduced in Step 2.

Step 2: Roadmap for the Chattogram-India NER Corridor

The Bangladesh-Tripura Industrial Ladder (BTIL) corridor concept was proposed in Section 3.2, which would be a ladder-like multimodal network. A roadmap for the ladder network is introduced in Figure 3-52, based on the anticipated development period.





Source: JICA Survey Team

Figure 3-52: Roadmap of Ladder Network for the Chattogram-India NER Corridor

The roadmap for developing the ladder network has implications for the road freight demand forecast. In the short term, Sabroom will be connected with the Chattogram-India NER Corridor, through a road route on the Bangladesh side and redundant road and railway connections on the Indian side.

Step 3: Traffic Diversion

Once open, the Sabroom connection will be the shortest path from Chattogram Port to India NER, thus it will be a competitive alternative to the existing Siliguri Corridor. It is assumed that 10% of the road freight traffic of Siliguri Corridor will be diverted to the Chattogram-India NER Corridor in the short term.

Step 4: Projection Scenario and Result

The lack of baseline traffic and the low amount of the diverted volume makes the projected result insensitive to the MVA scenario setting. The same traffic growth rate is assumed as the Kolkata-Dhaka Corridor, and the projection result is presented below.

Table 3-32: Traffic Projection for Sabroom Connection

Item	Truck	Trailer
Inefficient MVA scenario, 2030 Total	104	31
Efficient MVA scenario, 2030 Total	117	36

Source: JICA Survey Team

Under such assumptions, the cross-border road freight traffic of the Sabroom connection is estimated to be about **100 – 120** in 2030 (assuming the traffic of Siliguri Corridor increases at the same growth rate of the Kolkata-Dhaka Corridor, then its truck traffic will be 1,300-1,500 and trailer will be 300-350 in 2030).

For the cross-border freight traffic at the ICP, the DPR for the Sabroom ICP indicated a capacity of the ICP facility to be designed on the assumption of 300 units of vehicle of imports and 150 units of exports per day. As for the road freight demand forecast at the ICP, it is assumed the traffic volume will reach 450 in 2030. It is assumed that after 2030, road freight demand will increase at the same rate as the local GDP and population.¹⁹

(3) Demand Forecast for the Agartala - Akhaura Corridor

Step 1: Baseline Traffic

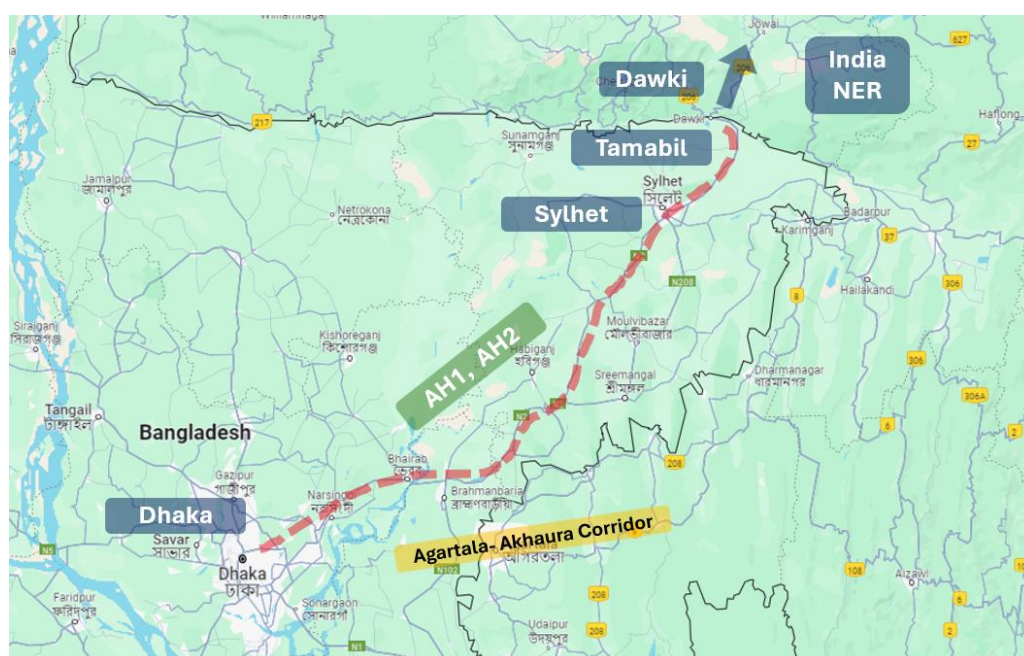
For Agartala ICP, there were 2,552 import freight vehicles and 742 export vehicles from April to October 2023. Translating the total vehicle volume into daily traffic, it is about 22 per day²⁰. The existing road traffic is small.

As mentioned below, there are 2 sources of the diverted traffic, and one of them is the Dhaka-Sylhet-India NER Corridor. The baseline traffic of the Dhaka-Sylhet-India NER Corridor is collected from Asian Highway Database, AADT traffic data in terms of vehicle types are summarized in the table below.

Table 3-33: Baseline Traffic of the Dhaka-Sylhet-India NER Corridor

Section	Year	Passenger Car	Pick-up	Bus	Truck	Trailer	Motorcycle	Others	NMV
Dawki (India)	2019	480	0	14	73	0	56	0	7
Tamabil (Bangladesh)	2017	108	9	874	2726	0	132	801	19

Source: Compiled by JICA Survey Team, based on UNESCAP's Asian Highway Database



Source: JICA Survey Team (Google Map)

Figure 3-53: Section of AH1 and 2 at Dhaka-Sylhet Corridor

¹⁹ The DPR for NH 208 considered normal traffic growth based on traffic survey data and socioeconomic data. Using an elasticity approach, the DPR proposed a 5% annual growth rate for road transport.

²⁰ JST collected the traffic data from Agartala ICP site visit. It is considered there are 150 workdays from April to October.

The number of freight trucks in India and Bangladesh is very different. This is due to the Tamabil-Sylhet road is an important National Highway (N2) for Bangladesh, and the traffic counted covers the large domestic portion²¹. In addition, the size of trucks in India and Bangladesh is different as mentioned earlier. JICA Survey Team considers Dawki's traffic to be more representative for the cross-border traffic and will use it as the baseline for projection.

Step 2: Roadmap for Agartala - Akhaura Corridor

The roadmap is mentioned in the previous discussion on the Roadmap of Chattogram-India NER Corridor. As mentioned in the roadmap, the railway link between Agartala and Akhaura was opened in November 2023. A dual-gauge link with the Indian Railways network is under negotiation and would connect with Ashuganj (a multimodal logistics center) in the near future. Therefore, an important role of rail mode is expected for the freight transportation on the Agartala - Akhaura Corridor.

Step 3: Traffic Diversion

The Agartala – Akhaura Corridor is a 10km road section, which is an extension of the Kolkata-Dhaka-India NER Corridor and an integral part of the Chattogram-India NER Corridor. The establishment of the corridor will improve the resiliency of the India NER network. It can be seen as the redundancy of the existing Dhaka-Sylhet-India NER, and an alternative route from Bangladeshi seaport (Chattogram, Matarbari) to India NER. Based on such positioning of the corridor in the network, the diverted traffic will include:

1. The traffic diversion from Dhaka-Sylhet-India NER Corridor. JICA Survey Team assumes 30% of its traffic will be diverted to the Agartala-Akhaura Corridor when it is open.
2. The traffic diversion from Siliguri Corridor to Kolkata-Dhaka Corridor as the Agartala-Akhaura Corridor is an extension of the corridor. 20% of the Siliguri Corridor traffic is assumed to be diverted, and the traffic volume will be 200 per day in 2030.

Step 4: Projection Scenario and Result

Same traffic growth rate is assumed as the Kolkata-Dhaka Corridor, the projection result is listed in the table below.

Table 3-34: Traffic Projection for Agartala-Akhaura Corridor

Item		Truck	Trailer
2023 baseline		22	-
Inefficient MVA scenario	2030	39	-
	2030 Diverted from Dhaka-Sylhet Corridor	48	-
	2030 Diverted from Siliguri Corridor	207	63
	2030 Total	287	63
Efficient MVA scenario	2030	45	-
	2030 Diverted from Dhaka-Sylhet Corridor	54	-
	2030 Diverted from Siliguri Corridor	234	71
	2030 Total	333	71

Source: JICA Survey Team

The final projection of the freight traffic of the Agartala-Akhaura Corridor is the sum of these diversions. For 2030, the freight vehicle volume (including trailers) is estimated to be about 350 (Inefficient MVA) or 400 (Efficient MVA) per day. After 2030, road freight demand will increase at the same rate as the local GDP and population.

²¹ The strategic role of Tamabil should be noted, as it is the major source of rocks and aggregates in Bangladesh.

3.5.4 Logistics Characteristics and Demand of the Major Land Borders

The volume and characteristics of goods at the major border crossings between India and Bangladesh can be summarized as follows. For detailed statistics, see Sections 3.2.1, this section, etc.

Table 3-35: Logistics Characteristics and Demand of the Major Land Borders

Major land borders (India - Bangladesh)	Volume and Characteristic in Logistics
Petrapole - Benapole	The main border between Kolkata and Dhaka Corridor, and the largest land border between the two countries. It handles exports of garment materials and transportation machinery from India and exports of light industrial products from Bangladesh. The number of incoming freight vehicles is 500 per day (350-400 from India to Bangladesh and 100-150 from Bangladesh to India). With the improvement of road infrastructure in the corridor, the number could reach 1,500 vehicles per day (India to Bangladesh 1,050 vehicles, Bangladesh to India 450 vehicles, about 3 times the current level) by 2030.
Gojadanga - Bhomra	Located between Kolkata and Khulna, it is an alternative border to the above-mentioned Petrapole-Benapole, with almost the same number of border entries (300,000 vehicles per year in Benapole versus 270,000 vehicles per year in Bhomra). On the other hand, agricultural products are handled more, with about one-fifth of the trade volume.
Other Borders between West Bengal and Bangladesh	West Bengal and eastern Bangladesh have traditionally had economic interactions and trade in agricultural products and commodities can be seen. The trade Many exports are from India.
Dawki - Tamabil	Cement aggregate exports from India are the main commodity handled, with a singular concentration of dump trucks. The demand of aggregate in Bangladesh is firm and this trend is expected to continue.
Agartala - Akaura	The largest land border on the Tripura, exports of fresh fish and industrial products from Bangladesh and wheat from India are seen. Bangladesh's exports exceed those of India. Currently, the daily export volume is 20 to 30 trucks per day, but with the future development of the rail line, exports are expected to reach 300 to 450 vehicles per day, including transit transport from India.
Starkandi - Sheola and vicinity	Connects Northeast Bangladesh to Assam, Meghalaya, and other states. If the N2 road in Bangla is improved and the Ashuganj River Port is developed, it could be positioned as a transit corridor to the northeast states.
Sabroom - Ramgarh	No current cargo traffic, awaiting opening (as of May 2024); full-scale operations are envisioned after the Ramgarh to Baraiyahat road improvement envisioned after summer 2025. Container transport via Chattogram port, mainly transit transport within India, is expected to be the main source of transportation. Future traffic will be influenced by the scale of demand in the northeastern states, however, 100-120 units of cross-border cargo per day are expected once the road connectivity is ready.

Source: JICA Survey Team

Chapter 4 Strategic Approach and Proposals

The following sections summarize findings of Chapters 2 and 3 and suggest issues and interventions to be considered for further improvement of cross-border logistics in the region. The JICA Survey Team formulated nine proposals for possible further assistance in a project sheet format.

4.1 Major Findings in Each Area

4.1.1 Findings Related to the Institutional Setting for Cross Border Transport

India's Strong Interest in Alternatives to the Siliguri Corridor

As indicated in Chapter 2, there are several major regional and bilateral trade facilitation agreements, completed or approaching finalization, including the Agreement on the Use of Chattogram and Mongla Port[s] (ACMP) for the Movement of Goods to and from India between the People's Republic of Bangladesh and the Republic of India (ACMP), the Protocol on Inland Water Transit and Trade (PIWTT) by India and Bangladesh, and the Agreement on Coastal Shipping between India and Bangladesh.

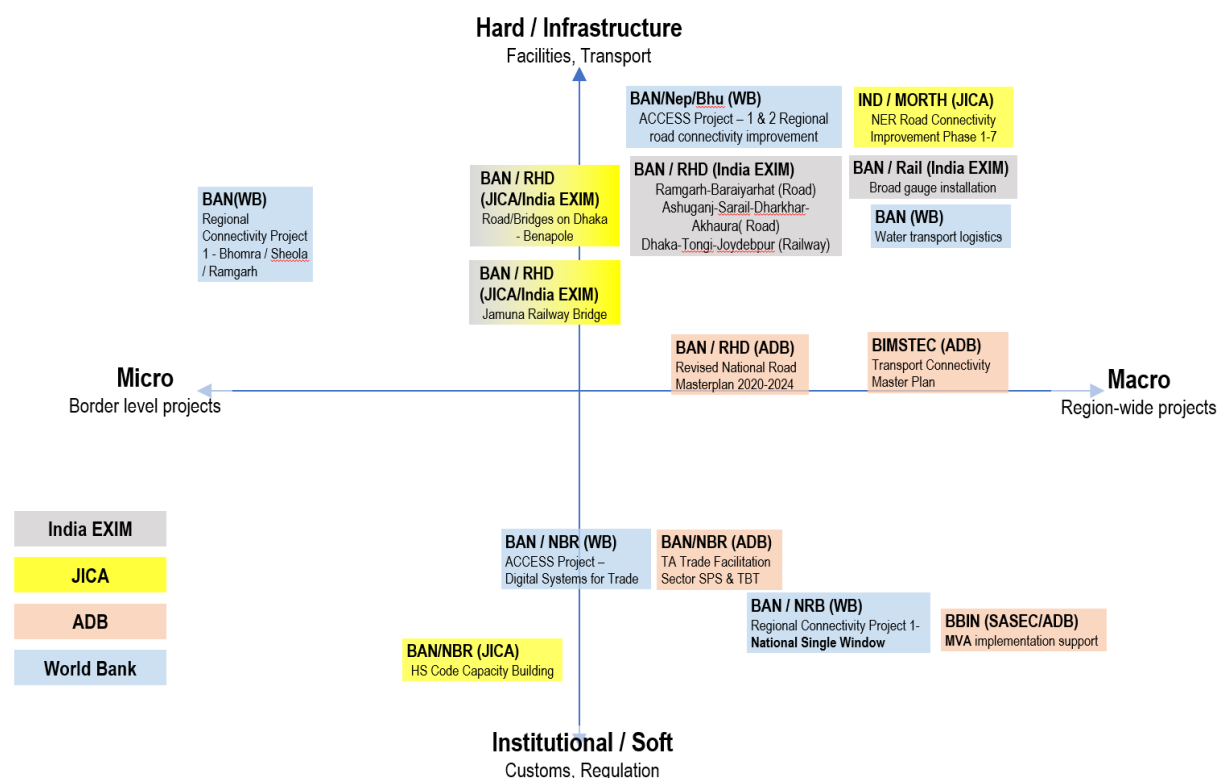
While JICA optimistically looks forward to and expects continued progress in trade facilitation between and among the concerned countries, a major motivation for those agreements for India is the development of an alternative or alternatives to the congested Siliguri Corridor to secure additional capacity for domestic transit demand. It is noteworthy that the agreements cover multiple modes, not just road transport.

For example, the development of routes to the North Eastern Region (NER) via Chattogram-Sabroom pursuant to current agreements is not for imports from third countries. – rather, the bilateral agreements envision "only same country transit to the NER from the rest of India" via Chattogram-Sabroom. At the same time, India has a strong need to develop route alternatives to the Siliguri Corridor.

