



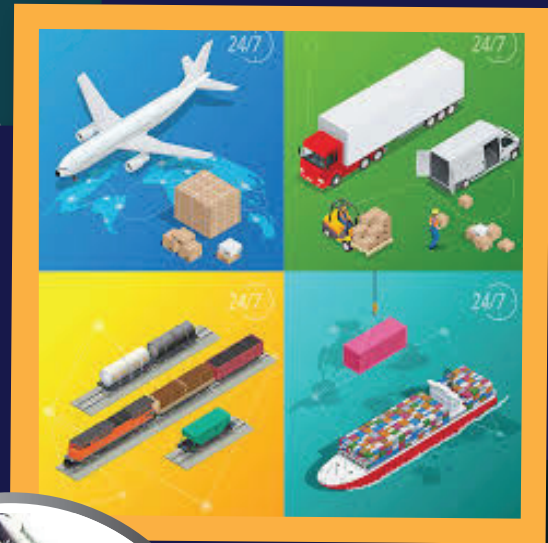
Government of the People's Republic of Bangladesh
WTO Cell, Ministry of Commerce

Bangladesh Regional Connectivity Project-1

Probashi Kollayan Bhaban
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Policy review/Policy Study/Policy Paper Preparation
on

National Integrated Multimodal Transport Policy, 2013



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on

National Integrated Multimodal Transport Policy, 2013

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Preface

The final report intends to respond to the requirement according to the provision of the contract agreement signed between Bangladesh Regional Connectivity Project-1 (BRCP 1) and the South Asian Network on Economic Modeling (SANEM) for conducting “**Policy Review/Policy Study/Policy Paper Preparation under the Bangladesh Regional Connectivity Project 1**””. One of the objectives of this technical assistance project is to review the existing government policies related to trade to strengthen cooperation in trade, transport, and transit facilities and facilitate the economic empowerment of women traders. The ongoing context and challenges are compared with the existing policies. It has also analyzed the best practices of regional comparators to promote and improve trade-related activities as well as the relevance of SHE trade with the existing policies. Finally, based on the findings, the recommendations for future policy have been identified.

Consultancy services for conducting the “**Policy Review/Policy Study/Policy Paper Preparation under the Bangladesh Regional Connectivity Project 1**”” was provided by the South Asian Network on Economic Modeling (SANEM), Bangladesh. The study team consists of four senior-level experts. The major objective of the study is to depict a clear picture of the current state of the implementation of the policies, and challenges and to provide suggestions for future policies. Furthermore, Reviewing and identifying the gaps in the existing policies were also aimed to be found for this study.

The review of the **National Integrated Multimodal Transport Policy, 2013** has identified some specific areas including the overview of the logistic sector of Bangladesh, regional cooperation, cross-cutting issues, challenges after LDC graduation, environmental impact, institutional mechanism, implementation issues, and legal enforcement. The recommendations of the review are expected to further improve multimodal regional connectivity and facilitate trade.

We are hopeful about the policy recommendations which would be beneficial for policymakers and other stakeholders for the improvement of the integrated multimodal transport sector.

Md. Mijanur Rahman

Project Director (Joint Secretary)

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Acknowledgements

It is indeed a great pleasure that Bangladesh Regional Connectivity Project 1 (BRCP-1), Ministry of Commerce has entrusted International Development Association (IDA), and the World Bank to carry out “**Policy Review/Policy Study/Policy Paper Preparation**”. The report of the study has been prepared based on a mixed methodology. The studies are 1) National Integrated Multimodal Transport Policy, 2013, 2) Bangladesh Standard Testing Institute Act, 2018, 3) the Export Promotion Bureau Act, 2015, 4) the Trading Corporation of Bangladesh Order, 1972(Amendment up to 2015) and 5) Antidumping Rules 1995, Countervailing Rules 1996 and Safeguard Measures Rules, 2010.

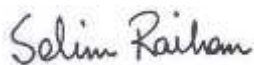
The policy papers contain the objective, scope, and methodology for the studies, current context, and challenges, deviation from the international practices, and the relevance of the policies to the SHE trade. The consultants also described the best practices of regional countries adapted to facilitate trade-related activities. In the end, the findings from the analysis and recommendations for the upcoming policy papers are portrayed.

The authors wish to thank Md Mijanur Rahman, Project Director, Bangladesh Regional Connectivity Project 1, and Md Munir Chowdhury, National trade expert, BRCP-1 for their valuable comments and continuous support in undertaking the study.

We are also thankful to all the officials and participants who took part in the consultation meetings, both online and in-person, for helping us with their constructive criticism and valuable suggestions during the study period.

This work would not have been possible without the participation of the relevant stakeholders in the Key Informant Interviews (KIIs) as well as in the Focus Group Discussion (FGD). Thanks are also due to all respondents of interviews, FGDS, and KIIs who helped us by providing their information during the data collection period.

The contribution and support provided by everyone for the study are greatly appreciated.



Dr. Selim Raihan

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List of Acronyms

ASEAN	<i>Association of Southeast Asian Nations</i>
BBIN	<i>Bangladesh, Bhutan, India, Nepal</i>
BIMSTEC	<i>Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation</i>
BIWTA	<i>Bangladesh Inland Water Transport Authority</i>
BLPA	<i>Bangladesh Land Port Authority</i>
BRCP-1	<i>Bangladesh Regional Connectivity Project 1</i>
BRTA	<i>Bangladesh Road Transport Authority</i>
BRTC	<i>Bangladesh Road Transport Corporation</i>
DFTZ	<i>Digital Free Trade Zone</i>
DFQF	<i>Duty-free and quota-free</i>
DTCA	<i>Dhaka Transport Coordination Authority</i>
FGD	<i>Focus Group Discussion</i>
GDP	<i>Gross Domestic Product</i>
GHG	<i>Greenhouse Gases</i>
GoB	<i>Government of Bangladesh</i>
ICD	<i>Inland Container Depot</i>
IMO	<i>International Maritime Organization</i>
KII	<i>Key Informant Interview (KII)</i>
LDCs	<i>Least Developed Countries</i>
LPI	<i>Logistic Performance Index</i>
MoC	<i>Ministry of Commerce</i>
MTO	<i>Multimodal Transport Operator</i>
MRT	<i>Mass Rapid Transit</i>
MVA	<i>Motor Vehicles Agreement</i>
NBR	<i>National Board of Revenue</i>
NIMTP	<i>National Integrated Multimodal Transport Policy</i>
NTP	<i>National Transport Policy</i>
PWITT	<i>Protocol on Inland Water Transit and Trade</i>
PP	<i>Perspective Plan</i>
RTAs	<i>Regional Trade Agreements</i>
SAARC	<i>South Asian Association for Regional Cooperation</i>
SAFTA	<i>South Asian Free Trade Area</i>
SAPTA	<i>SAARC Preferential Trading Arrangement</i>
SANEM	<i>South Asian Network on Economic Modeling</i>
SASEC	<i>South Asia Subregional Economic Cooperation</i>
SDGs	<i>Sustainable Development Goals</i>
TFA	<i>Trade Facilitation Agreement</i>
TIR	<i>Transport International Route</i>
UMIC	<i>Upper Middle Income Country</i>
UNCTAD	<i>United Nations Conference on Trade and Development</i>
WB	<i>The World Bank</i>
WTO	<i>World Trade Organization</i>
4IR	<i>Fourth Industrial Revolution</i>
7FYP	<i>7th Five-Year Plan</i>
8FYP	<i>8th Five-Year Plan</i>

Executive Summary

Bangladesh Regional Connectivity Project 1 (BRCP-1) is a project to ease trading and improve regional connectivity initiated by the government of the People's Republic of Bangladesh in conjunction with the International Development Association (IDA) and The World Bank. Component two is an umbrella project managed and conducted by the Ministry of Commerce (MoC). This technical assistance project under Component Two's primary goal is to study and review existing government trade policies in order to improve trade-related institutional capability, ensure long-term and active cooperation among trade stakeholders, and aid in the economic empowerment of women traders. Bangladesh will leave the LDC status in 2026, so a revision of existing trade rules is essential for a smoother post-graduation experience. The pre-graduation phase must be used wisely by designing and implementing effective trade strategies.

SANEM conducted this policy review of the National Integrated Multimodal Transport Policy 2013 by conducting extensive desk research and in-person interviews with key stakeholders. We ascertained the implementation issues, the policy's applicability to the shifting dynamics of the global perspective, and the current international trading environment when analysing the paper. This study paper provides an in-depth examination of Bangladesh's transport and trading sectors, as well as those of comparator countries such as India and China. Furthermore, the review study contains a section on gender concerns and mainstreaming women traders using the current National Integrated Multimodal Transport Policy 2013.

Chapter two of the review report outlines a detailed overview of the existing National Integrated Multimodal Transport Policy 2013 where it indicates the broad aspects, objectives, sub-sectors, cross-cutting issues, institutional policies and planned implementation of the policy. Next, the chapter details the current state and bottlenecks. Some of the key points detailed in this section are- the need for high investment in the road sector, existing investment in the railway sector, Underutilization of the waterway, the Padma Bridge and the new pathways for multimodal connectivity, the need for a sound multimodal transportation planning process, existing lack of collaboration and coordination among ministries as well as public participation, enhancement of roadway capacity, inadequate funds, utilization of technology and intermodal freight transport. Moreover, under the same chapter, there is another extended part that is a compilation of desk reviews regarding the changing nature of world trade and the relevance of the policy 2013. The report highlights that the country is not able to fully utilize and take advantage of the LDC graduation period, details on the plan for attaining SDGs, the Environmental aspect of the multimodal transport system, 8th Five Year plan has detailed literature on the transport industry and the multimodal transport of Bangladesh, regional cooperation, Protocol Inland Water Trade and Transit, BBIN, TFA and Multimodal transport system, crossborder connectivity in regards to SAFTA. Furthermore, the chapter has an extensive literature review on the overall logistic sector of Bangladesh. Some of the countries that have an impressive multimodal transport policy that facilitates the trading sector of the country are Malaysia, India and China. Hence, the chapter indicates major takeaways from the comparative countries.

The fourth chapter of the report lists the findings of the study. These findings are generated through KIIs and FGD conducted. One of the initial findings is that during the transportation

of goods, there is no fixed rate or fixed amount of fare for carrying the goods from one point to another. Moreover, several incidents report product loss during transportation. One of the crucial findings of the report is that there is an absence of an integrated approach which is also one of the objectives of this report. Next, there is an absence of proper connectivity in the transport system of the country. One of the key findings that should be included in the future transportation policy is the inclusion of the time-bound action plan for executing the provisions written in the policy. Higher security is the ground level is needed for better transportation of goods, hence, management of the maintenance of the road needs to be enhanced.

After extensive discussion sessions with a diverse group of stakeholders, several recommendations are highlighted in this report. The recommendations are- the action plan for implementation of the policy, there needs to be an introduction of the integrated approach which will facilitate travelling and movement of goods, development of the railway sector should be highly prioritised, there needs to be a national fixation of transportation fare, appropriate implementation and cooperation is needed as there are several pre-requisites to initiate a fully functional land port. Moreover, the policy draft should also include a detailed provision on emission charges, monitoring mechanisms of the policy, and management of road maintenance. Also, the overall system should be gradually moved towards a more digitalized system. Furthermore, the policy should be integrated with national logistic policy. The policy should also have provisions on port connectivity and enhancement of logistic facilities and special logistic systems.

To conclude, the review report of the policy paper focuses on the increase in integration between all modes of transport. The report targets to reduce the transport cost and make the domestic industry more competitive in the global market. Keeping the LDC graduation, trade facilitation and women traders in mind, new provisions to facilitate international and national trading should be included in the policy.

1. Introduction

1.1 Background and objectives

Trade and commerce are critical to every country's economic development, and effective trade is dependent on reliable, swift, efficient, and cost-effective transportation infrastructure. For a long time, environmental safety has been a top priority in the global transportation industry. The globe has reduced barriers to trading and protectionism in the age of globalization, with every commerce and financing feasible thanks to the internet and modern communication systems. The primary factors for globalization and the growth of globalized trade are commerce, finance, and transportation.

Globalization, supply chain, and outsourcing have profoundly altered the global gross domestic product. Without a doubt, dependable, safe freight transit is required for effective commerce. Transportation is the transfer of commodities from one location to another, from the point of manufacture to the buyer's door. Water, rail, road, air, and pipeline are the five main modes of transportation. They all have substantial advantages and downsides. Road transportation may be utilized for small amounts of freight and destinations that are flexible and secure, but the cost is somewhat expensive. Rail transit is safe, secure, and inexpensive, but its destinations are restricted. Water transport is highly cost-effective and secure, however, the delivery time and destination are both limited. The loading and unloading time of bulk freight can have an impact on the supply chain. The air transportation system is secure and rapid, but the cost is exorbitant, and the destinations are restricted. The pipeline transportation technology is only employed for a restricted number of destinations and liquid goods. As a result, a concept known as a multimodal transportation system has already arisen. Multimodal transportation is a method for transporting things from one location to another by employing several modes of transportation in a systematic, synchronized manner, allowing commodities to be delivered to their destination on time and securely. Clients may transfer their cargo more easily and reliably since multimodal transportation follows only one contract with a set rate. If multimodal transportation can be implemented in Bangladesh, the country will gain more competitiveness by lowering transportation costs while boosting safety, dependability, and environmental efficiency, and will be able to attract a larger portion of the worldwide market.

The current National Integrated Multimodal Transport Policy was approved on 26th August 2013 by the Government of Bangladesh. To modify the policy with the changing time and development, there is a paradigm shift that caused investment strategies to change their direction from continuous investment in the road sector to more sustainable mobility options. Therefore, the focus of the policy is to improve the railway network, upgrade its level of service, and revive the inland water transport sector. Simultaneously, the country's already existing infrastructure needs to be maintained properly. Hence, future public and private investment will represent an increase in resources for transport. The policy states that the Government may take necessary steps to increase investment in railways and inland water transport, as well as develop strategies for further integration between these modes.

The primary focus of the policy is to enhance the role of road transport, rail, inland water transport, and aviation to ensure the development of the overall transport network. The

policy outlines noteworthy objectives such as reducing the cost of transport, increasing export competitiveness, improving road safety and reduction of accidents, reduction of the negative environmental externalities caused by the transport sector, participating in the trading of transport services, and ensuring that the transport sector is cost-effective and meets the social needs across all society, reduce the level of transport by better land planning, aid towards reduction of poverty, improvement in energy security such as fuel, and increase options for passengers and freight transport.

The Bangladesh Regional Connectivity Project 1 (BRCP-1) has been undertaken in conjunction with the International Development Association (IDA) (IDA). Hence, the Bangladesh Land Port Authority (BLPA), the National Board of Revenue (NBR), and the Ministry of Commerce collaborated to carry out the project (MoC). It should be noted that the Ministry of Commerce is in charge of carrying out and implementing component two of the umbrella project. The primary goal of this technical project is to strengthen trade-related institutional capacity to ensure active and sustainable cooperation among all trade players while also assisting in the economic empowerment of women merchants.

SANEM (South Asian Network on Economic Modeling) has been tasked with providing consultancy services for the technical assistance project's selected activities. The primary tasks are to analyze existing trade-related policies to promote collaboration in the trading sector, transportation, and transit infrastructure. Furthermore, a component of the policy review highlights the hurdles that women traders face in being a more vital part of global supply chains and having better access to trading opportunities. SANEM has assessed multiple policy papers as part of the project and critically analysed each policy to provide the compatibility, aims, future and existing issues, future elements, and any recommendations for additional improvements if necessary.

1.2 Research questions

The research team has mainly focused in this study on the following key research questions,

- 1) What is the possible recommendation to increase integration between all modes of transport?
- 2) To reduce the transport cost and make out domestic industry more competitive in the world market, what possible new provisions can be included in the policy?
- 3) LDC graduation and its challenges will impact the country, thus, what new provisions can be incorporated and if the existing provision under the policy needs to be modified?
- 4) How can such a policy incorporate the SHE trade aspect and empower women in the labour market and women entrepreneurs?
- 5) Are the objectives of the policy in line with the present context? (LDC graduation, 8th five-year plan, graduating to Upper Middle Income Country (UMIC) category, and changing trade scenario due to Covid pandemic, Russia- Ukraine War)
- 6) Do the measures stated in the National Integrated Multimodal Transport Policy 2013 achieve the objectives consistently?
- 7) What are the possible implementation/institutional challenges to achieving the objectives?

1.3 Methodology

Given the objectives and the key research questions of this study, the research team has primarily followed mixed methodologies in presenting the deliverables. The methodology has been based on two significant tasks in general.

- (i) Rigorous desk research of all relevant policy documents, literature, and secondary data, and
- (ii) Primary data collection and analysis by conducting Key Informant Interviews (KIIs) with stakeholders relevant to the study.

Therefore, the research methodology can be categorized as follows.

1.3.1 Desk research

The research team has conducted exhaustive desk research encompassing all documents and literature relevant to the locus of the study. This will also involve examining and analysing the available secondary data and identifying potential policy gaps and differences related to the competition act, international standards, and women entrepreneurship between Bangladesh and the existing universal best practices. The research team will focus on the following documents for desk review-

- The National Integrated Multimodal Transport Policy 2013
- All the relevant documents related to Transport Policy in Bangladesh.
- Domestic and International literature available on the Multimodal Transport Policy
- National Transport Policy 2019-2030 of Malaysia
- The Maritime Code, 1993, Chapter IV, Section 8: Special Provisions Regarding Multimodal Transport Contract
- Regulations Governing International Multimodal Transport of Goods by Containers, 1997
- The Contract Law, 1999, Chapter 17, Section 4: Contracts for Multimodal Transportation
- Multimodal Transport Policy or similar policies implemented in comparator countries.
- Reports and findings on investments in Transport Industry.

During the desk research, the research team followed the following steps,

- In-depth review of the policy documents, which includes all relevant and existing acts, ordinances, legislation, agreements, treaty, and literature.
- Finalizing the KII checklists based on the scanning of the stated documents.
- Complementing the preliminary analysis with the findings from the primary data.
- Assessing the current act and its loopholes based on the past events of transport policy implementation and global literature.

1.3.2 Primary data collection

In collecting primary data, the research team has followed a qualitative approach. Social aspects that are mostly unrepresented in the quantitative data can be addressed through qualitative data, which are expected to provide in-depth information on social dimensions

and characteristics. As part of the qualitative data, the team has conducted Key Informant Interviews (KIIs).

Focus Group Discussions (FGD)

The research team has carried out one FGD for the study at the Bangladesh Land Port Authority (BLPA)

Key Informant Interview (KII)

The KIIs will be helpful for an in-depth understanding of the policies, assessment of projects, and identifying gaps. For this study, the research team has carried out a total of thirteen KIIs.

The mode of contact for the KIIs was face-to-face interviews, virtual meetings, and telephone interviews, depending on the situation. A detailed list of the interviewees is provided in the annexe section of this report.

1.4 Evaluation and analysis

All the gathered data and information has been evaluated and analyzed at this stage. This process includes:

- Identifying the gaps in existing information through rigorous desk research.
- Exploring the potential provisions of the existing policy guideline for mainstream women entrepreneurs.
- Analysing the objectives of the policy and its role in the post-LDC graduation phase.
- Analysis of primary data through KIIs to evaluate the actual activities of the implementing organization and its actors in the present scenario.
- Identifying the weaknesses and implementation challenges of the existing policy from stakeholders' experiences, through KIIs.
- Comparing the provisions in the current policy with international best practices and multimodal transport policies of the comparators.

Providing possible legal recommendations about changes, alterations, exclusion, and extension of the current guideline through consultation with legal experts, and recommendations of key informants.

1.5 Organisation of the Study

The policy review paper follows the later-mentioned structure. The context and current challenges of the policy are discussed in Chapter Two. This chapter briefs the scenario of the existing policy, trade-related provisions, and bottlenecks of existing provisions. The chapter also focuses on the patent and design policies of different countries and how our policy deviates from that. In Chapter Three, the relevance of this policy to SHE trade is depicted. This chapter also illustrates whether the current provisions of the existing policy support gender inclusiveness in trade or not. The findings based on the KIIs and FGDs are depicted in chapter Four. Chapter Five suggests necessary recommendations and ways forward make it a compatible and strong policy considering several issues such as LDC graduation of Bangladesh, changing global trade patterns, WTO guidelines, etc. Also, a detailed recommendation matrix is portrayed in chapter six. Finally, this paper marks its end with a concluding remark in Chapter Seven.

2. The National Integrated Multimodal Transport Policy- Context and Challenges

2.1 A detailed outlook of the current National Integrated Multimodal Transport Policy

2.1.1 Section one- Broad aspects of the policy

To address this imbalance, the National Integrated Multimodal Transport Policy, 2013, was developed after extensive discussions with relevant government agencies and stakeholders. The climate of our planet is being warned as the demand for transportation grows. The policy must cover all modes of transportation in an integrated manner so that future investment may take into consideration the appropriate mode in each situation to accomplish overall government objectives.

Road transportation, in particular, has transformed people's lives by providing greater freedom and broadening perspectives. The government does not wish to limit vehicle transportation. A thriving Bangladesh is one in which prosperity is shared by everybody. However, if we over-concentrate on road transportation, we will pay a high price in terms of safety, health, the economy, and the environment. As a result, equal emphasis must be placed on inland water transport, railways, and air transportation. Short-term transportation thinking has decreased options for both passengers and cargo carriers. This adds to the expense of transportation. The integrated transport policy is intended to broaden transportation options and safeguard mobility in a way that promotes long-term growth.

The three broad aspects that have also been covered in the policy

Environmental Issues: Globally, the emission of Carbon Dioxide from road transport has been majorly contributing to the climate issues. Climate change causes unpredictable weather extremes, such as more frequent and violent storms, floods, droughts, and rising sea levels. While Bangladesh does not contribute much in terms of CO₂, it bears the brunt of the repercussions of climate change. Road mobility adds to the concentration of specific matter in Bangladeshi urban areas. This pollution affects drivers, passengers, and the general public. Inland water transport and railroads, on the other hand, are less harmful than road travel.

Safety: Road traffic and speed increases have made roadways more dangerous for pedestrians and slow-moving automobiles. The economic and social costs of traffic accidents and fatalities are undermining the economic and social advantages of roadways. Road transport fatality rates in Bangladesh are substantially higher than those of inland water transport and railroads. That is the problem with road transportation. On the one hand, it has advantages, but it also takes up valuable area and has a high accident rate. Aside from a greater dependence on road transport, this strategy has promoted a balanced and dependable transportation system with a greater emphasis on inland water transport and railway.

Improving Logistics: The growth in intermodal freight transport is characterised by several key factors- Firstly, there is a need for higher responsiveness and flexibility in changing customer demands with smooth and integrated coordination of freight and equipment flows through various modes at minimum cost. Next, the increase in freight movement require freight integrator. Simultaneously, the growing need for intercountry freight transport needs to be met. Furthermore, constraint on and coordination of infrastructure capacity, regulatory issues, management issues and adaptation issues need to be considered.

2.1.2 Section two- Objective of the policy

The objective of the policy-

Constant development and change in the trading scenario, have led to a changed context of the multimodal transport system. Therefore, there is a paradigm shift in the policy itself which focuses more on the concept of sustainable mobility rather than continuous investment in the road sector. Sustainable transportation is intended to fulfil the mobility demands of the present without jeopardizing future generations' ability to meet their own needs. As a result, the policy is centred on expanding and strengthening the railway network, as well as revitalizing the inland water transport industry. At the same time, a great premium is placed on maintaining and managing the nation's existing transportation infrastructure. As a result, future public and private investments will improve transportation resources. More investment in railway and inland water transport, as well as more people and products utilizing them, will create more money, which can lead to even more investment and better services. Therefore, the government will enhance investment in railways and inland water transport, as well as create initiatives to improve intermodal integration.

