

Report on

**Enhance the Efficiency of Bangladesh Land Port Authority through
Streamlining of Port Management using Supply Chain Management
Theory-**

A Case Study on Benapole Land Port

By

Md. Hasan Ali

ID-21282007

An Internship Report Submitted to the BIGD, BRAC University in partial fulfillment
of the requirements for the degree of
Masters in Procurement & Supply Management

**BRAC Institute of Governance and Development
BRAC University**

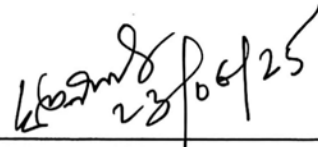
May 2025

©2025. BRAC University
All rights reserved.

Declaration

It is hereby declared that, the report submitted is my own original work while completing degree at BRAC University. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution. I have acknowledged all main sources of help.

Student's Full Name & Signature:



Md. Hasan Ali

Student ID: 21282007

Academic Supervisor's Full Name & Signature:



Shish Haider Chowdhury MCIPS

(Secretary, Govt. of Bangladesh & Senior Trainer
BIGD, BRAC University.

Letter of Transmittal

Shish Haider Chowdhury

MCIPS

(Secretary, Govt. of Bangladesh & Senior Trainer)

BIGD

BRAC University

66 Mohakhali, Dhaka-1212

Sub: Submission of Report titled “Enhance the Efficiency of Bangladesh Land Port Authority through Streamlining of Port Management using Supply Chain Management Theory A Case Study on Benapole Land Port”.

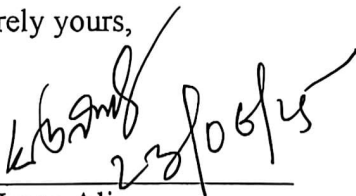
Dear Sir,

I am grateful to submit herewith my report on “Enhance the Efficiency of Bangladesh Land Port Authority through Streamlining of Port Management using Supply Chain Management Theory- A Case Study on Benapole Land Port” as a partial requirement to achieve the degree of Masters in Procurement and Supply Chain Management. It is my proud privilege to work under your active supervision and guidance.

I have attempted my best to finish the report with the essential data from officers of Bangladesh Land Port Authority, stakeholders of land port both private and government agencies.

I hope that the report will meet the desires.

Sincerely yours,



Md. Hasan Ali

Student ID: 21282007

BIGD, BRAC University

Date: -----May, 2025

Non-Disclosure Agreement

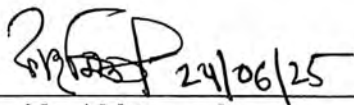
This agreement is made and entered into by the undersigned student Md. Hasan Ali at BRAC University. As I am currently working at the organization, I have the access to the Organization information that are confidential. I agree that I will keep all the information strictly confidential and will not share with anyone outside of the organization

Student's Full Name & Signature:



Md. Hasan Ali
Student ID: 21282007

Workplace Supervisor's Full Name & Signature:



Fahmida Akhtar, ndc
Additional Secretary, Govt. Of Bangladesh &
Member (Development)
Bangladesh Land Port Authority
Sthala Bondor Bhaban, Plot No. F-19/A, Shere-e-Banglanagar, Agargaon, Dhaka

Acknowledgement

Firstly, I would like to thanks to Almighty Allah for helping me to reach at the end of journey of my MPSM course. It would not be possible without the help of Almighty.

I would like to take this opportunity to express my heartfelt gratitude to the supervisor, **Mr. Shish Haider Chowdhury, MCIPS** (Secretary, Govt. of Bangladesh & Senior Trainer, BRAC University for his excellent motivation and patient supervision during the course of this report work.

The author is also thankful to the workplace supervisor, **Mrs. Fahmida Akhtar, ndc, Additional Secretary, Govt. Of Bangladesh** for her continuous support to complete the report.

The author is grateful to the BRAC Institute of Governance and Development, BRAC University too for its facilities and co-operation.

The author is in sincerely debited to the officers and staffs of Bangladesh Land Port Authority and different port users at for their help and support regarding collection of data and related information for this report. The support received from Customs, C& F Agent and other are worth mentioning.

Last but not the least, the author would like to express deepest gratitude and appreciation to his family members and other well-wishers for their constant inspiration and encouragement.

ABSTRACT

Land ports are playing a significant role in increasing import and export and collecting government revenue. At the same time, it is playing an effective role in alleviating poverty and reducing border smuggling by creating employment and increasing the income of the marginal people of the country. The daily activities of Bangladesh Land Port Authority are being conducted keeping in mind the objective of accelerating economic growth.

Bangladesh is bordered by India along 4,053 km and Myanmar along 193 km, making the border with India the 5th longest in the world. Bangladesh has 24 land ports along these borders with India and Myanmar. The trade through these land ports is growing steadily, with imports increasing at an average rate of 23.33% and exports at 4.83%. Notably, 16.47% of Bangladesh's total imports come from India, with a significant portion of this trade conducted via land routes. However, the efficiency of these land ports is currently suboptimal. A recent study at Benapole Land Port conducted by the National Board of Revenue (NBR) reported a total turnaround time of approximately 10 days, 8 hours, and 11 minutes. This extended turnaround time significantly raises business costs for traders and adversely affects consumers by increasing the cost of goods.

During the field visit of this for the study port stakeholders were asked why this high time required. They responded that lack of automation system and connected with all border agencies and stakeholders, shortage of mechanization in the port operation for cargo handling equipment, no Standard Operational Procedure (SOP) for port operations and coordination with the stakeholders. They suggested that a proper SOP should be develop from the pre-arrival procedure for export & import to the final delivery cargoes from the port. They also suggested to develop sufficient infrastructures for storage and parking of goods & vehicles including innovative facilities which may reduce the time & cost in port operation.

Land ports play a crucial role in global supply chains as Third-Party Logistics (TPL) service providers. Their functions, including the loading and unloading of cargo, storage, and payment of taxes and duties, are essential for international trade and transportation. Efficient port operations are vital for integrating these activities smoothly into the overall logistical chain. Given the significance of ports, inefficiencies at these points can disrupt the alignment between ports and their logistics chains. To address these challenges, this study applies the principles of lean operations and Just in Time (JIT) theories to enhance port efficiency. By applying lean principles and JIT theories, the goal is to develop a more efficient port operation that reduces waste and enhances the flow of goods through the supply chain. This approach aims to improve overall effectiveness, reduce costs, and facilitate smoother integration with regional and global logistics networks.

There are so many dimensions and measures need to be taken to increase the efficiency of land port for reducing the time which will positively impact the cost trade land routes. The major recommendation to address the challenges are Immediately implement the full automation system in an integrated way including the interfacing or interlink with other agencies, Mechanization of port operation, Develop innovative infrastructure, and Harmonization of time of port operation.

The land port has an effective role in the economic growth in Bangladesh. An effective port may reduce the cost of international trade, reduce the price of commodity by properly maintaining the supply chain. In the modern port management, Lean Operations in association of Just in Time (JIT) theories of Supply Chain Management will make reducing of wastage of different activities like transportation time, waiting time of cargoes, over processing of operational work and other port operations using measured interventions. This will be expediting the ports efficiency which is directly involved with the cost of trading. Considering the importance of increasing efficiency of ports through land routes, the BLPA may take the recommendations to implement as soon as possible.

Table of Contents

Chapter		
	Declaration	i
	Letter of Transmittal	ii
	Non-Discloser Agreement	iii
	Acknowledgement	iv
	Table of Content	v
	List of Table	vi
	List of Figures	vii
	List of Abbreviations	ix
	Abstract	x-xi
Chapter- One: Introduction	Introduction	1-5
	Rationale	5
	Research Problem	6
	Research Objectives	6
	Research Methodology	6-7
	Structure of the report	7
Chapter -Two: Literature Review	Land Port Concept	8
	Mission & Vision of Land Port	8
	Functions of Land Port	8
	Land Port Purposes	8
	Present Land Port Management Model	9
	Relationship between land port efficiency and supply chain	9-11
Chapter -Three: Existing Process & Performance Level of Land Port	Import Procedure	12-13
	Export Procedure	14
	Existing Performance Level	15-19
Chapter-Four	Finding from Field Visit & Survey	20-24
Chapter-Five	Measure for Efficiency Improvement	25-31
Chapter-Six	Recommendation and Conclusion	32-34
Reference		35

List of Tables

Table no	Name of tables	Page no
Table -1	List of Land Ports	2
Table -2	Time Requirement by the Different Agencies	15
Table -3	Time Taken by Customs	16
Table- 4	Time Taken by Port Authority	17
Table- 5	Time Taken by Other Govt. Agencies	18
Table -6	Time Taken by C & F Agents & Importer	18
Table 7	List of Agencies for Survey	20
Table -8	Main Reason for Additional Time Requirement	21
Table -9	Comparison of Time Requirement by Port Authority	21
Table -10	List Comparison of Time Requirement by C&F Agent	23
Table -11	Time Requirement by the Different Agencies as per Re-Engineering Process	31

List of Figures

Figure no	Name of figures	Page no
Figure -1	Location Map of Land Ports	1
Figure -2	Import Procedure	13
Figure -3	Existing Export Procedure	14
Figure- 4	Time Requirement by Different Agencies	16
Figure -5	Time Taken by Customs	17
Figure -6	Time Taken by Port Authority	17
Figure -7	Time Taken by C & F Agents & Importer	19
Figure -8	Reason for Additional Time Requirement	22
Figure -9	Indicative Diagram of Automation system	26
Figure -10	Conveyor Belt System	29
Figure- 11	Common Gate at Zero line	29
Figure -12	Facilities Develop at Zeroline	30
Figure -13	Modern Warehouse with Parking & Loading Area	30