While it would be ideal for third-country cargo to enter the NER from Chattogram-Sabroom, most of these imports, if any, would come from China, and given the India-China relationship, such trade demand with China is likely to be low or controlled.

Various Supports by the World Bank, ADB, JICA, and Regional Organizations

The JICA Survey Team's review in Chapter 2 showed that the world Bank, ADB, JICA, and regional organizations are active in supporting cross-border trade facilitation in the region and have supported masterplans, investment projects, and soft components with regional scope as well as individual land port improvement projects. Figure 4-1 summarizes the major projects and scopes in two axes, i.e., soft/hard in the vertical axis, and geographical ranges of the coverage in the horizontal axis. Section 2.5 and 2.6 provide for details.



See section 2.5 and 2.6 for details

Abbreviations: ADB = Asian Development Bank; BBIN = Bangladesh, Bhutan, India, and Nepal; EXIM = export-import; JICA = Japan International Cooperation Agency; NBR = National Board of Revenue (Bangladesh); RHD = Roads and Highways Department (Bangladesh); WB = World Bank

Source: JICA Survey Team

Figure 4-1: Demarcation Mapping of Projects by Development Partners and Proposed Projects

The World Bank has a broad range of assistance activities, including regional hard infrastructure¹ and border facility development at individual land ports, and regional and national institutional development, e.g., national single window (NSWs), border management systems, and smart applications for traffic flow management. As shown in light blue in the figure, the World Bank has supported several strategic studies for Bangladesh and the NER on transport integrations and related subjects. Therefore, the boxes in light blue can be seen in all quadrants in the figure. Subsection 2.6.3 provides more details.

ADB's major contributions have included support for regional masterplan development for SASEC, and BIMSTEC; and the Bangladesh Road Master Plan (Highway Master Plan 2041). ADB has also supported trade facilitation TAs, e.g., customs processes strengthening for the Bangladesh National Board of Revenue. The pink boxes relate to planning (in the middle of the figure) and institutional areas (at the bottom of the figure). Subsection 2.6.4 provides more details.²

JICA has supported planning for regional connectivity, as well as infrastructure investments in the NER road network over seven phases, and capacity building for Bangladesh Customs. JICA's support has been integrated with physical connectivity improvements supported by the Exim Bank of India. The

¹ E.g., the Meghalaya Integrated Transport Project (2021-2026).

² ADB has also provided support for road projects in the North Eastern Region, e.g., (i) India: North Eastern State Roads Investment Program – Project 2 and Multitranchise Financing Facility, for improvement of about 235 km of state roads in the states of Assam, Manipur, Mizoram, and Tripura, completed in December 2022 [https://www.adb.org/sites/default/files/project-documents/37143/37143-033-pcr-en.pdf]; and (ii) provision of transaction advice by ADB's Office of Public-Private Partnership (OPPP) on the Joydebpur Mymensingh Road (N3) PPP project [https://www.adb.org/news/bangladesh-mandates-adb-advise-400-million-expressway-connecting-10-economic-zones].

improvement of Jamuna (Bangabandhu) Bridge and double tracking of Joydebpur - Ishurdi section is also financed by JICA.

Financial support from the Exim Bank of India has been targeted the physical improvement of road and rail infrastructure, particularly for border connectivity. Reference may be made to boxes at the top of the figure.

Less Industrial Connectivity between the North Eastern Region and Bangladesh

From cross-border freight vehicle movement statistics between India and Bangladesh, it is clear that economic and industrial connectivity is much less between the NER and Bangladesh, compared with the situation between West Bengal and Bangladesh. The high trade volume of stone aggregates at the Dawki/Tamabil border crossing is dependent on robust construction demand in Bangladesh.

The industrial setting and export potential of the NER was examined in a detailed ADB study, which recommended bamboo products, fruits, spices, and medical tourism to drive regional development. However, as reported in the Chapter 3, at present local industries in the NER depend on demand from the rest of India, which entails unnecessary transport and logistics costs. “Local” trade restrictions at Agartala are a barrier to trade between the NER and Bangladesh.

JICA has supported NER road network development, industrial connections and cooperation should be cultivated in border areas between the NER and eastern Bangladesh. As mentioned, India will focus on transit, but additional elements should be added.

This survey has proposed the concept of an NER and Bangladesh Industrial Ladder, showing that the development of regional connectivity and industrial resources and industrial zones along two corridors in Bangladesh and Tripura/Assam, and the development of multiple border crossings, will promote regional integration.

4.1.2 Findings Related to the Infrastructure Setting

Infrastructure Is Improving, and a Rail Bridge in Ashuganj Will Be an Additional Improvement

Although there are several bottlenecks in road sections near the border area, arterial road connectivity between Kolkata and Petrapole is being increased, with expressway development and road widening. In addition, the road network in Bangladesh along the Kolkata-Dhaka Corridor was dramatically improved with the opening of the Padma Bridge in June 2022.

In addition to road transport, improvement of east-west railway connections in Bangladesh with broad gauge (dual gauge) is ongoing, and the railway bridge at Ashuganj (on which Bangladesh and ADB are discussing financing) will be the last section of the broad-gauge network in eastern Bangladesh. The operational capacity of the Bangladesh Railway will be the next bottleneck for handling transit demand from Kolkata/Chattogram to the NER after completion of the broad-gauge network. The congested Chattogram Port and main railway line to Dhaka will need further capacity to serve transit traffic to the NER.

Ashuganj river port will also be a focal point over the next decade, serving inland water, rail, and road transport. In addition, there will be a connection to Agartala and Dawki (a border crossing in Meghalaya across from Tamabil, Bangladesh), en route to Sylhet and beyond. Bulk cargo such as cement and rebars for construction will shift to inland water transport.

The JICA Survey Team proposed a roadmap of accessibility improvements for east-west transit using road and rail, which suggests that road and rail connectivity will provide multilayered connectivity to and from the region.

Petrapole/Benapole: High Demand from India to Bangladesh, and for Passenger Traffic

After installation of the e-Suvidha system in June 2022 with expanded official parking in the border area, the operation in Petrapole has been normalized. BLPA's improvements at Benapole will be helpful, and a new parking area will absorb excess demand at the border and alleviate congestion on the main road in Benapole. Large-scale CCTV installation in Benapole in 2022 shows positive will for border control by Bangladesh. Import-export demand from India to Bangladesh will remain and affect operations in Benapole.

Ghojadanga/Bhomra – the other border crossing along the corridor connecting Kolkata and Khulna, about 40 km south of Petrapole/Benapole – still has heavy congestion and its freight traffic volume is similar to that of Petrapole/Benapole. Efficient operations at Ghojadanga/Bhomra will be necessary to enhance regional trade. The World Bank has been supporting the operation of Bhomra on the Bangladesh side.

The limited interest in containerization and palletization along this corridor will become an issue. Transit demand in Petrapole/Benapole depends on the regional economy and logistics service providers. A Bangladeshi stakeholder noted delays in containerization and suggested developing a container lease service in the region.

Sabroom/Ramgarh: Unclear Operational Visions, and Limited Connectivity with the Local Market

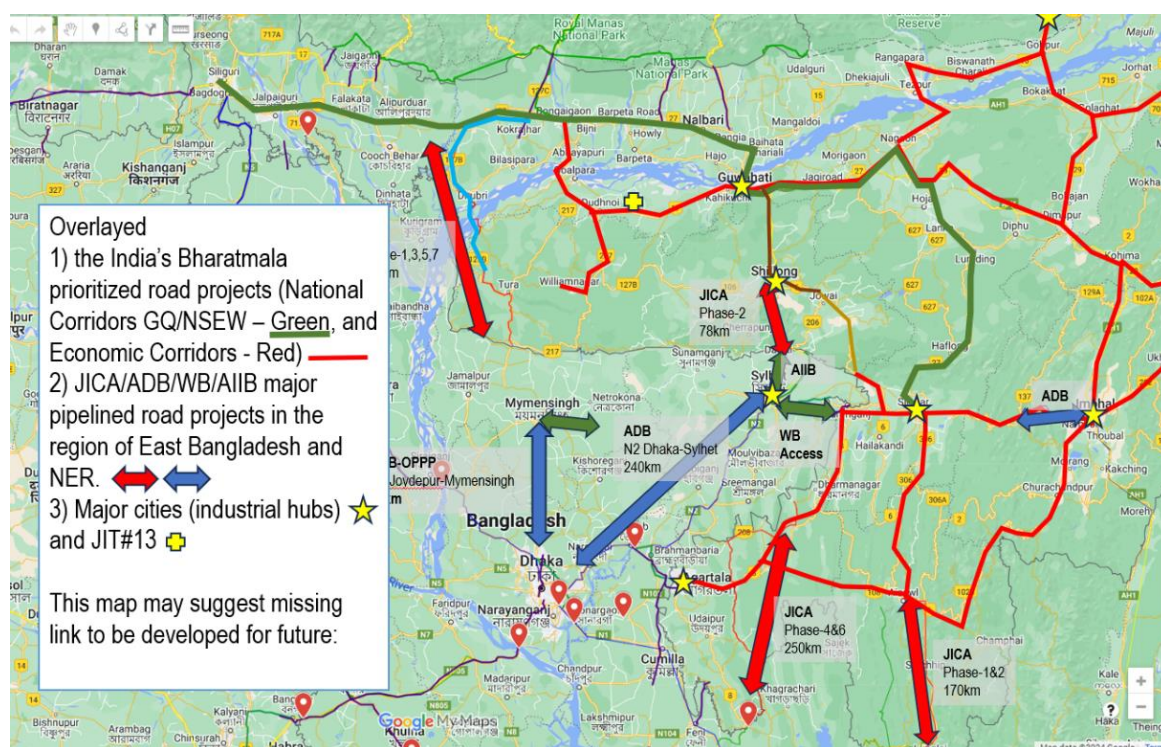
The Sabroom Integrated Check Post (ICP) is to serve as a transit gate via Chattogram Port, but the operational plan for the ICP is unclear, and there is considerable competition among ICPs, road, and rail transit routes through Sabroom. Local market stakeholders in Agartala seek to export their products to the Bangladesh market, but as noted, there are local trade restrictions on imports to Bangladesh, and industrial ties between Tripura and eastern Bangladesh are not strong.

The development of Mirsharai Industrial Estate, mentioned in Section 3.2.5, will be key for Sabroom and Tripura. Mirsharai is on the way between Chattogram and Sabroom and it will help develop industrial value chains through Sabroom, Tripura, and the rest of the NER. The size of development is much larger than other industrial park in Bangladesh and it is oriented to the local market rather than export/import, which will require local resources from Tripura and NER. The JICA Survey Team proposed an Industrial Ladder concept for Bangladesh and Tripura to enhance industrial connectivity in the region.

Redundancy in the transit network is essential for development of Sabroom, which is to be an alternative to transit via the Siliguri Corridor. NH 208 will be an important bypass of NH 8 from Sabroom and the NER. The other rail and road connections to Sabroom and Dawki along the border should be carefully examined for further development of the Industrial Ladder.

Proposal for Non-pipelined Link Development in NER and Bangladesh by JICA Survey Team

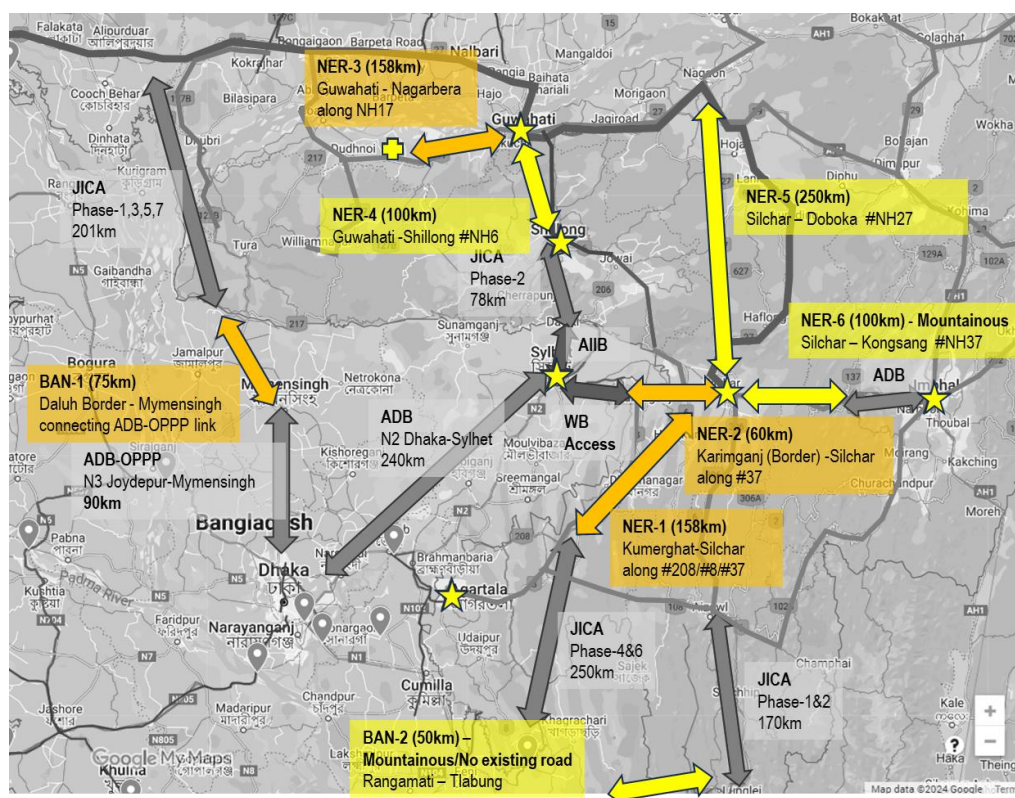
There are several on-going road infrastructure development projects and masterplans in the target region, as summarized in the Chapter 2. JICA Survey Team prepared the following charts overlaying i) India's Bharatmala Pariyojana road master plan (Chapter 2.2.2), ii) JICA/ADB/WB/AIIB major pipelined road projects in NER and eastern Bangladesh (see details in Chapter 2.9), and iii) major cities in the region.



Source: JICA Survey Team (Google Map)

Figure 4-2: On-going Road Projects overlaying with Major Cities

Then, JICA Survey Team proposes the following Non-pipelined links in the region. The details and background of those proposed links are summarized in the following table.



Source: JICA Survey Team (Google Map)

Figure 4-3: Non-Pipelined Road Links to Be Developed in the Target Region

Table 4-1: List of Non-pipelined Road Links with Development Potentials

Prioritized Group (Orange Arrows)	
NER-1 (158 km) Kumerghat - Silchar	Consisting of India National Highway #208/#8/#37. Connecting the JICA Phase 4&6 project for Sabroom/Khowai section, and regional hub city Silchar.
NER-2 (60 km) Karimganj Border - Silchar	Consisting of India National Highway #37. Connecting Karimganj (Border) to regional hub Silchar. WB Access project will cover the connection in Bangladesh side.
NER-3 (158 km) Guwahati - Nagarbera	Along India National Highway #17. Connecting Guwahati to JIT#13 site (Nagarbera) – which can be considered as low possibility.
BAN-1 (75 km) Daluh Border - Mymensingh	This will connect 1) Dhaka - Mymensingh (ADB OPPI project) and 2) JICA Phase 1-3-5-7 projects, including Dhubri Bridge, and will comprise short-cut between Dhaka and Bhutan.
Lower Priority Group with High Implementation Risk (Yellow Arrows)	
NER-4 (100 km) Guwahati - Shillong	Along India NH6, connecting JICA Phase-2 project, but regional instability are expected.
NER-5 (250 km) Silchar - Doboka Town	Along India NH27, designated as National E-W corridor, GoI may develop by themselves.
NER-6 (100 km) Silchar - Kongsang	Very mountainous section, connecting to ADB road project to Imphal, Manipur.
BAN-2 (50 km) Rangamati - Kawrpuichhuah (Tlabung)	There is no existing road, mountainous, high security risk, the shortcut to Mizoram from Chattogram.