Figure 1 Integration Strategies in the Light of Integrated Multimodal Transport Policy

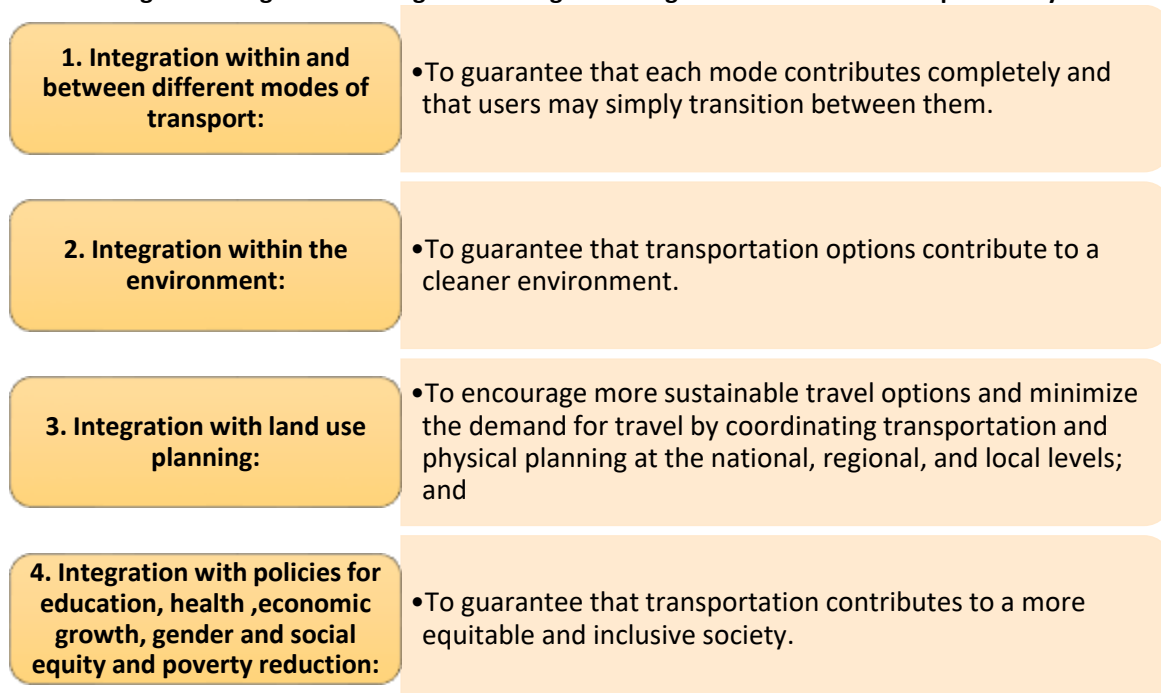


Table 1 The objectives of the policy

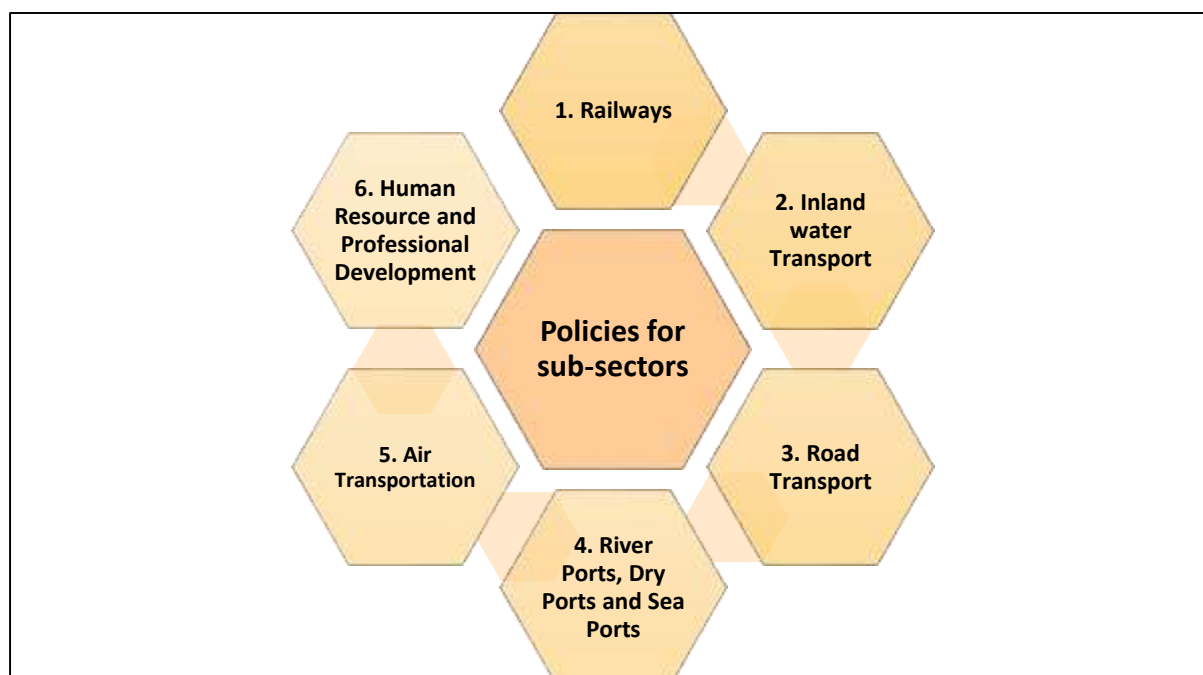
Objectives of the Policy
Minimize the transportation cost of goods, this may lead to lower costs of goods and services all over the country. Moreover, lowering costs will enhance export competitiveness.
Improve transportation safety
Reduce accident rate over time by setting a target for road safety.
Strategizing and taking advantage of Bangladesh's geographical position to trade in transport services and induce efficiency in the overall transport sector.
Reducing the environmental effects due to the transportation sector and including provisions for improving air quality.
Addressing whether the transportation cost meets the social needs of all sectors of society.

Objectives of the Policy
Enhancing the integration among the transportation networks and facilitating the interchange between modes easier. Moreover, ensuring physical and operational integration between different modes of transport.
Strategizing a better land use planning to reduce the need for travel.
Utilize the transport sector to aid in poverty reduction, and simultaneously, improve fuel and energy security.
Increasing options for passenger and freight transport.
Greater utilization and maintenance of existing assets and infrastructure.
Improving regional connectivity and encouraging more investment in rail and inland water transport.
Formulating the role of multimodal transport operators (MTOs).
Ensuring a firm commitment from the government to promote an adequate level of funding. Moreover, constructing innovative funding mechanisms, including road user charging and levies to fund road maintenance and utilizing the proper use of Road Funds.
Increasing private sector participation
Establishing rational tariffs for international traffic to ensure quality service in regional connectivity.
Constructing and establishing a more rational regulatory framework
Transportation needs should be more responsive to the needs and requirements of women and girls.
Implementation of advanced digital technology in the management of integrated transport policy.
Focusing on improving research, education, training, and technology to support integrated transport objectives.
Limiting the damage to roads by enforcing load control stations on highways at the axle.
Modernizing dry ports to increase efficiency in managing freight and passenger movement.
Increasing river navigability by enforcement, reducing encroachment on river banks, permanently halting river pollution, modernizing river ports, and providing an environment favourable to river port transportation.

Source: Authors compilation from the National Integrated Multimodal Transport Policy, 2013

2.1.3 Section Three- Sub-sectors in the policy

Figure 2 List of Sub-sectors in the policy



Source: Authors compilation from National Integrated Multimodal Transport Policy 2013

Table 2 Provisions outlined under each of the sub-sectors in the policy

Sub-sectors	Provisions
1. Railways	<p>Rail infrastructure in Bangladesh is marked by a lack of maintenance and other limitations, including a shortage of rolling stock, an absence of essential infrastructure maintenance, speed limits, and safety problems. Locomotives and rolling stock are relatively old and do not provide contemporary service standards to passengers. The railway has two gauges, which makes for inconvenient travel. These specific difficulties must be addressed by legislation for the train to play its full role in a multi-modal system in the future.</p> <p>The railway can play a major role in the following manner: Bangladesh Railway Infrastructure Improvement;</p> <ul style="list-style-type: none"> • Improving the quality, timeliness, and capacity of intercity transportation; • Increasing the efficiency and capacity of container transit; • More inland cargo terminals in sync with the railway network; • Reducing road congestion by improving passenger service quality via tight collaboration with other modes; • Creating multimodal corridors linking key economic hubs that prioritize freight and provide a high-speed network for passengers; • Developing technological compatibility and interoperability across diverse logistics and transportation systems, including regional traffic, with a focus on rail-based container transit; • Reorganizing the company into business lines with an emphasis on operations in a multimodal environment; • Creating regional linkages, such as the Trans-Asian Railway, to enable commerce in commodities and services; Corporatizing BR to improve efficiency and current business techniques; • Planning for funding and project preparation to meet the objectives. • Increasing Bangladesh Railway's operational capacity while also enhancing service quality; • Extending train service to people's homes through expanding the rail network in all parts of the country; • Introducing a contemporary system (such as electric traction, ticket punching, chord lines, and monorails); • The existing dual gauge system prevents continuous transit. Gradual changeover of dual gauge with later conversion to wide gauge to increase speed and comfort.
2. Inland Water Transport	<p>The priorities listed in the inland water transport sector are:</p> <ul style="list-style-type: none"> • Increasing the government's dredging budget; • Using sophisticated technology in dredging, as well as adopting contemporary management and cultivating talented human resources; • Modernizing hydrographic surveys to offer up-to-date information on all sorts of waterways; • Improving freight and passenger handling at current river ports; • Investing in existing river ports to facilitate interchange between water and other types of transportation; • Investing in a new port to meet rising passenger and bulk cargo demand; • Providing door-to-door service for passenger and freight transit by coordinating with cargo operators and other transportation providers; • Building inland container terminals to enable freight transit from seaports through waterways; • Improving the efficiency and safety of country boats by updating engine-driven country boats and fitting them with reversible gear; • Strengthening navigational systems and vessel tracking; • Rationalizing regulatory authorities and revising sector regulations; • Increasing research on more fuel-efficient ships; • Using digital tools to improve water transportation service;

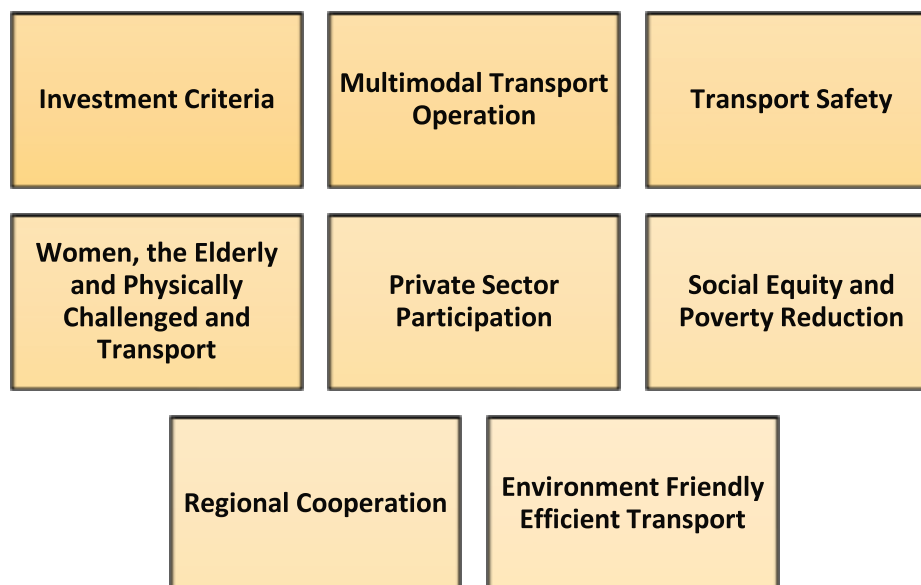
Sub-sectors	Provisions
	<ul style="list-style-type: none"> • ensuring the continuous circulation of inland water shipments; • Updating transit and commerce protocols to enhance trade and modernize inland water transport; • Introducing the water bus to give individuals with door-to-door service.
3. Road Transport	<p>Bangladesh has one of the higher road densities in Asia. However, ineffective and underfunded maintenance regimes, along with natural calamities, expedite the degeneration of the road network, necessitating immediate restoration. A lack of proper maintenance funding, on the one hand, wastes money and, on the other, prevents people from using the roads. When maintenance work is put off, the road network requires an expensive and onerous maintenance schedule. Poor traffic management harms the quality of the road network. Low-cost traffic management solutions can improve safety while avoiding costly road construction.</p> <p>The policy emphasises road transport through-</p> <ul style="list-style-type: none"> • Putting the utmost importance on improving road maintenance; • Road users paying reasonable user fees for utilizing good roads; • maximizing the usage of existing highways through improved traffic control systems; • Promoting carefully targeted capacity enhancements to alleviate network congestion; • Conducting complete social and environmental assessments of road projects and developing long-term action plans to alleviate the negative consequences of road construction; • To prevent unlawful invasion, empower concerned agencies and provide openness in their operations. • Priority is being given to increasing human resources in the Bangladesh Road Transport Authority (BRTA) and other associated entities. • Making road developments available for private sector participation; • Ensure rigorous control over axle load restrictions by installing axle load stations and providing transparency to their operations; • encouraging individuals to learn about traffic safety; • Implementation of modern technology in the transportation system.
4. River Ports, Dry Ports and Sea Ports	<p>The policy objectives under this section are-</p> <ul style="list-style-type: none"> • Determining the most essential infrastructure developments for the future; • ensuring that multimodal plans involving ports, barging, dock facilities, customs processes, and associated financial difficulties are executed so that they all operate together; • Implementing contemporary techniques to create new jobs in this area, increase capacity, and raise wages; • Developing mutually trusting relationships with trade unions; • Increasing the capacity and efficiency of Chittagong and Mongla seaports, including the feasibility of a deep sea port, and ensuring that ports are properly connected by rail and inland water transport. • Developing ports as a means of transporting goods between adjacent countries; • Streamlining customs processes and regulations to meet the needs of the advent of multimodal transportation; • Introducing new laws to address the documentation needs and liabilities for multimodal transportation operations, including insurance provisions needed to cover all risks. • Strengthening regulatory oversight of shipping via Bangladesh ports and seas; • Increasing private sector engagement in the Chittagong port's capacity and operational efficiency. • Improving operations at Mongla Ports to support the shrimp and fish export industries;

Sub-sectors	Provisions
	<ul style="list-style-type: none"> • Making the maximum use of Mongla Port's capabilities through inland water transport and rail links for general cargo and containers; • To prevent maritime pollution, adhere to International Maritime Organization (IMO) norms and treaties. • Increasing port capacity and efficiency via the use of local and international knowledge and investment. • Dredging channels to improve navigability to ensure safe berthing of ships; • Increasing Bangladesh's competitiveness through supporting dependable and efficient delivery and market access; • Improving environmental and operational performance by enabling multimodal market access; • maximizing the utilization of the private sector for investment and operations • promoting the highest environmental standards in port design and operation; • Developing a database for vessel management and control.
5. Air Transportation	<p>The government will initiate new research to formulate future policies on the air freight industry. The research will cover:</p> <ul style="list-style-type: none"> • Examine the sector's present development, particularly its economic relevance and broader implications. • Improve estimates of its future growth and the consequences for service demand and market change; • Support the creation of a new national airports strategy, which will lay the groundwork for the industry to plan for the future with greater clarity. <p>Meanwhile, air transport plans include:</p> <ul style="list-style-type: none"> • improving cargo handling at Hazrat Shahjalal International Airport and Hazrat Shah Amanat International Airport through the establishment of Cargo Villages with simplified processes to aid export competitiveness, particularly for perishable commodities; • Improve airport access for all kinds of transportation; • Immigration services at international airports will be strengthened through the recruitment and training of specialized personnel, as well as the implementation of upgraded information technology systems. • Encourage the operation of more international flights at Chittagong and Sylhet, subject to necessary commerce and trade agreements between Bangladesh and the various nations. • Increased engagement of the private sector in the operation of air flights on both international and domestic routes; • Private operators operating and expanding air transportation services in locations with airports under civil aviation; • Modernization and development of Cox's Bazar Airport to boost the tourism industry; • Implementation of helicopter services between district towns and strategic locations by government and commercial companies; • Increased engagement of the private sector in CAAB operations.
6. Human Resource and Professional Development	<ul style="list-style-type: none"> • Conduct a study on the requirements for human resources of the public and commercial sectors. • Determine the training requirements for government and agency personnel. • Improve training and professional development in the private sector; • Encourage the formation of transportation planning and management institutes.

Source: Compiled by the authors from the policy

2.1.4 Section four- Cross-cutting issues

Figure 3 Criteria discussed under Cross cutting issues



Source: Authors Compilation from National Integrated Multimodal Policy, 2013

The above figure illustrates the different sectors that are addressed in the section labelled “Cross-cutting issues”. Each sector has detailed provisions stated in the policy.

Table 3 Provisions under Cross-Cutting Issues

Cross-cutting issues	Provision
1. Investment criteria	Under the investment criteria, decisions on when and where to invest in the network improvements and measures to manage traffic will be decided in the light of the new approach to appraisal based on the following aspects- <ul style="list-style-type: none"> ➤ Integration ➤ Safety ➤ Economy ➤ Environmental Impact ➤ Accessibility ➤ Poverty Reduction ➤ Social Inclusion
2. Multimodal Transport Operation	Alignment of local laws, rules, and regulations with international norms, as supported by the United Nations Conference on Trade and Development's Multimodal Transport Convention; Encourage Multimodal Transport Operators (MTOs) to receive training to perform multimodal transport operations and deliver on-time, door-to-door services. Support for private sector transport operators, freight forwarders, and other government and semi-government entities in establishing themselves as MTOs, as well as support for a self-registration system among MTOs in regulating their operations following international norms, to ensure Bangladesh's competitiveness in this area.
3. Transport Safety	The target of the policy is to eliminate fatality as much as possible. The transport safety provisions are divided into three categories- <ul style="list-style-type: none"> ➤ Road Safety ➤ Railway safety ➤ Inland Water Transport Safety
4. Women, the Elderly and	<ul style="list-style-type: none"> • Increased emphasis on integrated transportation, including more accessible buses and improved information;

Cross-cutting issues	Provision
Physically challenged and Transport	<ul style="list-style-type: none"> • Improving the pedestrian environment, for example, by making it simpler for women, children, the elderly, and the physically challenged to move; • Prioritizing mass transportation projects over government investment initiatives; • Use of ramps at railway stations and bus terminals to facilitate access and canal navigation via specific arrangements. • Seats reserved for the elderly, children, and the physically impaired; and • Increasing the security of public transportation via increasing station security.
5. Private Sector Participation	<p>Most of the transport services and mobile assets except for the Bangladesh Railway are owned by the private sector. The policies are-</p> <ul style="list-style-type: none"> • Regulatory methods will be changed so that transportation modes are competitive and responsive to customer demand; regulatory policies will address consumer complaints such as service quality, safety, and so on; • The regulator will also be expected to serve as an arbiter in disputes between service providers or concessionaires and the concessioning authority, as well as to guarantee that regulatory agencies operate freely.
6. Social Equity and Poverty Reduction	<p>Bangladesh must establish a transportation system within an integrated multimodal framework with the particular goal of the nation's economic, social, and human growth.</p> <ul style="list-style-type: none"> • Labour-intensive techniques of transportation project construction and maintenance shall be supported where possible. • Future transportation infrastructure and services will be developed to meet the unique requirements of women, children, the elderly, and those with disabilities. • Programs will be designed to guarantee that experts, administrators, and decision-makers in all modes of transportation provide services that are appealing to and useable by women and girls. • All major transportation projects will be required to do environmental, social, and resettlement impact evaluations. Mitigation measures will be found and implemented, and initiatives will be launched to guarantee that transportation projects and services are tailored to assist the disadvantaged the most.
7. Regional Cooperation	<p>The primary objective of the Government is to take advantage of Bangladesh's geographical position to develop international transport links that will lead to revenue generation.</p> <ul style="list-style-type: none"> • The government will seek collaboration from neighbouring nations on regional concerns such as water management and regional transportation that can increase the effectiveness of Bangladesh's multimodal transportation. • Bangladesh will remain an active member of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and will promote cooperation in trade, transport, communications, and people-to-people contact; the government acknowledges that future cooperation under BIMSTEC will necessitate the development of key infrastructure, particularly transportation and communication links, to facilitate tourism, trade, and investment, and has agreed to this. • Government is also committed to considering the recommendations of the SAARC Regional Multimodal Transport Study (SRMTS) concerning transportation networks by road, rail, and IWT, and will implement those that are in the national interest as well as those that serve the interests of other countries in the region; • The government will take adequate steps to enhance transport routes of the Asian Highway, Bangladesh-China-India-Myanmar Forum, South Asia Sub Regional Economic Cooperation, and South Asia Sub Regional Economic Cooperation (SASEC). • Through collaboration with neighbouring countries and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the government will continue to encourage the construction of the Asian Highway and Trans-Asian Railway in Bangladesh.

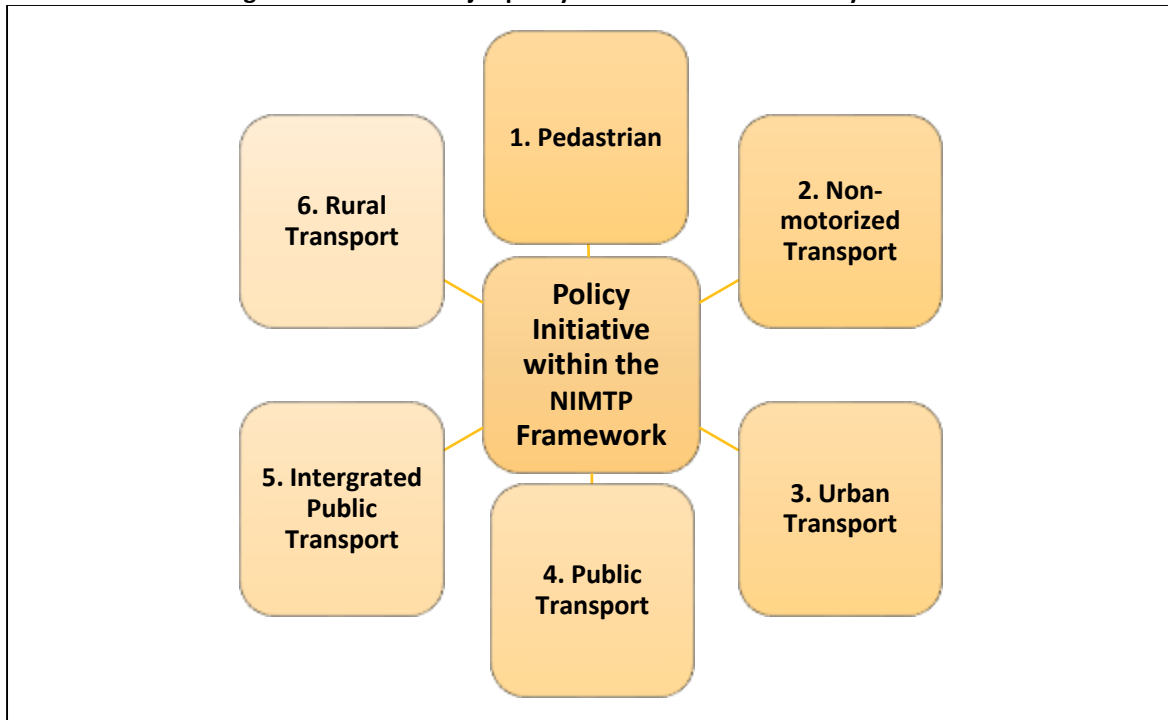
Cross-cutting issues	Provision
	<ul style="list-style-type: none"> • The government will take efforts to increase regional collaboration on water management, not just for flood control but also to ensure a regular and stable flow in important rivers, which would aid navigation. • Standardize road signs following the 1968 Vienna Convention on Road Signs and Signals to facilitate the safe movement of regional traffic; the government will investigate ways to minimize the transshipment of cross-border goods to reduce transport costs, and the government can take rational actions to enhance rail links with neighbouring countries.
8. Environment-Friendly Efficient Transport	<ul style="list-style-type: none"> • To minimize the use of cars, the bus services must be developed which provide cleaner, more comfortable and more reliable services. • Innovative solutions will be promoted to franchise bus routes to private sector operators in a transparent manner while meeting environmental goals. • promoting CNG-powered automobiles; • Solar-powered refrigeration devices for trucks transporting perishable goods will be promoted. • To prevent waste from vessels from being dumped in waterways, an adequate waste management system must be ensured. • Laws must be enforced in cases of industrial waste dumping through sewage systems or direct disposal of solid trash by individuals and other entities. • In the Motor Vehicle Act, environmental regulations for road transport will be set, including stringent emission restrictions.
9. Transport and Land Use	<ul style="list-style-type: none"> • Transport and land use are inextricably linked issues. Because land use creates transportation movements, the transportation system must be effectively planned to fulfil the demands that varied land uses generate. The research will be conducted to assess the special impacts of transportation on land use in Bangladesh so that: <ul style="list-style-type: none"> • land use policies that encourage local services, reducing the need to travel, can be implemented; and transportation planning can be integrated with land use planning, particularly in urban areas, including Upazila towns. The government will direct responsible local government entities to develop the appropriate town and municipal transportation plans. • Transport Policy implementation can be integrated with the government's Land Use Policy 2001.

Source: Authors compilation from National Integrated Multimodal Transport Policy, 2013

2.1.5 Section Five- Policy Initiative within the policy framework

The National Integrated Multimodal Transport Policy lists out sectors as pointed out in the figure below. Each sector has multiple goals that the policy wants to achieve in the near future.