List of Abbreviations

ARO	: Assistant Revenue Officer
ASYCUDA	: Automated System for Customs Data
BSTI	: Bangladesh Standards and Testing Institution
BGB	: Border Guard Bangladesh
BLPA	: Bangladesh Land Port Authority
B/E	: Bill of Entry
BOE	: Bill of Export
BOT	: Build, Operate and Transfer
BCSIR	: Bangladesh Council of Scientific and Industrial Research
C&F	: Clearing & Forwarding Agent
GOB	: Government of Bangladesh
ICP	: Integrated Check Posts
JIT	: Just IN Time
LCS	: Land Customs Station
LPAI	: Land Port Authority of India
MPSM	: Masters in Procurement & Supply Chain
NBR	: National Board of Revenue
OGA	: Other Government Agency
RO	: Revenue Officer
SC	: Supply Chain
SOP	: Standard Operating Procedure
TPL	: Third Party Logistics
TRS	: Time Release Study
ILPMS	: Integrated Land Port Management System
WTO	: World Trade Organization

Chapter- One

Introduction

1.1. Introduction:

The total length of Bangladesh's land border is 4,246 km, with 4,053 km shared with India and 193 km with Myanmar, according to the Bangladesh National Information Bureau. This extensive land border offers significant opportunities to enhance cross-border connections with neighboring countries, promoting import-export growth and regional cooperation. To develop infrastructural facilities and improve port management for land-based import-export activities, the Bangladesh Land Port Authority (BLPA) was established under the Bangladesh Land Port Authority Act, 2001 (Act No. 20 of 2001). The BLPA began operational activities of the land ports in 2002, aiming to facilitate and streamline trade across the borders with India and Myanmar (**Bangladesh Land Port Authority, 2023.**).

Currently, the Government of Bangladesh has declared 24 important land customs stations as land ports. Of these, 23 are with India and one is with Myanmar. Necessary infrastructure has been developed at 17 land ports, making them fully functional. Among them, 12 land ports namely - Benapole, Burimari, Akhaura, Bhomra, Nakugaon, Tamabil, Sonahat, Gobrakura-Karaitali, Belonia, Sheola, Dhanuakamapur and Ramgarh land ports are being managed by the Bangladesh Land Port Authority. For the rest 5 land ports namely- Banglabandha, Sonamsjid, Hili, Teknaf and Bibirbazar land ports, operators has been engaged on BOT (Build, Operate & Transfer) basis to facilitate infrastructure construction and port management. Development activities of the remaining 7 land ports are in the process of development (**Bangladesh Land Port Authority, 2023.**).

The land ports in Bangladesh environ the land customs station, border protection and other agencies responsible for the enforcement of the country's laws pertaining to border activities. They serve as a point of contact for travelers entering or leaving the country and are engaged in preventing the entry of illegal goods & passengers, collecting taxes, preventing the entry of harmful plants, animal pests, and human and animal diseases, inspecting export and import documents, registering valuable items being temporarily taken out of the country, and conducting business. Land ports are spread across the country connecting the border of surrounding countries like India and Myanmar. The list and location of the land ports in Bangladesh is mentioned in the following Table:

Table -1: List of Land Ports

No.	Land Port	Date of Declaration	Location (District)	Location at Indian/Myanmar	Management/Status
1	Benapole	12/01/2002	Jashore	24 Pargana, West Bengal	Govt. own management
2	Teknaf	12/01/2002	Cox's Bazar	Maungdaw, Myanmar	BOT (through Private operator)
3	Banglabandha	12/01/2002	Panchagarh	Fulbari, Jalpaiguri	BOT (through Private operator)
4	Sonamasjid	12/01/2002	Chapai Nawabgaj	Mahadipur, Maldah	BOT (through Private operator)
5	Hili	12/01/2002	Dinajpur	South Dinajpur, West Bengal	BOT (through Private operator)
6	Bhomra	12/01/2002	Satkhira	24 Pargana, West Bengal	Govt. own management
7	Darshana	12/01/2002	Chuadanga	Krishnanagar, West Bengal	Not yet operational.
8	Birol	12/01/2002	Dinajpur	Goura, West Bengal	BOT . Not yet operational.
9	Burimari	12/01/2002	Lalmonirhat	Mekhaljigonj, West Bengal	Govt. own management
10	Tamabil	12/01/2002	Sylhet	Dawki, Meghalaya	Govt. own management
11	Akhaura	12/01/2002	Brahmanbaria	Agartala, Tripura	Govt. own management
12	Bibirbazar	18/11/ 2002	Cumilla	Sunamura, Agartala	BOT (through Private operator)
13	Biloniya	23/02/2009	Feni	Biloniya, Tripura	Govt. own management
14	Gobarakura and Karitali	14/06/2010	Mymensingh	Tura, Meghalaya	Govt. own management
15	Nakugaon	30/09/2010	Sherpur	Dalu, Meghalaya	Govt. own management
16	Ramgarh	07/11/2010	Khagrachari	Sabroom, Tripura	Govt. own management
17	Sonahat	25/10/2012	Kurigram	Sonahat, Assam	Govt. own management
18	Tegamukh	30/06/2013	Rangamati	Demagri, Mizoram	Not yet operational.
19	Chilahati	28/07/2013	Nilphamari	Cooch Behar, West Bengal	Not yet operational.
20	Daulatganj	31 Jul 2013	Jibon Nagar, Chuadanga	Mazdia, Nadia	BLPA (Not yet operational)
21	Dhanua Kamalpur	21 May 2015	Bokshigonj, Jamalpur	Mohendragon j, Meghalaya	BLPA

No.	Land Port	Date of Declaration	Location (District)	Location at Indian/Myanmar	Management/Status
22	Sheola	30 Jun 2015	Bianibazar, Sylhet	Sutarkandi, Karimganj	BLPA
23	Balla	23 Mar 2016	Chunarughat, Hobiganj	Paharmura, Tripura	BLPA (Not yet operational)
24	Bholagonj	29 Jul 2019	Companygonj, Sylhet	Cherapunji, Meghalaya	BLPA (Not yet operational)

Source: BLPA Data



Figure-1: Location Map of Land Ports

Source: Collected from BLPA

Land ports in Bangladesh are vital for boosting import and export activities, collecting government revenue, and fostering economic growth. They contribute significantly to poverty alleviation and the reduction of border smuggling by creating jobs and increasing the income of marginalized communities. The Bangladesh Land Port Authority (BLPA) is dedicated to accelerating economic growth through its daily operations. As a member of the World Trade Organization (WTO), Bangladesh has entered the era of paperless trade. This initiative aims to simplify cross-border trade processes, expedite trade activities, and reduce the time and hassles associated with the export and import of goods. To align with the objectives of trade facilitation and paperless trade, it is essential to develop and implement standardized operating procedures that incorporate digital, automated, and smart border management approaches. This will enhance the efficiency of land port operations and support the broader goals of digital trade facilitation.

1.2. Rationale:

Bangladesh is bordered by India along 4,053 km and Myanmar along 193 km, making the border with India the 5th longest in the world. Bangladesh has 24 land ports along these borders with India and Myanmar (**Bangladesh Land Port Authority, 2023**). The trade through these land ports is growing steadily, with imports increasing at an average rate of 23.33% and exports at 4.83%. Notably, 16.47% of Bangladesh's total imports come from India, with a significant portion of this trade conducted via land routes. However, the efficiency of these land ports is currently suboptimal. A recent study at Benapole Land Port conducted by the National Board of Revenue (NBR) reported a total turnaround time of approximately 10 days, 8 hours, and 11 minutes [**National Board of Revenue. (2022)**]. This extended turnaround time significantly raises business costs for traders and adversely affects consumers by increasing the cost of goods.

To address these issues, improving trade facilitation is crucial. Reducing the time, cost, and visits (TCV) associated with port operations will lower overall trade costs and benefit consumers. This can be achieved by:

1. **Reducing Turnaround Time:** Streamlining processes to decrease the turnaround time of cargoes.
2. **Simplifying Trade Activities:** Implementing efficient procedures to simplify and expedite trade activities.
3. **Policy Changes:** Modifying policies and practices among port stakeholders, including land ports, customs, and other border agencies, to enhance overall efficiency.

These measures are essential for optimizing land port operations and supporting the growth of trade while keeping costs manageable for businesses and consumers.

1.3. Problem Statement:

The land ports (specially in Benapole) are presently facing the challenges of long-time requirement for cargo clearance, lack of inter-agency cooperation, regulatory reforms, stakeholder management, modern technologies and so on. To make the smooth port operation and strengthen the sustainable port management at Benapole land port, shortcoming will be identified and probable recommendations will be made to develop port logistics for seamless & effective supply chain.

1.4. Research Objectives:

General Objective: To measure enhancement of efficiency of Bangladesh land port authority through streamlining of port management using supply chain management theory with a focus on Benapole land port.

Specific Objectives are:

- Determine the existing performance level of Benapole land port.
- Inter and intra cooperation mechanism among the different border management agencies.
- Identify the present status of technological inputs.
- Scale up the cargo handling procedure for reducing the time & cost for trade activities.
- Formulate the stakeholder management system for smooth coordination
- Identify the required modern technologies towards smart land ports at Benapole land port.