Source: JICA Survey Team

The proposed sections are selected with the following reasons;

- 1) Connecting major land ports (Sabroom and Agartala) to the major cities and target destinations in the NER. (NER-1~NER-6, BAN-2)
- 2) Connecting on-going projects funded by development partners (NER-1, NER-4, NER-6, BAN-1)

JICA Survey Team proposed these links to India MoRTH, and Bangladesh RHD for their assessment. MoRTH mentioned that they will publish a new highway development plan to expand high-capacity access-controlled highway network in the NER by 2037³ (see Chapter 2.2.2 (vii)). MoRTH also requested JICA Survey Team to propose land bridges connecting NER and the rest of India, alter the Padma bridge corridor and Siliguri corridor. LPAI advised JICA Survey Team that it will be realized by i) Petrapole-Benapole bypass function, and ii) Hili-Makhendraganj connection (see Proj-7 and Proj-8 proposals in this chapter)

RHD agreed to the proposals of Proj-1 and Proj-2. RHD suggested the proposals should be kept consistency with the on-going road masterplan funded by ADB.

4.1.3 Findings Related to Customs Operations and DX

Continued Requirements for Improved Customs Operations and Digital Transformation

Findings of this Final Report are consistent with recent findings of ADB⁴ regarding trade facilitation in the region, including the following:

- (i) Cargo clearance processes still require face-to-face interactions between border authorities and customs brokers, resulting in clearance delays and increased risks of corruption.

³ According to MoRTH, the planned timeframe for NER is until 2037, though the masterplan covers until 2047.

⁴ Li Dongxiang, Anthony Bayley, and Lani Garnace, "A Framework for Enhanced Trade Facilitation in the Bay of Bengal Region", ADB Policy Brief, *Development Asia*, 29 September 2022 [<https://development.asia/policy-brief/framework-enhanced-trade-facilitation-bay-bengal-region>].

- (ii) Automated and manual processing often operate in parallel with duplication, with extended processing times as a result.
- (iii) Excessive clearance documentation requirements often result in delays in lodging submissions due to additional times required to collect and collate various documents.
- (iv) Limited use of risk assessment applications results in higher-than-necessary levels of physical inspections and examinations.
- (v) As a result of limited or no pre-arrival processing, clearance documentation may only be submitted after the physical arrival of the goods.
- (vi) There is limited use of inland transit systems, which results in increased congestion at the border.
- (vii) Cooperation and coordination between and among various border clearance authorities is inadequate.
- (viii) Outdated customs laws and regulations inhibit the introduction of automated applications and advanced processing practices.

Related Requirements to Improve Hard Infrastructure

There are also issues related to hard infrastructure. For example, land border infrastructure, especially at secondary borders such as Sabroom and Ramgarh, and Agartala and Akhaura, needs to be developed. Also, additional ICDs can reduce congestion at borders and ports.

Solutions to Customs Issues and Challenges

Solutions to customs issues and challenges include remote processing of customs clearance (i.e., “process distancing”, undertaking clearance operations online, thereby reducing the need for face-to-face interactions) and investment in border clearance facilities (e.g., modernizing primary and main secondary borders, development of adjacent land ports or ICPs).

4.2 Lessons from International Experience

4.2.1 Relevant International Experience with Land Ports and Related Trade/Transport Facilitation Initiatives

There have been several advances in facilitating cross-border trade and transport over the last few decades, especially with respect to land ports and one-stop-border posts (OSBPs),⁵ with significant scope for further progress in the years ahead. This section highlights aspects of this experience, at the global, continental, and regional/subregional levels, and draws lessons (learnings) from this experience for application in the BBIN subregion.

(1) Global Level

There is substantial international experience with land ports and related transport/trade facilitation initiatives at the global level, including the following:

- i) **World Trade Organization (WTO):** On the multilateral level, the Trade Facilitation Agreement (TFA) of the WTO was inserted into Annex 1A of the WTO Agreement and entered into force on 22 February 2017. It includes provisions on border agency cooperation in particular through the

⁵ Narrowly defined, an OSBP is a border crossing where travelers, goods, and means of transport stop only once to undertake exit formalities from one country and entry formalities into the other. From a broader point of view (as it has evolved over time), at an OSBP, border controls for exiting one country and for entering the other are conducted in a shared space through the principle of extraterritorial application of laws and hosting arrangements, institutionalizing inter-agency coordination at local, regional, and international levels, exchanging data through the use of ICT, simplifying and harmonizing procedures, and modifying or building new facilities for purposes of enhancing trade facilitation, thereby increasing trade, improving regional economies and the collection of taxes and duties, and maintaining public order and security by mitigating the risk of terrorism, preventing human trafficking, and preventing transmission of communicable diseases. African Union Development Agency – New Partnership for Africa’s Development and Japan International Cooperation Agency, *One-Stop Border Post Sourcebook*, 3rd Edition, June 2022 [<https://www.nepad.org/file-download/download/public/134689>].

establishment of “one stop border post control” in Article 8.I) and “single window” in Article 10.4.⁶ The TFA contains provisions for expediting the movement, release, and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other authorities on trade facilitation and customs compliance issues.

- ii) **World Customs Organization (WCO):** The Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (1999) of the WCO prescribes the operation of joint customs controls and the establishment of juxtaposed customs offices at common border crossings in Standards 3.4 and 3.5. The WCO has also issued relevant Recommendations, Standards and Guidelines, e.g., the WCO Authorized Economic Operator Implementation Guidance, the WCO Single Window Compendium, and the WCO Coordinated Border Management Compendium.
- iii) **World Health Organization (WHO):** The International Health Regulations 2005 of the WHO provide for joint intervention of adjoining countries at ground border crossings (Article 21).
- iv) **United Nations Economic Commission for Europe (UNECE):** Despite its name, the geographic scope of activities of UNECE is global. UNECE administers the Customs Convention on the International Transport of Goods under Cover of TIR Carnets (Geneva, 1975), which has 78 contracting parties to date (including India, which acceded to the TIR Convention on 15 June 2017) and establishes an international customs transit system with maximum facilitation for cargo movement from a customs office of departure in one country to a customs office of destination in another country, without requiring intrusive, time-consuming checks at intermediate borders, while providing customs administrations with the necessary security and guarantees. In addition, UNECE developed the International Convention on the Harmonization of Frontier Controls of Goods (Geneva, 1982). In accordance with Article 6 of Annex 8 of this instrument, the adjacent countries are to coordinate the physical layout of the border crossing in terms of the number of lanes, transit lanes, parking lots, and other relevant facilities. This requires the two countries to enter into negotiations on a (bilateral) agreement or treaty that will provide, among other things, a legal basis for the budgetary commitments of the two countries to establish and maintain joint facilities and division of costs, definition of the border line, and a legal basis for the officers from each country to exercise law enforcement measures (e.g. penalties, seizures, arrests) on the other country's territory within the limits of the joint customs office, including cases of hot pursuit.

(2) Continental and Regional/Subregional Frameworks

There have been several noteworthy continental and regional/subregional frameworks for trade and transport facilitation that have developed over the last few decades, including the following:

- i) **Schengen Agreement and Convention (1985, 1990, and following years)**
The Schengen Agreement led to the creation of Europe's Schengen Area in which internal border checks have largely been eliminated. The agreement was signed on 14 June 1985 by five of the ten member states of the then European Economic Community and was supplemented in 1990 by the Schengen Convention, which proposed the complete elimination of systematic internal border

⁶ “1. Each Member shall ensure that its authorities and agencies responsible for border controls and procedures dealing with the importation, exportation, and transit of goods cooperate with one another and coordinate their activities in order to facilitate trade.

2. Each Member shall, to the extent possible and practicable, cooperate on mutually agreed terms with other Members with whom they share a common border with a view to coordinating procedures at border crossings to facilitate cross-border trade. Such cooperation and coordination may include:

- (a) alignment of working days and hours;
- (b) alignment of procedures and formalities;
- (c) development and sharing of common facilities;
- (d) joint controls;
- (e) **establishment of one stop border post control.**” [emphasis added]

controls and a common visa policy. The Schengen Area now includes 27 European countries with a population of over 400 million covering an area of over 4.3 million km².

ii) **Greater Mekong Subregion (GMS) Cross-Border Transport Agreement (CBTA, early 2000s)**

The GMS CBTA – dating back to the early 2000s – is a pioneering, landmark accord, which consolidates, in a single legal instrument, all of the key nonphysical measures for efficient cross-border land transport. The CBTA began as a trilateral agreement among the Lao People's Democratic Republic (Lao PDR), Thailand, and Viet Nam, signed on 26 November 1999, which was followed by accession of Cambodia, China, and Myanmar in the early 2000s. The CBTA includes mechanisms that: (i) enable vehicles (on designated open routes), drivers (with mutual recognition of driving licenses and visa facilitation), and goods (with regimes for dangerous and perishable goods) to cross national borders through the GMS road transport permit system; (ii) enable avoidance of costly transshipment through the customs transit and temporary importation system and guarantee system for goods, vehicles, and containers; (iii) enable the reduction of time spent at borders, through single-window inspection, single-stop inspection, information and communication equipment/systems for information exchange, risk management, and advance information for clearance; and (iv) enable increases in the number of border checkpoints implementing the CBTA to maximize its network effects and economies of scale.⁷ Unfortunately, however, the initial/pilot (or “early harvest”) implementation of the CBTA has been slower than envisaged.

iii) **African Union Development Agency / New Partnership for Africa's Development (2018-present)**

The African Union (AU) Assembly of July 2018 approved the establishment of AUDA-NEPAD as a technical agency of the African Union, with its own legal identity, defined by its own statute, to deliver on the continent's development priorities, which include OSBPs. In June 2022, in association with JICA, AUDA-NEPAD launched the 3rd edition of the *One-Stop Border Post Sourcebook*, updating the 2nd edition published in May 2016.⁸

iv) **Agreement Establishing the African Continental Free Trade Area (2018)**

The main objective of the African Continental Free Trade Area (AfCFTA) – established in 2018 and now with 46 parties and another 7 signatories – is to create a pan-African single market for goods and services to facilitate the free movement of persons and investments and to lay the foundation for a Continental Customs Union by 2063 (Article 3). Once this final goal is reached, border crossing control will be unnecessary. Before that time, the initiative calls for trade facilitation via the removal of non-tariff barriers (Article 4), specifically in the field of border crossing. The AfCFTA appears to follow all WTO rules and regulations. The WTO considers the AfCFTA to be a regional trade agreement, so that it can escape from the Most Favored Nation treatment precept, which automatically extends to all other WTO members any trade liberalization agreed between individual WTO members.

v) **East African Community (EAC)⁹ Legal Instruments, Including the East African Community One Stop Border Posts Operational Manual, 2018**

Following enactment of the EAC One Stop Border Posts Act 2016 and the EAC One Stop Border Posts Regulations 2017, the EAC (with the support of JICA) developed a harmonized regional

⁷ Japan International Cooperation Agency, *Survey on Improvement of Customs Procedures for Trade Facilitation in the Mekong Region, Final Report*, 2011, pp. 3-6 to 3-7.

⁸ African Union Development Agency – New Partnership for Africa's Development and the Japan International Cooperation Agency, *One-Stop Border Post Sourcebook*, 3rd Edition, June 2022 [<https://www.nepad.org/file-download/download/public/134689>].

⁹ The East African Community now comprises Democratic Republic of Congo, Burundi, Kenya, Rwanda, Somalia, South Sudan, Uganda, and Tanzania.

procedures manual for OSBP operations. While drawing on several individual manuals used in the EAC, the regional manual is anchored on the EAC OSBP Act and Regulations. The manual also incorporated other related trade facilitation and modern border management practices. Box 4-1 presents the structure of the manual.

The EAC OSBP Procedures Manual provides operating procedures for the three types of OSBP models, i.e., juxtaposed, straddling, and single-country models. The OSBP procedures manual is designed to complement the objectives of a single customs territory framework considering that the EAC has a full-fledged customs union. The objective for developing a regional procedures manual was to provide harmonized step-by-step guidelines for border officials/officers on the execution of controls at an OSBP. The is used by all agencies operating at OSBPs in the EAC. In addition, some Partner States apply almost the same procedures at their OSBPs with non-EAC countries (e.g., between Ethiopia and Kenya at Moyale).

Box 4-1: Structure of the EAC OSBP Procedures Manual

1. Introduction
2. Coordination of Border Agencies
3. Principles of OSBPs
4. OSBP Facilities
5. Border Clearance Procedures
6. Conduct of Officers in the Control Zone
7. Activities of Facilitation Agents and Other Service Providers in the Control Zone
8. Jurisdiction
9. OSBP Management
10. Cooperation between the Adjoining Partner States and among Agencies
11. Communication

Source: East African Community, *The East African Community One Stop Border Posts Procedures Manual*, 2018 [prepared with support of a JICA trade facilitation technical cooperation project, 2014-2017]

Source: JICA Survey Team

The EAC OSBP Procedures Manual remains the most advanced set of OSBP procedures in force to date, but there are still inefficiencies with multi-stop processing instead of one-stop processing at the region's borders.

4.2.2 Lessons from the International Experience

Several lessons or learnings may be drawn from the international experience with land ports and related transport/trade facilitation initiatives with respect to application in the BBIN subregion:

- (i) A 2016 study by CUTS International found that **the TIR Convention could be applied in the BBIN countries to establish effective transit procedures among the countries and connect them to other countries**. It found that the TIR system would provide customs authorities with standard IT risk management tools. Further, it suggested that the TIR system could help the BBIN countries implement their WTO TFA commitments since many provisions of the TIR and TFA are complementary and mutually supportive.¹⁰ Alternatively, a regional transit system could be

¹⁰ CUTS International and the International Road Transport Union, *Benefits of the TIR Convention for the Implementation of the BBIN Motor Vehicles Agreement*, August 2017
[chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cuts-citee.org/pdf/Benefits_of_the_TIR_Convention_for_the_implementation_of_the_BBIN_Motor_Vehicles_Agreement.pdf].

considered, such as the Central Asia Regional Economic Cooperation (CAREC) Advanced Transit System (CATS), under development with ADB support.¹¹

- (ii) **Looking forward, OSBPs or joint border posts – as for example implemented successfully in the East African Community – may be part of the solution.** As noted in subsection 2.6.3, a World Bank project appraisal document referred to a potential pilot for “colocation” at the border crossing at Ramgarh between northeastern Bangladesh and Tripura State (Sabroom), northeastern India.¹² Moreover, there remains substantial scope for more efficient operation of single-stop border posts, e.g., by limiting the number of agencies involved in border crossing clearance, by deploying mobile officers to exercise controls on stationary users, by combining/merging all border crossing health aspects pursuant to the “one health doctrine”.¹³
- (iii) That said, a holistic approach should be adopted, including many elements of transport and trade facilitation, with elements of single-stop border operations, but also encompassing corridor infrastructure development, harmonized regulations, and technological developments, implemented in a phased manner.