Figure 4 The list of major policy initiatives with this Policy Framework



Source: Authors compilation from National Integrated Multimodal Transport Policy, 2013

2.1.6 Section Six- Institutional Policies and Planned Implementation

Strategies for Implementing Multimodal Transport Policy-

Institutional Policies

- The government will form a Cabinet Committee comprised of ministers from the relevant ministries to supervise the implementation of Bangladesh's multimodal transportation strategy. The Cabinet Committee will assess the policy's execution and set new goals on an ongoing basis.
- The Roads Division will coordinate the implementation of the integrated multimodal transport policy and serve as the Cabinet Committee's secretariat.
- National Multimodal Transport Coordination Committee will be formed to prepare proposals for the implementation and monitoring of the National Integrated Multimodal Transport Policy and will report to the Cabinet Committee. The Cabinet Committee will appoint members of the Multimodal Transport Coordination Committee, including private-sector representatives.
- The Roads Division will offer secretarial support to the National Multimodal Transport Coordination Committee and will be in charge of data coordination and exchange within the transportation industry.

- The National Coordination Committee on Multimodal Transport's mandate will be to coordinate all entities involved in multimodal transportation to increase efficiency. The Ministry of Communication (Roads Division and Bridges Division), the Ministry of Railways, the Ministry of Shipping (including port authorities), the Ministry of Civil Aviation and Tourism, the Local Government Division, the Ministry of Commerce, the Ministry of Finance, the Ministry of Planning, and the Ministry of Home Affairs will all be involved. If required, a new ministry or division will be added.
- The Ministries of Communication (Roads Division and Bridges Division), Railways, Shipping, Civil Aviation and Tourism, Local Government Division, and Commerce will designate their focal points.
- A single independent commission will be established to regulate fare structure in the public interest, rescinding the economic regulation of other agencies in the transportation sector.

Planned Implementation

- Problems with transportation infrastructure and operations across all modes, including access to ports and airports, will be thoroughly investigated, and integrated transport policies based on a multimodal approach will be designed and executed throughout the country.
- Multimodal transportation studies will be conducted to meet the goals and concerns of sustainable development, taking into account predicted demand, and leading to the adoption of investment plans.
- The government has already created a Road Master Plan, a Railway Master Plan, and an Inland Water Transport Master Plan, and will continue to develop the following sub-sectoral master plans/strategies/goals in the future: Transportation Security Strategy, Air passenger and cargo goals and Plans for Urban Transportation.
- Within the multimodal transport framework, and with the recommendations of the preceding plans in mind, an integrated multimodal transport investment plan will be developed, taking into account the relative economic costs of various modes, integration options for the transport network, and options for providing door-to-door services.
- Action plans will be developed to implement the multimodal transportation strategy, which will include legislative, regulatory, and institutional measures to meet the policy objectives of sustainable multimodal transportation. Existing policy contradictions will be explained and reinforced through legislative measures.
- The government will continue to support the establishment of Transport Sector Coordination capacity in the Planning Commission and the relevant ministries, with capabilities in multimodal transportation planning and forecasting, policy analysis and review, project appraisal, monitoring NIMTP and sub-sectoral policy implementation, and Advanced Geographical Information System, data collection, analyses, and support services.
- Strict execution of upgraded project assessment methodologies will be used to guarantee that transportation initiatives meet fundamental poverty and social objectives, as well as economic and environmental issues. To justify the investment, all proposed significant transportation projects must undergo a feasibility assessment.

- The government would encourage the implementation of its policy guidelines for private sector participation in projects, subject to any capital subsidy ceiling.
- The scope of project monitoring and evaluation will be expanded to determine if investments satisfy economic and social goals.
- The benefits of multimodal transportation will be communicated to relevant groups.

2.2 Current State and Bottlenecks

2.2.1 Investment in the road sector

At present, Bangladesh lacks well-developed integrated multimodal transportation networks. One of the reasons is because of the disproportionately high investment in the road sector. The road has become the dominant mode of transport with a modal share of over 70 percent. Nonetheless, despite a large share of investment, the road system capacity is substantially inadequate.¹ Whereas investments in the railway and inland waterway sectors have always been very minimal. Although, they are relatively safer, cost-effective and environmentally friendly modes.

As a result of disproportionately high investment in the road sector, modal share (both passenger and freight) on the road had been consistently increased in the last three decades. For instance, passenger demand on the road increased from 54 percent in 1975 to 88 percent in 2005 and during the same period, rail and inland waterway share of passenger demand declined from 30 to 4 percent and from 16 to 8 percent, respectively. The freight demand on the road had increased from 35 percent in 1975 to 80 percent in 2005 and during the same time period, rail and inland waterway share of passenger demand had declined from 28 to 4 percent and 37 to 16 percent, respectively.²

Even after such high investment in roads, poor maintenance significantly reduces the design life of roads and also provides degraded quality of service. Due to inadequate attention to improve safety, the roads remain very unsafe as one report indicated that there exist over 100 fatalities per ten thousand registered motor vehicles every year.³

2.2.2 Investment in the railway sector

Although being one of the most key sectors in the nation, the railway has historically received little attention because of inadequate investment levels and the segregation of the railroads in the country's eastern and western regions by two different gauges. With predominantly a single-track line, the eastern railway between Dhaka (the capital) and Chittagong (the major port city) operates on a meter gauge track.⁴

The railway experiences deficits as a consequence of its inadequate operational capacity, mismanagement, and insufficient service conditions (Table 4).⁵ However, with adequate

¹ Ibid

² Ibid

³ Ibid

⁴ Ibid

⁵https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb_29c1_423a_9d37_cdb500260002/20.%20Chapter-11%20Eng-21.pdf

investment and institutional developments such operation of long-distance trains for each division, the railway can become a profitable organization for both the government and the stakeholders.

Table 4 Overall Performance of Bangladesh Railway

Financial Year	Passenger Kms (Million)	Freight Ton Kms (Million)	Total operating revenue (Tk. In crore)	Total operating expenses (Tk. In crore)
2010-11	8051.92	692.64	747.70	1491.82
2011-12	8787.23	582.11	726.42	1567.12
2012-13	8253.00	525.00	804.26	1562.38
2013-14	8135.00	677.35	800.17	1601.69
2014-15	8711.36	693.84	935.45	1808.29
2015-16	9167.18	675.09	904.02	2229.22
2016-17	10,040.66	1052.67	130.37	2835.52
2017-18	12993.91	1236.50	1486.15	2918.02
2018-19	14334.76	913.48	1406.58	3050.66
2019-20	99577.68	1002.04	1225.85	3188.97
2020-21*	10455.60	1042.00	1182.00	3284.00

Source: Ministry of Railway. *Provisional⁶

2.2.3 Underutilization of Waterway

Being a riverine country with nearly 700 rivers including tributaries, the waterways have the potential to become an option for sustainable transportation. It has been well established that the waterway is a cost-efficient and environmentally friendly mode for moving goods and passengers. Furthermore, Bangladesh being one of the vulnerable nations to climate change and frequent flooding perspective, the waterway can be developed as the most adaptive mode of transportation. However, such a mode is heavily underutilized in Bangladesh despite its natural strength.

The waterway is the most economical and environment-friendly mode for many villagers and farmers to connect them with the markets and other destinations. Many southern districts especially all districts under the division of Barisal have easy access to waterways that have direct connections with the capital city and other major destinations through the waterway. The cost of developing inland waterways is also very low as compared to other modes including the maintenance cost.

Bangladesh is still a bit of a way from developing integrated multimodal transportation networks that are modally balanced. Bangladesh has to make significant investments, particularly in the rail and inland waterway sectors. Since Bangladesh and India share approximately 54 Transboundary rivers including the Ganges and Brahmaputra (these two rivers are also part of Indian national waterways), the collaboration of Bangladesh and India in the joint development of waterways as well as coastal shipping would be very beneficial for both the countries. Chittagong and Mongla sea ports can conveniently be connected with

⁶https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb_29c1_423a_9d37_cdb500260002/20.%20Chapter-11%20Eng-21.pdf

many destinations in India through waterways via these two major river systems (e.g., Ganges/Padma/Megna and Brahmaputra/Jamuna/Megna).⁷

With well-developed integrated multimodal transportation systems, Bangladesh can be able to use waterways for trading with India, Nepal and Bhutan provided that the inland waterway ports are physically integrated with major highways and rail transportation networks and hubs. For example, the river port in Ashugang can be well connected with the rail junction in Akhaura (a major transportation hub in Brahmanbaria District). Ashugang can also be connected with northeast India via waterways through the transboundary rivers Titas and Kushiya. Substantial investment will be needed in the development of inland waterway ports including berthing and logistic supports, passenger and freight transfer facilities, warehouses for freight distributions and transshipment facilities etc. In addition to dredging work to maintain appropriate channel depths and night navigational aids service would be needed. A large number of these activities can be contracted out to private sectors or executed under various public-private partnership (PPP) agreements.⁸

Furthermore, private investment can be sought for the rapid development of inland waterways (waterway services including inland water port management). It will also create new job opportunities and boost socioeconomic growth and development.

2.2.4 Need for a sound multimodal transportation planning process

To develop sustainable and cost-effective integrated multimodal transportation systems for the efficient movement of goods and passengers as well as to serve as a regional transportation hub, Bangladesh needs to come up with a sound multimodal transportation planning process for the identification, prioritization and selection of implementable transportation projects under the budget constraints.⁹

2.2.5 Dearth of collaboration and coordination across organisations, as well as public participation

Currently, when identifying, prioritising, and choosing transportation infrastructure projects (such as rail, road, and inland water), lacks a unified coordinated, continuous multimodal transportation planning process that would allow policy goals and objectives to be measured.¹⁰

Four separate ministries oversee the surface transportation development activities. For instance, rural roads are under the jurisdiction of the Ministry of Local Government, regional and national roads including associated bridges are under the Ministry of Transportation, the railway is under the Ministry of Rail, and inland waterways and ports are under the Ministry of Shipping.

Generally, projects are identified, prioritized and selected independently along modal lines by the respective modally segregated ministries (or subsidiary agencies) in association with the Ministry of Planning. Such an approach often takes place under the influence of politics

⁷ Ibid

⁸ Ibid

⁹ Ibid

¹⁰ Note 2

and without a comprehensive project evaluation. Furthermore, there is no formal public participation or involvement in the planning and project development process. Often unnecessary projects are implemented and important projects are postponed due to lack of funds or other reasons. Despite, the government had given much attention to developing transport infrastructure projects through Public Private Partnership (PPP) agreements in the sixth five-year plan (2011-2015), however, the intended results have not been achieved during the planning period.¹¹

2.2.6 Enhancement of roadway capacity

India also has been seeking road-based transit access through Bangladesh to connect its landlocked northeastern part (via Tamabil land port entry point) with its western part (via Banapole land port entry point) to boost the economy of its relatively poor northeastern part. Such a transit facility will significantly increase the mobility of people as well as boost the trade of all seven northeastern states and the state of West-bangle (one of the commercial hubs) of India as it will reduce the travel distance between Kolkata (capital of the state of West-bangle, India) and Agartala (capital of Tripura, northeastern India) from approximately 1,650 km through Indian territory via Chicken's Neck to 500 km through Bangladesh via Dhaka. However, the roadway capacity of Bangladesh is substantially inadequate even to meet the current domestic demands. Furthermore, the structural strength of roads and bridges in Bangladesh is not at a level to accommodate heavy Indian trucks. Thus, without substantial capital investments on roads, such a transit facility may not be materialized.¹²

2.2.7 Inadequate Funds

However, as the government has very limited financial resources for the development budget, Bangladesh relies heavily on international development partners such as World Bank, Asian Development Bank, International Monetary Fund etc. to bridge the development budget gap while compromising the government priorities and needs.

Based on the investment priorities and needs, for the implementation of the projects, a formula may be developed to allocate annual development program funds for multimodal developments and modal integration purposes.¹³

2.2.8 Use of technology

Technology should be used to improve the safety and operational efficiency of all modes including ports (e.g., sea, river and land) and intermodal facilities/terminals. In this regard, a vision for Intelligent Transportation Systems (ITS) ensuring the interoperability of equipment and systems needs to be developed and a priority base incremental deployment of ITS technologies needs to be ensured.¹⁴

2.2.9 Intermodal freight transport

Outstandingly, railway IFT is cheap and minimal in Bangladesh but passage time is long (For ILU transfer from Chittagong port to Dhaka ICD, rail takes 15 days whereas the road is only 2 days), which resulted in the common moving of cargo and container through trailers/trucks

¹¹Ibid

¹²Ibid

¹³Ibid

¹⁴Ibid

that also caused the pressure on road transportation. Unfortunately, due to a lack of intermodal transport facilities, huge numbers of containers are moving from port to consignee premises by road haulage/trailers for import cargo by taking special permission from the port and customs with the help of a shipping line and returning the container to the respective port /depot/off dock accordingly.¹⁵

2.2.10 Padma Bridge and Multimodal Transportation System

Padma Bridge, the most ambitious project in recent times, reduces the distance by road between Dhaka and other districts in the southwestern region by at least 100 km. According to World Bank, Padma Bridge will save about two hours for buses and five to ten hours for trucks which reduces the fuel and maintenance cost of transportation of passengers and goods significantly. Reduction in the distance also saves working hours and makes the transportation system more efficient. This reduction in cost and time will give a boost to transportation within the country and also cross-country transportation because this route is expected to be used as a sub-route for Trans-Asian Railway Network. As a part of the project, the linking roads from Padma Bridge to neighbouring districts are also further developed which will improve the inter-district connectivity. Improved connectivity will have a positive impact on trade within the country. Thus, employment will also increase in the southwestern region with a higher minimum wage as the demand for labour will also increase.

Padma Bridge is a great addition to the already existing multimodal transportation system as it supports rail roads beside a wide 4-lane road for normal vehicles. Mongla Seaport, the second-largest seaport in Bangladesh, is not currently being used at its maximum capacity. Because of Padma Bridge, the distance from Dhaka to Mongla sea port will be lower than from Dhaka to Chittagong port. As a result, Padma Bridge will help to increase the usability of Mongla seaport and give the government and relevant authorities an incentive to operate Mongla sea port at its maximum capacity. It will also reduce the extra pressure on Chittagong port and will help it to operate efficiently according to its capacity. We will see a similar impact on Payra Port also. Another impact is that the ease of transportation will work as a factor for the industrialization of the southern region of the country and the overflowed or idle workforce in that region can be used appropriately for the export-led growth of this country. This industrialisation is also expected to have a significant impact on poverty alleviation in the 21 districts.

After completing the Padma Bridge Rail Link project, the distance from Kolkata to Dhaka will reduce to half which will boost the trade with India, the second-largest trade partner of Bangladesh. Moreover, Padma Bridge will play an important role after ratifying the TIR convention as Bangladesh will be the shortest route for India to reach its northeastern region. Landlocked countries like Bhutan and Nepal will see the Mongla and Payra sea ports as their convenient way to access sea routes which will make Bangladesh a hub for the transportation of goods through sea routes. Overall, Padma Bridge will have a great contribution to boosting trade, improving connectivity and developing a multimodal transportation system.

¹⁵<https://www.eajournals.org/wp-content/uploads/Prospectus-of-Bangladesh-in-Developing-Intermodal-Freight-Transportation-Network-in-South-Asia.pdf>

2.2.11 Metrorail and Multimodal Hub

To deal with potential turmoil and a significant increase in passenger traffic, the government plans to turn Kamalapur into a "Multi-Modal Transport Hub." The already crowded neighbourhood will probably become the busiest and most chaotic as the government's multi-billion dollar communication projects of mass rapid transit (MRT), motorway, and bus rapid transit (BRT), are about to be implemented. Modern passenger services will be offered at the planned hub, which would be modelled after those in developed economies. To enable speedy transfers from one mode of transportation to another, this hub will be the first in the nation to bring roadways and railroad communications to the same location near the Kamalapur station. The Dhaka Airport Train Station will be surrounded by a hub of a similar design. To service passengers on the metro rail, underground, elevated highway, and BRT, a multi-story train station will be constructed beneath the structure. To carry out the project, Japan and the government of Bangladesh have signed a memorandum of agreement. Tokyo and Dhaka have both set 2030 as the date for implementing it into effect through a public-private partnership (PPP).¹⁶

2.2.12 RSTP and STP

By offering a transportation system that is distinguished by safety, amenity, and integrity and supported by a successful public transportation system, one may "ensure mobility and accessibility to urban services that are crucial for the people and the society." The current advantage of a high modal share of more than 65% should be maintained by a combination of supply-type and demand-type strategies. Eight distinct objectives and strategies have been formed from the overarching goal, which is increasing awareness of social issues related to urban transportation, effective urban development and growth management, promotion and development of attractive public transportation, regulation and management of traffic efficiently, efficient transportation demand management (TDM), extensive transportation space and environment development, improvement of traffic safety and sustaining of administrative and management capabilities in the transport sector. As previously mentioned, RSTP has determined the number of transport development policies. The following are the main points or components of the Master Plan:

1. Improving Public Transportation: The creation of a sustainable public transportation system, utilising the current high percentage of public transportation trips
2. Building an efficient transportation system that can sustain 10 million multi-core hub cities will increase the city's regional competitiveness.
3. Creation of a well-run and environmentally friendly city: This goal is achieved by introducing cutting-edge institutional and operational plans that enable world-class transportation integration with the built environment.
4. Deployment of Quick Congestion Mitigation Measures: Use of less expensive, quick-acting solutions to traffic congestion¹⁷

With assistance from the Japan International Cooperation Agency, the government created the RSTP in 2016 as an urban transport master plan for Dhaka with a 20-year timeframe. Six unique public transportation routes are identified by the RSTP as having an overwhelming

¹⁶ <https://thenewstimesbd.com/national/kamalapur-set-to-become-a-multimodal-transport-hub/>

¹⁷ [https://dtca.portal.gov.bd/sites/default/files/files/dtca.portal.gov.bd/page/2c9ed98b_602a_468b_84bc_6b4858449313/DFR_UrbanTransport%20Policy%20\(Edited\).pdf](https://dtca.portal.gov.bd/sites/default/files/files/dtca.portal.gov.bd/page/2c9ed98b_602a_468b_84bc_6b4858449313/DFR_UrbanTransport%20Policy%20(Edited).pdf)

need for pedestrian movement to link Dhaka's central business area with nearby satellite regional centres. The RSTP suggests building five MRT lines and two BRT lines along those routes by the year 2035 to meet the anticipated high demand.¹⁸

2.3 Changing Nature of the World Trade and Relevance of the NIMTP 2013

2.3.1 LDC Graduation Challenges

Losing preferential treatment, development assistance, and technical collaboration will be a difficulty for countries that graduate from the LDC category. As North America and Europe are Bangladesh's main export markets for clothing, Bangladesh currently has duty-free and quota-free (DFQF) market access in several of these developed economies. As an LDC under SAFTA, Bangladesh also has DFQF market access to the Indian market, which would likewise end after graduation. Bangladesh will no longer be qualified to provide subsidies as incentives to businesses with an export focus. Therefore, the increase in export revenues will slow down for these industries. Due to systemic bottlenecks, intense levels of congestion (on highways and in ports), a high number of empty trips, limited competition among transport modes, and the chaotic state of the transportation sector, logistics costs are high in the majority of Bangladeshi industries.¹⁹

In recent years, Bangladesh and India have made some good progress in the improvement of transportation connectivity between the two neighbouring countries. However, such connectivity is predominantly road based. For instance, regarding freight movements, a total of 16 land ports (though some are still in the development stages) currently facilitate more than half of the trade between the two countries. Among the land ports, Benapole land port is the busiest land port between Bangladesh and India which facilitates both passenger and freight movements. Approximately 90 percent of the imported goods to Bangladesh move through the Benapole land port. The Banglabandha land port located at the tip of northwestern Bangladesh is a strategic land access point for India, Nepal (the border of Nepal is 38 miles away) and Bhutan (the border of Bhutan is 42 miles away). The port is just at the meeting point of northeast India and western India. Currently, no Nepali trucks are allowed to enter Bangladesh.

Thus, a long-term bilateral or multilateral transit agreement will be needed to move goods and passengers among the four nations to boost trade as well as to facilitate import and export for landlocked Nepal and Bhutan using the Mongla seaport. Bangladesh and India have also been establishing direct rail connections between Akhaura of Bangladesh and Agartala of India. Akhaura, a southeastern city of Bangladesh is a transportation hub with a railway junction that conveniently connects Chittagong port, Sylhet, and Dhaka.

Regarding freight movements through waterways, a protocol has been in place between Bangladesh and India to allow Indian vessels to transit through Bangladesh waterways as well as each other's vessels to use each other's waterways for bilateral trades through specified waterway routes and port of calls. In addition, the two countries are further in the discussion of allowing coastal trade.²⁰

¹⁸ <https://www.adb.org/sites/default/files/linked-documents/54451-001-tor.pdf>

¹⁹ <https://businesspostbd.com/back/multimodal-transport-to-reduce-business-costs-2022-11-18>

²⁰ Ibid

Bangladesh will no longer be eligible for tax-free market access after 2029 since the country will graduate from the LDC membership in 2026, however, its exports will be eligible for a three-year extension until 2029. Thus, the country shall make the most of this period by trading with its regional partners through rail and waterway.

Currently, there are inconsistencies between policies and how the projects are identified and selected. Funding makes it even harder to achieve the policy goals. It is suggested that a comprehensive and continuous multimodal transportation planning process needs to be developed for the prioritization, and selection of programs and projects as well as for the analysis and evaluation of transportation policies. Furthermore, limited resources and money borrowed from multilateral banks and agencies need to be used transparently to justify the policy goals and objectives.²¹ To raise export earnings, the government should improve the competitiveness of logistics services through the integrated development of the transportation sectors and participation of all sectors in the creation of the national logistic industry development policy.²² Moreover, to convey goods efficiently, cut costs, and provide logistics assistance that is favourable to investments, there must be strong connectivity between all water, air, rail, and road systems. To minimize business expenses, all ports must be operational.²³

2.3.2 Plan for Attaining SDGs

As part of the sustainable development goals, poverty alleviation, gender equity, and women empowerment are some of the major goals of the government of Bangladesh. Thus, policies and programs are formulated to achieve such goals. The Planning Commission (PC) (a division of the Ministry of Planning) formulates long-term prospective plans and short-term five-year plans on a rolling basis for all sectors including the transportation sector. Currently, Bangladesh has been formulating its eighth five-year plan (JULY 2020-2025 JUNE). The five-year plan includes a wish list of development programs and projects encompassing all sectors. These plans are developed without any commitments of funds for implementation purposes. As such, many programs and projects are not implemented promptly or even within the planning time frame.²⁴

The plan²⁵ focuses on improving rail connectivity between the eastern and western regions of the country as well as improving roadway connectivity with the regional countries. It also gives importance to improving connectivity between rural roads and waterways where feasible. However, there are weaknesses in the planning process and prioritization of projects that have prevented the achievement of the intended benefits from the investments.²⁶

²¹ Ibid

²² <https://bangladeshpost.net/posts/transport-cost-cut-may-raise-export-99426>

²³ <https://businesspostbd.com/back/multimodal-transport-to-reduce-business-costs-2022-11-18>

²⁴ Ibid

²⁵ CHAPTER 6- TRANSPORT AND COMMUNICATION DEVELOPMENT STRATEGY, 8th five-year plan (JULY 2020-2025 JUNE), GED

²⁶ Ibid

2.3.3 Environmental Impact

The consequences of transportation and logistics systems on the physical environment (air, water, and land resources) will become increasingly complex as these systems continue to integrate. Demand for intermodal transportation services and multimodal transportation infrastructure is rising as a result of economic globalization, flexible manufacturing, speed to market, and supply chain management. The transportation sector, its clients, and other stakeholders will need to switch from policies that emphasize regulatory compliance to ones that emphasize proactive environmental management to deal with the effects on the environment. The effects of transportation and logistics systems on the physical environment (air, water, and land resources) will become increasingly complex as these systems continue to integrate. Demand for intermodal transportation services and multimodal transportation infrastructure is rising as a result of economic globalization, flexible manufacturing, speed to market, and supply chain management. The transportation sector, its customers, and other stakeholders will need to switch from policies that emphasize regulatory compliance to ones that emphasize proactive environmental management in order to deal with the impacts on the environment.²⁷

As the modal transition to off-road modes enables lower fossil fuel use and greenhouse gas emissions, multimodal transport is typically linked to greener and more sustainable logistics. As a consequence, the Law on Energy Transition for Green Growth promotes the use of off-road means of transportation. On June 24, 2020, at SITL Live, we presented a webinar on "Green Logistics," where we learned that a freight train emits 3 tons of CO₂, which is comparable to more than 45 large trucks (i.e. 44 tons of CO₂). 125 heavy trucks are required to haul a barge carrying bulk items, which is equivalent to 36 tons of CO₂ (i.e. the emission of 123 tons of CO₂). Increasing multimodal logistics through the use of integrated rail-road, river-road, or sea-road transportation would help reduce traffic, prevent accidents, and address the industry's driver shortage. Integrating the use of the road network (for the first and last kilometres) and the rail network to carry commodities is termed combined road-rail transport (for long distances). At the customer's location, the goods are loaded into an Intermodal Transport Unit (swap body that streamlines changing transport modes). When buying a new Intermodal Transport Unit, the carrier is entitled to financial advantages from France's ESC (Energy Savings Certificates). The axle tax is reduced by 75% for carriers who perform pre- and post-carriage operations. Even though combined road-rail transportation has indisputable advantages from an ecological and social standpoint, it only makes up a small portion of the French transportation sector because the network and infrastructure are frequently regarded as insufficient. It also finds it difficult to compete with heavy trucks in terms of pricing and service quality, and it costs a lot of money to undertake a full rearrangement of current transport streams.²⁸

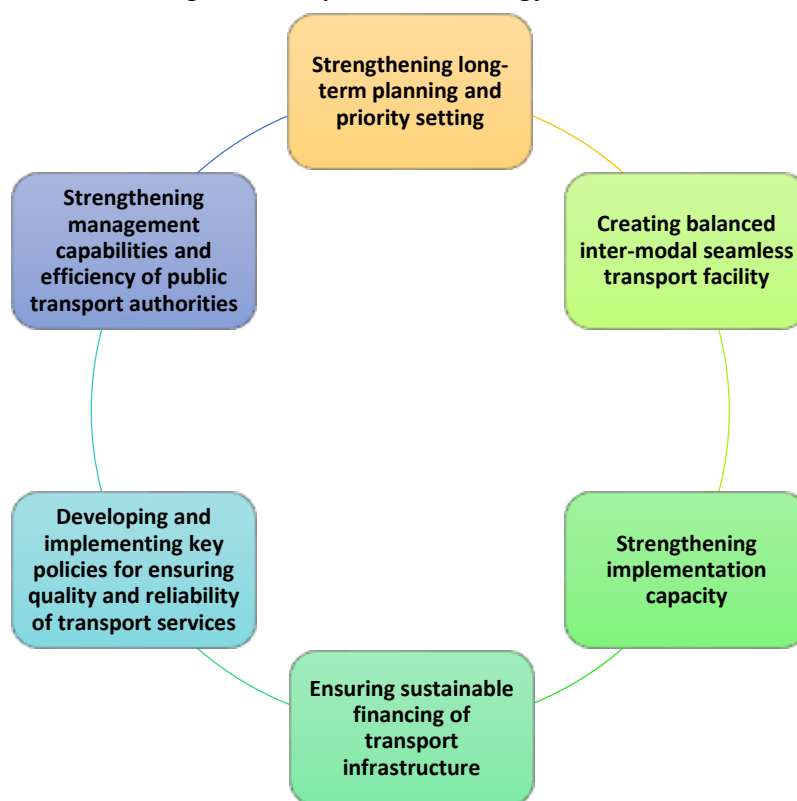
²⁷Rondinelli, Dennis & Berry, Michael. (2000). Multimodal transportation, logistics, and the environment: Managing interactions in a global economy. *European Management Journal*. 18. 398-410. 10.1016/S0263-2373(00)00029-3.