1.5. Methodology:

Following are the methodology has been considered for this study report:

1. Preparation and planning of the study report;
2. Collection of data & review of literatures;
3. Analysis of data & existing procedure;
4. Preparation of report.

1. Preparation and planning of the study report:

In this stage, the framework of the study has been planning & done like collecting & reviewing of data, information, how to analysis these data, field visit and other activities has to be completed.

2. Collection of data & review of literatures:

- ✓ Collecting data from the primary source i.e. from BLPA.

- ✓ Collecting data & information from the different secondary source.
 - ✓ Field visit to see the actual system & procedure and discussing the issues with the port users.
3. Analysis of data & existing procedure:
The collected data & information has been reviewed and analysis in the desk.
 4. Preparation of report:
Finally, all data, information, analysis and findings are writing for final production of the report.

1.6. Structure of the report:

There are five chapter are in this report. In the 1st chapter, there are comprising of background, objectives, rationale, research problem, methodology and structure of the report. Chapter two, details in literature review consisting land port concept, mission & vision of land port, functions of land port land port's purposes, present land port management models and common challenges are included. Chapter-Three, existing process of import-export and performance level and challenges for poor performance are mentioned. Measure for the efficiency improvement are there in the Chapter-Four. In Chapter-Five, recommendation & conclusions are presents of this study.

Chapter- Two

Literature Review

2.1 The Land Port Concept:

Lands ports are mainly border between two countries having land customs station (LCS) and integrated check post (ICP) to facilitate movement of import and export cargo laden and empty trucks/vehicles. As land ports possess vast opportunities to expand regional trade, the Government is taking steps to strengthen the land ports to facilitate trade with neighboring countries.

2.2 Mission & Vision of Land Port:

Vision:

Facilitating export-import through land route.

Mission:

Infrastructure development, efficient cargo handling, improvement of storage facilities, fostering public-private partnership for effective and better service delivery [1].

2.3 Functions of Land Port:

- a) Formulating policy for development, management expansion, operation and maintenance of all land ports;
- b) Engaging operators for receiving, maintaining and dispatching cargoes at land ports;
- c) Preparing schedule of tariffs, tolls, rates and fees chargeable to the port users having prior approval of the government;
- d) Executing contracts with any person to fulfill the objectives of the Act.
- e) Exchanging opinions and communicating with the related countries with the land ports and developing infrastructures as well as extending trade through co-operation of the organizations concerned to national and international trades for developing and running the port activities smoothly.

2.4. Land Port's Purposes:

A land port typically performs following logistics tasks:

- Storage of goods for import & export awaiting shipment;
- Goods delivery processing for transit and delivery to the receiver
- Provide space for various services like immigration, customs, security, banking, telecommunications, and taxation authorities;
- Develop and maintain physical infrastructure;
- Maintain security;
- Handling of goods for loading-unloading.

- Services provided to the international passengers.
- Regulatory authorities to over port operations. Coordinating all the stakeholders for smooth & effective port operation for expediting trade through land routes.

2.4. Present Land Port Management Models:

Presently following two models are using by the BLPA for development & operation of land ports:

- (A) Govt. Owned operate
- (B) Build, Operate & Transfer (BOT) Model

(A) Govt Owned Operate:

In this management model, govt i.e. BLPA will develop the port facilities, operate the port operation using own manpower and collecting tariff from the port users.

(B) BOT Model: The private entrepreneur is engaged/appointed for port development and operation of the port activities. The private entrepreneurs are developed port facilities, operate the port for certain tenure (25 Years). After expiry of the contract tenure, the operator will hand the port with developed facilities to the port authority. The port operator is sharing the earning revenue with the authority as per the contract. Presently 5 land ports named Sonamasjid, Hili, Bibirbazar, Teknaf and Banglabandha land ports are developed and operating using this model(**Bangladesh Land Port Authority, n.d.**).

2.8. Relationship between land port efficiencies and supply chain:

Land ports play a crucial role in global supply chains as Third-Party Logistics (TPL) service providers. Their functions, including the loading and unloading of cargo, storage, and payment of taxes and duties, are essential for international trade and transportation. Efficient port operations are vital for integrating these activities smoothly into the overall logistical chain.

Given the significance of ports, inefficiencies at these points can disrupt the alignment between ports and their logistics chains. To address these challenges, this study applies the principles of lean operations and Just in Time (JIT) theories to enhance port efficiency.

The principles of lean operations in port management focus on creating greater value for port users by eliminating dwell time and improving overall efficiency. It begins with identifying what the users truly need and mapping the entire operational process to remove non-essential steps. Lean emphasizes a smooth workflow, where processes run without delays, and adopts a pull system, ensuring operations are based on actual customer demand. It also promotes continuous improvement through ongoing efforts to refine processes and reduce inefficiencies. These principles help ports enhance service quality, lower costs, and deliver more responsive and reliable operations.

In port management, Just in Time (JIT) is a lean operational strategy aimed at reducing time-related waste by providing logistics support only when needed. JIT ensures that goods and services are delivered exactly on time, based on actual customer demand. This approach enhances operational efficiency, minimizes storage requirements, and helps identify and eliminate process inefficiencies. Successful implementation of JIT in port operations requires strong coordination between service providers and receivers to ensure timely and smooth flow of cargo and services.

Key Approaches for Developing Lean Port Operations:

1. **Reducing Transportation Time:** Streamline procedures to minimize delays in moving cargo through the port.
2. **Minimizing Waiting Time for Cargo:** Implement systems to reduce idle times and expedite processing.
3. **Eliminating Over-Processing:** Simplify operational workflows to avoid redundant or unnecessary tasks.
4. **Improving Overall Efficiency:** Introduce interventions to address other inefficiencies in port operations.

By applying lean principles and JIT theories, the goal is to develop a more efficient port operation that reduces waste and enhances the flow of goods through the supply chain. This approach aims to improve overall effectiveness, reduce costs, and facilitate smoother integration with regional and global logistics networks.

2.9. A land port serves as a logistics hub for export-import (EXIM) trade conducted through land routes. It facilitates the cross-border movement of goods and passengers, playing a vital role in regional and international trade. The operational management of land ports encompasses several key processes, including import, export, and international passenger handling. Numerous government and private stakeholders are actively involved in these operations, and the overall efficiency of port management largely depends on effective coordination among them.

A detailed description of the operational processes and a comprehensive list of stakeholders are presented in the subsequent chapters. In **Chapter Three**, port efficiency has been assessed through the collection and analysis of both primary and secondary data. **Chapter Four** focuses

on field visits and surveys conducted to identify the root causes of poor performance and gather insights from key port users. Based on the findings, specific recommendations for enhancing the efficiency of port operations are also provided in the following chapters.

Chapter-Three

Existing Process & Performance Level of Land Port

3.1 Benapole Land Port, being the largest and most significant land port in Bangladesh, provides crucial Third-Party Logistics (TPL) services for importers and exporters. It handles major activities including:

1. **Import Activities from Neighboring Countries:** Managing and processing goods entering Bangladesh from countries like India.
2. **Export Activities from Bangladesh:** Facilitating the shipment of Bangladeshi goods to international destinations.
3. **Services to International Passengers:** Providing services related to the movement of people across borders.

This case study of Benapole Land Port will focus on evaluating its operational processes, identifying challenges, and exploring potential improvements to enhance its efficiency as part of the broader logistics and supply chain network.

3.2 Import Procedure:

Following procedure is following by the Land port, customs Authority & other agencies for import cargoes:

- 1) Indian truck comes at zero points with car pass;
- 2) Truck information Entry by BGB;
- 3) Entry of car pass information by customs & port Authority;
- 4) Weighing of trucks at weighbridge scale;
- 5) Posting at terminal. The perishable goods carrying trucks are going at transshipment yard for weighing, handling & unloading truck.
- 6) Goods are posting to shed & yard by posting section of ports after getting all relevant documents for import cargoes.
- 7) Submission of Bill of Entry (BOE) by C& F to customs.
- 8) Examination of cargoes by customs.
- 9) Assessment of import duty by customs.
- 10) Payment of import duty by the C&F Agents & importers.
- 11) Release order or note issued by customs.
- 12) Release order submitted to port Authority.
- 13) Port Authority assess the port dues.
- 14) Payment of port dues by the C&F.
- 15) Port Authority issues the Exit pass.
- 16) Loading of goods to truck & exit from ports.
- 17) Finally, customs & Port Authority checked the all documents in the final check point.



Figure-2: Import Procedure

Source: Survey at Benapole Land Port

3.3 Export Procedure:

Following procedure is happening for export to India through Benapole land port:

- 1) Arrival of export vehicles at port;
- 2) Submit bill of exports to customs;
- 3) Customs verify the documents;
- 4) Weights the export cargoes (Optional);
- 5) Assessment & examination by customs;
- 6) Export documents submit to port;
- 7) Pay the port charges to the port authority;
- 8) Issue exit pass;
- 9) Finally, exit the zero point for Indian port.