4.3 Strategic Approaches and Project Proposals

4.3.1 Strategic Approach and Project Screening

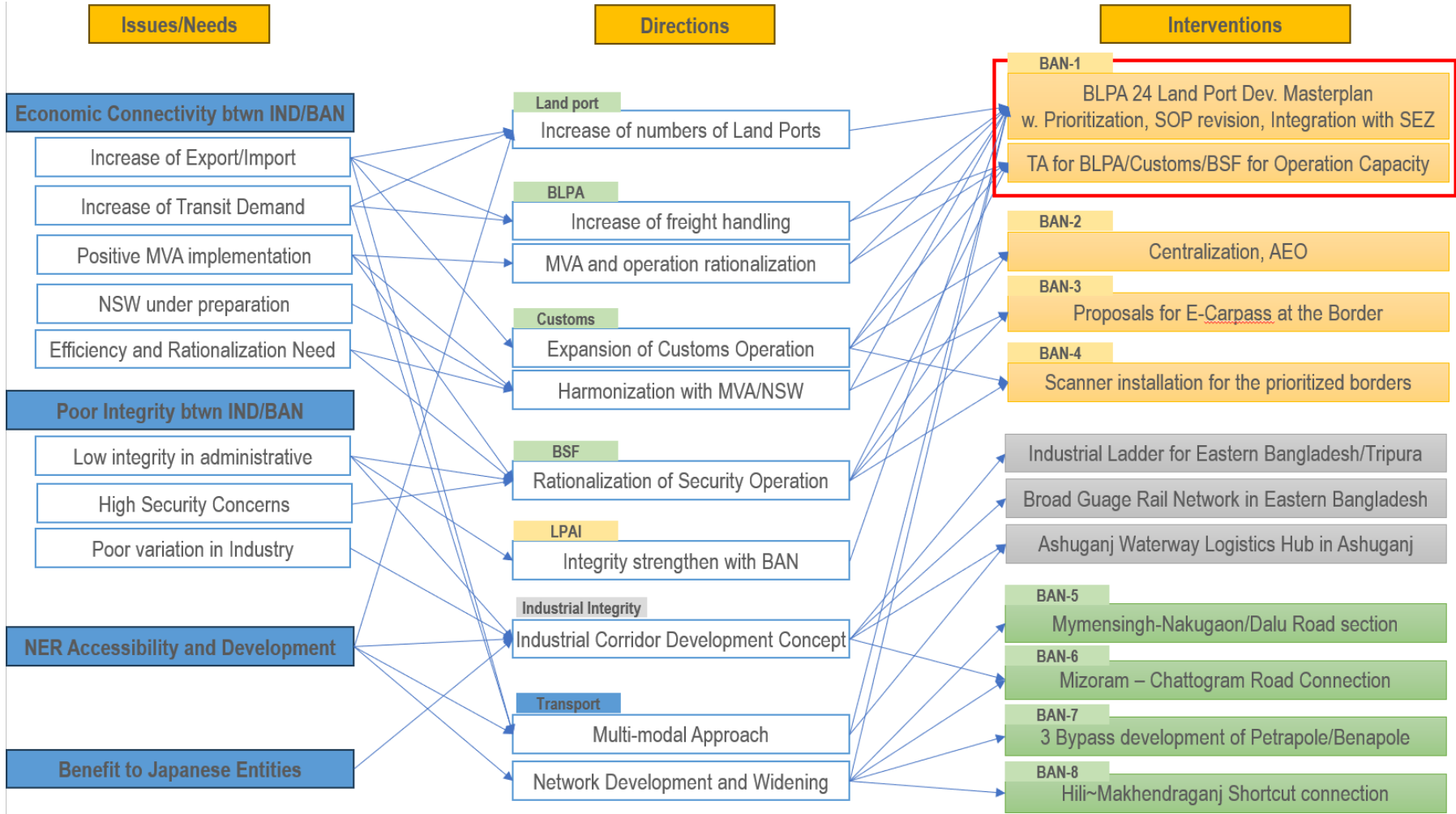
As shown in Figure 4-4, the JICA Survey Team prepared a flowchart identifying major issues regarding trade facilitation in the region, the direction of development corresponding to these issues, and project proposals or interventions based on the development directions, showing the relationships among issues, directions, and interventions.

¹¹ See, e.g., Lyaziza Sabyrova, Dorothea Lazaro, and Roman Mogilevskii (Asian Development Bank and Central Asia Economic Cooperation), *Trade Facilitation and Digital Connectivity*, June 2023, slide 4 [<https://www.unescap.org/sites/default/d8files/event-documents/1.%20Lyaziza%20Sabyrova%20ADB.pdf>].

¹² The World Bank, *Project Appraisal Document for Bangladesh Regional Connectivity Project 1*, 13 March 20217, p. 11 [<https://documents1.worldbank.org/curated/en/675531491616976672/pdf/Project-Appraisal-Documents-PAD-P154580-03172017.pdf>].

¹³ See, e.g., <https://www.who.int/news-room/fact-sheets/detail/one-health>.

4-12



Source: JICA Survey Team

Figure 4-4: Strategic Approaches for Interventions

(1) Import/Export Demand Growth and NSW

Despite the impact of the COVID-19 pandemic on imports and exports between India and Bangladesh, import and export demand between the two countries is now increasing, with exports from India to Bangladesh increasing from USD 5.52 billion to 13.8 billion between 2015 and 2022, and imports from Bangladesh to India similarly increasing from USD 660 million to 2 billion during this period, with 2022 figures 2.5-3.0 times larger than the 2015 levels.

The Government of India is strongly interested in addressing regional disparities and expanding access to the NER of India. Since 2015, it has sought to secure transit routes using Bangladesh's roads, railways, river ports, and sea ports rather than the current transport system relying on overland routes through Siliguri. As part of this effort, it has opened the Sabroom/Ramgarh border.

Regarding trade facilitation in Bangladesh, the World Bank's ACCESS project is supporting the introduction of a national single window (NSW) to simplify the exchange of applications and inter-organizational data related to imports and exports, and there are signs of momentum toward a shift from paper-based handling to digital data-based handling.

If NSWs and the computerization of customs clearance progresses, functions will be decentralized outside of or beyond the border, with for example customs clearance procedures at SEZs and ICDs, instead of customs clearance at the border.

In parallel, the development of transport infrastructure between India and Bangladesh is progressing, with a general trend toward time reduction and streamlining: the Padma Multipurpose Bridge, which opened in 2022, has created a "Padma Revolution" by significantly improving travel times between the capital Dhaka and southwestern Bangladesh and Kolkata. The Karnaphuli Bridge, opened in the same year with a JICA grant, has also made a significant contribution to reducing transit time. In Petrapole on the Indian side of the border, an entry reservation system (e-Suvidha) became operational in 2022 and has improved the situation in which previously many import/export cargo vehicles were forced to wait 10-40 days for their turn to enter the border facilities. Now all cargo trucks enter the border with advance online reservations. In addition, domestic logistics and handling facilities in India are utilizing DX equipment made in India, with such usage expected to spread to the border area. The mechanization rate at border facilities using conveyor belts and pallets is around 20-30%, but LPAI and Indian state governments, which took over operation of border facilities in 2014, are coordinating modernization with labor unions. Based on these developments, the JICA Survey Team expects that door-to-door transit time between Kolkata and Dhaka (including transshipment) will improve from about three days at present to about 10 hours by around 2030.

(2) Weakness of Administrative Linkages

In spite of the advances noted in the previous subsection, in observing linkages and cooperation in border facilities and management between India and Bangladesh, the JICA Survey Team found them weak compared to those in other regions, such as Africa, where OSBPs and other facilities and systems have been developed. Consider, for example, that trade between the two countries is focused on the textile industry, and there is no movement toward promoting specific industries through cooperation between the two countries; rather, the focus has been on anticipation of transit to the North Eastern Region of India. The development of border facilities on the Bangladesh side has lagged behind the expansion of facilities on the Indian side. Similarly, there are restrictions on exports to Bangladesh at the Agartala (India)/Akhaura (Bangladesh) border, the background of which is unclear.

Security concerns also remain an issue between the two countries. At Petrapole, security checks that take 15-20 minutes per vehicle are one of the causes of traffic congestion and are not expected to be resolved in the future. This is mainly due to security checks by Border Security Force of India, which

takes about 15-20 minutes per vehicle. Although the number of lanes is expected to increase, delays and disruptions due to security checks are expected to remain.

The lack of variety in industrial linkages is also an issue. Bangladesh is dominated by the textile and sewing industry, and although it imports a large amount of cotton yarn and other materials from India, it lacks other linkages. Indian materials, such as rubber products produced in Tripura, are also losing out to materials from China and ASEAN countries, which have superior cost competitiveness. West Bengal and western Bangladesh are historically close, and there are links between local industries. It is hoped that the development of transit-oriented infrastructure will provide an opportunity to link the region's development through industrial collaboration.

(3) Potential Synergies with Japanese Projects

It will be helpful to consider linkages and synergies with Japanese investments, and indeed there are official development assistance (ODA) projects along and around the target corridors, including the Bangladesh Special Economic Zone (BSEZ), the Matarbari Port and Industrial Complex, JICA's cooperation involving overseas investment and loans for environmentally friendly steel plants, and road and rail infrastructure development including road development in the NER of India.

Japanese companies such as Lion Corporation have located in BSEZ and have become flagships for the Government of Bangladesh's goal of industrial diversification. However, it should be noted that companies entering the BSEZ expect to serve the Bangladeshi domestic market, rather than exploiting industrial linkages with the NER of India or mainland India.

Even if border improvements and logistics facilitation in the BBIN region progress, synergies with existing infrastructure projects are possible, but the benefits to Japanese companies and tenants in the BSEZ will be limited. In this sense, it is necessary to envision a regional development concept that includes industrial complexes along the border.

4.3.2 Development Directions and Interventions

Based on the above discussion, the following development directions and related projects are proposed. For each, a project sheet is proposed.

(1) Technical Assistance (TA) on Border Facility Development and Operation (Soft Components)

Proj-1: Strategic Master Plan and Implementation Program for Development of Next-Generation BLPA Land Ports

The number of border and customs facilities to be operated by BLPA is increasing. In particular, Bangladesh needs to catch up with developments of integrated check posts (ICPs) on the Indian side, which are linked with Bangladesh. Similarly, the Bangladesh Land Port Authority (BLPA), which oversees cargo handling on the Bangladesh side, as well as customs and security organizations of Bangladesh need to be expanded. At the same time, rationalization, decentralization, and optimization of operations with the implementation of an NSW need to be considered. The Land Ports Authority of India (LPAI) will also need to take actions to improve its linkages with Bangladesh.

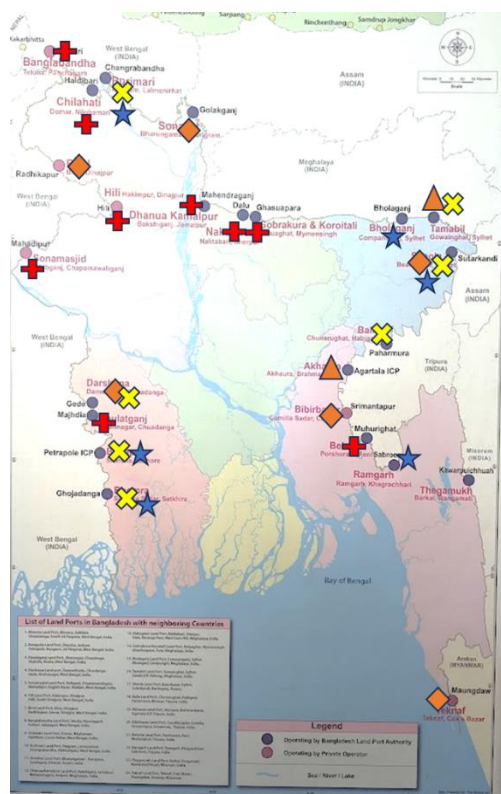
The proposed project is based on a request submitted by BLPA in July 2023 for improvement of its border facilities. The project includes (i) formulation of a master plan for facility improvement considering priorities, and (ii) formulation of a new standard operating procedures (SOPs) in the new setting with development of special economic zones outside (beyond) the border. With BLPA as the core implementation body, a TA to improve operational capacity for three organizations (BLPA, Customs, and Border Guard Bangladesh) is envisioned, followed by (iii) project identification (formation) activities, for grants and loans for border facility improvement.

One of the anticipated outputs of this project is the introduction of an OSBP. With the number of land borders expected to increase in both countries, OSBP is a means of streamlining facility development and deserves consideration. The JICA Survey Team explained to the Ministry of External Affairs of India the necessity of developing a bilateral administrative data exchange system for the implementation of OSBP.

Coordination of Maintenance Scopes and Avoidance of Duplication with Other International Donors

Since the World Bank and ADB have already developed facility development plans for individual borders, it is necessary to confirm the development scopes of individual borders and develop a development plan while avoiding duplication. Since the proposal for this project is a strategic master plan and is positioned as including a general maintenance strategy concept while confirming the maintenance status of the World Bank and ADB, it is necessary to aim for overall optimization without being simply concerned with the number of individual border maintenance cases.

The following figure shows the current border facility development targets of the World Bank and ADB, and identifies land borders that have not yet been planned. Both the World Bank and ADB continue to be interested in border facility development, and it is an area that requires continued coordination. In addition, private operators tend not to accept projects such as facility improvement at borders where operational concession agreements have already been concluded. While the reasons for not accepting publicly funded improvements are unclear, we believe that the status of private sector operation and maintenance should also be investigated as a target and facility improvements should be identified.



Target Border in Existing ADB TA-6690

 Borders covered in Phase 1

Akhaura, Tamabil (facility development, introduction of scanners for customs)

◆ Borders covered in Phase 2

Darshana, Birol, Sonahat, Sheola, Bibirbazar, Teknaf
(Facility improvement plan in place)

★ Borders to be maintained in WB ACCESS project

Benapole, Bhomra, Burimari, Ramgarh, Sheola, Boraganj

Unplanned Borders (Candidate for JICA Assistance)

+ Borders directly under BLPA

Nakugaon, Dhanua Kamalpur, Chilahati, Belonia,
Thegamukh

+ BLPA concession contract

Sonamasjid, Hili, Banglabandha

(The 25-year concession contract is already about 10 years old. Concessionaires do not appear to be accepting new facility development)

✘ (Reference) 7 locations for urgent X-ray scanner installation proposed by BLPA

Source: JICA Survey Team

Figure 4-5: Target Borders for the Development of Border Facilities by WB and ADB and Unplanned Borders

Proj-2: Project to Centralize Verification of Border Clearance Through an Electronic Clearance System

With the introduction of an NSW in Bangladesh, it will be possible to rationalize and centralize Border clearance. This will provide an effective system to apply interpretation of Harmonized System (HS) Classification[s] of imported goods and fairly apply customs valuations for all import declarations of similar or identical goods. It also provides centralization platform for all government agencies are concerned for border crossing clearance procedures. This system will also provide for distant processing, which is expected to reduce the opportunities for corruption by importers, clearing agents, and governmental authorities. (refer to Section 3.4.5, Asycuda development and its augmentation, Needs of paperless)

Proj-3: e-Carpas Development

The Car (Vehicle) Pass document – which will be used as a permit to move within border facilities – is viewed as a document to be managed across both countries' land port(s) authority, customs, and border security forces, and provides proof or evidence in the two countries and for multiple organizations. Considering the weakness at the administrative level in and between the two countries, the JICA Survey Team considers that this document may be an essential document for some time. The introduction of an e-Carpas in a form that is linked to the NSWs of both India and Bangladesh will contribute to DX for border operations, rationalizing operations and reducing transit time. It is proposed that this concept be based on the container fast pass (CONPAS) concept to be introduced in the Ports of Tokyo and Osaka in 2024. The JICA Survey Team briefed the Indian Ministry of External Affairs on the need to develop a bilateral administrative data exchange system for the implementation of the OSBP. On the other hand, ADB is already in discussions with West Bengal and Bangladesh to unify the border operation system, which is expected to include the digitization of Carpas. Therefore, it is necessary to proceed with the implementation of the project while keeping an eye on the progress of the project.