²⁸<https://kardinal.ai/plan-transport-flows-to-reduce-their-environmental-impact/#:~:text=Using%20multimodal%20transport,and%20lower%20greenhouse%20gas%20emissions.>

2.3.4 8FYP

The transportation plan for the 8FYP will be based on the lessons learned from the implementation of the 7FYP and the PP2021. Overcoming the 7FYP strategy's implementation deficiencies will be a top priority. The other goal will be to resolve the fundamental institutional impediments that have impeded transportation project implementation. A third aim is to revamp the PPP strategy to make more progress under the 8FYP. Finally, one of the 7FYP's key lessons is that Bangladesh must be more strategic in identifying essential transportation projects and allocating money accordingly. Preference should be given to progressive infrastructure investment. This endeavour has already begun under the 7FYP. The 8FYP will fortify it further to facilitate the timely adoption and completion of the most important transportation projects. The physical goals for the transportation industry call for large investments and effective implementation. The 8FYP transport plan has included meticulous planning and priority setting. Bangladesh is well-versed in developing long-term transportation plans.

Figure 5 Transport Sector Strategy For 8FYP



Source: Compiled by authors from 8FYP

2.3.5 4IR

The significance of transportation in the development of any economic growth of the country cannot be overstated, notwithstanding the extent of industrial shifts. As a result, efforts have been made to ensure timely and efficient transportation. The following are fundamental to transportation and cannot be separated from it: social integration, geographical interaction, and economic goals. The sustainability of innovation, automation, and complex processes—the cornerstones of industrial success strategies—is the fourth industrial revolution. Despite the potential risks in the fourth industrial revolution, it is possible to lessen their consequences. The modern era is probably going to present industrialized nations with a ton

of opportunities, and underdeveloped nations will also gain a lot from technological transfer. The fourth industrial revolution will raise the bar for emerging nations in terms of creating sustainable and efficient modes of transportation as well as spending more on technology transfer, which will benefit the local manufacturing industry and agriculture.²⁹

One of the most essential components of the smart city, which was impacted by the fourth industrial revolution, is smart transportation networks. Smart transportation types, systems, and infrastructures, which are changing quickly in the information age as a result of technological advancements and information-communication infrastructure, should be a primary concern for local governments. To enhance urban life quality, reduce environmental degradation, and avert numerous material and life-sustaining losses, smart transportation applications must be used wisely. Smart mobility refers to a framework for safe, clean, and efficient transportation in which many modes of transportation and infrastructures are interwoven.³⁰

2.3.6 Regional cooperation

Multimodal transportation is a time-efficient and cheaper way of transportation. Although transportation of freight requires using multiple modes of transport, what distinguishes the multimodal transportation process is that one logistic service provider is transporting the goods through all the phases of the journey. However, given the multiple regulatory and non-regulatory constraints that affect international freight transportation, it is difficult to offer integrated logistics solutions to consumers in the global environment. To overcome such difficulties many south Asian countries are taking initiatives to promote and attain regional cooperation through organizations in which different countries in the regions are members of such as SAARC, BIMSTEC, ASEAN, etc (Goh et al.,2008). Some countries in the region have already taken initiatives to improve trade through bimodal and multimodal transportation and trade agreements (like SAFTA) and are already reaping the benefit of these agreements. And countries like India are already planning to expand the multilateral transportation system with countries farther away (East Asia) through the Bay of Bengal ways. However, effective and interconnected transport systems are crucial for the successful implementation of these agreements for which there is a need for regional cooperation among the neighbouring countries (Goh et al.,2008; Nath, 2016). Regional cooperation is a requirement for the establishment and smooth running of the multimodal transportation system for several reasons.

For a multimodal transportation system to operate there have to be logistic service providers to provide the service. However, there are not many logistic service providers these companies would have to guarantee goods in transit and also insurance but cannot always do so as the rules are not standardized across borders. Furthermore, there are significant gaps in the comprehension and application of rules and procedures. The understanding of rules and procedures varies across border points as such there is significant information asymmetry causing delays at the borders (Nath, 2016). Moreover, road transport has grown significantly in the region however due to a lack of cross-border agreements the trucks have to unload and reloaded at the border rising cost and border congestion. Also at times goods are damaged

²⁹<https://core.ac.uk/download/pdf/234690193.pdf>

³⁰<http://193.255.128.114/index.php/igd/article/view/390/303>

and get stolen and transporters are often subjected to informal payments and harassment. Therefore, there is a need for standardized tariffs, customs, and cabotage rules. Measures to facilitate transit and transportation agreements and transactions have not been given the same priority as trade facilitation measures. The growth of multimodal transportation across international borders has been hampered because of this (Goh et al.,2008; SAARC Secretariat, 2006; Suberi,2020). Another mode of transport is the railways, the SAARC countries could use rail for transportation as there are several railway tracks in each country which just need to be connected with the boarding country. And to do so a proper framework dedicated to this specific mode is needed but no such framework exists (SAARC Secretariat, 2006). In the cases where agreements are being drawn up, some countries are less willing to take part as signing such an agreement may lead to job losses and because the protocols or agreements lack details. If these concerns are not addressed in the regional trade agreement the countries involved may face serious problems (Suberi,2020). So the regional corporation is needed while drawing up the agreement so that all parties can benefit. Furthermore, there have to be standardised rules and regulations and also the understanding of the rules and regulations has to harmonise, for which the countries must cooperate and adjust accordingly. To achieve all these there has to be institutional connectivity and harmonization of standards and simplification of customs procedures concerning law enforcement, accessible international and interstate borders, acceptable permits for trade and transit, acceptance of driver's licenses and identity documents on both sides of the border, and clear and understandable customs regulations. These trade and transport agreements, rules and regulations are the soft infrastructures required for regional connectivity and to reduce the non-physical trade barriers. Which in turn will aid the investment in the hard infrastructure. For regional connectivity hard infrastructure is also required along with soft infrastructure. Infrastructure improvements for trade and transit, as well as better roads, are considered hard infrastructure (Nath, 2016; SAARC Secretariat, 2006).

The essential infrastructure is already in place in many nations in the region; only integrating the modes would create mutually beneficial intra- and interregional transport links. This necessitates collaboration to improve regional communication, transit, and transportation ties. The nations in the region must cooperate since removing physical infrastructure barriers would require special attention from each country's government. If domestic resources are insufficient, the state may take assistance from multilateral institutions. For instance, Bangladesh has roads that are not equipped for the use of heavy vehicles used for multilateral trade and has insufficient funding for the improvement of other modes (Chowdhury, 2016; SAARC Secretariat, 2006). Additionally, at the moment, travel between SAARC nations in the group's south and those in its north is typically done through a hub situated outside the SAARC territory, such as Bangkok, Doha, or Dubai. This is due to the lack of a hub at the moment. This is because currently there is an absence of a hub, so to develop a hub within the region some steps has to be taken in an integrated manner. Moreover, Ferry services are required for effective maritime trade, however, there are currently no suitable vessels to fulfil this need. The launching of ferry services will require an intra-governmental agreement (SAARC Secretariat, 2006).

The development of multilateral trade can be very beneficial for the landlocked countries Nepal and Bhutan as they anyway have to pass through and use ports in Bangladesh and India to export or import their goods. For instance, Bhutan uses Indian ports to export their goods

but it would be cheaper for them to use the ports of Bangladesh and so an agreement has been drawn up. But Bhutan lacks many facilities (Bhutan Rivers have swift water currents making them unsuitable for riverine transport and have no railway connectivity). So Bangladesh has cooperated with Bhutan and allowed trade using the mode available to Bhutan (Road and airways). Moreover, Bangladesh would also need to provide infrastructure and facilities for the goods that are being transported. Bhutan exports fresh and perishable goods that can be damaged during transportation due to the absence of suitable storage and warehousing facilities in Bangladesh (Chowdhury, 2016; Suberi, 2020). So countries in the region have to cooperate and build facilities that trading countries need.

According to a study, the crucial step for a multimodal transport system to work is to take initiative to provide both infrastructural and organisational facilities that encourage, enable, and direct the shifting of freight flows between various modes of transportation. These initiatives must be uniform across all nations, demanding a high degree of coordination and intensive exchange of information along with carrying out cooperative initiatives for organizational support and infrastructural development (Kramarz et al., 2020).

2.3.7 BBIN

BBIN is a sub-regional and quadrilateral initiative to review and implement agreements on transport, power connectivity, water resource management and infrastructure. The cost of trade among BBIN countries is very high because of inadequate infrastructures at border crossings, long and complicated paper-based procedures, inefficient logistics and restrictive policies and regulations. For instance, an Indian truck needs to wait for several days to cross the border and another few days to offload goods on the Bangladeshi side of the border which also increases the cost of trade among these countries along with the inefficiencies. According to a world bank report, trade between India and Brazil is 15-20% cheaper than trade between India and Bangladesh. Consequently, the true potential for trading among BBIN countries is far from the present situation. According to World Bank, Bangladesh has 93% of unexploited potential to grow trade if the BBIN becomes functional.

The lengthy process of submitting documents and 80-100 percent of checking of goods at the border can be eased by the Motor Vehicle Agreement. Under Motor Vehicle Agreement, the transport route, travel time and cost of transportation will significantly decrease. The World Bank found that it is 65% less time-consuming and 68% cheaper to transport goods from Agartala to Kolkata port through Dhaka. Bangladesh will also have benefits as the cost of trade with Nepal and Bhutan will decrease. Digitization and harmonization of required documents in BBIN country borders can further shrink the cost of trade and shorten the time.

Capacity mismatch of check posts in borders is another reason for the slow movement of transport. The development of infrastructure to match the capacity of the other side can significantly reduce the waiting time. The crowded connecting roads further slow-down the transportation and some parts of the road are not fit for large container-carrying trucks. Thus, smooth transportation within the nation and across the border demands heavy infrastructure development. Seamless connectivity can significantly increase the national income of the BBIN countries, according to the World Bank. At present, the Motor Vehicles Agreement (MVA) is on hold due to objections raised by Bhutan but the possibility of future inclusion of Bhutan is still open. In other words, the BBIN group of countries should indeed establish an

atmosphere that is conducive to an informed political economics discussion for them to cooperate in large-scale multi-modal connectivity endeavours. Acknowledging the circumstances and elements underlying successful regional, sub-regional, and bilateral connectivity initiatives in Central, South, and Southeast Asian nations is crucial in this setting. This will assist in positioning advocacy messages to address the BBIN Motor Vehicles Agreement (MVA) implementation challenges in Bangladesh, India, and Nepal. It will also lay the foundation for multi-stakeholder connectivity initiatives in this subregion that will combine roads with inland waterways, coastal shipping, and railways.³¹

For several reasons, the launch of the BBIN initiative is crucial for trade. Market access restrictions like tariffs and non-tariff measures have been debated in SAFTA for many years and will continue to be negotiated within the same framework, as was previously mentioned. All of these projects that are ongoing under SAFTA will be retained by BBIN. The treaty will permit cars to cross borders and do away with the necessity for commodities to be transshipped from one truck to another at the border, eliminating a time-consuming and expensive operation. This will not only reduce the price of trade between countries, make transactions run more smoothly, and increase trade, but it may also lessen some of the informal trade that takes place between these nations. An integrated and seamless road and rail network will further facilitate containerization in South Asia and potentially decrease trade costs because one of the major benefits of containerized trade is that it is multimodal.³²

2.3.8 Multimodal Transport System and Trade Facilitation Agreement

Trade facilitation generally means simplification, harmonization and standardization of international trade formalities, documents, operations and procedures to save time and reduce costs. This is also the purpose of the Trade Facilitation Agreement in WTO. The exact shape of the relationship between trade facilitation and transport issues is not always clear. But transport issues come up when it is about trade facilitation because it is the people in transport who face obstacles, such as strict border control rules and time-consuming procedures. A multimodal transport system can enable faster trading since the time and cost of transportation of goods will be reduced significantly. Multimodal transport system opens the opportunity to shift to low-cost mode from high-cost mode.

2.3.9 Transport International Route

The recent inclusion of neighbouring countries with large economies gives a strong signal about the importance of TIR for Bangladesh. China signed TIR in 2016 which decreased their time of transportation by road significantly. Now it is possible to transport goods in 16 days from Southern Europe to South Eastern China. India, Pakistan and Afghanistan have also acceded to the TIR convention.

By coordinating customs transit operations, TIR enables quicker border crossings. In a TIR registration certificate, the specifics of the cargo are listed. As a result, each cross-border customs authority does not need to physically inspect the transported items. The only thing the customs authority must do is determine whether the TIR seal is still intact. Because the

³¹ <https://cuts-citee.org/enabling-a-political-economy-discourse-for-multi-modal-connectivity-in-the-bbin-bangladesh-bhutan-india-nepal-sub-region/>

³² https://orfonline.org/wp-content/uploads/2016/03/ORF-Issue-Brief_135.pdf

customs seal must be unbroken from the point of departure to the destination, the TIR seal assures that the products are not tampered with. Eliminating unnecessary steps speeds up transportation, improves efficiency, cuts down on time, and lessens the environmental effect of shipping products. This means that a greater number of transports can pass over the borders, lowering transportation costs and making commodities more affordable to end users.

Bangladesh's exports to India suffer numerous non-tariff impediments. Joining the TIR system can decrease barriers and save days of waiting at the border. According to a recent World Bank report, improved transportation between Bangladesh and India has the potential to increase national revenue by up to 17% for Bangladesh and 8% for India. Bangladesh is India's major trading partner in the subcontinent, hence a seamless transportation system is essential, and TIR is the most successful international transportation system. Signing TIR can also create opportunities for the transportation industry because another country can use Bangladesh's transportation route for a short distance. Because India is already in TIR, it could utilize Bangladesh's route to reach its other eastern states, generating cash for Bangladesh's road transport industry. TIR will improve the usability of the seaports that we are constructing and have previously constructed. Because countries such as Nepal and Bhutan would consider these ports as a way to get access to sea routes, providing Bangladesh with a new source of money. The local transportation business will have the possibility to establish an international transportation service for cross-border goods transit.

Joining TIR will make it much easier to transport products by road to Central Asia, Iran, Turkey, Southern Europe, and the Gulf Cooperation Council countries. Bangladesh now has a land link to other nations in the Middle East after joining India and Pakistan. Furthermore, efficient and short-term transportation would lower Bangladesh's carbon footprint, which is another goal for Bangladesh in the future because Bangladesh is one of the countries most affected by natural disasters.

The TIR system has contributed significantly to the development of regional trade mechanisms by facilitating cross-border trade flows. The TIR system has shown to be an efficient instrument for minimizing trade transaction costs and fostering greater growth of intra-regional and inter-regional trade on a global scale. The benefits of the TIR system are obvious: it protects customs charges and taxes from loss to the state budget and offers a strong guarantee mechanism, ensuring security for customs officials while also facilitating effective customs management.³³

2.3.10 WTO regulations and provisions

Bangladesh is a crucial advocate for LDCs and maintains its commitment to the multilateral economic system. Among other things, privileged market access to important markets and WTO benefits associated with special and differentiated treatment (S&D) are anticipated to be impacted by its impending graduation from LDC classification (e.g. TRIPS). Because it prioritises fostering intra-regional business ties, particularly its potential for graduation, Bangladesh has commenced steps to negotiate regional trade agreements (RTAs) with a few states. The only RTAs that are currently in effect are the Asia Pacific Trade Agreement, the

³³ https://www.iru.org/system/files/BBIN%20media%20fact%20sheet_0.pdf

South Asian Association for Regional Cooperation (SAARC) Preferential Trading Arrangement (SAPTA), and the South Asia Free Trade Agreement (SAFTA), but Bangladesh is a party to several other RTA negotiations that are still in progress. Many of these treaties have had a relatively minor impact on Bangladesh's trade and product coverage up until this point. It is nevertheless eligible for additional LDC-specific preferences under some programmes and continues to profit from the Generalized System of Preferences (GSP) schemes of other countries. Despite receiving trade-related technical assistance for a long time and notifying the WTO of its GATS inquiry points and TFA category commitments, Bangladesh only made a small number of regular notifications (four times for customs tariffs) throughout the review period. In addition, it remained out of WTO trade battles (WTO, 2019). Bangladesh remains an advocate for the multilateral trading system based on rules; it works to increase market access, uphold just laws, and strengthen special and differential (S&D) provisions in WTO agreements. Bangladesh also concentrates on obtaining technical and financial support to address supply-side and infrastructure challenges. The NIMTP should have provisions concerning the aforesaid focus.

2.3.11 Protocol Inland Water Trade and Transit

The governments of the People's Republic of Bangladesh and the Republic of India concur to reach a mutually advantageous arrangement for the use of their waterways for trade between the two countries as well as for the passage of goods between two points on one country's territory and to third countries by the provisions of Article VIII of the Trade Agreement signed on June 6, 2015. Under these circumstances, fees and charges may be imposed (if they are permissible in accordance with international agreements, conventions, or standards), and a transit assurance system may be established through mutual discussions. It could previously be extended every two years, but since October 2001, extensions have very sometimes been granted. On June 6, 2015, the two countries confirmed the convention and included a clause that provided for its automatic renewal for an additional five years. On June 6, 2015, the two countries confirmed the convention and included a clause that provided for its automatic renewal for an additional five years. These accords will enhance trading between these nations and Nepal, Bhutan, and Myanmar.³⁴

To offer services to the vessels of other countries engaged in international trade, there are six ports of call on each side. Vessel refers to a watercraft that is registered under the Indian Inland Vessels Act, 1917, and the Bangladesh Inland Shipping Ordinance, 1976. A Port of Call works as an intermediary system where ships frequently dock to refuel, make repairs, or transship cargo. In Bangladesh, these ports are Narayanganj, Khulna, Mongla, Sirajganj, Ashuganj and Pangaon. And in India, these ports are – Kolkata, Haldia, Karimganj, Pandu, Silghat and Dhubari.³⁵ The agreement further specifies that the suggested costs will be agreed upon by the two nations, that voyage licenses must be obtained at least four days before the trip, and that the ships' tonnage will be shared equally. According to the PWITT, inland vessels from one area may go along the designated routes of the other nation. Indian and Bangladeshi ships are allowed to share their cargo 50:50 for both transit and international trade. The agreement also includes conservancy and pilotage, port dues and other charges, handling facilities, supply of bunkers, purchase of essential stores, purchase of provisions by the fleet

³⁴[http://biwta.portal.gov.bd/sites/default/files/files/biwta.portal.gov.bd/page/b9fbb84f_6e13_49ab_bf41_4a_a386ee4d50/Protocol%20Summary\(New\)%20\(1\).pdf](http://biwta.portal.gov.bd/sites/default/files/files/biwta.portal.gov.bd/page/b9fbb84f_6e13_49ab_bf41_4a_a386ee4d50/Protocol%20Summary(New)%20(1).pdf).

³⁵ <https://www.mea.gov.in/Portal/LegalTreatiesDoc/BG15B2421.pdf>

personnel during the voyage, repair facilities, assistance to be provided by either country to the vessels of the other in distress, submission of voyage forecast for voyage permission to use waterways, the nomination of "Ports of Call" on an equal basis, recognition of survey certificates and other documents, flying of flags, use of radio-telephone by river craft, etc.

The Protocol on Inland Water Transit and Trade (PIWTT), has created a remarkable example of low-cost, environmentally friendly trade and commerce globally. Along with enhancing trade and business, it has also tightened ties between the participating nations. Due to Bangladeshi manufacturers' preference for river routes for importing raw materials from India, cargo movement between India and Bangladesh via waterways increased to 47.4 lakh tonnes in fiscal 2021–22, a 20% increase. Data from the Bangladesh Inland Water Transport Authority show that this is the highest number since fiscal 2001–2002. (BIWTA). According to a report, the amount virtually doubled in four years from 24 lakh tonnes in fiscal 2018–19 due to an increase in cement manufacturing in Bangladesh. Bangladeshi vessels transported 42.18 lakh tonnes during the previous fiscal year, whereas Indian vessels transported 5.22 lakh tonnes. The third year in a row that cargo flow between Bangladesh and India has increased through waterways.

Additionally, there is a substantial demand for Indian stones in other ongoing megaprojects, such as the Bangladeshi Rooppur Nuclear Power Plant development project. As a result, the essential customs facilities have been expanded to allow the transportation of stones over the Godagari/Sultanganj-Maya canal while adhering to protocol routes no. 5 (Aricha-Rajshahi-Godagari-Sultanganj-Maya-Dhulian) and no. 6. (Dhulian-Maya-Sultanganj-Godagari-Rajshahi-Aricha). As a result, the mega projects' building projects are moving rather swiftly. IBP routes now total 10, up from 8 previously. The Sonamura-Daudkandi segment of the Gumti River will have better access to the economic hubs of India and Bangladesh if it is included in the Protocol. The opening of the Rajshahi-Dhulian-Rajshahi Route and its expansion to Aricha, Bangladesh, will aid in the improvement of the country's infrastructure. Additionally, both sides' Land Custom Stations will become less crowded.

The main challenge behind implementing the agreement is the navigational problem. In Bangladesh, shifting river banks and silted erosion in the current river beds provide the main challenges to river traffic as well as to any port operation. Climate change also plays a great role in this regard. The other challenges regarding the trade between two countries using the waterway are infrastructural weaknesses, longer lead time and procedural obstacles. The allocation of the development budget for the surface transport sector is another prime obstacle to the optimum utilization of the IWT system in both countries. The removal of various trade obstacles would undoubtedly promote an increase in bilateral trade, but the process and mechanism are very complicated. Efficiency and optimization may also be utilized to lower trade barriers and hence lower trading costs.³⁶

2.3.12 Cross-border connectivity

Infrastructure that connects two or more nations (through energy transmission, high-speed communication linkages, or rail/road) through collaboration and coordination between the

³⁶ Hasan, K., Alamgir, M., & Islam, M. (2018). India-Bangladesh Trade: The Prospect of Inland Water Transportation System. *Bangladesh Maritime Journal*, 2(1).

governments is referred to as cross-border or regional infrastructure. Projects affecting the nation's infrastructure that have a substantial impact internationally may also be included. For instance, a country's air and sea ports facilitate the movement of people and products, which benefits its trading partners. Because of the prevailing inefficiencies in trade facilitation and transportation, there is a great opportunity for regional cooperation. Regional integration through connectivity infrastructure can boost industrial investment levels and unleash the region's growth potential. Trade expenses rise as a result of poor trade and transportation infrastructure, harming both domestic and international trade.³⁷

In recent years, South Asian nations have been gradually advancing toward a South Asia Free Trade Area (SAFTA). For the seven nations in the South Asia region, the South Asia Free Trade Agreement (SAFTA) is seen as essential to the success of trade liberalisation, welfare gains, and economic progress. The proclaimed intention of the SAFTA agreement is to "intensify intra-SAARC economic cooperation to enhance the development of the region's trade potential and the development of its people." The agreement advocates for removing trade restrictions, easing cross-border trade of goods, fostering an environment of fair competition, and creating a foundation for further regional cooperation.³⁸ Integrated multimodal connectivity could be beneficial for Bangladesh and other developing nations, which would benefit trade relations.