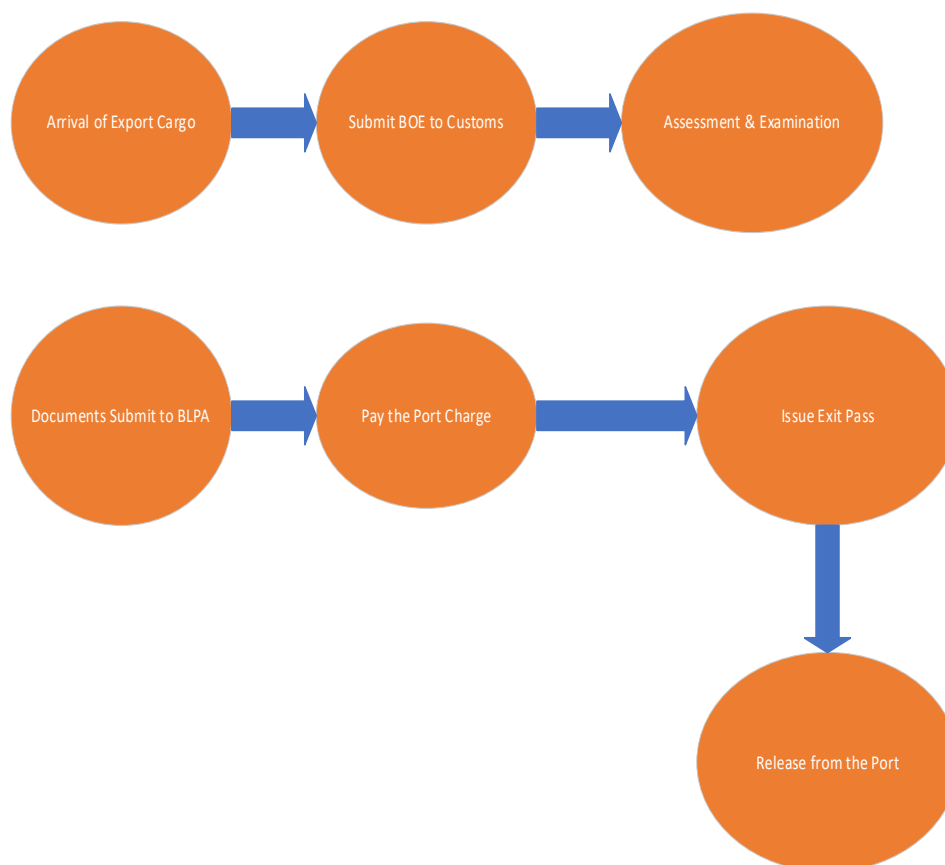


Figure-3: Existing Export Procedure

Source: Survey at Benapole Land Port

3.3 Existing Performance Level:

The performance level of a port is often evaluated by measuring the total time required to process cargoes from their arrival at the port to their release after completing all necessary formalities. This process involves multiple government and private agencies, each contributing to the overall time required.

Key Agencies Involved:

Government Agencies:

- **Customs:** Responsible for clearing goods and ensuring compliance with trade regulations.
- **Land Port Authority:** Oversees the management and operation of the land port.
- **Border Guard Bangladesh (BGB):** Ensures border security and control.
- **Quarantine:** Checks for any health or safety issues related to cargo.
- **Bangladesh Standards and Testing Institution (BSTI):** Ensures that goods meet quality and safety standards.
- **Explosive Department:** Handles matters related to the safety of explosive materials.
- **Police:** Provides law enforcement and security.

Private Agencies:

- **Import-Export Companies:** Manage the trade of goods.
- **C&F Agents:** Customs and Freight agents handle documentation and logistics.
- **Transport Agencies:** Responsible for the movement of goods.
- **Banks:** Facilitate financial transactions related to trade.
- **Labor Unions:** Represent the workforce involved in port operations.
- **Relevant Agencies:** Other private entities involved in the port operations.

Time Release Study (TRS) Findings for Benapole Land Port: According to a recent Time Release Study (TRS) conducted by the National Board of Revenue (NBR), the total time required for a consignment from entry at the zero point to release from the port is approximately 10 days, 8 hours, and 11 minutes (**National Board of Revenue, 2022**).

Table-2: Time Requirement by the Different Agencies

Sl No.	Name of the Agency	Time Requirement (in %)
1	Customs	7%
2	Land Port	20%
3	C&F Agent	72%

4	Other Govt. Agencies (OGA)	1%
	Total=	100%

Source: TRS'2022, NBR

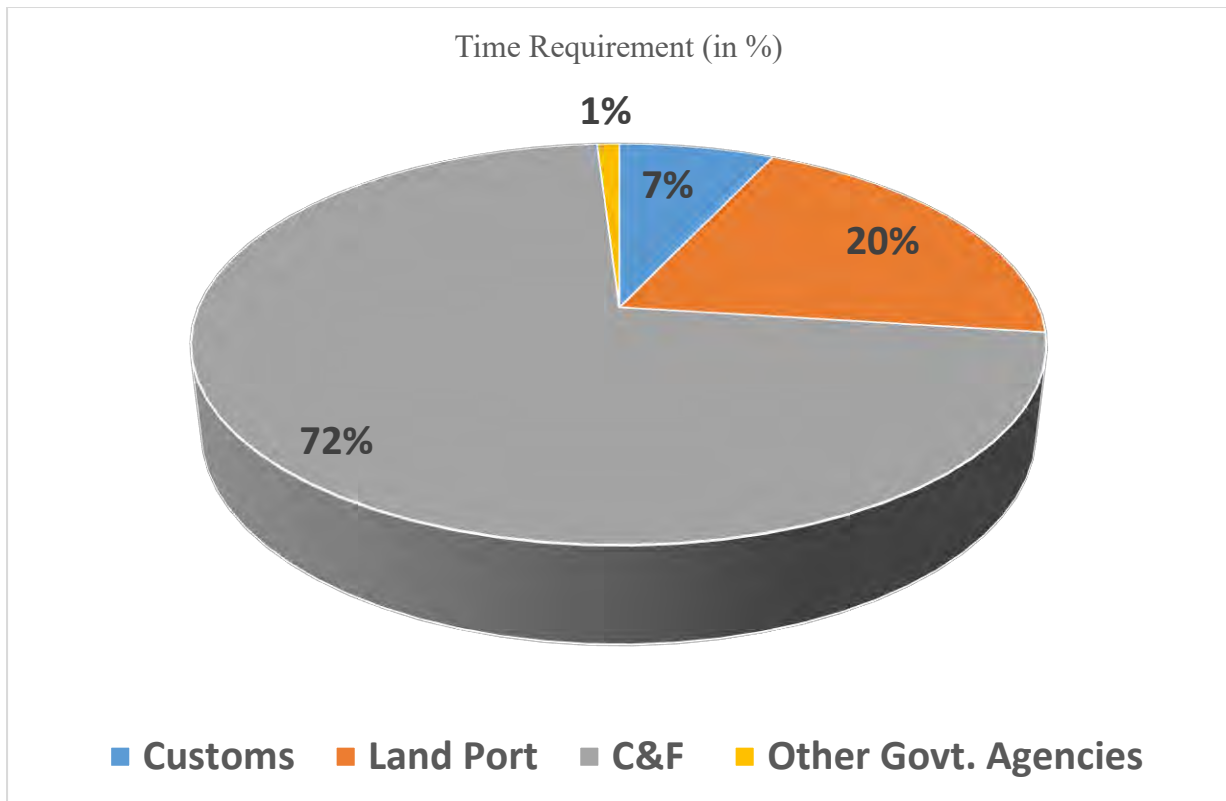


Figure-4: Time Requirement by Different Agencies

It was seen that 72% time is required for the C& F agents, 20% for Port Authority and 7% for customs. The detail time requirement for customs, land port and C&F agents are details in the following table:

Table-3: Time Taken by Customs

Activities	Average Time Required
Scanning of Cargoes	0.08 hr
Manual B/E Approval	0.67 hr
Document Making by RO for Examination	0.42 hr
Examination	27.32 hr
Assessment	9.17 hr
Issuing of Customs Release Order	1.83 hr
Exit Gate	0.63 hr
Total=	40.12 hr

Source: TRS'2022, NBR

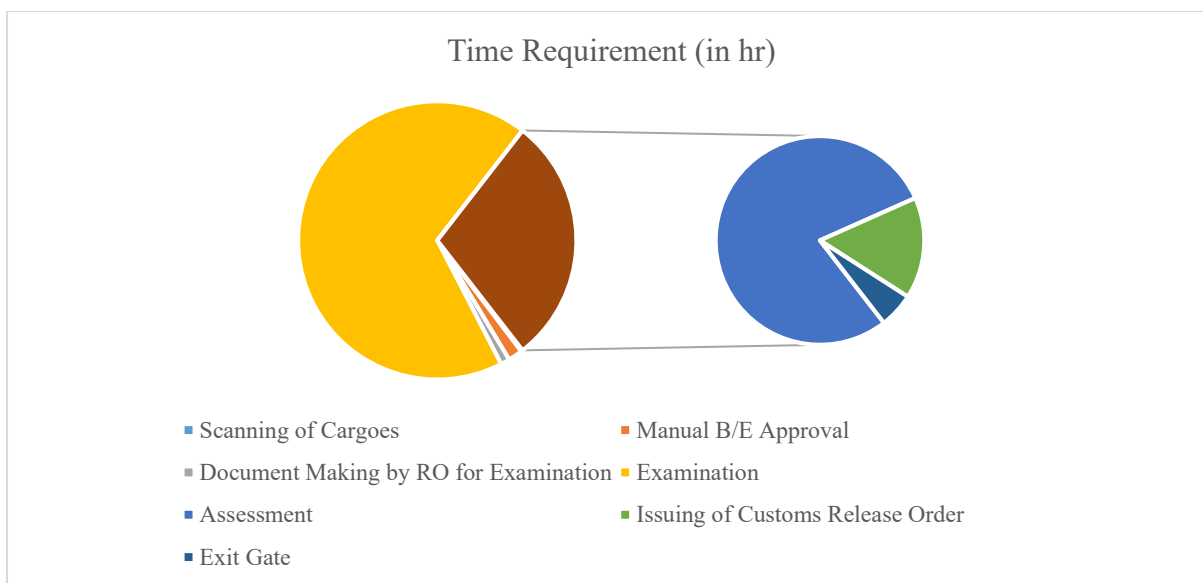


Figure-5: Time Taken by Customs

Table-4: Time Taken by Port Authority

Activities	Average Time Required
Weighing of Cargoes	0.06 hr
Shed Posting	19.60 hr
Unloading of Cargoes	38.78 hr
Cargo Delivery	2.43 hr
Total=	60.87 hr