Proj-4: Installation of Large-Scale Scanners at Bangladesh Borders

The JICA Survey Team proposes the introduction of scanners at border crossings in conjunction with the development of an AEO program and the review of SOPs. In particular, BLPA has a shortlist of 5-7 borders out of the existing 24 borders that need scanners and proposes promoting the enhancement and streamlining of border security capacity by deploying scanners at these borders (to be provided on a grant basis) before the implementation of TA. On the other hand, since it was eventually found that NBR is ahead of the project in introducing scanners at the land border with ADB financial support, the survey team does not strongly recommend this project, but it will be included in the report as a project proposal from BLPA. On the other hand, NBR is ahead of the project proposal from BLPA for the introduction of scanners at the land borders (Akhaura and Tamabil) with ADB financial support, so it is listed as a project proposal from BLPA.

(2) Projects Related to Road Infrastructure Development (Hard Components)

In the infrastructure development sector, the JICA Survey Team proposes the expansion of transport modes, network development, and capacity expansion. Regarding transport infrastructure facilities in India, road and rail development in the NER have been developed and are being developed with domestic funds in India. For this reason, infrastructure development within India is not included in the project scope. In addition, the expansion of broad-gauge railway infrastructure in eastern Bangladesh and the development of the Ashuganj inland water transport hub is already underway. In line with these concepts, the proposed projects have focused on developing missing links within Bangladesh.

Proj-5: Mymensingh-Nakugaon/Dalu Road Improvement

Mymensingh-Nakugaon/Dalu is an unimproved section along the shortest route linking Dhaka-Dalu Border-Meghalaya-Dhubri Bridge connecting with Bhutan, and therefore this project will establish a

northbound transport linkage from Bangladesh. The detailed specifications of the road are to be confirmed, and it is also necessary to confirm the road's status in the road development master plan (supported by ADB) being finalized by the Roads and Highways Department of Bangladesh. A 200 km road section, including the Dhubri Bridge, is being developed with a Japanese yen loan from JICA, and the section between Dhaka and Mymensingh is being developed as a PPP project supported by ADB.

Proj-6: Chattogram-Mizoram Connection

The Roads and Highway Department of Bangladesh is planning to prepare a development project proposal (DPP) for the construction of a road between Chattogram and Mizoram, India. The project is challenging regarding security and natural conditions. Currently, there is no direct transport route between Mizoram and a seaport, and the project is positioned as a road project with high political expectations in India. The JICA Survey Team proposes this project because the road and rail link between Silchar and Imphal has already been developed in India, and India has experience in infrastructure development in mountainous areas, which may mitigate technical risks. It should be noted that there is no existing road in the area and therefore the project should be considered long-term.

Proj-7: Alternative to the Petrapole/Benapole Border and Proj-8: Development of Strategic Crossing Points

There are three existing borders in the vicinity of the congested Petrapole/Benapole border, and the project proposes the construction of a road connecting these borders, particularly for improvement of the Ghojadanga/Bhomura connection, which handles large traffic volumes similar to Petrapole/Benapole, but which has a poor road connection. This project also needs to be checked for consistency with the Bangladesh's road development master plan prepared by RHD (with ADB support) and India's priority projects in West Bengal.

The Hili-Makhendraganj shortcut is a proposed project that would replace the Siliguri route and provide the shortest connection across Bangladesh with a crossing of about 80 km, requiring a large bridge over the Brahmaputra River (the Jamuna River in Bangladesh).

On the other hand, industrial linkages between the two countries, India and Bangladesh, have not yet been developed. This study presents an industrial corridor concept linking eastern Bangladesh and Tripura that connects existing industrial parks based on transit demand in the Chattogram-Sabroom-Northeastern Region corridor. It is necessary to formulate a broad industrial corridor concept that creates momentum for the development of Mirshalai Industrial Estate in Bangladesh, and between Sylhet, a major city in northeastern Bangladesh, and Silchar in southern Assam, to encourage private investment.

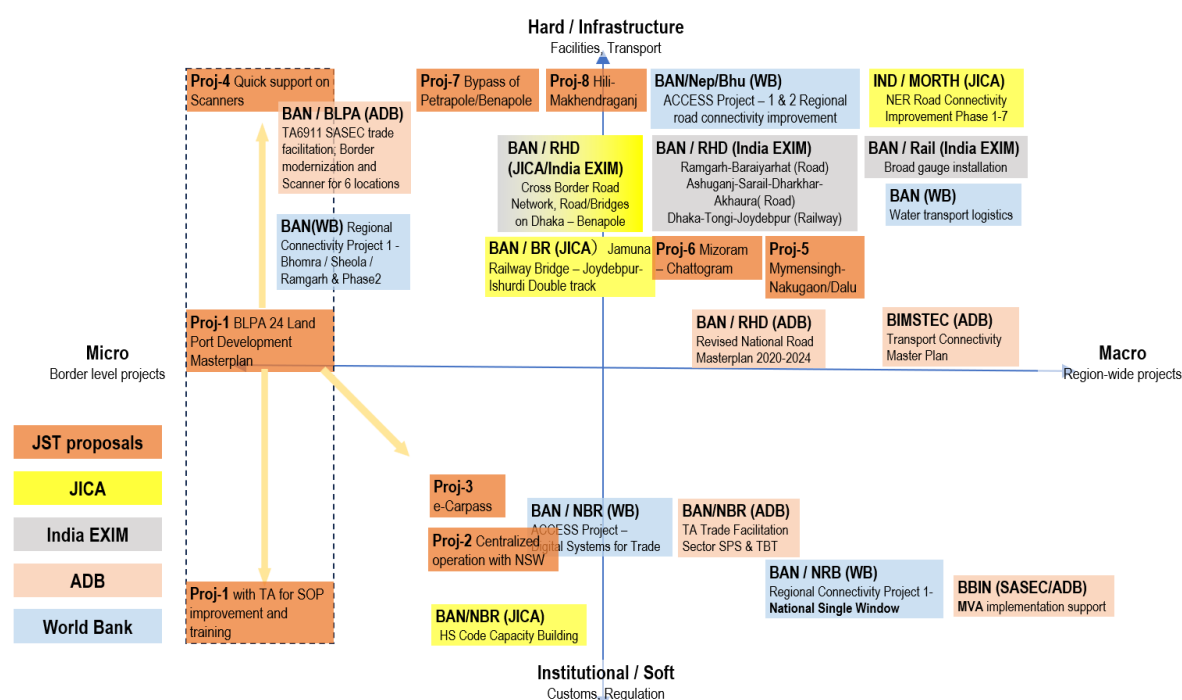
(3) Project Positions in the Regional Development Demarcations

Referring to the mapping chart showing activities of development partners, the projects proposed by the JICA Survey Team could be positioned as shown in Figure 4-6 at the end of this subsection.

Proj-1 and Proj-4 could be positioned on the left of the figure (focusing on individual land port operations). Proj-1 and Proj-4 may overlap with the World Bank's regional connectivity development (ACCESS) projects, but they focus on three border crossings, while Proj-1 will support the entirety of land port operations harmonized with the NSW development at the individual land ports after screening demand analysis conducted during the master planning stages, and it ensures investment consistency, including existing individual plans. Proj-2 will proceed after the development and implementation of NSW at each border level, while focusing on the rationalization of customs operations. The e-Carpass (Proj-3) may require a bilateral data exchange agreement between India and Bangladesh, and will be more of an institutional design project. Proj-4 is preceded by the introduction of scanners by the NBR (supported by ADB), which partially overlaps.

Proj-5 to Proj-8 are positioned at the top of the figure since they are road development projects. If a route will contribute to individual border connectivity, the project is positioned in the left part of the figure. While Proj-5 relates to road development inside of Bangladesh, the scope of this project envisages regional connectivity improvements between Bangladesh and Bhutan via Meghalaya and the Dhubri Bridge. Proj-7 and Proj-8 are more related to the development of individual border crossings.

Proj-9 is a unique project, not directly related to cross-border logistics, but which focuses on renewable energy resources and regional industry development.



Source: JICA Survey Team

Figure 4-6: Mapping of Projects Proposed by JICA Survey Team

(4) Project Priority and Roadmap

Table 4-2 lists the nine proposed projects, with priority and initial actions to materialize the projects.

Table 4-2: Priority Recommendation of Proposed Projects

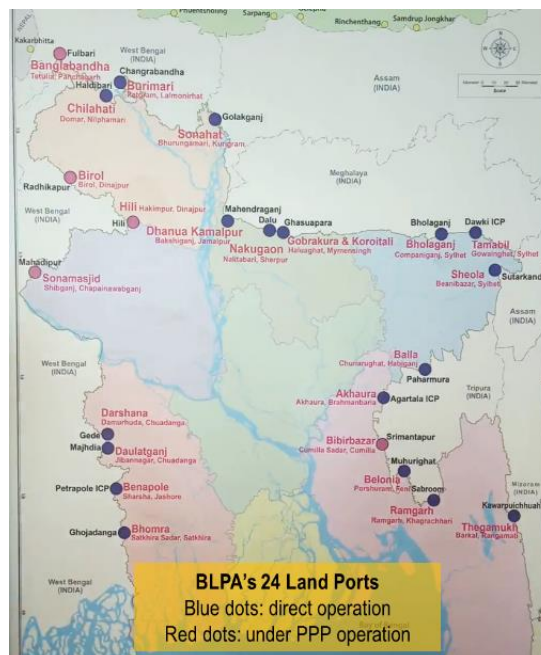
Project	Priority	Initial Actions
Soft Components		
Proj-1: Master Plan/SOPs for 24 Land Ports (BLPA)	High	Initial actions include preparation of scopes of work (SOW), and establishment of joint committees with stakeholders including LPAI. The SOW should be finalized while monitoring progress of implementation of the NSW in Bangladesh.
Proj-2: Customs Centralization (NBR)	Medium	There is a need to coordinate the demands of NBR with proper negotiations and project formulation. It will also be necessary to monitor the progress of the World Bank's regional connectivity development program (e.g., NSW), on which basis the SOW should be prepared and agreed with NBR.
Proj-3: e-Carpass Development (BLPA)	Low	Implementation may not be required depending on the status of ADB assistance. The SOW for this project should be prepared individually, or after the initial assessment in Proj-1; this project can be programmed as a pilot project under Proj-1.

Project	Priority	Initial Actions
Proj-4: Deployment of Large-Scale Scanners at Prioritized Land Ports (BLPA/NBR)	Low	Since the NBR is already working on the scanner, priority will be given to the NBR. On the other hand, since BLPA and NBR have different proposals, we will leave the proposal as a "low" priority.
Hard Components	Priority	Initial Actions
Proj-5: Mymensingh-Dalu Road (RHD)	High	This project has not yet been pipelined and no funding sources have been identified. There is a need to check the project's priority in the Bangladesh Road Master Plan (being finalized by RHD in 2024).
Proj-6: Road for Chattogram-Mizoram Road (RHD)	Medium	This project has not yet been pipelined and no funding sources have been identified. There is a need to check RHD's preparation of the DPP for this project in 2024. Also, it is necessary to assess natural, social, and environmental impacts in the vulnerable areas along the site.
Proj-7: Bypass Road of Petrapole/Benapole (MoRTH/RHD)	High	There is high demand and no duplication of dedicated road maintenance behind the current Benapole freight facility. A site survey will be conducted and the scope of the project will be defined.
Proj-8: Hili-Makhendraganj (RHD)	Low	There is a need to check the priority of this project in Bangladesh's Road Master Plan and consider the benefit to the Bangladesh road network and local resources.

Abbreviations: BLPA = Bangladesh Land Port Authority, DPP = detailed project proposal, LPAI = Land Ports Authority of India, MoRTH = Ministry of Road Transport and Highways (India), RHD = Roads and Highways Department (Bangladesh), SOW = scope of work

Source: JICA Survey Team

Project Code:	Proj-1
Target Country:	Bangladesh (Assume India participation)
Project Name:	Strategic Master Plan and Implementation Program for Development of Next-Generation BLPA Land Ports
Project Description:	BLPA operates 24 land ports, most of which are on the border with India. Trade with India has grown by about 10% annually over the last 25 years, and accordingly facility development is needed to accommodate this growing demand. At the same time, implementation of a national single window (NSW) in Bangladesh will change the logistics service structure in the region, and in response rationalization of land port operations and optimized investment programs should be considered. BLPA submitted requests to the Embassy of Japan in July 2023 for a land port master plan, green energy development, sanitation development, and preparation of land port standard operating procedures (SOPs). Bangladesh has committed to developing clean, green land ports, but proposals have not included prioritization among the 24 land ports, and have not viewed issues from a strategic perspective or considered the requirement for harmonizing SOPs with the NSW, to prepare detailed specifications for facility development. The JICA Survey Team proposed the following in response the BLPA's request: (i) a facility needs assessment for the 24 land ports, (ii) preparation of a strategic development plan for border facilities and off-border facilities in line with NSW implementation; (iii) specification and prioritization of facility development, (iv) a facility development feasibility study combined with grant/loan application packages, and (v) formulation of a technical assistance (TA) program for new development of new SOPs and associated training. (vi) The Agartala Training Center of LPAI in India was made a joint training center for new SOPs between India and Bangladesh, and training support was provided from Japan. BLPA responded favorably to JICA Survey Team's proposal. Major aspects of the proposal include the following: 1) Preparation of a cargo handling facility development plan and an infrastructure development plan including prioritization of the 24 land ports, with rationalization of operations with ICT, centralization, automation, paperless processing, NSW implementation, and SEZ/EPZ improvement; 2) Preparation of SOPs in coordination with the other stakeholders, including Customs (NBR) and Border Guard Bangladesh (BGB); 3) Undertaking of a feasibility study of facility development for grant aid or loans; and 4) Capacity building in the new SOPs for officers of BLPA and related agencies.