2.4 Overview of the logistic sector in Bangladesh

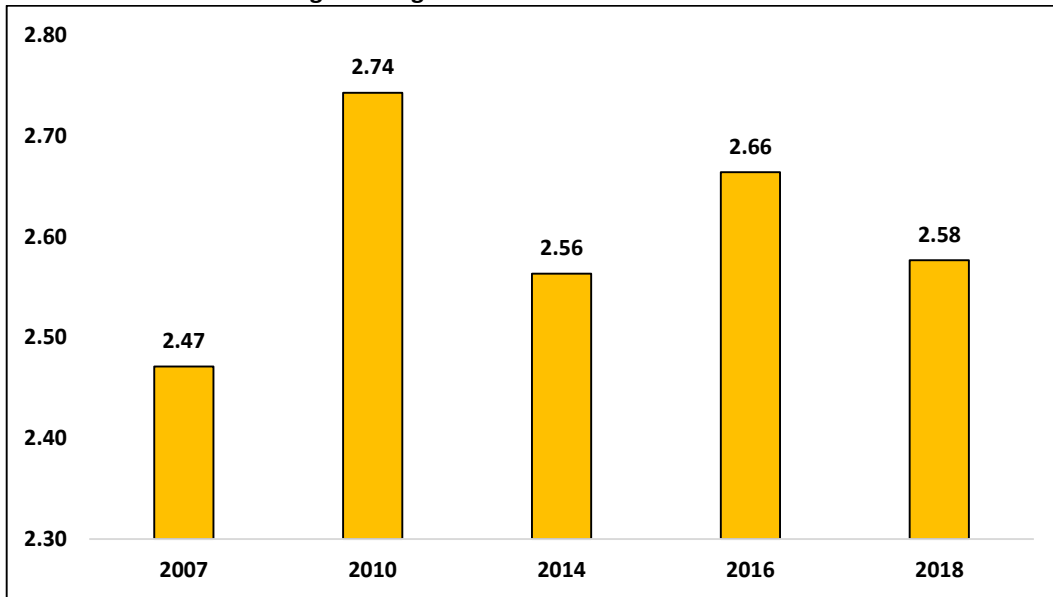
Bangladeshi producers are under intense cost pressure due to rising labour pay demands, escalating global prices and ineffective logistics. The infrastructural problems hurdle the progress of the logistic service sector in Bangladesh. Though Bangladesh has made some advancements in terms of logistical performance, it still falls behind India and Vietnam, especially regarding infrastructure and customs. Although substantial investments in infrastructure, Bangladesh's transportation and logistics network has been unable to keep up with the nation's rapid economic expansion (Dappe, et al., 2019). Also, it does not help that The legal framework in the logistics sector is relatively dated (Argyrou, 2014; Dappe, et al., 2019).

The logistic performance index of Bangladesh over the last decade demonstrates a low band score (Figure 6). However, despite some periodical variations, as can be seen in 2010 and 2018, the performance remains poor and indicate a downward trend.

³⁷ <https://www.adb.org/sites/default/files/publication/30065/regional-cooperation-integration-south-asia.pdf>

³⁸ <https://www.gtap.agecon.purdue.edu/resources/download/2977.pdf>

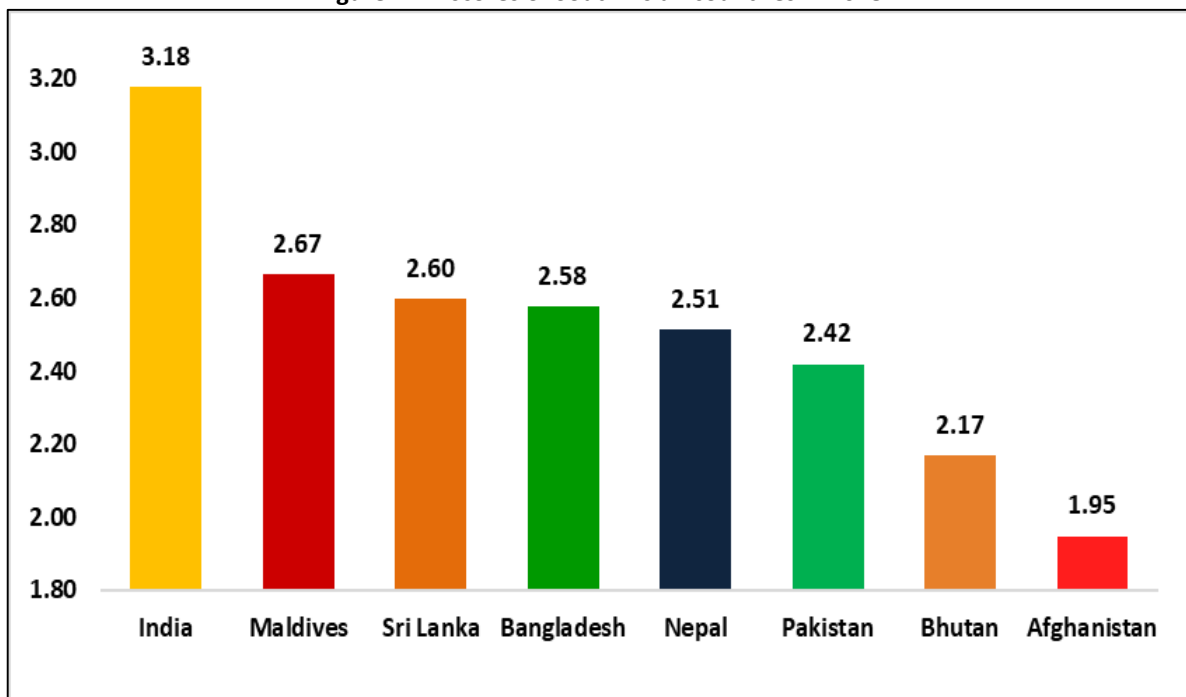
Figure 6 Logistic Performance Index: Overall



Source: LPI in various years (2007-18), World Bank

In terms of LPI, Bangladesh is not an outlier in South Asia, as most of its neighbour countries exhibit a similar low band of scores, with the only exception of India (Figure 7). Notably, the difference in LPI between India and the rest of the South Asian countries is significantly high.

Figure 7 LPI scores of South Asian countries in 2018



Source: LPI 2018, World Bank

The performance of the South Asian countries across the LPI components provides more disaggregated pictures of the issues in question (Table 5). While India maintains considerable advances across the indicators in comparison with its neighbour countries, Bangladesh demonstrates particularly poor performance in customs.

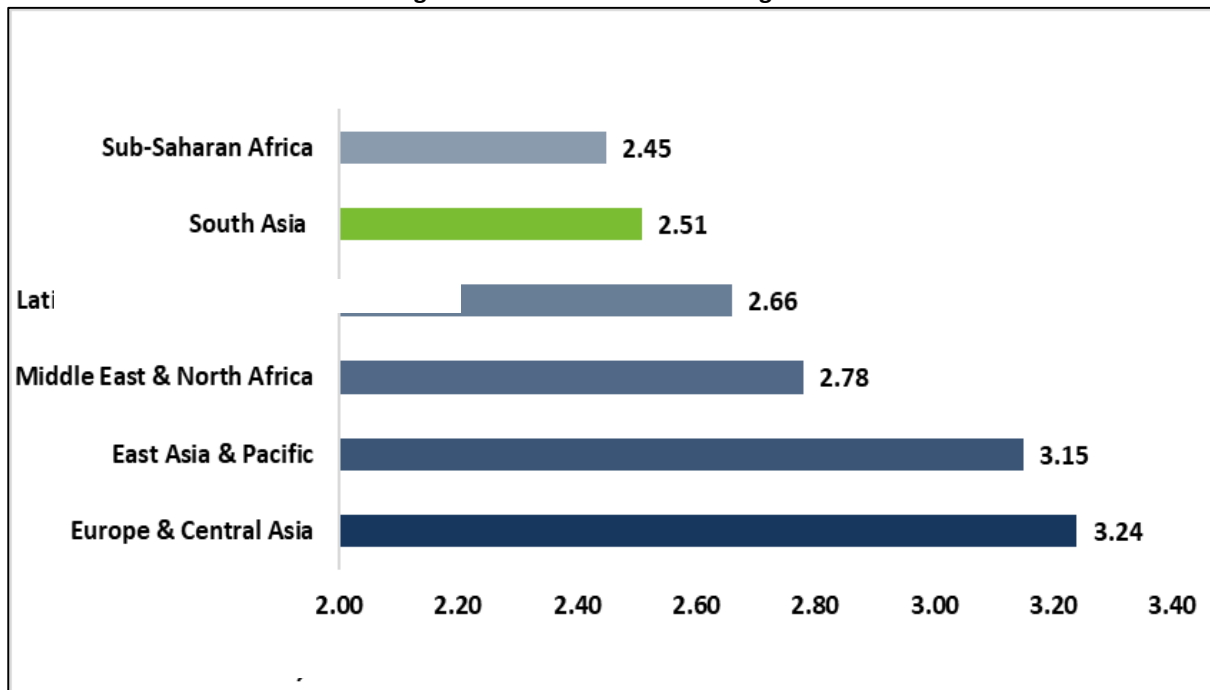
Table 5 LPI score by South Asian countries and indicators in 2018

South Asian Countries	LPI	Customs	Infrastructure	International shipments	Logistics quality and competence	Tracking and tracing	Timeliness
Bangladesh	2.58	2.30	2.39	2.56	2.48	2.79	2.92
Afghanistan	1.95	1.73	1.81	2.10	1.92	1.70	2.38
Nepal	2.51	2.29	2.19	2.36	2.46	2.65	3.10
Bhutan	2.17	2.14	1.91	1.80	2.35	2.35	2.49
Pakistan	2.42	2.12	2.20	2.63	2.59	2.27	2.66
India	3.18	2.96	2.91	3.21	3.13	3.32	3.50
Sri Lanka	2.60	2.58	2.49	2.51	2.42	2.79	2.79
Maldives	2.67	2.40	2.72	2.66	2.29	2.60	3.32

Source: LPI 2018, World Bank

South Asia’s poor performance in LPI places it at the bottom in comparison with other regions, with only Sub-Saharan Africa behind it (Figure 8). This indicates a serious issue of capacity and implications for comparative advantage across South Asia.

Figure 8 LPI scores of different regions



Source: LPI 2018, World Bank

In Bangladesh, storage costs are low at main sea and land ports thus, storing cargo at the ports appears to be a low-cost option. However, low storage rates result in more cargo being stored and longer dwell times (Argyrou, 2014). The two main trade gateways of Bangladesh are Chattogram and Mongla, which are the central hubs of the transportation system. In Chattogram Port 90% of Bangladesh's sea-going cargo is handled and the remainder of the cargo is handled by Mongla Port. Even more unequally distributed is the distribution of

containers, with Chattogram handling more than 98 percent of all containers. This is because Mongla port faces difficulties due to draft availability, handling infrastructure, and connectivity to industrial clusters and consuming areas (Dappe, et al., 2019). Moreover, empty containers are transferred to the off-docks due to a lack of storage space and ineffective yard operation then again for export, they must be brought from the off-docks back to the port, leading to congestion in the city. Moreover, all of Bangladesh's 13 operating land ports have poor operational practices and infrastructure. The road system and business hubs are not well connected to river ports and in many cases, the access to river terminals is through busy and narrow roads; as a result, it takes longer to get there, which raises the cost (Dappe, et al., 2019).

In general, the road, railways and waterways require maintenance and are insufficient for the demand, increasing the cost. On the other hand, although the share of cargo transported by airways has increased, the proportion is still very small. The Hazrat Shahjalal International Airport handles 90% of all air cargo, and the only ground-handling agent there is a government-owned airline, Biman. Delays occur at the airport because Biman lacks the necessary infrastructure, skilled labour, and equipment also the airport's warehouses can't hold all of the arriving cargo. Furthermore, the airport lacks an explosive detection system that is necessary to obtain approval for direct cargo shipments to the European Union. Because of this, the cargo is sent to hubs in other countries to be scanned to get approval, increasing the cost. Furthermore, the logistics industry in Bangladesh has been poorly managed as a result of institutional fragmentation and overlapping mandates among organizations with sometimes conflicting interests and incentives plus implementation delays because of insufficient funding as the cost of building infrastructure in Bangladesh is high. Plus, there is no strategy in place for maintaining the infrastructure when projects are finished. As a result, infrastructure quickly degrades and needs to be replaced before it reaches the end of its useful life (Dappe, et al., 2019).

Besides the logistic service provided in Bangladesh is not up to the mark because of many other reasons besides infrastructural problems. Firstly, commercial warehousing services still do not have a fully developed market. Storage and warehousing are outsourced to a relatively little extent. Secondly, the market is extremely fragmented and most logistics service providers only have one type of logistics service so several providers are needed to complete a shipment. Based on the findings of a survey, many small businesses and individuals provide services from their homes or modest workplaces and so these forwarders depend on regional businesses, small importers and exporters, or on their connections to international suppliers. Most small-scale freight forwarders rely on other service providers for alternatives because they don't often own assets. Own-account operations and third-party or for-reward logistics provision are the two main modes of operation for logistics service providers in Bangladesh. Nevertheless, the business has to depend on logistics service providers other than road and inland water transport services and warehousing as only third-party provision exists for rail, air, and sea shipping; freight forwarding; and customs clearance services. The large companies have their warehouse as high-quality logistics service providers are absent and so warehouses remain underutilized and small commercial logistics service providers cannot grow. Furthermore, service providers face difficulties to get funds or investments as the financial sector thinks it is risky to invest in the transport services sector. Plus the tax rate is also very high so the operating companies do not want to grow to be formal service providers.

Finally, the logistic market in Bangladesh should be competitive in theory but is not because of the existence of unions and associations as they fix the prices and bookings. In a study percent of shippers claimed there was no competition in the market. Therefore, providers are discouraged to improve the quality of service and encourage own-account service provision and restrict international operators to enter the market (Dappe, et al., 2019). In a survey when shareholders were asked what could be a threat in the logistics sector, most believe that the most significant threats to the logistics sector in Bangladesh are the political climate. 50 percent of the respondents think corruption and excessive bureaucracy as serious threats and 26-24 percent of respondents see failing infrastructure and legal uncertainty as serious threats (Argyrou, 2014).

As Bangladesh is a developing country, the logistics concept is still in its infancy. Many logistics companies are unaware of the cost-cutting benefits of 3PL or 4PL because they use multiple providers for various services. Investment in total logistics, including warehousing and distribution, may be the best investment type, aided by inventory management and warehouse management technology (Argyrou, 2014).

2.5 Country comparison

2.5.1 “National Transport Policy 2019-2030” of Malaysia.

Table 6 Summary of The National Transport Policy 2019-2030 of Malaysia

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
National Transport Policy 2019-2030 of Malaysia	<p>The NTP was created with the following goals in mind:</p> <ol style="list-style-type: none"> 1. Establish a favourable environment for the transportation industry to boost production and competitiveness. 2. Facilitate the smooth circulation of products to increase commercial activity and convenience of conducting business. 3. Provide mobility that matches people's expectations and fosters diversity. 4. Increase public transportation's modal share 5. Provide an intelligent, safe, and secure transportation system 6. Ensure effective and sustainable resource usage and reduce environmental degradation 	<p>The National Transport Policy (NTP) was established in close consultation with the private sector. Over 150 individuals from the government, academia, and the commercial sector have participated in a series of workshops, focus group discussions, and meetings since September 2016.</p>
Policy Thrust 1: Strengthen Governance to Create a Conducive Environment for The Transport Sector	<p>Strategy 1.1- Strengthen Coordination Among Agencies and Industry Players</p> <ul style="list-style-type: none"> • Strengthen transportation sector governance; • Optimize resource usage and decision-making for appropriate interventions; and • Improve sector-level planning and policy formulation. <p>Current issue- Despite multiple efforts to upgrade the transportation industry, issues in coordination and planning continue to impede the delivery of effective transportation services. Policies and programs developed at the federal level must be more effectively cascaded down to state and local governments for execution.</p>	<ul style="list-style-type: none"> • Spearhead the national transportation industry towards reaching high-income nations. • Align the duties of State government and local governments with the Ministry of Transport. • Conduct a complete evaluation of the present governance framework for inland and coastal waterway management. • Ensure active participation of state/local governments, industry players, and the general public in public transportation planning and development. • Strengthen LPKP (Lembaga Perlesenan Kenderaan Perdagangan) as Sabah and Sarawak's specialized land transport authority. • Strategically manage all modes of transportation safety through a single body.
	<p>Strategy 1.2- Enhance Skills Development in The Transport Sector and Make the Sector an Attractive Career Option</p> <ul style="list-style-type: none"> • Ensure adequate capacity and capability for strategic transportation planning and execution. 	