Source: TRS'2022, NBR

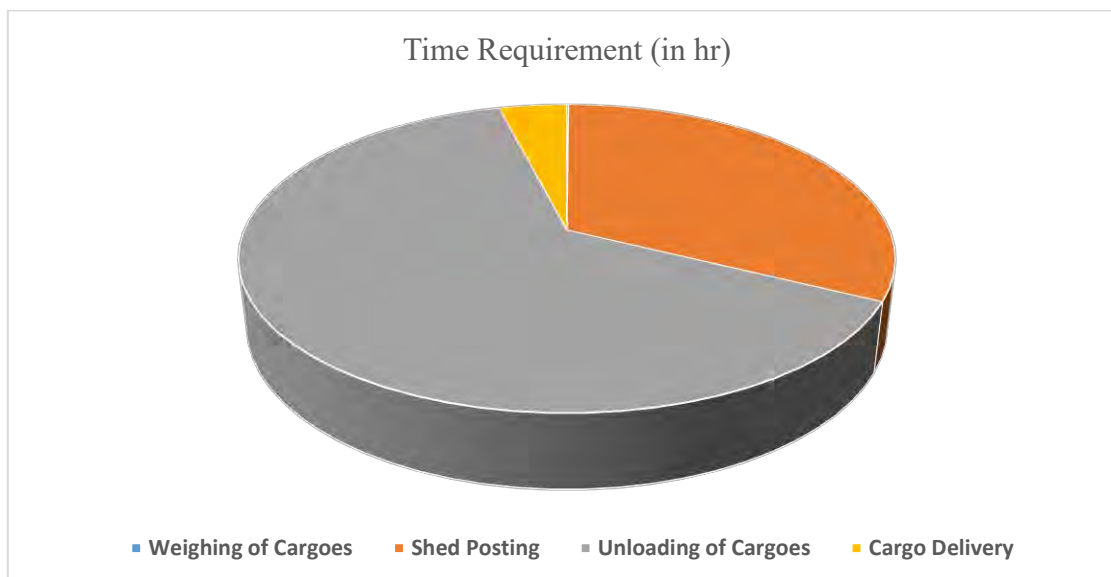


Figure- 6: Time Taken by Port Authority

Table-5: Time Taken by Other Govt. Agencies

Activities	Average Time Required
Quarantine	4.11 hr
BSTI	191.08 hr
BCSIR	540 hr
Department of Explosive	170.15 hr
Total=	905.34 hr

Source: TRS'2022, NBR

The lion shares of taking time by the Importer and C & F agents. The total time taken is 72%. The details in the following table:

Table-6: Time Taken by C & F Agents & Importer

Activities	Average Time Required
Manifest Submission to ASYCUDA	29.95 hr
Manifest Withdraw	86.83 hr
Manual B/E Submission	0.18 hr
B/E Submission in ASYCUDA World	10.08 hr
Hardcopy Submission to Customs	14.33 hr
File Transfer Time (After making examination)	9.27 hr
File Submission to Assessment Group (After Examination)	34.52 hr
Payment of duty & tax	63.52 hr
Document submission to Port Authority for cargo delivery	5.25 hr
Documents submission to customs delivery/exit	0.95 hr
Total =	254.88 hr

Source: TRS'2022, NBR

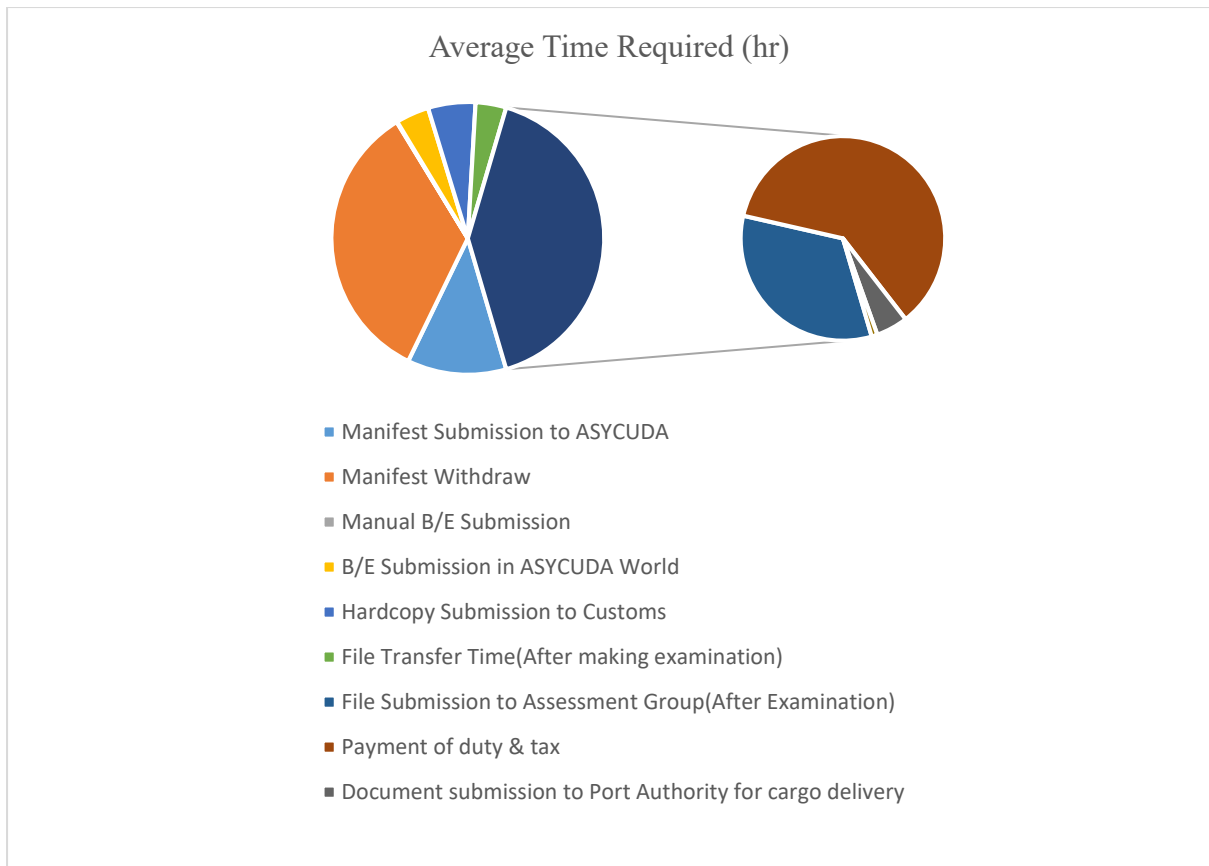


Figure-7: Time Taken by C & F Agents & Importer

Chapter-Four

Findings from Field Visit & Survey

In the previous chapter, it was discussed that the current process at the port requires an average of 10 days, 8 hours, and 11 minutes to release cargo. In comparison, at Petrapole ICP in India, it takes only 1 day, 9 hours, and 42 minutes (**Land Ports Authority of India, 2022**). During a field visit, responses were gathered from port users to understand how this time requirement could be reduced.

The study aimed to gather key information and understand the existing status of port management, with the goal of making recommendations to enhance port operation efficiency using supply chain management theories. The field visit included consultations with port stakeholders who are directly involved in port activities. These consultations provided valuable insights into the current challenges and potential areas for improvement in port operations.

A total of 30 participants attended the survey from various agencies and stakeholders. The types of participants are mentioned below:

Table 7: List of Agencies for Survey

Participants Type	% of Frequency
Benapole Land Staffs & Officials	26.67
BLPA HQ Officials	10.00
C& F Agent	20.00
Transport Agents	6.67
Labor Association	6.67
Labor Contractor (Manual & Equipment)	6.67
Security Personals	6.67
BGB	6.67
Others	10.00

Source: Survey

The Participants were asked why additional time is required for land port activities. Their responses highlighted several key areas contributing to delays:

- **Effective Automation System:** 51.33% of the time is required due to the lack of an effective automation system. This includes delays in processing documentation, tracking cargo, and coordinating with various stakeholders.
- **Storage and Parking Facilities:** 7.83% of the time is attributed to insufficient storage and parking facilities. This leads to congestion and delays in handling cargo.
- **Coordinated Infrastructures (One-Stop Border Post - OSBP):** Another 9.18% of the time is needed due to the lack of coordinated infrastructures, such as an efficient One-Stop Border Post that facilitates streamlined operations.
- **Shortage of Mechanical Equipment:** 20.63% of the time is required due to a shortage of mechanical equipment necessary for cargo handling and other auxiliary services. This results in slower loading and unloading processes.
- **Policy Issues:** 7.73% of the time is needed due to policy-related issues. These could include regulatory hurdles, bureaucratic delays, and inadequate policy support for efficient port operations.