Source: JICA Survey Team

Anticipated Task(s):	- Master plan formulation based on marketing analysis and demand forecasting and ensuring consistency with existing individual border development plans. - Preparation of SOPs harmonized with the NSW, including rationalization, automation, integration of cargo handling with inland container depots and SEZs/EPZs (off-border sites), and centralization of customs clearance (OSBP). - Use of LPAI training center in Agartala, development of an appropriate curriculum, retention of qualified trainers, and selection of appropriate trainee candidates (the training courses would be given over a specified time period, perhaps two years). - Establishment of a joint coordination committee (JCC) to monitor progress of the TA, with the committee to include representation from LPAI and related agencies for harmonization of operations between India and Bangladesh.			
Anticipated Timeframe:	1 st year: Master plan development with the lead of BLPA. 2 nd and 3 rd years: Capacity building activities, supervision of grant aid, and procurement of services with loan financing.			
Linked Project(s):	World Bank ACCESS Project (Phase 1) for Bangladesh (the proposed project will need to take into account progress with the electronic automated border management systems [e-ABMS] supported by the World Bank's ACCESS project, which is expected to leverage trade data systems such as NSW and customs systems such as ASYCUDA to provide opportunities for further connectivity and improved service delivery among the border management community.) The facility development for warehouse, transport capacity, green energy (Solar power generation, etc.), sanitation for water, sewerage and waste disposal which was originally requested by the BLPA should be considered by the Masterplan and TA.			
Benefits:	- Improvement of the operation capacity of the land port in relation to growing demand. - Economic benefits to exporters and importers from logistics improvements.			
Impacts:	Social Impacts:	Physical Labor Employment	Environmental Impacts:	Limited at BLPA site
Construction Impacts:	Limited to BLPA land port sites.			
Implementation Risks:	Challenges in achieving interagency cooperation, within Bangladesh and between Bangladesh and India.			
Implementing Agency:	Lead: BLPA; Other organizations: BGB, Customs (NBR), and other agencies at the border. India: LPAI as a member of the JCC or as an observer (LPAI has already been verbally briefed by the survey team on its role in the JCC, which includes participating in the JCC approximately once every three months and advising on the master plan, and LPAI has expressed its willingness to actively participate and cooperate).			
Anticipated Cost:	Not yet costed			

Project Code:	Proj-2
Target Country:	Bangladesh
Project Name:	Project for Centralize Verification of Border Clearance Through an Electronic Clearance System
Project Description:	- BLPA operates 24 land ports, most of which are on the border with India. Among these, there are many small-scale land borders, which the deployment of Customs (NBR) officers and other border agency personnels are limited. - Verification and assessment of import and export clearance requires a good knowledge of Harmonized System (HS) classification and customs valuation, however due to the limited number of customs officers deployed at small border offices, Bangladesh customs would face challenges if all kinds of goods are declared at small scale clearance offices. Therefore, NBR imposed restrictions on the types of goods that can be imported at small scale borders. - For example, at the Akhaura border (across from Agartala, India), the types of goods that can be imported were limited to only 43 types (see Chapter 3.2.4.(2)). As a result, traders from Eastern India are unable to export goods to Bangladesh and

	beyond with the right timing. When exporting these goods, it is necessary to transport them through the Siliguri Corridor by truck or railways. • A practical example is that, if one intends to export rubber products from Agartala, the products will need to be transported along the northern corridor of India (via Manipur, Meghalaya, Assam, and Bihar, to Kolkata/Haldia) for export to other countries. However, this transport route takes a considerable amount of time, leading to a significant decrease in competitiveness in terms of transport time and costs. • To fundamentally address this issue, this proposed project would introduce a centralized customs system to ensure proper clearance without imposing import restrictions at small-scale borders. • This is why JICA Survey Team recommends to introduce centralized clearance system that will solve the challenges of small scale border offices. It also ensures uniform application of laws and regulations of Bangladesh and fair revenue collection. • Moreover, World Customs Organization Capacity Building Committee has been discussing “Future of Customs Works” and recommending to introduce modern way of doing customs clearance such as centralization of clearance system. • It is applied by most advanced countries, and these days some emerging economy countries like Brazil, Malaysia and India implemented this approach. It is a recommended way of doing customs business in the future. • Other implemented country examples are at Eswatini, Kosovo, Kenya, Uganda, Tanzania, Zambia, Zimbabwe, Botswana, that aiming to improve efficiency, uniformity in policy application, specialization for different commodities, and reduce corruption and face-to-face interactions. • The discussion explores the idea of centralizing customs declaration processing away from border locations once all supporting documents are digitized. The World Bank is working for National Single Window (NSW) which document digitalization can be achieved. As such that NSW is under implementation by WB it is recommended to wait its implementation can be forestalled. • JICA team may be able to start discussions with NBR its feasibility and establish a policy for implementation. <u>Concept</u> • Customs clearance procedures in Bangladesh are conducted using the ASYCUDA World system developed by the United Nations Conference on Trade and Development (UNCTAD). The system links the NBR Data Center and domestic customs offices, and clearance data is processed through an online system. • At present, each office processes clearances using the ASYCUDA system, but the proposal is to connect them through a National Single Window and document review processes (e.g., acceptance of declarations, HS classification of goods, customs valuation assessment, and payment of duties) would be conducted centrally by a specialized customs team. • The assigned specialized team member will work at well-equipped centralized office where all necessary reference materials for verification of declaration are provided. The clearance procedure or getting license from other government agencies also must be studied how it can process it centrally. • The office entry/exit is controlled by face recognition system or fingerprint recognition system, and the officers in charge are required to leave the personal communication system (cell phone) outside of the office room. • Cargo inspection procedures such as confirmation of the goods or cargo verification would be carried out at the border customs offices with instruction from centralized special team. • The role of government agencies at the border would be to inspect and verify the actual goods upon arrival if necessary, report the results, and then issue import permits (release orders) when document verification and duty payment is done.
--	--

	Considering of the volume and number of declarations handled, Chattogram port and airport clearance remain at respective site but the document verification and other works will be separated in a same way of centralized clearance procedures.
Anticipated Task(s):	<u>Institutional Requirements and Tasks for Implementation</u> - Study the customs and other government agency clearance system under the NSW and discuss how to formulate national policy of centralizing clearance system. - Design the clearance system with centralized system and study possibility of Software Modification: - Study the possible modification of the electronic clearance system (ASYCUDA World) and the National Single Window system. - Development of a document management system using blockchain technology (B/L, Invoice, Packing List, Insurance Policy, and all other documents). The NSW system may already introduce blockchain - Establishment of a concept of Central Processing Center - Study the area where legal review will be required. (e.g. acceptance of declaration attachments (e.g., invoices, packing lists, insurance premiums, certificates of origin, bills of lading, export-import licenses) in PDF format). <u>Hardware Requirements and Tasks for Implementation</u> - Establishment of a Central Processing Center: Facilities development at headquarters office, Chattogram and airport customs. Modify an existing office for separation of work for verification of declaration and entry/exit control system. - Establishment of a Stable Electricity Supply: Installation of backup generators at border offices - Strengthening of the Communications Network: Upgrading from 3G to 4G, enhancement to 5G, and installation of optical fiber.
Anticipated Timeframe:	1st year: Research and detailed study to refine the ASYCUDA World and NSW systems. Establish a national policy of centralizing the border clearance. Drafting to laws and regulations regarding border clearance procedures. 2nd year: Modification of existing systems and software development. 3rd year: Implementation of a trial of the system and training for stakeholders. Reorganization of government authority procedure departments. Operational capacity building activities, including implementation tests and training.
Linked Project(s):	World Bank's ACCESS Project (Phase 1) for Bangladesh (the proposed project will need to take into account progress with the electronic automated border management systems [e-ABMS] supported by the World Bank's ACCESS project, which is expected to leverage trade data systems such as NSW and customs systems such as ASYCUDA to provide opportunities for further connectivity and improved service delivery among the border management community.)
Benefits:	- Achievement of swift border clearance processing at all border government authorities. - Uniform application of laws and regulation of customs and trade related rules and ensures fair revenue collection. - Consistent examination of import declarations by a specialized customs and government authority team at the national level to ensure that there will be no delays in declaration processing, allowing for smooth revenue collection. - Reduction of face-to-face contact between stakeholders and government agencies, thereby reducing opportunities for corruption.
Social Impacts:	Uniform application of laws and regulation of customs and ensures fair revenue collection.
Construction Impacts:	A centralized office would be set up in the existing customs and/or government office space. Therefore, there would be no construction impacts.
Implementation Risks:	- Electricity failure: Unstable electricity supply at local borders. - Communication network weakness: The weakness of the communication network is a vulnerability at local borders. - Reality of relevant government agencies: Limited digitalization in local government agencies leads to inefficient cross-border processing.

	• Mindset of relying on documents: People tend to distrust electronic processing and prefer using paper documents for evidentiary purposes. • The WB is working with NBR for implementation of NSW. Need to wait till NSW implementation is feasible. • It requires a cultural shift and may face initial resistance from officials accustomed to physical document verification.
Implementing Agency:	Lead: NBR, BLPA, and participating government agencies (PGAs) using the NSW
Anticipated Cost:	Total: JPY 300 million • Design of work to modify ASYCUDA and the NSW (concept): JPY 100 million • Set up of centralized clearance office: JPY 50 million • Training of stakeholders: JPY 50 million • Project management and support from consultants: JPY 100 million

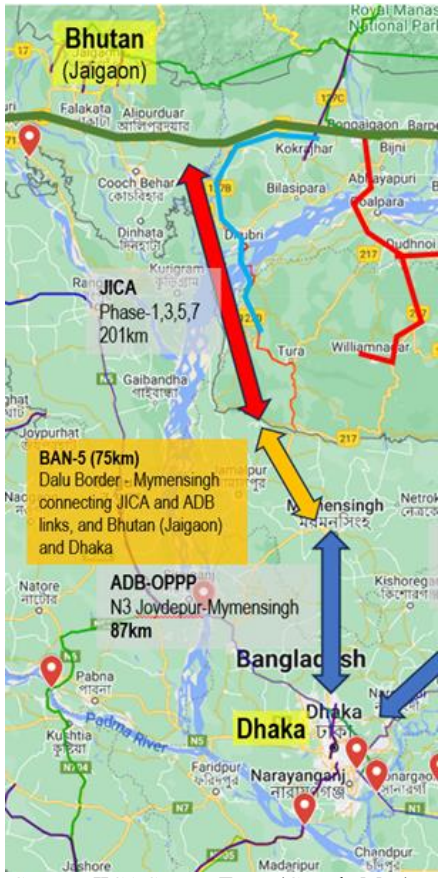
Project Code:	Proj-3
Target Country:	Bangladesh and India
Project Name:	Digitization of the Carpass (Vehicle Pass)
Project Description:	Currently, when a logistics vehicle crosses the border between India and Bangladesh, a document called a carpass is used for inspection before entry permission is granted. In India, the digitization of driver's license and vehicle inspection data is progressing through the Unified Logistics Interface Platform (ULIP). By linking these systems it will be possible to build an efficient Carpass operating model in India; this project would develop similar services in Bangladesh so that manual examinations will no longer be necessary. Concept (1) The Carpass (hereinafter referred to as the e-Carpass) would be digitized to streamline submission, examination, and approval processes. (2) The e-Carpass would be built on a public cloud service that does not belong to any country, and development and operations would be based on agreements between the user countries. (3) User registration for the e-Carpass, and examination of driver's licenses, vehicle inspection certificates, and vehicle owner information would be performed on a new e-Carpass registration/examination server constructed by the participating countries. It is assumed that there would be a decentralized system realized by an application programming interface (API) connected through a secure communication service (e.g., a virtual public network or VPN). (4) Application forms would be submitted from the user's smartphone or PC connected to the internet, which would then undergo examination and approval, with complete entry processing through display of a dynamic QR code on a smartphone. (5) A QR reader connected to the internet would be installed at the ICP gate where vehicles enter the country, and processing would be performed using the reader.
Anticipated Task(s):	• Conducting a survey of the actual operation status of the Carpass utilizing paper formats at present. • Designing the e-Carpass system and reaching agreements with neighboring countries and related organizations • Building e-Carpass registration/examination servers in each country. • Conducting implementation, testing, and operational training.
Anticipated Timeframe:	1st year: Carpass operation survey and basic design. 2nd year: Agreement between participating countries and organizations based on a detailed design and prototype. 3rd year: Building of an actual operational system for the e-Carpass. 4th year: Implementation and testing at ICPs / land ports, and operational training.
Linked Project(s):	N/A
Benefits:	• Improving the efficiency of various procedures at the time of vehicle entry between India and Bangladesh.

Impacts:	Social Impacts:	Labor saving by DX	Environmental Impacts:	Reduced vehicle waiting time
Construction Impacts:	There will be no facility construction in this project.			
Implementation Risks:	Delays in the development of registration/examination servers that need to be built in each participating country.			
Implementing Agency:	India: LPAI, Central Board of Indirect Taxes and Customs (CBIC) Bangladesh: BLPA, NBR			
Anticipated Cost:	Total Cost: JPY 200 million Research and system design: JPY 50 million Construction of and operational system: JPY 100 million Introduction, testing, and operations training: JPY 50 million			

Project Code:	Proj-4
Target Country	Bangladesh
Project Name	Installation of Large X-Ray Scanners at Prioritized Land Ports
Project Description	Background • BLPA operates 24 land ports, most of which are on the border with India. Trade with India has grown by about 10% annually over the last 25 years and accordingly facility development is needed to accommodate this growing demand. • At the same time, implementation of a national single window (NSW) in Bangladesh will change the logistics service structure in the region. • It is expected that trucks will be able to move in neighboring countries, and therefore efficient truck and cargo inspection at the border by security and customs authorities will be required. • In this respect, large X-ray scanners that can be used to quickly inspect both cargo and vehicles will be necessary to ensure the smooth movement of trucks crossing borders. • BLPA has proposed seven borders for installation of large X-ray scanners: Benapole, Bhomra, Burimari, Chunarughat, Darshana, Sheola, and Tamabil. • However, the NBR, which operates scanners in customs operations, already has a plan to introduce them to those borders with the support of ADB, and the installations to two borders are underway ahead of the others. • While not strongly recommended, the NBR project and the BLPA proposal are described in this report as there are differences in the targeted borders between the NBR project and the BLPA proposal. Concept (1) With one X-ray scanner it will take less than 10 minutes to scan one truck (i.e., the time for the truck to move into the scanning area, for scanning operation itself, examination of scanned image and the truck then exiting the scanning area). Therefore, 6-7 trucks can be scanned in one hour and 50-60 trucks can be scanned in one day (assuming eight working hours). (2) As such, with one scanner it would not be possible to scan all trucks and cargo crossing the border at Benapole, where 200-300 trucks cross per day. (3) Therefore, the selection of the trucks and cargo to be scanned requires a risk management system. SOPs for selection of trucks and cargo to be scanned should be developed. (4) The large X-ray scanner to be procured would be operated by border security (BGB) and Customs (NBR). (5) Inspections should be conducted with coordination of the concerned government agencies.
Anticipated Task(s)	• Prioritize land borders among the proposed seven sites where a large X-ray scanner would be effective and useful for border crossing control operations. • Review the truck movement flow at the selected borders and decide the optimal locations for the scanners. • Construct a scanner operation facility at the selected borders.

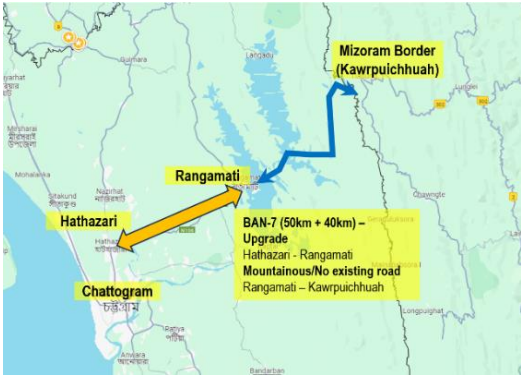
	- Select and procure the large X-ray scanners. - Develop an operational procedure by selectivity with risk management modules and conduct training in operations for customs and security authorities.
Anticipated Timeframe	1st to 2nd year: Select and decide what type of scanners to procure (mobile or permanent installations). Design the movement of trucks and the scanning facility and construct the site. 3rd year: Set up the scanner and train users.
Linked Project(s)	World Bank border facility improvements under the ACCESS program
Benefits	- Improved safety and security in the transportation and importation of goods with proper operation of the X-ray scanner system. - Faster border clearance procedures for logistics operators and customs brokers. - Improvement of the operation capacity of the land ports to better serve the growing demand for border-crossing traffic. - Economic benefits to exporters and importers from logistics improvements.
Social Impacts	Safety of using X-ray for truck and cargo inspection
Construction Impacts	- Construction would be limited to BLPA land port sites. - The facility must be safe enough for X-ray usage. - Thick wall would be necessary, or the examination place must have certain distance from public.
Implementation Risks	- There will be an issue concerning the source from which the large X-ray scanners will be procured. India will not accept Chinese X-ray scanners, while Bangladesh may not have such concerns. - Allocation of maintenance costs by the Government of Bangladesh.
Implementing Agency	Lead: BLPA Other Organizations: Customs (NBR), BGB (border security), other border agencies
Anticipated Cost	Cost of Installing Five Large X-Ray Scanners: About JPY 1.25 billion - Implementation cost: JPY 230 million ➢ Procurement of land for X-ray scanners: In-kind contribution by the Government of Bangladesh. ➢ Construction of scanner facility: JPY 100 million per facility ➢ X ray scanner: JPY 100 million per scanner ➢ Training of X-ray scanner operators for the five sites: JPY 30 million (total) - Consulting fee for five sites over three years: JPY 100 million (total)

Project Code:	Proj-5
Target Country:	Bangladesh (Assume India participation)
Project Name:	Construction of Mymensingh-Nakugaon/Dalu Road Section
Project Description:	Bangladesh's domestic road network is being improved, particularly regarding the development of arterial roads. The Padma Bridge and approach roads along with the N301 Purbachal Expressway are significant recent achievements in the development of Bangladesh's road network. The Inner and Outer Ring Roads of Dhaka and the N2 National Highway to Sylhet are developments envisaged in the near future. With regard to the transit demand between the North Eastern Region (NER) of India and the rest of India ("mainland India"), diagonal corridors from Kolkata, the corridor between Dhaka and Agartala, or a corridor in a southwestern to northeastern direction, may contribute to expansion of transit capacity for the NER. The Roads and Highways Department, RHD, with ADB support, has been revising its Road Master Plan, which will propose prioritized road sections to be upgraded by 2030 and 2035, including the development of international corridors.