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<ul style="list-style-type: none"> • Create a transportation business that attracts immigrants and increases the number of local skilled workers in the transportation sector. • Boost the productivity of the transportation workforce. • Provide sufficient trained and experienced individuals to meet the demands of the transportation sector to deal with current and future developments such as digitalization and autonomous cars. • Prepare human capital to meet the demands of future technology (e.g. ITS and autonomous vehicles). <p>Current issue: The fast growth of the transportation business places a premium on both specialized skillsets and the capacity to adapt to new technology; in some situations, future needs are for skillsets that have yet to be established. The education and skills development industries must reduce the danger of our transport operators not being adequately prepared to comprehend and operate new technology and equipment to its full potential. Furthermore, the entities involved in transportation planning and development lack the necessary knowledge to carry out their tasks and functions efficiently.</p> <p>Strategy 1.3- Strengthen and Streamline the Regulatory Framework</p> <ul style="list-style-type: none"> • Examine current regulatory frameworks and recommendations to ensure they remain relevant and adaptable to current and future demands. • Ensure that the future regulatory structure that controls transportation is strong and capable of fast adapting to new technology and trends. <p>Current issue: Because the transportation business is continually evolving, certain present norms and standards are out of date to satisfy current demand and future trends. Furthermore, the present regulatory framework must be prepared to accommodate new technology and disruptive business models to guarantee that the transportation sector's development keeps pace with the current trend.</p> <p>Strategy 1.4- Embed A Robust Evidence-Based Assessment in the Planning and Development of the Transport Sector to Meet the Market Demands</p> <ul style="list-style-type: none"> • Make evidence-based policymaking and planning official. • Improve economic analysis for more informed decision-making. 	<ul style="list-style-type: none"> • Create Transport Centers of Excellence (CoE) within existing learning institutions to support transportation-related programs and R&D. • Increase the transport industry's capabilities and knowledge. • Ensure that appropriate transportation agencies provide suitable training, upskilling, and skills through training schemes, qualification courses, and certification. • Create a program for managing and operating airports, trains, ports, and land transportation to increase the quality and efficiency of the transportation service sector. • Raise public awareness of transportation careers as an appealing option that provides a diverse variety of work and business possibilities. <ul style="list-style-type: none"> • Promote and encourage market ideals of transparency, freedom, and competition. • Increase the use of public-private partnerships (PPPs) and performance-based contracts. • Create an incentive and penalty mechanism for public transportation operators to assure service dependability and quality. • Advocate for wiser e-commerce legislation to improve the efficiency and convenience of doing business. • Create a framework for identifying, prioritizing, adopting, and regulating future technologies for all forms of transportation. <ul style="list-style-type: none"> • Establish a centralised transportation database, geospatial data, and modelling to aid government agencies in evidence-based and strategic planning.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<ul style="list-style-type: none"> Provide a standard database that can be utilized as a reference point by various authorities for evidence-based planning. Establish real-time data collecting for transportation planning and public usage. <p>Current issue: Recent trends indicate that new, possibly game-changing technologies will be launched at an increasing rate. To enable adequate and high-quality research and modelling, a regularly updated data set and centralized database that is accessible to all transportation-related entities is required. Furthermore, there is a definite desire among transportation agencies for extra analytical skills to analyze strategic and data-driven planning.</p> <p>Strategy 1.5- Improve Efficiency of Clearance Process by Agencies for Logistics</p> <ul style="list-style-type: none"> Reduce the number of steps required for cargo clearance to attract importers and exporters. Increase trade activities and compete with other advanced countries in terms of cargo clearance efficiency. <p>Current issue: The current cargo clearance process can be complex and time-consuming, incorporating multiple rules and regulations mandated by various border management agencies. This can divert importers' and exporters' attention away from the cargo clearance process. To compete with other advanced countries, the time required for import and export processes must be reduced.</p>	<ul style="list-style-type: none"> Create a centralised, publicly accessible database to facilitate more and better analytics, monitoring, and evaluation. Improve Big Data capabilities at the MoT, other transportation agencies, and local governments. Create an integrated, market-driven aviation expansion strategy. Improve collaboration among government agencies, universities, and businesses to utilise research work. <ul style="list-style-type: none"> Streamline non-tariff measures for cross-border export, transshipment, and imports of goods and distinguish between transshipment and regular cargo in the customs process. Process and procedure simplification will promote multimodal freight movement.
<p>Policy Thrust 2: Optimise, Build And Maintain The Use Of Transport Infrastructure, Services And Networks To Maximise Efficiency</p>	<p>Strategy 2.1- Implement Smarter and More Efficient Use Of Existing Infrastructure And In Developing New Infrastructure</p> <ul style="list-style-type: none"> maximise resources, cut waste, and boost output in the current transportation infrastructure. By implementing automation and digitization, the transportation sector can advance the Internet of Things (IoT). Enhance the experience of users of public transportation. <p>Current issue: There is evidence that existing transportation infrastructure can be used much more efficiently, especially at ports, airports, railroad stations,</p>	<ul style="list-style-type: none"> The adoption of technology and digitalization in transportation will improve current infrastructure and assets, speed up the use of automation, and reduce environmental impact. Prioritize public transportation connectivity while integrating the development of transportation infrastructure with land use planning. To increase opportunities and engagement for cruise tourism by private local and international cruise operators, ports should optimise their facilities.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>and park-and-ride lots. Increasing the use of technology has the potential to solve some of the problems that are currently being experienced as well as provide enough information to enable more precise forecasting of future demand for the construction of the best possible infrastructure.</p> <p>Strategy 2.2- Increase The Utilisation of Rail Service for Passengers and Goods</p> <ul style="list-style-type: none"> • Promote the switch of freight from the road to the rail. • Maximize the use of the current rail network and resources. • Lessen road congestion and greenhouse gas emissions. • Fewer heavy vehicles on the road. <p>Current issue: Less than 5% of land freight is currently transported by rail, which accounts for only 30% of the capacity of all railway tracks. As a result, there is unacknowledged potential for using rail to move goods, hazardous ones. The safest way to transport large quantities of chemicals over long distances is widely acknowledged to be by rail transportation of hazardous materials. Similar to this, there is extra capacity on the current KTM Komuter and intercity rail services that could be used.</p> <p>Strategy 2.3- Upgrade Hinterland Connectivity to Gateways and Connect Corridors For Improved Economic Distribution</p> <ul style="list-style-type: none"> • Increase trading activity and domestic cargo volume. • Reduce the traffic jam and make it easier to transport cargo to the airport and seaport. • To enable effective goods transportation, create a seamless and effective total logistics system. <p>Current issue: A major issue with moving cargo that can result in higher costs and delays is the hinterland connectivity of seaports and airports. The imbalanced modal split, which is heavily reliant on the road, traffic jams, and restrictions in inland facilities (like warehouses and depots) are a few of the difficulties. To ensure the best possible development of infrastructure and services, development in economic corridors also necessitates increased coordination and alignment among agencies.</p>	<p></p> <ul style="list-style-type: none"> • Rail service liberalisation is being done gradually to support a multi-operator environment. • To make moving freight easier, upgrade the rail infrastructure near and inside ports. • To maximise the use of rail, simplify transportation regulations and procedures such as customs clearance. • Improving intermodal connectivity between rail and roads to encourage the switch from roads to rail. <ul style="list-style-type: none"> • Enhance, integrate, and expand the airport, seaport, inland port, industrial areas, and hinterland links in addition to rail and road connections. • To expand ports and provide logistics services, adequate hinterland facilities must be provided. • Where possible, increase the infrastructure for rail and roads to facilitate connectivity for hinterland logistics.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>Strategy 2.4- Reinforce The Maintenance Regime of Transport Infrastructure</p> <ul style="list-style-type: none"> • Ensure that all assets are in top working order to deliver services that are dependable and effective and meet user expectations. • Reduce the number of accidents, disruptions, and expenses brought on by inadequate maintenance of transportation infrastructure. <p>Current issue: To guarantee seamless, secure, and effective operations, the maintenance regime for all assets and infrastructure needs to be strengthened. Inadequate maintenance of the transportation infrastructure is to blame for the majority of the delays and costs involved. This necessitates improved resource management and coordination between agencies. Furthermore, corrective maintenance has received more attention than preventive maintenance.</p>	<ul style="list-style-type: none"> • For cost-effective operation, perform preventive maintenance and renovation on all infrastructure components related to transportation. • Adopt best practices for all maintenance of transportation infrastructure, especially for rail and road. Use high-quality, low-maintenance materials, assess risks, and manage assets over their life cycles, as examples. • Maintain a strict performance-based contract monitoring regime, and through proper maintenance, improve the asset's performance.
	<p>Strategy 2.5- Enhance Competitiveness in Air Cargo Operation to Support Malaysia in Becoming a Regional Distribution Centre</p> <ul style="list-style-type: none"> • To keep regional air cargo operations competitive, address global trends in the industry. • Ensure that KL International Airport (KLIA) is the region's top cargo hub. <p>Current issue: The transport industry is about to experience a significant impact from new global trends in air cargo, making it more challenging than ever to put the right infrastructure in place while maintaining safety. As a result, the current regulatory framework needs to be given more careful consideration because adding more regulations could have a negative impact on the value of air cargo as a quick means of shipping goods by dramatically raising the cost of doing business and impacting transit times.</p>	<ul style="list-style-type: none"> • Encourage the expansion of the Digital Free Trade Zone (DFTZ) and aviation support services like MRO (MRO). • Designate Senai as the southern regional hub, KKIA, Kota Kinabalu, and KIA, Kuching as the eastern regional hubs, with KLIA (KLIA Aeropolis) as the primary cargo hub. • Improve facilities, accessibility, and affordability to make it easier to handle transshipment cargo using multiple modes of transportation.
	<p>Strategy 2.6- Modernize Integrated Logistics to Reduce the Cost of Doing Business</p> <ul style="list-style-type: none"> • Enable the smooth movement of goods. • Reduce the cost of doing business for activities involving transportation. • Make Malaysia a hub for regional distribution. <p>Current issue: Integrated logistics are in high demand as the foundation of the transportation industry due to the spread of technologies like cloud-based services, miniature sensors, and online shopping. It is urgent to transition to</p>	<ul style="list-style-type: none"> • Promoting the growth of urban logistics distribution will help cities deal with urbanisation and ease e-commerce operations. • Enhance the ease of access and the cost of delivering goods to outlying and rural areas. • Place a track-and-trace requirement on companies that offer logistics services.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>web-based platforms for better sharing of warehouse, goods vehicle, and container space utilisation to increase efficiency.</p> <p>The Logistics and Trade Facilitation Masterplan 2015-2020 offers the strategic framework to clear the logistics sector's bottleneck and elevate Malaysia to become a regional player.</p>	<ul style="list-style-type: none"> • Create freight villages in key locations, complete with parking, maintenance, loading and unloading, and rest areas. • For effective container movement, strengthen the trailer and container monitoring system.
<p>Policy Thrust 3: Enhance Safety, Integration, Connectivity And Accessibility For Seamless Journey</p>	<p>Strategy 3.1- Strengthen Enforcement to Ensure Adherence to Rules and Regulations to Improve Safety, Service Quality and Reliability</p> <ul style="list-style-type: none"> • Enhance the capabilities of the enforcement agencies by, for example, heavily utilising technology. <p>Current issue: Even though technology and enforcement methods have advanced significantly, the land transportation industry still faces problems like unacceptably high accident and fatality rates, congestion, overloading, and unreliable transport services. Although the sector's regulatory framework is considered adequate, enforcement is still a major concern. To increase the safety, dependability, and service level of transportation providers, it is urgently necessary to strengthen the enforcement capabilities of relevant agencies.</p> <p>Strategy 3.2- Adopt A Safe System Approach That Advocates Safer Road Users, Infrastructure and Vehicles</p> <ul style="list-style-type: none"> • Enhance road safety regulations, laws, and enforcement standards. • Fewer traffic collisions and fatalities. <p>Current issue: Of the ASEAN nations, Malaysia has one of the highest rates of traffic fatalities (24 per 100,000 people). The number of fatalities rose to 6,740 in 2017, with motorcycles responsible for 63% of them. Over 4,000 motorcyclists died each year on average. In 2017, RM8.8 billion in losses to the country were attributed to traffic accidents. The enforcement of safety laws, rules, and guidelines must be urgently strengthened.</p>	<ul style="list-style-type: none"> • Streamline traffic offence penalties and improve joint enforcement for land transportation. • Enforce safety regulations for land transportation equipment and vehicles strictly. • As a requirement for commercial vehicle licencing, impose stricter ICOP SHE (Industrial Code of Practice - Safety, Health, and Environment) compliance. • Increase the amount of technology being used in enforcement. • Utilize cutting-edge technology and tighten regulations for enforcement agencies to promote road safety. • Enhance the enforcement capabilities of relevant agencies concerning safety and security for the aviation industry. <ul style="list-style-type: none"> • Enhance vehicle security and safety features to improve the driving experience. • introduce a safety star rating system for new and used cars, as well as commercial vehicles. • Set safety standards for land transportation infrastructure, especially for heavy goods vehicles (HGVs). • Enable requirements and regulations that prioritise active and non-motorized transportation by making active mobility a major aspect of all transport modes. • Through efficient and all-encompassing user behaviour improvement programmes, creative ideas, and techniques, you can raise awareness of safety mobility issues and change behaviour.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>Strategy 3.3- Ensure That Malaysia’s Transport Sector’s Safety and Security are in accordance with International Standards</p> <ul style="list-style-type: none"> • Make certain Malaysian airport and airline operators adhere to the Standards and Recommended Practices (SARPS) established by the International Civil Aviation Organizations (ICAO). • Through ongoing engagement, collaboration, and consultation, address safety and security issues at the global level, particularly the ICAO. • Make sure that the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) recommendations and guidelines are adhered to when providing marine aids to navigation and related services. • keep implementing the International Maritime Organization's (IMO) safety and security conventions. <p>Current issue: For the regulator or authority, keeping up with the quick changes will be a difficult challenge as aircraft manufacturers develop their technology for potential commercial uses. To identify and implement regulatory changes in enhancing safety features to keep up with global trends, the government will need to work more closely with aircraft/drone manufacturers, experts from the industry, and international organisations (like IATA, and ICAO). Rapid technological advancements and changes are taking place in the maritime sector, including changes to ship operations and design. To improve maritime safety and security, regulators and maritime transport companies must adopt the newest technological advancements.</p> <p>Strategy 3.4- Strengthen Infrastructure/Facilities and Intensify The Use of Digitalization to Improve Connectivity, Accessibility And Acceptability</p> <ul style="list-style-type: none"> • Maximize the use of transportation infrastructure and resources. • To encourage the switch from private vehicles to public transportation, and improve the connectivity and accessibility of public transportation. • Offer shared and intelligent transportation for both passengers and goods. <p>Current issue: There is a need for more road and rail connectivity between different transport nodes (seaports, airports, terminals, and inland ports) to decrease travel time and costs for moving people and goods. Additionally, first</p>	<ul style="list-style-type: none"> • build research capacity in traffic safety measures. • Using an appropriate monitoring system and certification, make sure that international safety standards are being followed. • Establish a standard or set of guidelines for observing, enforcing, and auditing the security and safety of transportation hubs using a centralised system. <ul style="list-style-type: none"> • Create seamless connections between the various modes of transportation (rail, airports, seaports and roads) • Integrate and collaborate to ensure effective connectivity for first and last-mile services. • To make sustainable public transportation the preferred mode of transportation, proper planning and implementation of the costs must be made. • Create the infrastructure required to increase the use of active and non-motorized transport and enable their carriage in trains.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>and last-mile connectivity will need more attention to ensure that public transportation services are used more frequently.</p>	<ul style="list-style-type: none"> • Promote all international airports as passenger hubs to improve air connectivity. • Make sure airports and ferry/cruise ship terminals integrate land use with public transportation. • Offer resources and services for maritime transportation. • Encourage the use of open data platforms for improved data integration across all transportation modalities and the introduction of single entry passes/payment options for streamlined travel. • Offer comprehensive land public transportation options that can also serve disadvantaged groups (i.e. PWDs and special needs groups including the elderly, and pregnant ladies). • Enhance accessibility in passenger terminals and on public transportation to provide all people with disabilities with access (PWDs). • Give vulnerable users (such as pedestrians, active, and non-motorized users) priority when moving through nodes for public transportation and in pedestrian areas.
<p>Policy Thrust 4: Advance Towards Green Transport Ecosystem</p>	<p>Strategy 4.1- Enforce Compliance with Acts/Regulations and Shift Towards International Environmental Standards</p> <ul style="list-style-type: none"> • Minimise the environmental impact of the expansion and development of the transportation sector. • Reduce the transportation sector's emissions of GHG, black smoke, and other pollutants. • Boost support for green initiatives across all transportation industries. <p>Current issue: Additional environmental protection-related standards and laws are required in the transportation industry; for instance, there are no requirements for environmentally friendly terminals for logistics and transportation. Due to the voluntary nature of standards, poor awareness of regulations, and a lack of enforcement, there are problems with the level of compliance in areas where standards and regulations are present.</p>	<ul style="list-style-type: none"> • Adopt and continuously compare international sustainable indicators for all tiers of transportation planning in all relevant organisations. • Create institutionalised green logistics, a green airport, a green port, etc. • Make sure that highway construction is based on the Malaysia Green Highway Index (MyGHI). • Limit the construction of new highways through urban areas. • Conurbation growth reform focused on the public transportation network. • Aim to prioritise active transportation and public transportation in a more methodical, comprehensive, and sustainable manner. • Encourage and facilitate green transportation.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>Strategy 4.2- Prioritize Public Transport Network as Fundamental Structure in Charting Out Sustainable Spatial And Transportation Growth In Urbanized Areas</p> <ul style="list-style-type: none"> Plan public transportation and land use together. Make sure developments are integrated with the public transportation network to lower the demand for private vehicle travel. <p>Current issue: Best practices from around the world demonstrate that town planning and public transportation development must be seamlessly integrated. Given the continued growth of Malaysia's cities and population, this is becoming increasingly important. To solve this problem, transit-oriented developments (TODs) are the best option. Although the National Physical Plan and the Land Public Transport Master Plan acknowledge the significance of TOD, adoption rates have been comparatively low thus far.</p> <p>Additionally, because of the need for access and the impact on the land nearby, ports and airports should be subject to the same rules regarding land use and the integration of public transportation. In essence, they should be treated as independent sub-cities.</p> <p>Strategy 4.3- Accelerate Implementation of Low Carbon Mobility Initiatives</p> <ul style="list-style-type: none"> Reduce the emissions of greenhouse gases (GHG) from the transportation sector. More people should choose energy-efficient vehicles (EEVs) as their primary mode of transportation. Increase the use of non-motorized and public transportation. <p>Current issue: A lot of effort has been put into reducing fuel consumption and carbon emissions because mobility, especially private transportation, has historically been seen as being carbon-intensive. When it comes to the development of low-carbon alternatives, such as hybrid and all-electric vehicles, the private transportation industry has taken the lead. Future policies will reduce unsustainable consumption patterns by increasing the adoption of low-carbon initiatives and planning for future infrastructure.</p>	<ul style="list-style-type: none"> Align the national housing, national urbanisation, and national transport policies concerning the long-term planning of urban areas and the public transportation system. Consistently make sure that land use and public transportation are integrated into development guidelines. Place a requirement for TOD near public transportation hubs and in urban areas. To reduce the need for travel, promote self-contained or comprehensive Work-Play-Shop-Stay development concepts. Greening the transportation network is part of the effort to repair the urban environment's damage and create a sustainable city. <ul style="list-style-type: none"> The Low Carbon Mobility Blueprint Action Plan should be carried out. To support the development and use of EEVs/electric vehicles (EVs) in Malaysia, study the regulations currently outlined in Act 333. Create infrastructure for EEVs that is environmentally friendly and profitable, such as EV charging stations. Consider different EEV models and offer incentives to EEV producers and users. Make a fuel economy policy and put it into action. Improve fuel standards or create cleaner fuel. To incentivize transport operators to go green, create a green index and incentives. Vehicles with low carbon emissions must be purchased as a requirement for government green procurement.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	<p>Strategy 4.4- Institute Measures to Control Pollution, Noise and Waste From The Transport Sector</p> <ul style="list-style-type: none"> • Make sure waste materials from the transportation industry are treated and disposed of in a methodical, ethical manner. • Reduce the damage that the transportation sector's pollution causes to the environment. <p>Current issue: The amount of vessel traffic along Malaysia's coastline has steadily increased, which has had an effect on the marine ecosystems and increased waterborne pollution. To ensure minimal impact on the environment and the living standards of those who live along the coastline and inland waterways, shipping companies must also be fully compliant with environmental regulations.</p> <p>Current issue: In Malaysia, increased economic development has resulted in a higher percentage of vehicle ownership and use. However, a regulatory framework is urgently required to ensure proper vehicle disposal and effective waste management in the logistics sector. It is essential to manage noise pollution appropriately because of the growing population density in urban areas, especially along important transportation corridors.</p> <p>Strategy 4.5- Develop Effective Communication, Education And Public Awareness (CEPA) to Create Behavioral Change Towards Practices of Sustainable Transport</p> <ul style="list-style-type: none"> • To increase the productivity of the transportation industry, educate operators and service providers about the importance of prioritising quality service delivery. • Encourage people to use public transportation instead of their cars. • Ingrain positive behaviour, such as courteous driving. <p>Current issue: Behavioural change will inevitably be crucial to achieving the goal of improving sustainable practices in the management of the transportation sector. However, among transport operators, manufacturers, service providers, and users, the degree of environmental awareness and the advantages of adopting sustainable transport practices is still low, impeding efforts to shift to</p>	<ul style="list-style-type: none"> • Create and implement rules regarding the end of the life of vehicles (commercial & private vehicles). • Establish standards for recycling, refurbishing, and scrap waste. • Encourage the recycling and reuse of dredging waste. • To address any annual increase in the total CO2 emissions from international civil aviation, implement a Global Market-Based Measure (GMBM) programme in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). • Reduce the amount of noise generated by transportation infrastructure. <ul style="list-style-type: none"> • Create communication channels to spread the word about the advantages of taking public transportation. • To find the best intervention to encourage a change in behaviour, research to understand travel behaviour and patterns. • Implement initiatives to encourage behavioural modification. • Increase cooperation with the Ministry of Education (MOE) to educate and promote environmentally friendly behaviour in schoolchildren.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	green practices. It is crucial to remember that raising awareness alone will not have an impact; instead, behaviour change is required.	
Policy Thrust 5: Expand Global Footprint and Promote Internationalization Of Transport Services	<p>Strategy 5.1- Create an Environment That Facilitates Local Transport Industry Operators to Become Regional Or Global Players</p> <ul style="list-style-type: none"> • Make sure that business owners and participants can compete internationally and grow their businesses. • Encourage local businesses to expand internationally and upgrade their services. <p>Current issue: The vast majority of local industry participants have kept their attention primarily on the domestic market and have little to no presence abroad. There is a lot of room for international expansion as ASEAN regional integration increases. Local operators will also face increased pressure from the global transportation industries to become more competitive on a national or international scale. Local businesses must make a concerted effort to expand operations abroad given the demand from consumers for greater integration as a result of technological advancements.</p>	<ul style="list-style-type: none"> • Encourage and aid international business expansion for transportation services. • To elevate regional players, and strengthen the industrial collaboration programme. • Choose an offset programme and implement it to ensure knowledge and technology transfer. • Establish criteria for industry participants' readiness to provide hauliers with the necessary equipment for the global market (such as halal logistics, Muslim-friendly transport services, e-commerce, and cold chain). • Encourage international expansion by Malaysian port and airport operators.
	<p>Strategy 5.2- Facilitate Regional Cooperation and Agreements That Improve the Transport Industry</p> <ul style="list-style-type: none"> • Boost regional cooperation to make it easier to put plans and agreements into action <p>Current issue: With seamless cross-border trade and travel for both goods and passengers, the ASEAN Economic Community (AEC) aims to establish a single economic entity. Given the geographical and regulatory difficulties involved in integrating the economies of ten countries, strong leadership and cooperation are required.</p> <p>The AEC, which has a combined GDP of US\$2.6 trillion and a population of over 622 million, represents a market with significant opportunities for the transportation sector, which will in turn have a catalytic impact on the economy and citizen movement.</p> <p>In addition, the development of communications and technology indicates a world that is becoming more integrated. The improvement of regional and international cooperation will need to be prioritised in blueprints, agreements,</p>	<ul style="list-style-type: none"> • Encourage the implementation of international standards and the ASEAN Economic Community Blueprint. • Expedite the implementation of international and regional agreements that facilitate transportation. • Implement all air transportation agreements with ASEAN and the Dialogue Partners. • Assist in the execution of the Kuala Lumpur Transport Strategic Plan 2016–2025. • Establish effective communication channels between Malaysian ports and ports throughout Asia and ASEAN. • Continue to represent Malaysia in international forums.

Section/chapter	Objectives/function of the Act	Major Takeaway (Initiatives planned to mitigate the current issue)
	and partnerships—both current and future. These partnerships and agreements must be created promptly and adhered to, even though they have been carefully developed and examined.	

Source: Authors' compilation of Policy retrieved from the Official government website of Malaysia. Link: https://www.pmo.gov.my/wp-content/uploads/2019/10/National-Transport-Policy-2019_2030EN.pdf

2.5.2 China

The following table represents the list of laws and regulations related to national multimodal transport in China:

Table 7 Existing government laws and Provisions on Transport Policies in China

Government laws and regulations	
A.	The Maritime Code, 1993, Chapter IV, Section 8: Special Provisions Regarding Multimodal Transport Contract
B.	Regulations Governing International Multimodal Transport of Goods by Containers, 1997
C.	The Contract Law, 1999, Chapter 17, Section 4: Contracts for Multimodal Transportation

Table 8 A. The Maritime Code, 1993, Chapter IV, Section 8: Special Provisions Regarding Multimodal Transport Contract

Sections	Provisions	Takeaways
Chapter IV, section 8 of the Maritime Code	In Article 102, the Multimodal Transport contract is stated as the contract under which the Multimodal Transport Operator (MTO) undertakes the responsibility to transport the goods, against the payment of the freight for the entire transport. The transportation contract starts from the place where the goods were received in his charge to the destination; the goods are then delivered to the consignee by two or more different modes of transport, among them one of which being a sea carriage. The provision of this chapter will only cover the multimodal transport contract and the sea leg. The Multimodal Transport Operator is described as the person who has undertaken a multimodal transport contract with the shipper either by himself or by another person acting on his behalf.	MTO is a Multimodal Transport Operator who is a formal entity bounded by contracts to rightfully and properly transfer goods from one point to another. Hence, the contract has detailed the specific time by which the goods must reach their destination spot.
Period of responsibility	MTO has undertaken the duty for a period from the time he has taken the goods in his charge to the specific time of delivery.	
Liability of the MTO	The MTO has the sole responsibility for the performance or procurement of the performance of the Multimodal Transport contract, hence, is responsible for the whole transport. There can be contracts with the unimodal carriers which are also under the multimodal transport contract, the MTO's responsibilities regarding the whole transport period will remain unaffected.	MTO is fully responsible for properly transferring the goods and will be held liable if otherwise.

Sections	Provisions	Takeaways
Basis of Liability	In Article 105, it outlines a network system of liability by stating in detail that if there is a loss or damage to the goods that occurred in a certain part during the transport, the provisions of the relevant laws and regulations governing the specific section of the multimodal transport shall come to practice concerning the liability of the MTO and the limitations thereof. Moreover, if it can be determined at which stage of the transport the damage to the goods occurred then the rules applicable to that specific leg of transport will be applicable.	
Non-localized damage	This is applicable when the leg of transport where the loss or damage took place cannot be determined, then, according to Article 106, the liability of the MTO shall be determined by the provisions governing the carrier's liability for the carriage of goods by sea. Therefore, Article 106 states that if the section of transport in which the loss occurred cannot be known or ascertained, then the MTO shall be liable for the compensation under the stipulations regarding the carrier's liability and the limitations are then detailed under the chapter. Under the Maritime Code, the basis of liability of the carrier for loss or damage to goods is modelled on that of The Hague/ Hague/ Visby Rules. The carrier is needed at the beginning of the voyage to exercise the practice of due diligence to make the ship seaworthy, properly handled by men, adequately equipped and supply the ship. The carrier is bound to properly and carefully load, handle, stow, carry, keep, care for and discharge the goods carried. Furthermore, the carrier will then be fully entitled to rely on the exceptions (including nautical faults and fire) and under the "Hague Rules exceptions" to relieve himself from liability for loss or damage to goods.	In a case where the location of loss or damage of goods cannot be certainly determined, then the MTO shall be liable for the compensation given the carrier's liability and limitations.
Delay in delivery	Contrary to The Hague Rules, under this provision, the carrier is held liable for delay in delivery of the goods. As stated in Article 50, a delay in delivery occurs when the goods are not delivered at the port of discharge within the specific time that was agreed upon. Therefore, the carrier is liable for the loss of, or damage to the goods caused due to delay in the delivery because of any fault of the carrier except those causes for which the carrier is not liable as stated in the provision. Moreover, the carrier is also liable for economic losses which are a result of the delay in delivery even without any actual damage to the goods unless such economic losses occurred from causes for which the carrier was not liable. Provisions are made which convert the delay in delivery into a total loss. Thus, the person entitled to claim the loss of goods may treat the goods as lost if it is not delivered within 60 days starting from the specific date of delivery previously agreed upon.	Inclusion of the provision in the case of a delay in delivery, the carrier is held liable for the loss.
Limitation of liability	Article 56 states the liability of the carrier for loss or damage of goods to a maximum amount of 666.67 SDR per package or other shipping units. Or the carrier is charged 2 SDR per kilogram of the total weight of the goods damaged or lost (whichever is higher) unless the nature and value of the goods have been declared by the shipper and inserted in the bill of lading (described as a legal document issued by a carrier (transportation company) to a shipper that details the type, quantity, and destination of the goods being carried). Or a higher limit has been previously agreed upon between the carrier and the shipper. According to Article 57, the carrier's obligation for economic damage caused by late delivery of goods is restricted to a sum equal to the freight payable for the items thus delayed. The carrier, on the other hand, has no right to limit his liability if it can be proven that the loss, damage, or delay in delivery was caused by his act or omission	Under this section, the amount of compensation that should be paid by the carrier in case of loss or damage of goods is properly stated. The detailed calculation of the estimated compensation is also stated.

Sections	Provisions	Takeaways
	done with the intent to cause such loss, damage, or delay, or recklessly and with the knowledge that such loss, damage, or delay was likely to occur. The Maritime Code includes regulations dealing with shipper obligations, shipping documentation, delivery of products, and contract cancellation, in addition to definitions and basic concepts. Article 44 states that any term in a contract for the transport of goods by sea, a bill of lading, or other similar papers proving such a contract that deviates from the rules of this chapter is null and invalid. However, such nullity and voidness shall not affect the legality of the contract's other stipulations, the bill of lading, or other similar papers. A provision that assigns the benefit of goods insurance to the carrier or any similar clause is null and invalid.	

Source: United Nations Conference on Trade and Development. (2001). *Implementation of Multimodal Transport Rules*. UNCTAD secretariat. <https://unctad.org/system/files/official-document/posdtetlbd2.en.pdf>

Table 9 B. Regulations Governing International Multimodal Transport of Goods by Containers, 1997

Sections	Provisions	Takeaways
	The regulation which became effective on October 1, 1997, pertains to "the international multimodal transport of goods by containers by waterway, highway and rail." As a result, the Regulations do not govern international Multimodal Transport of products by containers via air, presumably because of the lesser frequency of such travel.	
Definitions	In Article 4, there is a list of definitions. The Regulations define "international multimodal transport of goods by containers" as "the international carriage of goods by containers from a point in one country where international containers are taken in care by the international MTO to a predetermined point of delivery in a different country." Article 4 also includes definitions of contract for international MT of goods by containers, documents for international MT of goods by containers, international MTO of goods by containers, consignor and consignee, all of which are based on the MT Convention. The phrase "delivery delay" has been defined as "the items not being delivered within the period specifically agreed upon."	
Liability of the MTO	Article 27 stipulates that the MTO is accountable for any loss, damage, or delay in the delivery of goods that occurred while the commodities were in his control. The laws also allow the consignee to deem the items as lost if they are not delivered within 60 days of the expressly agreed-upon delivery date. Furthermore, it adopts a liability network system that states that where the loss of, damage to, or delay in the delivery of the items occurred in one specific stage of the multimodal transport, the MTO's liability and the limitation thereof shall be governed by the relevant laws and regulations of that particular stage of transport. In the instance of localized damage, when it is possible to determine which stage of transport loss or damage occurred, the regulations regulating that specific stage of transit shall apply. In the case of concealed damage, where the location of the damage cannot be determined, "the limitation of liability of the multimodal transport operator shall be defined as follows: If the multimodal transport includes sea carriage, the limitation of liability shall be governed by the Maritime Code of China; and if the multimodal transport does not include sea carriage, the limitation of liability shall be governed by the Maritime Code of China."	The item is deemed as a lost item or good during the period of transportation if it is not delivered within the first 60 days of the predetermined delivery date. Therefore, the liability and limitation of MTO thereof shall be governed by the relevant laws and regulations of that particular stage of transport.