These insights underscore the need for targeted interventions in automation, infrastructure development, equipment availability, and policy reforms to enhance the efficiency of port operations.

Table 8: Main Reasons for Additional Time Requirement

Sl No.	Activities	% of Weightage
1	Full Automation system at land port integration with port stakeholder	51.33%
2	Improvement of Infrastructure	
	(a) Storage & Parking	7.83%
	(b) Coordinated Infrastructure with neighbouring countries.	9.18%
3	Mechanization of Port cargo handling	20.63%
4	Policy Framework	7.73%
5	Others	3.25%
		100%

Source: Survey

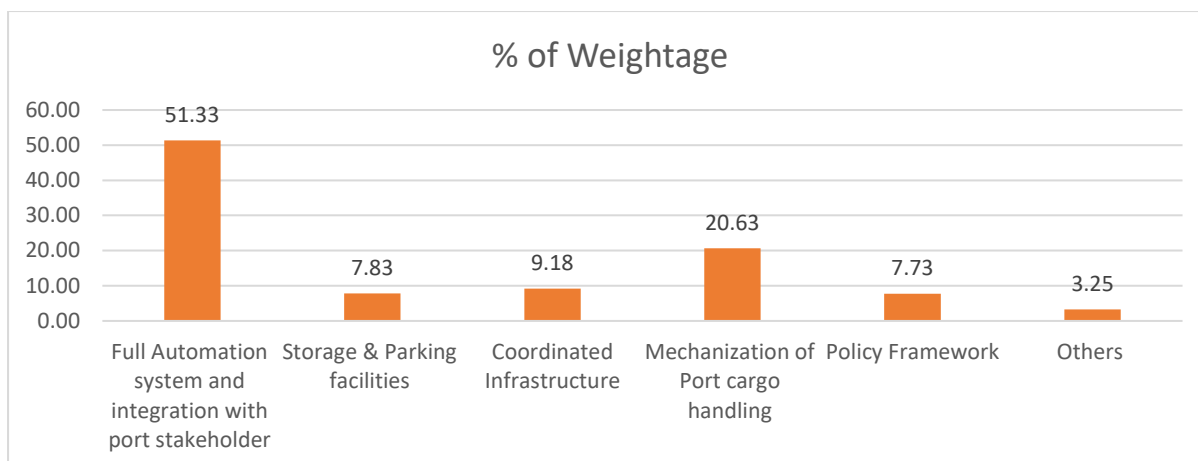


Figure 8: Graphical Representation of Additional Time Requirement

The participants mentioned that if the automation system is fully developed and connected with all border agencies and stakeholders, it will be very effective to the port operations. They also mentioned that, there is a shortage of mechanization in the port operation for cargo handling equipment. Presently, there is no equipment for perishable goods handling and also no equipment facilities in the warehouse and handling of railway cargoes.

At present, there is no Standard Operational Procedure (SOP) for port operations and coordination with the stakeholders. The participants suggested that a proper SOP should be developed from the pre-arrival procedure for export & import to the final delivery cargoes from the port. The SOP should be endorsed by the highest authority of the government for effective implementation.

The responders also suggest to develop sufficient infrastructures for storage and parking of goods & vehicles including innovative facilities which may reduce the time & cost in port operation. During discussion with the Indian counterpart and also the international border expert, they suggest to develop facilities adjacent to zero line which will reduce the waiting time for entry.

It was asked to the participants that, if the effective full automation system will be implemented, develop storage & parking facilities, coordinated infrastructures (OSBP), introduce mechanical equipment at port for perishable cargo handling, warehouse & railway cargo handling, mechanization for other auxiliary services and policy reformed, how much time will be required for the port to do the activities named Weighing of Cargoes, Shed Posting, Unloading of Cargoes and Cargo Delivery. In response to the question, they mentioned that it will require 7.55 hrs whereas is required 60.87 hrs. The details are in the following table:

Table 9: Comparison of Time Requirement by Port Authority

Activities	Average Time Required	
	Previous Process	Re-engineering Process
Weighing of Cargoes	0.06 hr	0.03 hr
Shed Posting	19.60 hr	0.5 hr
Unloading of Cargoes	38.78 hr	6 hr
Cargo Delivery	2.43 hr	1 hr
Total=	60.87 hr	7.55 hr

Source: Survey & Field Visit

In TRS 2022, the major time taker is the C&F agent for doing their activities. They asked how much time will require if the reformed done as mentioned. They responder that 88.70% time will be reduced. Earlier total 254.88 hrs is required. After reprocess and development of facilities it will be required 28.80 hrs. Detail responses as mentioned in the table:

Table 10: Comparison of Time Requirement by C&F Agent

Activities	Average Time Required	
	Previous Process	Re-engineering Process
Manifest Submission to ASYCUDA	29.95 hr	2 hr
Manifest Withdraw	86.83 hr	0
Manual B/E Submission	0.18 hr	0.17 hr
B/E Submission in ASYCUDA World	10.08 hr	2 hr
Hardcopy Submission to Customs	14.33 hr	0 (No Hard Copy Requirement)
File Transfer Time (After making examination)	9.27 hr	0.58 hr
File Submission to Assessment Group (After Examination)	34.52 hr	0(Automated)
Payment of duty & tax	63.52 hr	23.50 hr
Document submission to Port Authority for cargo delivery	5.25 hr	0(automated)
Documents submission to customs delivery/exit	0.95 hr	0.54 hr
Total =	254.88 hr	28.80 hr

Source: Survey & Field Visit

During field visit, detail discussion with port authority officials, C&F agents and port users, it was found the following major reasons:

1. Delay in getting import documents to start the customs clearance;
2. Delay due to choose of cargo posting of their selected shed/yard;

3. Delay of submission B/E to customs for better choice of customs assessment group;
4. Low warehouse charge which encourage the C&F not to release the cargoes from the port.;
5. Presently, there is no standard procedure between Bangladesh and neighbouring countries how to manage export-import at the port level. There is systematic policy how the export-import will be done.
6. The major time-consuming issue is the lack of automation system in the port management.
7. In absence of Electronic data interface with the stakeholders.
8. Absence of data sharing with the neighbouring countries.
9. Shortage of handling equipment for handling of cargoes at port.
10. There are no testing facilities like BSTI, BCSIR and others at port level. In absence of testing facilities more time is required for release of cargoes. The testing activities are done from Khulna & Dhaka.
11. In sufficient physical infrastructures like parking & storage facilities.
12. Lack of coordinated & integrated facilities between Bangladesh and neighbouring countries.
13. Coordination is the main challenges at present situation. There is a severe problem of coordination among the port users which accelerated the cargo release time. Unnecessary checking by the border guarding forces.
14. Harmonization of time between two port authorities of both the countries.

Chapter-Five

Measure for Efficiency Improvement

During the field visit, responses has taken from the port users how the time requirement may be reduced. The major activities are full automation system, improvement of physical infrastructure, mechanization of cargo handling and formulation of new policy for port operation.

5.1 Introducing the Full Automation System:

In the TRS of NBR, it was seen that the major time consumed by Importer-Exporter & C& F Agents and the port authority. It was analyzed that the time is required due lack of automation system in port operation and integration with other agencies. Also, the automation system should be interlinked or data sharing with the neighbouring countries.

In the earlier chapter the major time requirement in absence of effective automation system and interlink or interfacing with the port users. Also, in absence of interlink with the neighbouring countries. To overcome the challenges the land port should be developed full automation system which will effective for the port operation, sharing of data with the port users including the neighbouring countries. This will reduce the turnaround time and providing seamless & transparent port operation. In this system all the data sharing, processing, documentation, billing and the other works will be through the system. The name system may use “Integrated Land port Management system (ILPMS)”. This system will also be interfacing with neighboring countries.