	At the same time, improved transit corridors are expected in the BBIN region not only connecting Bangladesh and India, but also connecting Bangladesh and Bhutan as well as Bangladesh and Nepal. In this regard, road sections under construction with JICA and ADB financing, crossing Bangladesh and Meghalaya State, will formulate a new diagonal international corridor. i.e., (i) JICA's NER Road Network Connectivity Improvement project (Phases 1, 3, 5, and 7), a 201-km length road upgrade, connecting Dalu in Meghalaya, Tura, Milanpur, and Srirampur in Assam, including construction of the Dhubri Bridge over the Brahmaputra River (red arrow in the figure), and (ii) the ADB's Office of Public-Private Partnership's Joydebpur (North of Dhaka)-Mymensingh (National Highway No. 3), 87 km, four lanes, a full access control expressway, traversing 10 economic zones (blue arrow in the figure). The remaining section linking Mymensingh- Nakugaon/Dalu (75 km) (orange arrow in the figure) would be the last section to be completed in developing a Dhaka-Bhutan Corridor. It has not yet been pipelined, but the financing status should be (re)confirmed in the updated Bangladesh Road Master Plan.
Anticipated Task(s):	Source: JICA Survey Team (Google Map)  - Feasibility study of development of the Mymensingh-Nakugaon/Dalu road section, which is expected to be improved to an access-controlled, two-lane road, with a four-lane road in urbanized sections. - The road should be connected appropriately to the ADB-funded project and the existing network in Mymensingh. Project components include: (i) R371/N402 connecting Shomvugang, Phulpur, Nakla, Nalitabari, and the Nakugaon/Dalu Border; and (ii) several medium-sized bridges, e.g., Tarakanda Bridge, Phulpur Bridge, Jora Bridge, Hazi Bazar Bridge (from south to north). The feasibility study should clarify the necessity of improvement, construction of a new bypass section development, two- and four-lane sections, safety control measures, and land acquisition and relocation. There does not yet seem to be a detailed project proposal (DPP) for this section in Bangladesh. - After completion of the feasibility study and arrangement of funding, design and construction tasks will follow.
Anticipated Timeframe:	Before commencement of the project, there is a need to check its priority in the Bangladesh Road Master Plan and any existing DPP. The project could be completed within six years: 1st year: feasibility study and loan arrangement 2nd year: procurement of general consultants and design 3rd to 6th years: contractor procurement and construction.
Linked Project(s):	JICA's NER Road Network Connectivity Improvement Project (Phases 1, 3, 5, and 7), Road Upgrading (210 km)

	ADB's Office of Public-Private Partnership's Joydebpur (North of Dhaka)-Mymensingh (National Highway No. 3) Project, 87 km, developing a four-lane, fully access-controlled expressway, traversing 10 economic zones. The Mymensingh Kewatkhal Bridge Project (connecting Shomvugang and Mymensingh including access road construction), financed by the Asian Infrastructure Investment Bank (AIIB).			
Benefits:	- Regional connectivity improvement between Meghalaya and Bangladesh - Regional connectivity improvement between Bhutan and Bangladesh, passing through the Dhubri Bridge over the Brahmaputra River.			
Impacts:	Social Impacts:	Possible resettlement along the site	Environmental Impacts:	Large-Scale Civil Engineering Construction
Construction Impacts:	A 75-km long road upgrading project can be expected to have significant construction impacts.			
Implementation Risks:	Involuntary relocation along the widening section can be minimized during the feasibility assessment stage and detailed design stage.			
Implementing Agency:	Road and Highways Department (RHD), Bangladesh			
Anticipated Cost:	About USD 150 million for the 75-km construction of a two-lane road, with some four-lane sections; proper traffic control equipment; bridge rehabilitation; and consulting services for detailed design and construction supervision.			

Project Code:	Proj-6
Target Country:	Bangladesh
Project Name:	Mizoram-Chattogram Transport Connection
Project Description:	Mizoram – a landlocked state located in the southern part of the North Eastern Region (NER) of India – is landlocked. Access to seaports is difficult from the state; the distance to the nearest seaport, Chattogram, from the state's capital city, Aizawl, is more than 550 km, traversing Tripura and Bangladesh, although Chattogram Port is only about 80 km from Kowrpuchhuah, the town at the state border of Mizoram. There is no connecting road link between Chattogram and Kowrpuchhuah. The N106 national road connects Chattogram and Rangamati, 50 km east of Chattogram. However, there is no road link between Rangamati and Kowrpuchhuah, and waterborne transport on Kaptai Lake in Bangladesh provides access to Kowrpuchhuah, Mizoram. The Government of India understands the difficulty of developing this section. Hilly terrain in the section presents engineering challenges, including landslides and high volumes of rainfall. Moreover, the Chittagong (Chattogram) Hill Tracts area is characterized by ethnic diversity, sometimes leading to complex issues. Various ethnic groups and tribes inhabit this region, and tensions can arise, affecting the overall security situation.

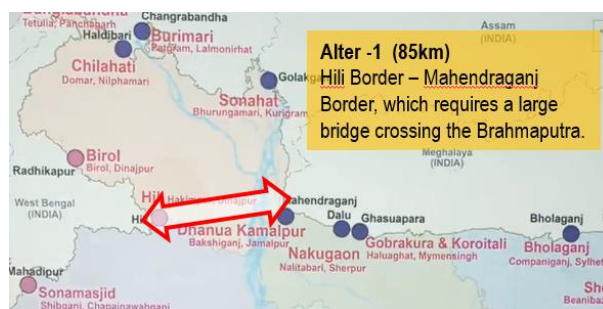
	However, recently Indian contractors successfully constructed road and railway connections linking Silchar-Kongsang-Imphal in the last couple of years, which suggests the possibility that an Indian contractor could also carry out construction in the Chittagong Hill Tracts. Also, the Bangladesh Roads and Highways Department (RHD) is in the process of preparing a DPP for the improvement of Chatteram-Rangamati (N106 between Hathazari and Rangamati, about 50 km). For further consideration, the remaining 40-km section between Rangamati and Kawrpuichhuah could be developed with waterborne transport logistics services.	 Source: JICA Survey Team (Google Map)
Anticipated Task(s):	- A prefeasibility study or initial factfinding study on the development of transport services between Chatteram and Kawrpuichhuah, expected to be improved to an access-controlled, two-lane road, including, (i) review of RHD's DPP report, (ii) arrangement of possible transport and logistics services for the remaining Rangamati-Kawrpuichhuah section, and (iii) identification of possible local arrangements to minimize implementation risks (e.g., risks related to engineering, local security, and demand). - If the initial study identifies further possibilities for implementation, a full feasibility study followed by arrangement of a loan (with cofinancing by the Government of India) should be carried out.	
Anticipated Timeframe:	1st year: Pre-feasibility / Factfinding. 2nd year: After initial confirmation of feasibility in terms of engineering and social/natural aspects, a full feasibility study for further analysis. 3-5th years: Implementation with financing arrangements.	
Linked Project(s):	RHD's DPP report (not yet prepared)	
Benefits:	Logistics access to southern Mizoram from Chatteram Port and City	
Impacts:	Social Impacts: High security concerns with indigenous people	Environmental Impacts: Impact on neighboring nature reserves
Construction Impacts:	Impacts from improvement of a 50-km road segment.	
Implementation Risks:	Involuntary relocation along the section to be widened can be minimized during the feasibility assessment and detailed design stages.	
Implementing Agency:	Roads and Highway Department (RHD), Bangladesh	
Anticipated Cost:	1) About USD 50 million for the rehabilitation of the 50-km, two-lane road, between Chatteram and Rangamati. 2) Additional costs for the 50-km Rangamati-Kawrpuichhuah (Mizoram, India) section; the implementation details should be specified in a prefeasibility study.	

Project Code:	Proj-7
Target Country:	Bangladesh
Project Name:	Bypass Development around Petrapole/Benapole

Project Description:	Road-based trade between India and Bangladesh is concentrated at the Petrapole/Benapole border crossing along the Dhaka-Kolkata corridor. This corridor is located along the historical Jashore (Jessore)-Kolkata corridor, which provides these historic cities with local industrial resources and international trade opportunities. However, the large volume of traffic along this corridor results in delays and congestion at the border. There are two road-based crossings near Petrapole/Benapole. The Gede/Darshana border is located about 50 km north, and the Ghojadanga/Bhomra border is located 40 km south. In addition, there is a minor border facility at the Gede/Darshana crossing, and the existing road connection is weak. There is less possibility to improve this link in the short term. On the Indian side, MoRTH is reluctant to develop a road on this border due to the difficulty of land expropriation in West Bengal. LPAI believes it is a viable alternative pathway. Ghojadanga/Bhomra is located along the corridor between Kolkata and Khulna, where economic zones of the Bangladesh Economic Zones Authority (BEZA) are located, and the crossing is connected to Road No. 2 of West Bengal State Road in India and R760 of Bangladesh. The access road (Old Satkila Road) needs to be improved to carry freight traffic between Kolkata and Khulna. The improvements have already been shown by the World Bank ACCESS project, and it has been informed that the road maintenance on the Indian side is also good. The border is designated as an integrated check post (ICP) in India, and the e-Suvidha system has been deployed to facilitate operations. Less modern border management methods are applied at the Ghojadanga ICP, although it is served by the e-Suvidha system. BLPA is considering with RHD the development of a bypass road in Benapole that would connect directly outside the border from the new cargo parking area to be completed in 2025. The improvement would extend approximately 10 km. BAN-8/IND Expansion of the Gede-Darshana border and Ghojadanga-Bhomra border for expansion of Petrapole-Benapole capacity. Source: JICA Survey Team Proj-7 Freight exclusive access road development behind Benapole freight terminal to R780 Source: JICA Survey Team (Google Map)
Anticipated Task(s):	- Feasibility study on (i) Feasibility study on a new road (approx. 10 km) connecting the Benapole freight district and R780. - Financial arrangements, detailed design, and procurement.

	Construction.			
Anticipated Timeframe:	Before proceeding, there is the need for coordination with RHD and check the existing DPP for Bangladesh as well as the existing DPR in West Bengal State. The project could be completed within six years: 1st year: Feasibility study and loan arrangement. 2nd year: Procurement of general consultants and design. 3rd to 6th years: Contractor procurement and construction.			
Linked Project(s):	RHD's DPP report (not yet prepared)			
Benefits:	Decongestion of Benapole area			
Impacts:	Social Impacts:	Possible resettlement along the site	Environmental Impacts:	Large-Scale Civil Engineering Construction
Construction Impacts:	Impacts from construction of a 10 km long road section			
Implementation Risks:	Involuntary relocation along the section to be widened could be minimized during the feasibility assessment and detailed design stages.			
Implementing Agency:	Road and Highways Department (RHD), Bangladesh			
Anticipated Cost:	About USD 20-25 million for the 10-km improvement of a two-lane road, including proper traffic control equipment, bridge rehabilitation, and lighting, with consulting services for detailed design and construction supervision.			

Project Code:	Proj-8
Target Country:	Bangladesh
Project Name:	Hili-Makhendraganj Shortcut Route
Project Description:	The surface transport connection between the North Eastern Region (NER) of India and the rest of the country ("mainland India") depends on the Siliguri Corridor. The Government of India physically and institutionally seeks potential transit corridors across Bangladesh, with several transit routes with multimodal functions. The proposed section would provide the shortest route between the states of West Bengal and Meghalaya over the territory of Bangladesh. The length of the section would be about 85 km. At present, there is no direct highway in Bangladesh territory connecting the two borders. It should be noted that the route must cross the Brahmaputra/Jamuna River for more than 15 km. There is distance of 100 km south to the Bangabandhu (Jamuna) Bridge and 90 km north to the Dhubri Bridge north. The Indian connecting highway (NH512) at the Hilli Border (West Bengal) has two lanes with proper shoulders; however, the road connecting with Bangladesh has only a single track, and it needs to run more than 20 km for Bangladesh arterials. At the Makhendraganj Border the route is connected with State Highway No. 12 and needs to run over the mountainous section to reach the NER. The proposed section has poor connections in Bangladesh and similarly poor connections to the hinterland area in India. However, geographically it provides the shortest



Source: JICA Survey Team

	connection between the states of Meghalaya and West Bengal and may generate benefits for India.			
Anticipated Task(s):	- Pre-Feasibility study or initial factfinding study on development of the route, including (i) a review of the Bangladesh Road Master Plan; (ii) a review of the road connectivity development plans in the India highway masterplan and DPRs; and (iii) demand analysis, comparing forecast demand with the present Siliguri traffic, which could justify the construction of a bridge over the Brahmaputra (Jamuna) River. - In case the initial study finds further possibilities for implementation of the project, a full feasibility study and loan arrangements (with cofinancing by the Government of India) should be coordinated.			
Anticipated Timeframe:	1 st year: Prefeasibility Study / Factfinding. 2 nd year: After the confirmation of the initial feasibility in engineering and social/natural aspects, a full feasibility study for further analysis. 3 rd to 5 th year: Implementation with financing arrangements			
Linked Project(s):	None (at this stage)			
Benefits:	Logistics access improvement between West Bengal and Meghalaya State (NER)			
Impacts:	Social Impacts:	Improved regional connectivity	Environmental Impacts:	N/A at this moment
Construction Impacts:	Improvement of an 80-km road section with a long bridge (more than 15 km) will result in construction impacts.			
Implementation Risks:	Such risks cannot be precisely specified at this stage			
Implementing Agency:	Roads and Highways Department (RHD), Bangladesh Ministry of Road Transport and Highways (MoRTH), India			
Anticipated Cost:	The cost of the project may exceed USD 3 billion in total, although it is not necessary to estimate the cost at this stage.			

Appendices

Appendix A

Economic Partnership Agreement among BBIN Countries

Appendix A

Economic Partnership Agreement among BBIN Countries

1. India Extends SAFTA Benefits to All Its Neighboring Countries in the BBIN Region

Under the South Asian Free Trade Area (SAFTA) 25 items (mainly tobacco and liquor) all goods from Bangladesh enjoy duty-free access to India. Post its Least Developed Countries (LDC) Graduation in 2026, Bangladesh will lose this duty free access, requiring a Comprehensive Economic Partnership Agreement (CEPA).

SAFTA Document available at:

<https://commerce.gov.in/wp-content/uploads/2020/05/safta.pdf>

2. CEPA between India – Bangladesh

Bangladesh and India agree to wrap up negotiations for a CEPA by 2026, trying to give their close cooperation a further fillip.

In 2022, both nations concluded a joint feasibility study on the CEPA. The CEPA gains additional significance as Bangladesh is set to lose its LDC status after 2026, thereby losing its duty-free and quota-free market access in India. The proposed CEPA goes beyond the traditional free-trade agreements and also addresses trade in services, investment, intellectual-property rights and e-commerce.