Sections	Provisions	Takeaways
	<p>The MTO's restriction of liability in the event of non-localized damages, rather than the foundation of liability. The question is whether the MTO's culpability will be decided under Article 27, with no defences or exceptions available to the MTO other than those given in paragraphs 18 and 19 in the context of the consignor's liability. In other words, the MTO may be responsible for loss or damage to the goods unless such loss or damage is caused by the consignor's negligence. Furthermore, the MTO's obligation in the event of non-localized damage where multimodal transport does not involve transportation by water is regulated by the relevant legislation.</p> <p>Article 28 addresses the limitation of liability for delivery delay in the event of non-localized damage, stating that if "the multimodal transport includes a sea leg, the limitation of the obligation of the MTO for delivery delay shall not exceed the freight payable under the MT contract." When loss or damage to the goods occurs concurrently with delivery delay, the MTO's obligation is the same as his liability for loss or damage to the products. Articles 27 and 28 deal with the limitation of responsibility and apply to any claim against the MTO for damages resulting from loss of, damage to, or delay in delivery of goods "whether such claims are justified in the contract, in tort or otherwise."</p> <p>When an action is taken against an MTO servant for loss, damage, or delay in delivery of goods, if he can establish that "he behaved within the extent of his employment, he shall be able to avail himself of the defences and limitation of responsibility which the MTO is entitled to" (article 30). If it is proven that the loss, damage, or delay in delivery arose from his act and omission done with the purpose to cause such loss, damage, or delay, or carelessly and with the knowledge that such loss, damage, or delay would probably happen, the MTO is not entitled to the benefit of the limitation of responsibility contained in articles 27 and 28. (article 31).</p>	
Contractual agreements	<p>Article 32 assures that commercial agreements do not supersede statutory rules governing the MTO's obligation. It states that "the MTO may engage into agreements with interested parties to agree on the precise duties, rights, and obligations between them as well as the business arrangements involved. However, unless laws and regulations specify differently, this has no bearing on the MTO's duty for multimodal transportation."</p>	<p>The commercial agreements between MTO and interested parties will not supersede statutory rules governing the MTO's obligations.</p>
Documentation:	<p>The MTO is required to issue a Multimodal Transportation (MT) document upon taking possession of the commodities, comprising both negotiable and non-negotiable documents (articles 15-16), their contents (article 14), reservations (article 23), and their evidential value (article 24).</p>	
Liability of the consignor	<p>The provisions dealing with the consignor's guarantee of the correctness of the particulars regarding the description and general nature of the goods are mostly taken from the MT Convention (articles 17 and 19). The consignor is explicitly held accountable for loss or damage to the goods, as well as damages experienced by the MTO if such loss or damage is caused by the following factors:</p> <ol style="list-style-type: none"> 1. The container body and seal are both in acceptable condition, and the items were either counted, packed, and sealed by the consignor or transported in the consignor's container. 	<p>The Consignor is held accountable for the loss or damage of goods. Moreover, the Consignor may also be held responsible for damages experienced by the MTO if the</p>

Sections	Provisions	Takeaways
	<p>2. Poor quality of commodities, or scarcity or degradation of packaged items, even though the external packaging appears to be in good shape;</p> <p>3. Inadequacy of packaging or insufficient or illegible markings" (article 18).</p> <p>Furthermore, the consignor is accountable for any loss suffered by the MTO or a third party that is the result of his negligence or carelessness (article 19). There are further provisions regarding the consignor's obligations and liabilities for the carrying of dangerous goods (article 20).</p>	<p>causes mentioned under the provision occurs.</p> <p>Losses suffered due to negligence or carelessness will also be levied upon the Consignor under the provisions regarding the obligations and liabilities for carrying dangerous goods.</p>
Time-bar	<p>According to Article 34, when MT includes a maritime leg, any action against the MTO is time-barred if proceedings are not initiated within one year. When no maritime conveyance is involved and action is taken against the MTO under the General Rules of Civil Law, this term is extended to two years. The limitation period begins the day after the items were delivered or should have been delivered by the MTO (article 34).</p> <p>It is also stated that the requirements of Article 34 "must not impact the limitation of action of a claimant who has the right to bring an action under the rules and regulations of the stage of multimodal transport to which loss or damage to the goods can be ascribed" (article 34). The provisions dealing with the time restriction for the MTO's recourse action against a third party are similar to those in the MT Convention (article 34).</p> <p>The regulation and management of multimodal transportation comprise regulations governing MTO operating conditions as well as licensing criteria.</p>	<p>When the provisions in MT include a maritime leg, any action against the MTO is time-barred given that the proceedings are not initiated within one year.</p>

Source: United Nations Conference on Trade and Development. (2001). *Implementation of Multimodal Transport Rules*. UNCTAD secretariat. <https://unctad.org/system/files/official-document/posdtetlbd2.en.pdf>

Table 10 C. Contract Law, 1999

Sections	Provisions	Takeaways
	<p>The Contract Law includes five provisions that govern contracts for multimodal transportation (317 to 321). According to Article 317, "a multimodal transportation business operator shall be accountable for the fulfilment of the multimodal transportation contract, enjoy the rights and bear the liabilities of the carrier for the whole transport." According to Article 318, a "multimodal transportation business operator" may enter into agreements with unimodal carriers engaging in multimodal transportation "on their respective obligations for different portions under the multimodal transportation contract."</p> <p>Article 319 requires the multimodal transportation company operator to "issue multimodal transportation documentation" upon receiving goods from the shipper. Such documentation may be negotiable or non-negotiable at the shipper's discretion.</p>	<p>The Contract Law outlines the proper definition of MTO and its responsibilities in detail.</p> <p>Proper documentation of multimodal transportation must be issued by the multimodal transportation company operators right after receiving goods from the shippers.</p>

Sections	Provisions	Takeaways
	Article 320 holds the shipper accountable for any damage caused by the "multimodal transportation business operator" as a result of his negligence, even if the "multimodal transportation document" has been assigned to other entities.	
Liability of the MTO:	<p>Concerning the MTO's liability, article 321 adopts the network system of liability, stating that Where damage to, destruction of, or loss of goods occurs in a specific section of multimodal transportation, the liability of the multimodal transportation business operator for damages and the limit thereof shall be governed by the relevant laws in the specific model of transportation used in the specific section. Where the part of transportation where the damage, destruction, or loss happened cannot be established, the provisions of this chapter control the obligation for damages.</p> <p>Thus, if the stage of transit at which the loss or damage occurred can be determined, the laws and regulations relevant to that specific method of transport will be utilized in evaluating the MTO's obligation. However, in the situation of non-localized damage, when it is unknown which leg of transport the loss or damage happened, the requirements of Chapter 17 of the contract law shall regulate the MTO's obligation.</p> <p>The provisions which deal with "contracts for goods transit," would thus apply in circumstances of non-localized damage. Article 311, which addresses the carrier's liability, states:</p> <p>"A carrier shall be responsible for the loss or destruction of goods during the period of carriage unless the carrier demonstrates that the damage or destruction of goods was caused by force majeure, inherent natural character of the goods, reasonable loss, or fault on the part of the shipper or consignee."</p> <p>Article 312 includes provisions about the assessment of compensation for loss or damage to goods, which states: "Where such an agreement exists, the number of damages for loss to or destruction of the products should be the amount agreed on the contract between the parties. Where such an agreement does not exist or is unclear, or cannot be determined under the provisions of article 61 of this law, the market price at the time of delivery or at the time when the products should be delivered will be used. Where laws or administrative rules specify otherwise on the method of calculating damages and the number of damages, such requirements must be observed."</p>	

Source: United Nations Conference on Trade and Development. (2001). *Implementation of Multimodal Transport Rules*. UNCTAD secretariat. <https://unctad.org/system/files/official-document/posdtetlbd2.en.pdf>

2.5.3 India

An act to regulate the multimodal transportation of commodities from any location in India to any location outside of India based on a multimodal transport contract is the Multimodal Transportation of Goods Act which was first formulated in 1993 and later amended in 2000.

Table 11 Multimodal Transportation Of Goods Act of India

Sections	Provisions	Takeaways
Definitions	<p>(a) "carrier" means a person who performs or undertakes to perform for hire, the carriage or part thereof, of goods by road, rail, inland waterways, sea or air;</p> <p>(b) "competent authority" means any person or authority authorized by the Central Government, by notification in the Official Gazette, to perform the functions of the competent authority under this Act;</p> <p>(c) "consignee" means the person named as consignee in the Multimodal transport contract;</p> <p>(d) "consignment" means the goods entrusted to a multimodal transport operator for multimodal transportation;</p> <p>(e) "consignor" means the person, named in the multimodal transport contract as the consignor, by whom or on whose behalf the goods covered by the such contract are entrusted to a multimodal transport operator for multimodal transportation;</p> <p>(f) "Delivery" means, --</p> <p>(i) in the case of a negotiable multimodal transport document, delivering of the consignment to, or placing the consignment at the disposal of, the consignee or any other person entitled to receive it;(ii) in the case of a non-negotiable multimodal transport document, delivering of the consignment to, or placing the consignment at the disposal of, the consignee or any person authorized by the consignee to accept delivery of the consignment on his behalf;</p> <p>(g) "endorsee" means the person in whose favour an endorsement is made, and in the case of successive endorsements, the person in whose favour the last endorsement is made;</p> <p>(h) "endorsement" means the signing by the consignee or the endorsee after adding a direction on a negotiable multimodal transport document to pass the property in the goods mentioned in such document to a specified person;</p> <p>(i) "goods" means any property including live animals, containers, pallets or such other articles of transport or packaging supplied by the consignor, irrespective of whether such property is to be or is carried on or under the deck;</p> <p>(j) "mode of transport" means carriage of goods by road, air, rail, inland waterways, or sea;</p> <p>(k) "multimodal transportation" means the carriage of goods, by at least two different modes of transport under a multimodal transport contract, from the place of acceptance of the goods in India to a place of delivery of the goods outside India;</p> <p>(l) "multimodal transport contract" means a contract under which a multimodal transport operator undertakes to perform or procure the performance of multimodal transportation against payment of freight;</p>	<ul style="list-style-type: none"> • Inclusion of some definitions such as multimodal transport contract, multimodal transportation, multimodal transport document, multimodal transport operator, negotiable multimodal transport document, non-negotiable multimodal transport document etc.

Sections	Provisions	Takeaways
	<p>(la) “multimodal transport document” means a negotiable or non-negotiable document evidencing a multimodal transport contract and which can be replaced by electronic data interchange messages permitted by applicable law;</p> <p>m) “multimodal transport operator” means any person who--</p> <p>(i) concludes a multimodal transport contract on his behalf or through another person acting on his behalf;</p> <p>(ii) acts as principal, and not as an agent either of the consignor, or consignee or of the carrier participating in the multimodal transportation, and who assumes responsibility for the performance of the said contract;</p> <p>(n) “negotiable multimodal transport document” means a multimodal transport document which is—</p> <p>(i) made out to order or to bearer; or</p> <p>(ii) made out to order and is transferable by endorsement; or</p> <p>(iii) made out to the bearer and is transferable without endorsement</p> <p>(o) “non-negotiable multimodal transport document” means a multimodal transport document which indicates only one named consignee</p>	
<p>Regulation Of Multimodal Transportation</p>	<p>No person to carry on business without registration. - No person shall carry on or commence the business of Multimodal transportation unless he is registered under this Act; Provided that a person carrying on the business of multimodal transportation immediately before the commencement of this Act may continue to do so for three months from such commencement; and if he has made an application for registration within the said period, till the disposal of such application</p> <p>Registration for multimodal transportation</p> <ul style="list-style-type: none"> • Any applicant who is not a resident of India and who is not engaged in the business of shipping shall not be granted registration unless he has established a place of business in India. • A certificate granted under sub-section (3) shall be valid for three years and may be renewed from time to time for a further period of three years at a time. • An application for renewal shall be made in such form as may be prescribed and shall be accompanied by such amount of fees as may be notified by the Central Government <p>Cancellation of registration Provided that no such registration shall be cancelled unless the multimodal transport operator has been given a reasonable opportunity of showing cause against the proposed action.</p> <p>Appeal 1) Any person aggrieved by, the refusal of the competent Authority to grant or renew registration under section 4 or by the cancellation of registration under section 5, may prefer an appeal to the Central Government within such period as may be prescribed.</p>	<ul style="list-style-type: none"> • Provisions on the registration for multimodal transportation, cancellation of the registration and appeal etc.

Sections	Provisions	Takeaways
Responsibilities and Liabilities of the Multimodal Transport Operator	<p>Basis of liability of multimodal transport operator.</p> <p>(1) The multimodal transport operator shall be liable for loss resulting from—</p> <p>(a) any loss of, or damage to the consignment;</p> <p>(b) delay in delivery of the consignment and any consequential loss or damage arising from such delay, where such loss, damage or delay in delivery took place while the consignment was in his charge;</p>	<ul style="list-style-type: none"> • Provisions for liabilities of the multimodal transport operator. • Inclusion of the provision on the assessment of the compensation if any kind of loss occurs
	<p>Provided that the multimodal transport operator shall not be liable if he proves that no fault or neglect on his part or that of his servants or agents had caused or contributed to such loss, damage or delay in delivery:</p> <p>Provided further that the multimodal transport operator shall not be liable for loss or damage arising out of delay in delivery including any consequential loss or damage arising from such delay unless the consignor had made a declaration of interest in timely delivery which has been accepted by the multimodal transport operator.</p>	
	<p>Assessment of compensation</p> <p>2) The value of the consignment shall be determined according to the current commodity exchange price, or, if there is no such price, according to the current market price, or, if the current market price is not ascertainable, concerning the normal value of a consignment of the same kind and quantity</p>	
Miscellaneous	<p>Special provision for dangerous goods'</p> <p>(1) Where the consignor hands over the prescribed dangerous goods to a multimodal transport operator or any person acting on behalf of such operator, the consignor shall inform him of the nature of the dangerous goods and, if necessary, the precautions to be taken while transporting such goods</p> <p>(2) Where the consignor fails to inform the multimodal transport operator or the other person acting on behalf of the such operator of the nature of the dangerous goods and such operator or person does not otherwise know about the dangerous goods—</p> <p>(a) the consignor shall be liable to the multimodal transport operator or the other person acting on behalf of such operator for all loss resulting from the multimodal transportation of such goods; and</p> <p>(b) the goods may at any time be unloaded, destroyed or rendered innocuous, as the circumstances may require, without payment of compensation</p>	<ul style="list-style-type: none"> • Specifying provisions for dangerous goods • Inclusion of the right of multimodal transport operators to have a lien on goods and documents
	<p>Right of multimodal transport operator to have a lien on goods and documents</p> <p>(1) The multimodal transport operator who has not been paid the amount of consideration stipulated in the multimodal transport contract shall have a lien on the consignment and the documents in his possession</p>	

Source: Compiled by authors from

[https://www.dgshipping.gov.in/WriteReadData/userfiles/file/The%20Multimodal%20Transportation%20of%20Goods%20Act,%201993%20\(as%20amended%20in%20December,%202000\).PDF](https://www.dgshipping.gov.in/WriteReadData/userfiles/file/The%20Multimodal%20Transportation%20of%20Goods%20Act,%201993%20(as%20amended%20in%20December,%202000).PDF)

3. The National Integrated Multimodal Transport Policy and its relevance to SHE trade

A recent study has discovered that gender disparity impedes economic growth, emphasizing the effectiveness of the relationship between poverty reduction and gender equality (Neves and Silva, 2014, Hakura et al. 2016). Reduced gender disparity is a driving force behind reaching the first Sustainable Development Goal of eradicating poverty in all its dimensions worldwide.

Impediments are frequently explicit regulatory obstacles. According to a World Bank assessment, 28 of the 143 nations questioned have ten or more legal inequalities between men and women, such as inequities in registering a business, travelling outside of a country, inheriting and owning lands and other productive resources, and opening a bank account. Surprisingly, gender disparities persist today; 90% of the nations polled had at least one policy that discriminated against men and women in terms of treatment and rights (World Bank, 2016). It is difficult to reduce gender disparity in trade facilitation since inequities are not formally or publicly disclosed in trade processes. It takes a broader vision to see inequities for women who want to trade overseas. Women's roles in international commerce may be examined from five perspectives: as international traders, export manufacturers, producers, entrepreneurs, workers and policymakers (Brenton, et al. 2013; Higgins 2012).

(Sharda & Sabu, 2021) Daily low-wage employees and garment industry workers have relatively limited access to and the cost of public transportation. In comparison, middle-income women in Bangladesh can afford to use public transportation, but safety concerns and harassment experiences in public transportation restrict and discourage women from utilizing it. Some of the obstacles that discourage women from utilizing public transportation include the poor condition of buses, the lack of bus shelters, and long wait periods in bus waiting areas. Even while high-income women are not as constrained as their poor and middle-income counterparts, they, too, are discouraged from making use of efficient and appropriate transportation options owing to social conventions and attitudes. Safety concerns prevent women from using the country's transportation infrastructure to engage in productive economic activity (INTAL Inc, 2019). This translates into poor female engagement in economic activity; according to World Bank data, the female labour participation rate in Bangladesh in 2019 was 44.6 percent. Women make up less than 10% of company owners in Bangladesh (Bangladesh Bureau of Statistics, 2013).

The National Integrated Multimodal Transport Policy 2013 of Bangladesh has outlined provisions under chapter four regarding “Women, the Elderly and Physically Challenged and Transport”. The objective of the policy is to encourage greater participation of women, the elderly and the disabled in economic, social, and cultural affairs. Moreover, the policy aims towards enhancing the accessibility of public transport such as buses and better information. Furthermore, the provision aims towards improving the quality of the pedestrian environment, enhancing better security system of mass transport by improving security at stations.

Incorporating the women's perspective during strategic planning of transport policy

The effectiveness of sustainable transportation planning and mobility initiatives is dependent on acknowledging that women and men frequently have distinct travel demands. Positioning women at the centre of strategic planning may result in a win-win scenario for everyone: safer public transportation (for all passengers), stronger labour force participation and economic/fiscal returns, and increased environmental advantages by reducing the usage of private automobiles.

Notable initiatives by European countries to improve women's security

Some European countries have already taken conscious steps to improve the safety of women using public transportation. These initiatives include assuring last-mile connection, reducing vegetation near bus stops, eliminating dark access routes to bus stops, introducing and establishing women-only taxis, educating transportation personnel to intervene and manage sexual harassment incidents, and passenger education programs.

Among the possible strategies to include gender issues in transportation policy are:

1. Incorporating gender-based commuting patterns into transit timetables or schedules, addressing travel hours and patterns, bus-stop accessibility to critical facilities (schools, childcare), and enhancing fare structure flexibility to accommodate dependents and multiple-stop journeys;
2. Addressing and incorporating gendered demands into transportation design elements, such as appropriate room for prams and bicycles and barrier-free access (with transit facilities, design elements should also recognize that women require more sanitary facilities than males);
3. Undertaking related efforts, such as minimizing the need for several stops in a single journey via e-commerce and delivery alternatives (European Investment Bank, 2022).

Gender-sensitive transport policy for regional trade

Building an inclusive transportation and trading system requires a gender-sensitive transportation strategy that pays enough attention to gender-specific demands. The subregion's transportation plans (the region may cover India, Bhutan, Nepal, Bangladesh etc) should include a strategy for meeting the special requirements of women, such as safety and accessibility. All geographical areas should get enough consideration in public transportation design, as women rely heavily on public transportation for their travel requirements (Bandagi, 2021). There should be adequate and regular public transportation to cross-border commerce and transportation offices.

The transportation policy should also attempt to boost women's involvement in transportation-related professions and services. Women-friendly places in transportation have to be created, hence the participation of women in the industry is critical (.

Building gender-friendly infrastructure

The public transportation system should be built to meet the demands of people of all genders; men, women and others. They should include safeguards for the safe entry of pregnant women and mothers with infants. Shelters in public spaces should be provided with safety monitoring settings such as CCTV cameras. A separate restroom for women with running water should be established at transit and roadside facilities regularly.

Generating awareness and building capacity

People should recognize that women have the right to go whenever and wherever they choose, based on their requirements. Ensuring a secure environment for female travellers and carriers, as well as preparing for it through awareness development, should be embedded in all policy discourses and transportation-related efforts. For this goal, specifically planned capacity-building and awareness-generating programs are necessary. Policymakers must also be made aware of this.

Encouraging more women drivers and transporters into the industry

Driving heavy vehicles has traditionally been a career reserved for men in the sub-region. However, in the last decade, there has been an increase in the number of women working as truck and bus drivers. There should be incentives to encourage women to work as drivers and carriers. This, together with the provision of basic facilities in public transportation and public spaces, will encourage women to work in the field. The She Taxi system, which is being introduced in India's southern state of Kerala, with female-driven cabs and an online booking and monitoring system, is a suitable model for the sub-region to investigate in the commercial trucking system to attract more women to participate in the industry. Women should be encouraged to work in different logistics-related fields, such as logistics management, warehouse and store management, freight forwarding, and transportation analysis.

Increasing the infrastructure for safety and monitoring

All public spaces should have surveillance and monitoring equipment. All public vehicles should be equipped with a GPS-based real-time tracking system. Provisions such as an emergency button on public transportation should be put in place. Streetlights should be installed on all public highways and streets. Creating a 24-hour helpline that allows women to report security concerns will be a valuable tool for lowering crime and enhancing real-time reporting of threats. Security personnel and pink police should be stationed at all key intersections, in addition to routine patrols. The Pink Police program began in Kerala to give women, children, and older residents with essential assistance, counselling, and security knowledge. They will prevent eve-teasing in public locations and enhance children's and women's safety when travelling.

Even while women-centric legislation and gender-friendly infrastructure may have a hugely positive domino effect on the country's socioeconomic situation, the country's transportation sector is woefully under-equipped. Bangladesh's transportation regulations do not address women's problems individually, presuming that the impact of such measures is gender-neutral.

4. Findings of the Study

This chapter includes the findings that are based on the stakeholders' consultation.

4.1 No fixed fare for transportation of goods

For trucks, covered vans, lorries, and prime movers involved in moving products, there was no practice of establishing fares; instead, owners raised the fares as they thought fit. This has disrupted the market for many products and raised the cost of shipping goods, with the price

of essentials like vegetables already rising substantially. Since government agencies have not set truck rates, truck owners are allowed to determine their own prices.³⁹

4.2 Product loss during transportation

Transportation often experiences loss or damage as a consequence of temperature changes, humidity, tilt, or shock. Damages and losses cause issues for each actor in the supply chain, such as interruptions in business operations, a lack of product availability, and subsequently lost revenues.⁴⁰

4.3 Absence of integrated approach

In the case of regional connectivity and trade facilitation, the intergraded approach is necessary for the execution of the policy framework. For example, more than 70 organizations are aligned with this framework, therefore, only MoUs are not sufficient from the customs' end to facilitate trade. Here, both institutional integration and MoUs are needed. Moreover, the routes are sometimes not viable or cost-effective. Here, instead of just fulfilling other countries' requirements, Bangladesh should be vocal about its concerns and requirements.

4.4 Coordination and Implementation

When a land port is declared, exports and imports can't be facilitated overnight. There are many organizations linked to it. For example, it is important to see if sufficient roads are linked to Chittagong Port. So, internal connectivity (Roads, capacity) should be increased. Coordination in decision-making in these institutions is also necessary. There are mentions of physically challenged people and women and children in consecutively 3.16 and 4.4 points. Regardless of these, there are fewer implementations in practical settings. In the case of other developed countries, there are medical facilities and roads designed for the movement of people having special needs.

4.5 Inadequacy of appropriate connectivity

Akhaura has a land port, but no evidence of rail connectivity is present. An enhanced rail network is required to make the trade with Nepal, India, and other nations easier. India has already conducted a multimodal transport trial run from Mongla to Tamabil port, where the container arrived by waterway to Mongla and was subsequently transported to Benapol by road. Both seaport and land port were utilized in this manner. Tamabil has also road connectivity to ports. There's a rail network from Khulna to Mongla. But connectivity is needed in the route from Benapol to Mongla. The transport facilities increased in the route of Navaron to Mongla after the construction of the Padma Bridge. Currently, a bridge is constructed targeting Benapol port, sponsored by World Bank. In Changrabandha port,

³⁹<https://www.tbsnews.net/bangladesh/transport/damning-home-ministry-report-uncovers-fare-irregularities-338806>

⁴⁰Skorna, A. C., & Fleisch, E. (2011, September). Loss prevention in transportation to ensure product quality: Insights from the cargo insurance sector. In *IFIP International Conference on Advances in Production Management Systems* (pp. 148-156). Springer, Berlin, Heidelberg.

expansion of the rail network is needed. In the case of Banglabandha port, the mahananda river should be used.