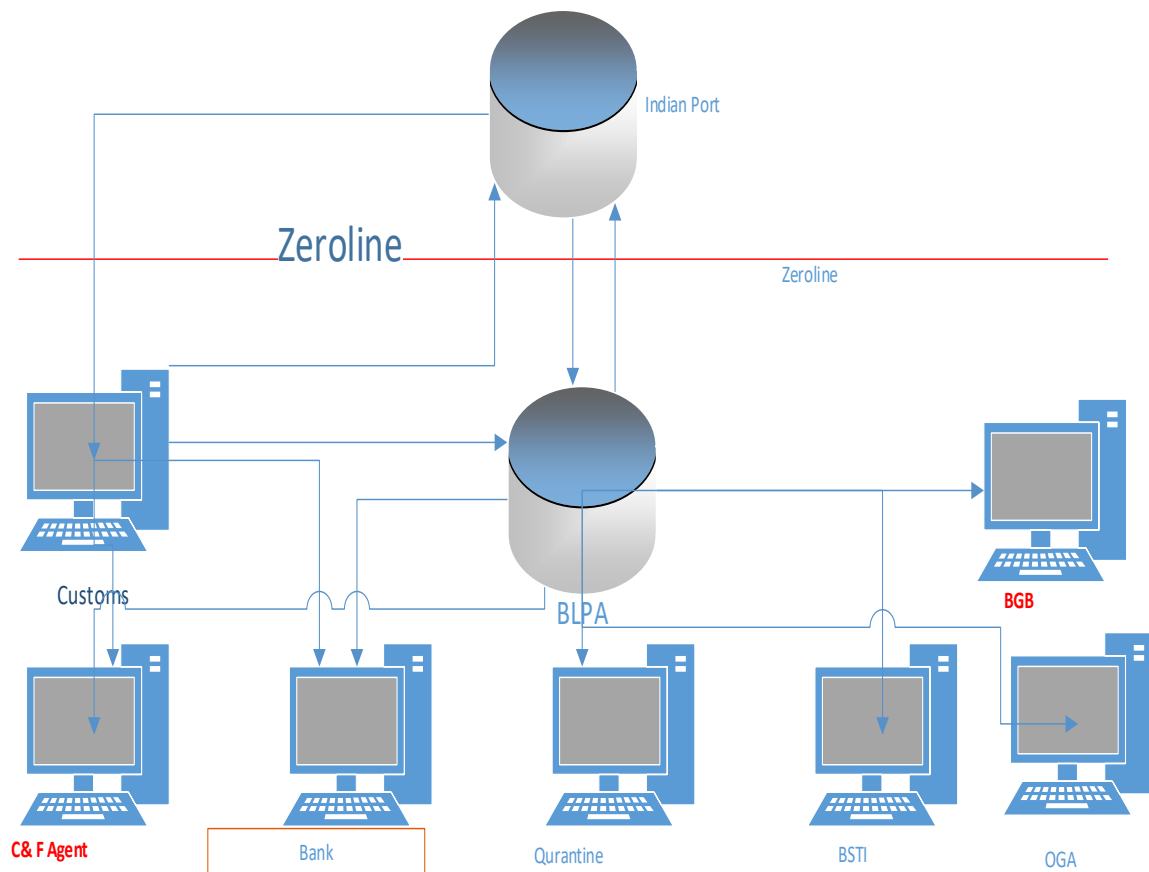


Figure-9: Indicative Diagram of ILPMS

Steps in ILPMS:

1. Prior intimation of importable cargoes/vehicles.
2. Documents sent in advanced by India Authority.
3. Trucks arrives a zero point.
4. Scan the car pass in the road machine.
5. Sharing the information to Customs & BGB in the Automation system.
6. Weighing of cargoes of fully automated weighbridge scale.
7. Automated posting of Vehicles using AI in the parking area.
8. C&F agent should submit all document in the system .
9. Self-posting of cargoes by using AI in the warehouse & yard.
10. B/E submitted to Customs & ASYCUDA System.
11. Customs authority assigns ARO for assessment of examination.
12. Physical Examination.
13. Assessment approval and notify C&F Agent for payment.
14. C&F Agent or Importer will pay the duty in Ekpay Payment system.
15. Bank will notify customs for payment.
16. Customs will issue released order to C&F Agent and sharing the release order to Port Authority through the system.
17. Port will assess the tariff or port charges using port management system.

18. Port Authority notify the bill to C&F agents.
 19. C&F agent will pay the tariff to Bank. Bank will notify the payment port Authority bank.
 20. Port Authority will issue Exit Pass.
 21. Delivery of Cargoes.
- 4.1 The electronic data sharing between Bangladesh and neighbouring countries including relevant border agencies. This will save much more time requirement.

4.2 Mechanization of Operational Procedure:

Mechanization of operational procedure is one of the most important activity in the port operation. Presently, mechanical equipment are using for loading -unloading of heavy cargoes in limited scale. There is no mechanical equipment using for handling of perishable goods and in the warehouse. Recently, railway cargoes are coming from India. But there is no equipment for handling cargoes from railway. Only manual labors are using for handling of perishable goods and in warehouse cargoes which consumed more time for handling. For efficient and quick delivery of perishable cargoes, conveyor belt may be used for loading & unloading of cargoes. This will reduce almost 60% of total time requirement.

In warehouses, presently full dependency on manual labor for loading-unloading of goods. The manual activities consumed more times which causes delay of goods delivery to the importers. It was not possible to staking of goods in desired height in the warehouse which reduces the storage capacity of the warehouse. Delay of the loading-unloading of cargoes creates congestion at the port.

Port premises is a large area and so many infrastructures are there. To keep the environment clean and reduces the pollution, need clean the port regularly. But there is equipment for cleaning and sweeping. The road vehicles sweeping trucks and sprinkler system may used for these purposes.

TRUCK LOADING CONVEYOR





Figure-10: Conveyor Belt System

4.3 Improvement of Innovative Infrastructure:

Common integrated facilities should be developed at zero point. Common gate may develop at zero point where all relevant border & port agencies of both the countries will use the facilities. Adjacent to common gate parking facilities need to developed for accommodating cargo carrying vehicles. Using the common facilities, the cargo carrying vehicles can cross the border without any delay. This system will be very effective for reducing excessive time requirement at zero point.



Figure-11: Common Gate at Zero line

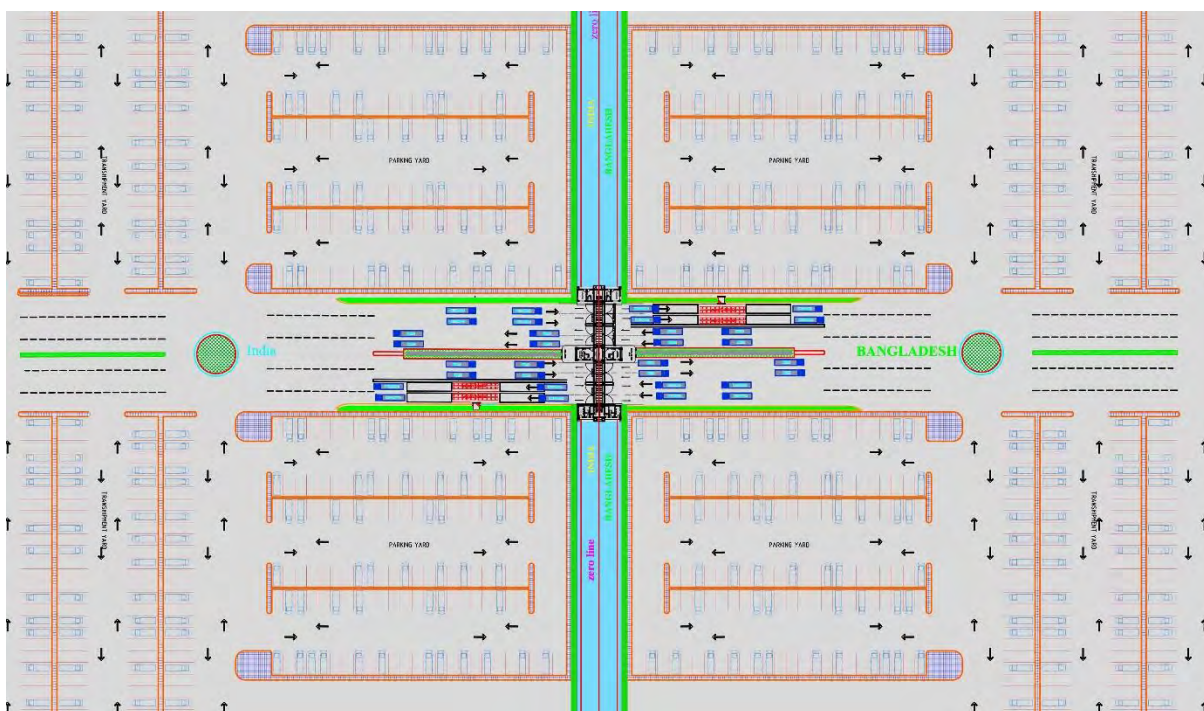


Figure-12: Facilities Develop at Zeroline

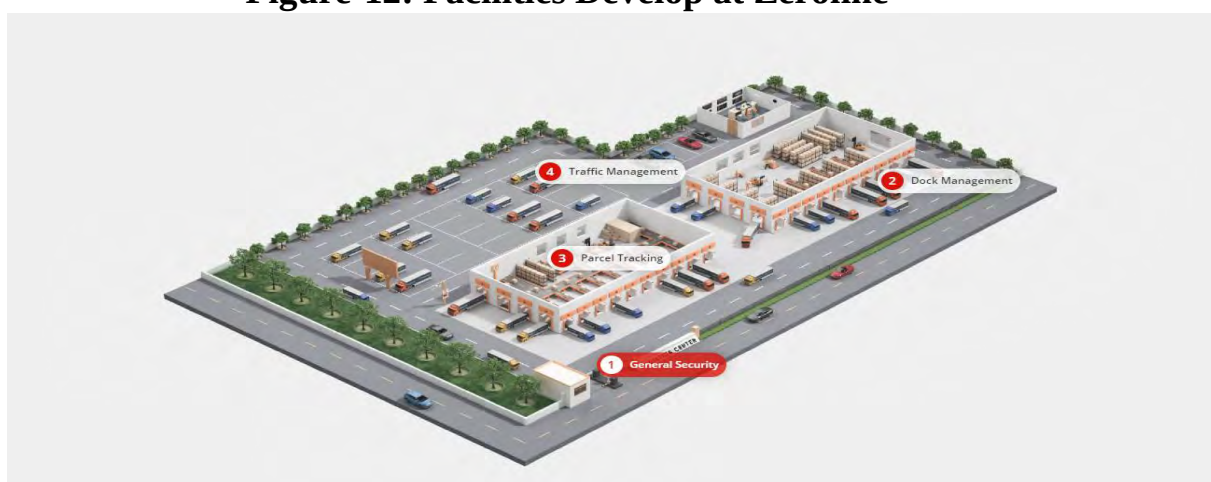


Figure 13: Modern Warehouse with Parking & Loading Area

4.4 Harmonization of time of the port operation between Bangladesh and neighbouring country. Presently, 5-10% of total vehicles are entry by 12 pm. Most of the vehicles are entering after 12 pm. This creating a congestion at the port and hampering the normal port operation.