The proposed deal, which calls for withdrawal of duties, is expected to boost Bangladesh's exports by 190.15 per cent and more if transaction costs were also reduced through improved connectivity, said a study by the Bangladesh Foreign Trade Institute and the Indian Centre for Regional Trade. India's exports to Bangladesh are also expected to increase by 188 per cent. The CEPA will increase Bangladesh's GDP by 1.72 per cent and India's by 0.03 per cent, the study said. (Source: <https://thefinancialexpress.com.bd/trade/bangladesh-india-agree-to-activate-cepa-by-2026>)

Appendix B

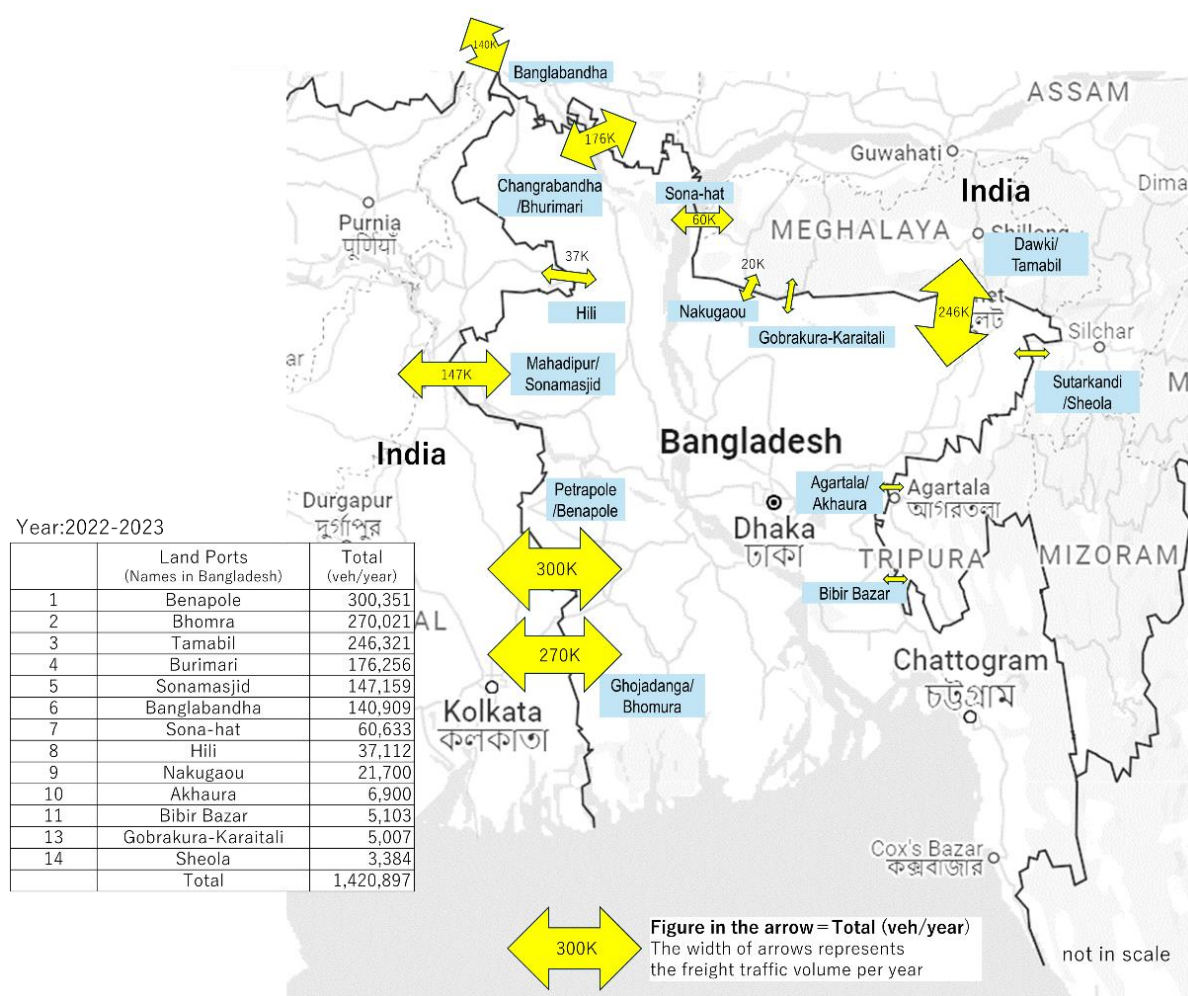
Statistics of Traffic at Land Borders

Appendix B

Statistics of Traffic at Land Borders

In Appendix B, charts showcasing vehicle numbers from 2016 to 2024 are included for the India-Bangladesh.

1.1 India - Bangladesh Border



Source: Bangladesh Land Port Authority

**Figure 1 Comparison of Freight Traffic Volumes by Borders
(India-Bangladesh, 2022-23)**

The map above depicts the comparison of the freight vehicle numbers accessing the borders between India and Bangladesh. There are 23 border crossings between the two countries and 15 land ports are active, and 14 ports have statistics. The detail of the source is summarized in the following table.

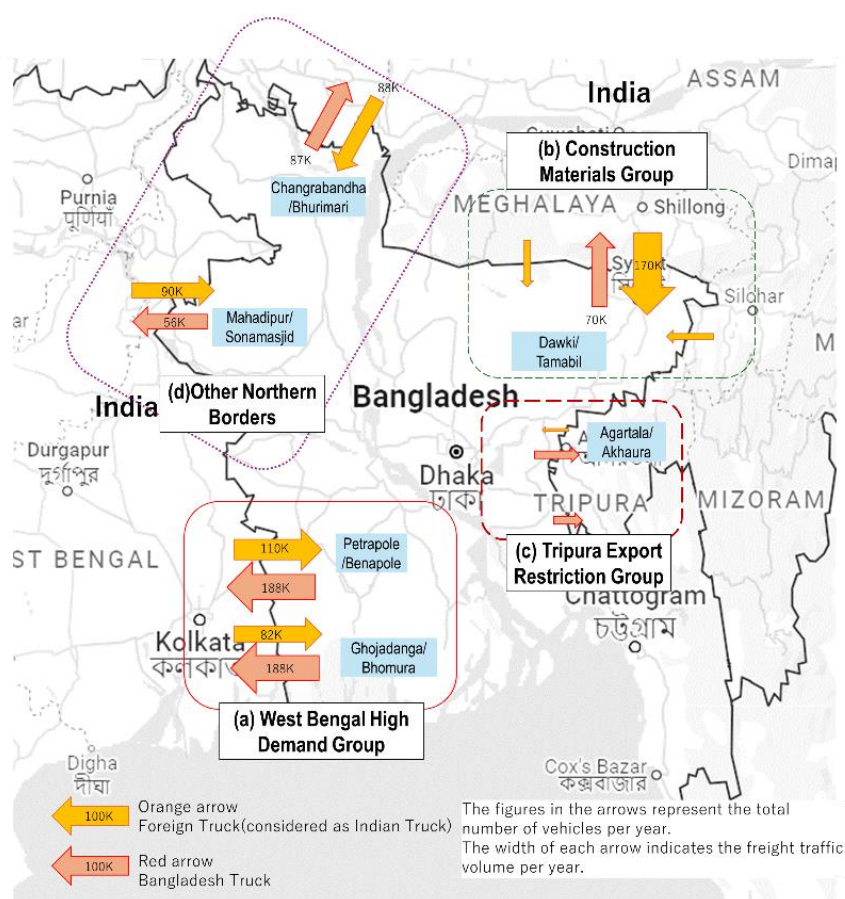
Table 1: Total Number of Vehicles Crossing through Land Ports of Bangladesh

Year	2016-17			2017-18			2018-19			2019-20		
Land Port (India/Bangladesh)	Foreign Truck	Bangladesh Truck	Total	Foreign Truck	Bangladesh Truck	Total	Foreign Truck	Bangladesh Truck	Total	Foreign Truck	Bangladesh Truck	Total
Petraole/Benapole	114,511	137,359	251,870	121,633	172,001	293,634	122,335	173,964	296,299	94,405	132,885	227,290
Mahadipur/Sona-Masjid	86,776	56,482	143,258	77,245	66,940	144,185	67,494	53,553	121,047	36,724	23,134	59,858
Hili/Hilli	44,177	69,852	114,029	44,632	84,901	129,533	40,401	70,902	111,303	40,283	80,214	120,497
Changrabandha/Bhurimari	73,890	74,623	148,513	101,751	104,842	206,593	105,896	106,729	212,625	73,890	75,765	149,655
Agartala/Akhaura	1	6,873	6,874	7	5,108	5,115	5	10,020	10,025	10	12,023	12,033
Srimantapur/Bibir Bazar	40	6,829	6,869	63	9,350	9,413	215	11,670	11,885	148	8,804	8,952
Fulbari/Banglabandha	39,177	5,365	44,542	44,934	7,551	52,485	61,520	61,529	123,049	47,145	47,141	94,286
Ghojadanga/Bhomura	79,054	127,465	206,519	80,458	160,292	240,750	81,807	154,009	235,816	65,208	140,376	205,584
Dalu/Nakugaou	7,812	7,815	15,627	1,041	1,041	2,082	5,785	5,852	11,637	6,954	6,982	13,936
Dawki/Tamabil	NA	NA	NA	55,383	23,850	79,233	132,407	49,921	182,328	102,868	36,709	139,577
Sonahat/Sonahat	NA	NA	NA	NA	NA	NA	22,440	22,465	44,905	9,007	9,765	18,772
Muhurighat/Belonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gachhuapara/Gobrakura-Karaitali	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sutarkandi/Sheola	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	445,438	492,663	938,101	527,147	635,876	1,163,023	640,305	720,614	1,360,919	476,642	573,798	1,050,440

Year	2020-21			2021-22			2022-23		
Land Port (India/Bangladesh)	Foreign Truck	Bangladesh Truck	Total	Foreign Truck	Bangladesh Truck	Total	Foreign Truck	Bangladesh Truck	Total
Petraole/Benapole	117,326	169,958	287,284	108,819	176,111	284,930	111,903	188,448	300,351
Mahadipur/Sona-Masjid	78,920	56,022	134,942	86,914	57,770	144,684	90,894	56,265	147,159
Hili/Hilli	49,667	97,711	147,378	50,165	91,211	141,376	36,732	380	37,112
Changrabandha/Bhurimari	103,620	105,757	209,377	100,008	105,757	205,765	88,506	87,750	176,256
Agartala/Akhaura	10	11,674	11,684	4,527	9,886	14,413	761	6,139	6,900
Srimantapur/Bibir Bazar	266	6,597	6,863	2,326	7,077	9,403	548	4,555	5,103
Fulbari/Banglabandha	61,540	61,649	123,189	60,521	61,043	121,564	69,736	71,173	140,909
Ghojadanga/Bhomura	98,224	20,961	119,185	99,051	215,342	314,393	82,481	187,540	270,021
Dalu/Nakugaou	11,385	11,385	22,770	16,576	16,575	33,151	10,850	10,850	21,700
Dawki/Tamabil	132,563	58,286	190,849	176,214	77,818	254,032	176,070	70,251	246,321
Sonahat/Sonahat	21,834	23,518	45,352	26,349	28,442	54,791	29,452	31,181	60,633
Muhurighat/Belonia	NA	NA	NA	NA	NA	NA	21	20	41
Gachhuapara/Gobrakura-Karaitali	NA	NA	NA	NA	NA	NA	5,007	NA	NA
Sutarkandi/Sheola	NA	NA	NA	NA	NA	NA	3,384	NA	NA
Total	675,355	623,518	1,298,873	731,470	847,032	1,578,502	706,345	714,552	1,412,506

Ratios of Foreign Trucks and Bangladesh Trucks at Each Border Point 2022-2023		
Land Port (India/Bangladesh)	Foreign Truck	Bangladesh Truck
Petraole/Benapole	37%	63%
Mahadipur/Sona-Masjid	62%	38%
Hili/Hilli	99%	1%
Changrabandha/Bhurimari	50%	50%
Agartala/Akhaura	11%	89%
Srimantapur/Bibir Bazar	11%	89%
Fulbari/Banglabandha	49%	51%
Ghojadanga/Bhomura	31%	69%
Dalu/Nakugaou	50%	50%
Dawki/Tamabil	71%	29%
Sonahat/Sonahat	49%	51%
Muhurighat/Belonia	51%	49%
Gachhuapara/Gobrakura-Karaitali	100%	0%
Sutarkandi/Sheola	100%	0%

Note: Bangladesh's fiscal year (July to June)
Source: Bangladesh Land Port Authority



Source: Bangladesh Land Port Authority

Figure 2: Flow of Trucks Freight Traffic Volumes by Borders (India-Bangladesh, 2022-23)

The figure above illustrates the directional flow of trucks between India and Bangladesh based on data from BLPA for the period of 2022 to 2023. The orange arrows represent trucks from foreign countries (considered as vehicles from India), while the red arrows indicate the number of trucks from Bangladesh. While the overall numbers of trucks from India and Bangladesh are roughly equal, there are different characteristics observed in each region. The distribution and features are considered to be influenced by factors such as vehicle size, trade regulations, and industrial cooperation. The characteristics of each region are as follows:

- West Bengal High Demand Group (Kolkata-Dhaka Corridor):** There is a higher number of trucks from the Bangladesh side compared to India. This disparity is attributed to the smaller size of trucks on the Bangladesh side, possibly influenced by historical factors such as the impact of old ferries and the construction of the Padma Bridge, which may eventually accommodate larger vehicles.
- Construction Materials Group (Dhaka-Sylhet-India NER Corridor):** There is a higher influx of trucks from India, indicating a significant flow of goods, possibly related to the import of construction materials.
- Tripura Export Restriction Group (Agartala-Akhaura Corridor):** Most trucks are from the Bangladesh side, is likely influenced by Export Regulation at Agartala.

- (d) **Other Northern Borders (e.g., Birampur):** The number of trucks from India and Bangladesh is nearly equal. This parity is speculated to be due to Bangladesh's ability to accommodate larger vehicles.

According to the India Directorate General of Commercial Intelligence and Statistics, the trade volumes at the Petrapole/Benapole and Ghojadanga/Bhomra borders differ significantly. In the 2022-2023 period, the export figures for Petrapole Land Port stood at \$2,806,964,197, whereas Ghojadanga recorded \$577,164,834. For imports, Petrapole Land Port reported \$993,939,462, compared to Ghojadanga's \$323,596,812.

The disparity in trade volumes between Benapole/Petrapole and Ghojadanga/Bhomra is likely influenced by differences in cargo types and infrastructure development. Petrapole predominantly exports industrial products, including cotton fabric, while Ghojadanga focuses on agricultural products such as cotton, onions, garlic, and spices. This difference in cargo types is believed to impact the trade amounts significantly.

On the import side, Petrapole handles items like Readymade Garments, Cotton Rags, Briefcase, Bags, Jute Yarn, and Hydrogen Peroxide, whereas Ghojadanga deals with Jute bags, cloth scrap, and broom sticks, showing a difference in the types of goods traded.

Moreover, there are significant differences in infrastructure between Benapole/Petrapole and Ghojadanga/Bhomra. For example, Benapole has a storage capacity of 40,000 MT, while Bhomra's capacity is only 1600 MT. Additionally, Bhomra is currently operating on a transshipment basis, as per information from the Bangladesh Land Port Authority.

Overall, the trade volume disparities between these border points are influenced by the types of goods traded and the differences in infrastructure development and capacity. These factors contribute to the significant difference in trade volumes between Petrapole/Benapole and Ghojadanga/Bhomra land ports.