4.5 Policy Framework:

For coordinated effective border management and enhance the efficiency following policy formulation is necessary:

- 4.5.1 Standard Operating Procedure (SOP) for coordinated port management among the port users. This should be included in the act or rules of the port.
- 4.5.2 Develop SOP for hazardous cargo handling and clearing procedure.
- 4.5.3 Develop SOP for loading-unloading, warehousing and other auxiliary services in port.

If the above-mentioned measures implement by the port authority, it was analyzed that the time requirement will be reduced as mentioned below. The details are in the following tables:

Table-11: Time Requirement by the Different Agencies as per Re-Engineering Process

Sl No.	Name of the Agency	Time Requirement (in %) (as per TRS 2022)		Time Requirement as per study	Remarks
1	Customs	7%	17.37	17.37	Fixed as per TRS 2022
2	Land Port	20%	49.64	7.55	Consider Re-engineering Process
3	C&F Agent	72%	178.69	28.80	Consider Re-engineering Process
4	Other Govt. Agencies (OGA)	1%	2.48	2.48	Fixed as per TRS 2022
Total=		100%	248.18	56.20	

The turnaround time of a consignment reducing from 248.18 hrs. to 56.20 hrs. or 2 d 8hrs 12 m. Noted that the turnaround time of Petrapole ICP, India is 1 d 7 hr. 18 m. So, it is possible to reducing the time implementing the re-engineering process of operational supply chain and also implement the recommendation of this study.

Chapter -Six

Recommendation and Conclusion

6.1. Recommendation:

There are so many dimensions and measures need to be taken to increase the efficiency of land port for reducing the time which will positively impact the cost of trade in land routes. Following are the major recommendation to address the challenges:

6.1.1 Immediately implement the full automation system in an integrated way including the interfacing or interlink with other agencies which will increase the efficiency regarding turnaround time. The automation system should encompass end-to-end digitalization of the entire workflow—from the entry of goods at the port to their final exit—covering all internal port operations. It should enable real-time data sharing and integration with all key stakeholders, including Customs, Border Guard Bangladesh (BGB), Immigration Police, Quarantine Authority, BSTI, importers, exporters, and other relevant agencies. This integrated approach will eliminate duplication of tasks, minimize processing delays at each step, and facilitate touchless communication. As a result, it will significantly reduce the Time, Cost, and Number of Visits (TCV) for traders. Moreover, it will enhance transparency and accountability, while also reducing opportunities for corruption within the port management system.

6.1.2 The current cargo handling process at the port is largely manual, resulting in delays, damage to goods—particularly perishables—and increased labor costs. To enhance operational efficiency, it is recommended to mechanize port management activities, with a focus on perishable cargo handling and warehouse operations. The immediate installation of a conveyor belt system is essential for fast, safe, and efficient loading and unloading of cargo. This will significantly reduce loading/unloading time, improve cargo turnaround time, and help preserve the quality of perishable goods. At present, warehouse management is also conducted entirely manually, with no equipment in use. The introduction of appropriate material handling equipment such as forklifts, stackers, and other modern tools will expedite warehouse operations and facilitate the development of an efficient, modern storage management system. This mechanization will not only improve overall productivity but also ensure better utilization of space and resources.

6.1.3 Infrastructure development is a critical component in enhancing the efficiency of land port operations. In particular, the establishment of innovative infrastructure—such as a common gate at the zero line, along with dedicated parking and transshipment facilities—can significantly streamline cross-border processes. Facilities at the zero-line help reduce vehicle idle time at entry and exit points by enabling seamless movement of cargo and documentation. Such infrastructure allows

both countries to share and verify documents at a single point, facilitating faster coordination. In cases of incomplete documentation, issues can be jointly identified and resolved immediately, minimizing delays. The creation of common facilities accelerates operational procedures on both sides of the border and fosters closer cooperation between port authorities. It is expected that these developments will significantly boost trade volume through land ports by improving efficiency, reducing congestion, and creating a more trader-friendly environment.

6.1.4 Currently, there is no Standard Operating Procedure (SOP) in place for the harmonization of port operation timings and procedures between the two countries. As a result, each country conducts its export-import (EXIM) activities independently, following its own processes, which leads to operational discrepancies, increased complexity, and longer dwell times. To address this, a common SOP should be developed and adopted jointly by both countries, focusing on the synchronization of operational hours, and the standardization of key procedures related to cargo handling, documentation, inspection, and clearance. The SOP should clearly define the specific timing, processes, responsibilities, and modalities of port operations, ensuring uniformity and coordination. All relevant stakeholders—including customs, port authorities, security agencies, freight handlers, and C&F agents—should be required to strictly adhere to the SOP. Implementing such a harmonized framework will enhance efficiency, reduce delays, and create a more predictable and transparent trading environment at the land ports.

6.1.5 Cargo loading and unloading is a core responsibility of the land port and constitutes one of the most critical logistics services provided to port users. However, in the absence of a clearly defined procedure for cargo handling, warehousing, and other auxiliary services, the overall efficiency of port operations remains suboptimal. To address this, a standardized procedure should be developed, clearly outlining the roles and responsibilities of port users and relevant government agencies involved in cargo operations. Furthermore, the procedure should include a specific timeframe for each activity, which must be incorporated into the Standard Operating Procedure (SOP). Implementing such a defined framework will help ensure the accountability of all stakeholders, reduce operational delays, and significantly enhance the overall efficiency and coordination of port activities.

6.2. Risk & Challenges:

The operational activities are interlinked with the neighboring countries and also interrelated with multi-stakeholders both Government & private agencies. The

recommendations, some of are linked with international like development of common facilities, SOP for harmonization port operation. To overcome the international challenges, close coordination needs to develop between the port authorities and through diplomatic channel. Another challenge is to develop coordination among the government agencies working in the port. Due to mechanization of port, the scope of manual labor will be reduced which create some agitation among the labors. To overcome the challenges, regular dialog should be done from the planning stage to implementation.

6.3. Conclusion:

The land port has an effective role in the economic growth in Bangladesh. An effective port may reduce the cost of international trade, reduce the price of commodity by properly maintaining the supply chain. In all developed & fast-growing countries the role of port is very important. An inefficient port will cause the negative impact in the country regarding international trade and reducing Foreign Direct Investment (FDI). In the modern port management, Lean Operations in association of Just in Time (JIT) theories of Supply Chain Management will make reducing of wastage of different activities like transportation time, waiting time of cargoes, over processing of operational work and other port operations using measured interventions. This will be expediting the ports efficiency which is directly involved with the cost of trading. Considering the importance of increasing efficiency of ports through land routes, the BLPA may take the recommendations to implement as soon as possible.

References:

1. Bangladesh Land Port Authority. (n.d.). Home. <http://www.bsbk.gov.bd>
2. National Board of Revenue. (2022). Time Release Study–2022. <https://www.nbr.gov.bd>
3. Ministry of Commerce. (2023). Study: A compiled policy and regulatory guidelines/standard operating procedures (SOP) for cross border land port management with respect to international trade and transport formalities, procedures, documentation and related matters. Ministry of Commerce, Government of the People’s Republic of Bangladesh.
4. Land Ports Authority of India. (2022). Time release study at seven integrated check posts. https://www.lpai.gov.in/sites/default/files/2022-07/Time_Release_%20Study_LPAI.pdf
5. Ministry of Commerce. (2023). Simplification of trade procedures, customs modernization, ease of doing business for export promotion of Bangladesh to ensure policy coherence between national development priorities and international obligations on Trade Facilitation Agreement. Ministry of Commerce, Government of the People’s Republic of Bangladesh.
6. National Board of Revenue. (n.d.). Customs modernization strategic action plan 2019–22. National Board of Revenue, Government of the People’s Republic of Bangladesh.
7. CUTS International. (2014). India-Bangladesh trade potentiality: An assessment of trade facilitation issues. CUTS International.
8. Bangladesh Land Port Authority. (2023). Annual report of Bangladesh Land Port Authority 2022–23. Bangladesh Land Port Authority.
9. Bangladesh Bureau of Statistics. (2023). Foreign trade statistics of Bangladesh 2021–22. Bangladesh Bureau of Statistics.
10. Bangladesh Foreign Trade Institute. (2017). The scoping study on paperless trade reform in Bangladesh. Bangladesh Foreign Trade Institute.
11. Bangladesh Foreign Trade Institute. (2017). Bridging infrastructural deficits at select trade ports in India (Brief 2016). Bangladesh Foreign Trade Institute.
12. Land Ports Authority of India. (n.d.). Improving operational efficiency at land ports. Land Ports Authority of India.
13. Allamgir, M. (2021, June 19). Land ports in Bangladesh: Prospect and challenges. *The Financial Express*. <https://thefinancialexpress.com.bd/views/views/land-ports-in-bangladesh-prospects-and-challenges-1624025987>
14. National Board of Revenue. (n.d.). Home. <http://www.nbr.gov.bd>
15. Bangladesh Regional Connectivity Project-1. (n.d.). Home. <http://www.brcp-1.gov.bd>