4.6 Time-bound action plan for executing the policy

There are numerous topics covered by the National Integrated Multimodal Transport Policy of 2013. Even so, there is no clear plan in place to carry out the policy. For the appropriate implementation of the policy, a detailed time-bound action plan is very much crucial.

4.7 Management of the maintenance of road

Due to the movement of heavy trucks, roads are damaged. Therefore, the capacity of the roads should be increased. Highway police and other security forces should develop their capability to maintain any disruptions. Fair representation of ethical ground is missed at the ground level.

4.8 Coordination of various modes of transport

In Bangladesh, there is a lack of integration between the various types of transportation. However, given Bangladesh's severe resource shortage, the creation of integrated systems, which has recently emerged as a key problem in modern sustainable transport development, is particularly important. Therefore, it is crucial to minimise resource use and combine the best possible forms of transportation. If one views a mode in isolation from other modes, such a blend cannot be achieved. Each mode should be utilised for what it does best in an overall transport chain to increase overall efficiency due to the inherent characteristics of the various modes. Each mode of transportation operates independently in Bangladesh, with no effort made to create effective logistical networks connecting points of origin and destinations that involve various modes. In Bangladesh, each mode of transportation runs independently without any attempt to construct effective logistical chains between the point of origin and the destination that would involve many modes as needed. So from the origin to the final destination, an integrated system using several modes is essential. For instance, if a customer wants to travel by train and water from Barishal to Chittagong via Dhaka, there is no rail connection after reaching Sadarghat Terminal which might provide a comfortable ride for the traveller to Chittagong. It might not be possible for the person to get to Kamalapur and avail of the desired train of Chittagong; due to the traffic jam of old Dhaka. The railway track from Kamalapur to Narayanganj, which is about 1.50 kilometres from Sadarghat and passes via Dayagonj and Gandaria, might be connected to Sadar Ghat. A seamless, convenient, and secure service that offers convenient connections and transfer facilities for goods and passengers will be realised through the integration of various modes.⁴¹

⁴¹ Islam, B. G. D. S. (2015). INTEGRATED TRANSPORTATION SYSTEM IN BANGLADESH: IMPACT ON SOCIOECONOMIC DEVELOPMENT AND NATIONAL SECURITY. *NDC E-JOURNAL*, 14(1), 2-1.

4.9 Link between logistic policy and multimodal transport policy

The similarity between the New Logistics policy and transport policy, which can be a recommendation for future adjustment is the logistics cost. There is a report on the logistics sector published in 2019. The report showed that the logistics cost of the business is about 4.5%- 47% of the profit came from the sale in Bangladesh. The logistics cost is about 4.5% in leather goods and about 47% in the horticulture sector. This logistics cost is an important issue in business competitiveness. After LDC graduation, Bangladesh will get fewer facilities in tariffs, and then the export competitiveness will increase. So, we should focus on the costs across the border, behind the border, and at the border. As the border cost is full in our hands, the cost behind the border and at the border has to be minimized. Here, logistics costs will play a big role if we want to be competitive. Unless we will not be able to cope. 27% - 30% of logistics cost is related to transport. So, the integrated multimodal transport policy has a direct linkage with logistics costs. If the logistics performance can be improved, the cost will be decreased by 25% and the export will increase by 20%. A 1% reduction in the transport cost can increase the export volume by 7.5%. These relationships between transport and export are directly linked to business competitiveness, LDC graduation and trade competitiveness. The quality of infrastructure and transport is assessed with the logistics performance index. So, these are interconnected.

4.10 Too many aspects in one policy

there are too many objectives in the policy. Some main objectives are transport cost reduction to ensure export competitiveness and enhance efficiency in the transport sector. There are also some sub-objectives like social means and poverty reduction. When the objectives were drafted, those were not based on data-driven facts. The logistics modelling or import modelling was not prepared then. The logistics arrangement and transportation value chain of the RMG sector (The number 1 manufacturing sector in Bangladesh) is different from the leather goods' logistics arrangement and transportation value chain. The frozen food/fish sector's logistics arrangement is also different. The current export requirement and future export requirements should be different. Future export requirements have to be based on those sectors which will participate in the future value chain like Bangladesh is looking towards Vision 2041.

5. Recommendations

5.1 Action Plan for the Implementation of the Policy

The National Integrated Multimodal Transport Policy 2013 has covered so many areas. Though it does not have any specific action plan to implement the policy. A detailed time-bound action plan is very much crucial for the accomplishment of the existing policy. Policy mechanisms should be addressed and an action plan/guideline should be developed. In the case of digitalization, need assessment is necessary. While following other countries, the demand/geographical location/connectivity of those countries are needed to be compared with Bangladesh. Case studies should be analysed. The action plan of the ministries should be addressed. In the case of transit fees, environmental charges can be implemented if the hazardous matter is found.

5.2 Introduction to the integrated approach

The intergraded approach is important for the implementation of the policy framework in the case of regional connectivity and trade facilitation. For instance, this framework is supported by more than 70 organizations, therefore just MoUs are insufficient on the part of customs to ease commerce. Both institutional integration and MoUs are required in this situation. Additionally, the routes are not always practical or economical. Here, Bangladesh should express its concerns and demands openly rather than just complying with those of other nations.

5.3 Inland waterway development

Inland water transportation is undoubtedly the most affordable method for moving passengers and cargo anywhere in the world. In many places of the world, inland waterway transportation is becoming more and more common as a substitute form of transportation to assist relieve traffic on other transportation networks (UNCTAD, 2009). However, especially in areas with well-developed alternative modes of transportation, inland waterways only make up a small portion of products carried globally. Additionally, Ashuganj might be designated as a new port of transshipment by Bangladesh (Rahmatullah, 2009), and facilities could be set up there to facilitate the transfer of containers and commodities from IWT to road transport and vice versa.

5.4 Railway development

The rail sector is the key part of an intermodal freight transport system where it has a great role in decreases the pressure on road transport and it is reliable considering other modes of transport because of its dynamics. Fortunately, Bangladesh has a good railway track from the port city to all parts of the country. Now, it needs to develop only. Remarkably, Bektas and Crainic (2007) found that railways are facing the biggest challenge in competing with road transportation by trucking as it is a time factor comparatively.

5.5 Fixation of Transportation Fare

Truck operators are free to set their prices because government authorities have not regulated truck rates. Governmental organisations can negotiate with the Covered-van association to fix fares.

5.6 Appropriate Implementation and Cooperation

Exports and imports cannot be facilitated immediately after a land port has been declared. This is because there are numerous organizations associated with it. For instance, it's crucial to check whether Chittagong port is connected by enough roadways. Consequently, internal connection (roads, capacity) needs to be improved. In these institutions, decision-making must be coordinated. Women, children, and those with physical disabilities are all mentioned in turn between points 3.16 and 4.4. Despite these, there are fewer instances of

implementation in real-world situations. Some hospitals and roads are intended for use by people with special needs in other developed nations.

Given how interconnected many of the players are, coordination should be required. Three authorities—river, rail, and land—need to be facilitated. Additionally, a neutral authority is required to coordinate all the parties. To boost efficiency and create a plan, 5 to 6 ports can be the primary focus of the piloting of this. The development of road connectivity should also take into account the Indian side of the border.

5.7 Identification of the challenges in an appropriate manner

Government should focus on the reduction in transport fees for facilitating exports. Moreover, as it's mentioned in 4.7, according to GoB's objectives, i.e. regional transport facilitation, cost-effective transportation, and trade expansion, the strategies of the government and challenges should be identified. Also, before going for digitalization, it is important to see if the policy instrument is present, for example, it is required to see if there are load control stations on the main roads of Bangladesh and if there are specific policies as well as the capacity to implement these.

5.8 Improvement of logistic facilities/special logistic system

Specific logistic systems or any special mechanisms are not developed for exports and imports. For example, food for domestic consumption such as meat comes in the open air from India instead of being frozen. Therefore, specific mechanisms and regulations should be mentioned in the policy. The pandemic has taught us that supply-centric disruption can emerge and there should be specific measures for emergencies. There should be a clear mention of supply-related transportation in policies. In the case of cargo transportation, there are extortion issues. For analyzing this issue, information from proper stakeholders (business associations, export businesses) should be gathered.

5.9 Monitoring mechanism of the policy

There are cases that the fares are not fixed practically. This can arise due to other issues connected, such as the rise of the market price of diesel. A monitoring mechanism by the government is necessary to address these issues. Specific guidelines under objectives along with a time-bound action plan should be addressed. There are fewer alternatives in Bangladesh's regional transportation. If we had proper government-oriented management in 4 ways of transportation, i.e. air, road, sea, and rail, we would have transportation alternatives. Also, the syndicate issues would be less if government-supported vehicles increased. The inclusion of transportation disruptions in relevant laws is necessary. There is no monitoring mechanism for this in the policies.

Moreover, the output of these policies should be checked from time to time and should be reformed. The implementation/monitoring mechanism should be there and be reviewed regularly so that challenges of these policies can be identified. The other policies' formal structure can be reviewed to find ideas for implementation. The objectives of the ministries should be specified.

5.10 Development of port connectivity

Increasing road connectivity from ports is necessary to improve regional connectivity. In addition, the rail and water routes from various ports must be improved. For instance, Akhaura has a land port but no apparent rail connectivity. An enhanced rail network is required to make the trade with Nepal, India, and other nations easier. India has already conducted a multimodal transport trial run from Mongla to Tamabil port, where the container arrived by waterway to Mongla and was subsequently transported to Benapol by road. Both seaport and land port were utilized in this manner.

5.11 Management of road maintenance

Roads are damaged as a result of large vehicle movement. As a consequence, road capacity should be improved. Highway police and other security forces should improve their ability to maintain any disruptions.

5.12 Digitalization

For Bangladesh, digitalization is crucial. The truck owners association and freight board will be connected by the digital freight system. Truck and train tracking systems could bring in a new dimension. Other crucial factors include the use of ICD-based solutions, advanced traffic signalling, and road signal systems. The wait time at toll booths can be reduced using a prepaid toll system. The clearance time at the port will be shortened if there is a procedure in place for submitting the IDB or bill of entry within three days. For the clearance process to proceed quickly, the entire system must be transparent. The selection criteria for the physical examination have a problem as well. Lower clearance times will result from the collection of all fees.

5.13 Importance of National Logistic Policy

The logistics strategy of a State affects how effectively import and export operations work. A state's turn-up profit will steadily rise with a cohesive structure among the logistics, import, and export sectors controlling the process of product delivery. Logistics is the term used to describe the movement and distribution of commodities from the point of initial manufacturing to the final consumer destination. The framework that establishes how a State's logistics process, including infrastructure development, customs, transportation, and trade policy, will effectively function is known as a national logistics policy. The lack of legislation surrounding logistics hinders the entire EXIM process and causes bottlenecks in both shipping and the process of delivering goods. There are laws regarding logistics in many countries, and some are trying to pass laws in this area. Bangladesh may also implement a national logistics policy for the benefit of all parties involved, to lessen losses brought on by improper logistical preparations in the EXIM process, and to protect the domestic economy from continuous inflation.⁴²

⁴² <https://www.thedailystar.net/law-our-rights/news/the-necessity-national-logistics-policy-bangladesh-3098396>

6. Recommendation Matrix

Table 12 Recommendations for future

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
Chapter One: Background of the Policy	<p>1.4 The worldwide growth of intermodal freight transport is characterized by several key factors:</p> <p>1.4.1 The need to reliably and flexibly respond to changing customer requirements with seamless and integrated coordination of freight and equipment flows through various modes at minimum costs and time;</p> <p>1.4.2 Increasing freight movement requiring freight integrators e.g. container depots, freight stations, and logistics parks;</p> <p>1.4.3 Meeting the growing needs of inter-country freight transportation; and</p> <p>1.4.4 Constraints on and coordination of infrastructure capacity, including policy and regulatory issues, as well as better management of existing infrastructure and broader considerations on future investment in new infrastructure.</p> <p>1.4.5 Consideration of adaptation issues with the inter-country system</p>	N/A	<ul style="list-style-type: none"> Introduction of a time-bound/ contractual action plan for Increasing freight movement requiring freight integrators e.g. container depots, freight stations, and logistics parks 	<p>A Multimodal Transport Operator, or MTO, is a legal person or organization constrained by agreements to carry commodities legally and properly from one location to another. As a result, the contract specifies the precise time by which the items must arrive at their destination. The items must be transferred correctly, and MTO is entirely responsible and accountable if they are not.</p>
Chapter Two The Objective of the Policy and Other Important Issues	<p>2.1 Integration Strategies in the Light of Integrated Multimodal Transport Policy</p> <p>2.1.1 Integration within and between different modes of transport: To ensure that each mode contributes its full potential and people can move easily between them;</p> <p>2.1.2 Integration within the environment: To ensure that transport choices support a better environment;</p> <p>2.1.3 Integration with land use planning: To support more sustainable travel choices and reduce the need to travel through coordinated transport and physical planning at the national, regional and local levels; and</p> <p>2.1.4 Integration with policies for education, health, economic growth, gender and social equity and poverty reduction: To ensure that transport helps to make a fairer, more inclusive society.</p>	N/A	<ul style="list-style-type: none"> Spearhead the national transportation industry towards reaching high-income nations. Aligning the duties of State government and local governments with the Ministry of Transport. Conduction of a complete evaluation of the present governance framework for inland and coastal waterway management. 	<ul style="list-style-type: none"> Separate action plan for implementation of the objectives Assigning a single monitoring authority for following up on the progress

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	<p>2.2 Objectives of the Policy</p> <p>2.2.1 Reduce the cost of transporting goods, to make goods and services within Bangladesh less costly;</p> <p>2.2.2 Aid export competitiveness, through lower transport costs;</p> <p>2.2.3 Improve safety;</p> <p>2.2.4 Reduce accident rate;</p> <p>2.2.5 Take advantage of Bangladesh’s geographical position to trade in transport services and induce efficiency in the transport sector;</p> <p>2.2.6 Reduce the worst environmental effects of transport;</p> <p>2.2.7 Ensure that transport meets social needs in terms of cost accessibility to all sectors of society;</p> <p>2.2.8 Improve integration of the overall transport network and foster measures to make interchange between modes easier;</p> <p>2.2.9 Reduce the need for travel by better land use planning;</p> <p>2.2.10 Use transport as a means to assist poverty reduction;</p> <p>2.2.11 Improve fuel and energy security; and</p> <p>2.2.12 Increase alternative options for passenger and freight transport.</p> <p>2.3 Policy Emphasis</p> <p>2.3.1 Adopting Strategies for integrated transport policy;</p> <p>2.3.2 Ensuring best utilization and maintenance of existing assets and infrastructure;</p> <p>2.3.3 Encouraging more investment in rail and inland water transport;</p> <p>2.3.4 Adopting integrated and interchange between modes of transport;</p> <p>2.3.5 Improving regional connectivity;</p> <p>2.3.6 Fostering the role of multimodal transport operators (MTOs);</p> <p>2.3.7 Setting specific targets for improving air quality, road safety, public transport provision and efficiency, and road traffic growth reduction;</p> <p>2.3.8 A firm commitment from the government to provide adequate levels of funding;</p> <p>2.3.9 Greater private sector participation in the sector;</p>		<ul style="list-style-type: none"> Ensuring active participation of state/local governments, industry players, and the general public in public transportation planning and development. 	

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	<p>2.3.10 Upgrading traffic management;</p> <p>2.3.11 Innovative funding mechanisms, including road user charging and levies to fund road maintenance and proper and efficient use of Road Fund;</p> <p>2.3.12 Establishing rational tariff for international traffic to ensure quality service in regional connectivity;</p> <p>2.3.13 Ensuring physical and operational integration between different modes of transport;</p> <p>2.3.14 Establishing a more rational regulatory framework;</p> <p>2.3.15 New coordinating mechanisms to advise on integration at the national level and act as a force for change;</p> <p>2.3.16. Meeting the transport needs of women and girl-children;</p> <p>2.3.17 Applying digital technology in the Management of integrated transport policy</p> <p>2.3.18 Improved research, education, training and technology to support integrated transport objectives.</p> <p>2.3.19 Limiting the damage to roads through enforcement at axle load control stations on highways;</p> <p>2.3.20 Modernizing dry ports to enhance efficiency in the management of freight and passenger movement; and</p> <p>2.3.21 Bringing navigability of rivers through enforcement, removing encroachment of river banks, permanent stopping of river pollution, upgrading of river ports and ensuring an environment conducive to transportation through river ports.</p>			
<p>Chapter Three Policies for sub-sectors</p>	<p>3.1 Railways</p> <p>3.1.1 Upgrading infrastructure of Bangladesh Railway;</p> <p>3.1.2 Improving inter-city service quality, timetable and capacity;</p> <p>3.1.3 Increasing container movement efficiency and capacity;</p> <p>3.1.4 Establishing more inland container depots in harmony with the railway network;</p> <p>3.1.5 Releasing pressure on roads by enhancing service quality for passengers through close coordination with other modes</p> <p>3.1.6 Developing multimodal corridors between major economic centres which give priority to freight and highspeed network for passengers;</p>	N/A	<ul style="list-style-type: none"> Provisions to make moving freight easier, and upgrade the rail infrastructure near and inside ports. 	<ul style="list-style-type: none"> Introducing Rail service liberalization to gradually support a multi-operator environment. Inclusion of provision to maximize the use of rail, and simplify transportation regulations and procedures such as customs clearance.

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	<p>3.1.7 Establishing technical harmonization and interoperability between various logistics and systems, including regional traffic, particularly for rail-based container movement;</p> <p>3.1.8 Reorganizing the organization into lines of business with a focus on operations in a multimodal environment;</p> <p>3.1.9 Establishing regional links, including those of Trans- the Asian Railway, to facilitate trade in goods and services;</p> <p>3.1.10 Corporatizing BR to bring in efficiency and modern business practices;</p> <p>3.1.11 Planning for financing and preparing projects to achieve the objectives;</p> <p>3.1.12 Enhancing the operating capacity of Bangladesh Railway alongside improving quality of service;</p> <p>3.1.13 Extending rail service to the doorsteps of people through the expansion of the rail network in all regions of the country;</p> <p>3.1.14 Introducing modern system (Electric traction, ticket punching, chord line, monorail, etc.); and</p> <p>3.1.15 Existing dual gauge system impedes uninterrupted travel. Gradual conversion of dual gauge with subsequent conversion to broad gauge for increasing speed and enhancing comfort.</p>			<ul style="list-style-type: none"> Improving intermodal connectivity between rail and roads to encourage the switch from roads to rail.
	<p>3.2 Inland Water Transport</p> <p>3.2.1 Increasing government allocation for dredging;</p> <p>3.2.2 Applying advanced technology along with introducing modern management and developing skilled human resources in dredging;</p> <p>3.2.3 Modernizing hydrographic survey to provide updated information on waterways of all classes;</p> <p>3.2.4 Investing in existing river ports to improve cargo and passenger handling;</p> <p>3.2.5 Investing in existing river ports to improve interchange between water transport and other modes;</p> <p>3.2.6 Investing in new port to better serve increasing passenger and bulk cargo needs;</p> <p>3.2.7 Providing door-to-door service in passenger and freight movement through coordination with cargo operators and other transport operators;</p>	N/A	<ul style="list-style-type: none"> Addition of an action plan for introducing modern management and developing skilled human resources in dredging 	<ul style="list-style-type: none"> Inclusion of a follow-up mechanism for the regulatory agencies and updating regulations in the sector

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	<p>3.2.8 Constructing inland container depots to facilitate freight movement through waterways from seaports;</p> <p>3.2.9 Enhancing efficiency and safety of country boats by modernizing engine-driven country boats and by using reversible gear-fitted country boats;</p> <p>3.2.10 Improving navigational aids and vessel tracking;</p> <p>3.2.11 Rationalizing regulatory agencies and updating regulations in the sector;</p> <p>3.2.12 Strengthening research into more fuel-efficient vessels;</p> <p>3.2.13 Introducing digital techniques in ensuring better service in water transport;</p> <p>3.2.14 Ensuring uninterrupted movement of inland water transports;</p> <p>3.2.15 Updating protocol for transit and trade to increase trade and modernize inland water transport;</p> <p>3.2.16 Introducing water buses to provide door-to-door service to people.</p>			
	<p>3.3 Road Transport</p> <p>3.3.1 Attaching highest priority on improved road maintenance;</p> <p>3.3.2 Paying rational user charges by roads users for using quality roads;</p> <p>3.3.3 Making the best use of existing roads by improving traffic management measures;</p> <p>3.3.4 Promoting carefully targeted capacity improvements to address existing congestion on the network;</p> <p>3.3.5 Conducting full social and environmental appraisals of road projects with sustainable action plans to mitigate adverse effects of road building;</p> <p>3.3.6 Empowering concerned agencies and ensuring transparency in their activities to prevent illegal encroachment;</p> <p>3.3.7 Increasing human resources in Bangladesh Road Transport Authority (BRTA) and other related agencies on a priority basis;</p> <p>3.3.8 Earmarking road projects for private sector participation;</p>	N/A	<ul style="list-style-type: none"> FOR Motivating people to learn about road safety, the addition of some specific action plans 	<ul style="list-style-type: none"> Where possible, increasing the infrastructure for rail and roads to facilitate connectivity for hinterland logistics.

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	<p>3.3.9 Ensuring strict control on axle load limits through the installation of axle load stations and bringing transparency in their operations;</p> <p>3.3.10 Motivating people to learn about road safety;</p> <p>3.3.11 Applying modern technology to the transport system.</p>			
	<p>3.4 River Ports, Dry Ports and Sea Ports</p> <p>3.4.1 Identifying the key infrastructure improvements for the future;</p> <p>3.4.2 Ensuring that multimodal plans are implemented covering ports, barging, dock facilities, customs procedures and associated banking issues so that these all work together;</p> <p>3.4.3 Introducing modern procedures to create new employment in this sector, enhance capacity and raise wages;</p> <p>3.4.4 Developing relationship with trade unions based on mutual trust;</p> <p>3.4.5 Increasing capacity and efficiency of Chittagong and Mongla seaports, including consideration of a deep sea port, and ensuring that ports are fully connected by rail and inland water transport;</p> <p>3.4.6 Developing ports as a gateway for freight movement among neighbouring countries;</p> <p>3.4.7 Streamlining customs procedures and regulations in line with the requirements for the introduction of multimodal transport;</p> <p>3.4.8 Introducing new legislation covering the documentary requirements and obligations for multimodal transport operations, including insurance provisions needed to cover all risks;</p> <p>3.4.9 Improving regulatory control of shipping using Bangladesh ports and waters;</p> <p>3.4.10 Expanding the capacity of Chittagong Port and improving its operational efficiency through greater private sector participation;</p> <p>3.4.11 Fostering shrimp and fish export industry through improvements to operations at Mongla Ports;</p> <p>3.4.12 Making the best utilization of the potential of Mongla Port through inland water transport and rail connections for general cargo and containers;</p> <p>3.4.13 Following International Maritime Organization (IMO) protocols and conventions to prevent marine pollution;</p>	N/A	<ul style="list-style-type: none"> Enhance, integrate, and expand the airport, seaport, inland port, industrial areas, and hinterland links in addition to rail and road connections. To expand ports and provide logistics services, adequate hinterland facilities must be provided. 	N/A

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	<p>3.4.14 Utilizing local and foreign expertise and investment to increase port capacity and efficiency;</p> <p>3.4.15 Ensuring safe berthing of ships by dredging channels to increase navigability;</p> <p>3.4.16 Promoting Bangladesh's competitiveness by encouraging reliable and efficient distribution and access to markets;</p> <p>3.4.17 Enhancing environmental and operational performance by encouraging the provision of multimodal access to markets;</p> <p>3.4.18 Making the best use of the private sector for investment and operations;</p> <p>3.4.19 Promoting the best environmental standards in the design and operation of ports; and</p> <p>3.4.20 Creating a database to manage and control vessels.</p>			
	<p>3.5 Air Transportation</p> <p>3.5.1 The increasing demand for rapid distribution of goods is gradually growing and putting pressure on air freight services and in turn on airports and associated infrastructure. The rapid growth of air cargo services and their wider economic, environmental and social significance require further examination. The government will commission new research to formulate future policies on the air freight industry. The research will:</p> <p>3.5.1.1 Assess the current development of the sector, including its economic importance and wider impacts;</p> <p>3.5.1.2 Provide a better basis for forecasts of its future growth and the implications for demand for services and market change;</p> <p>3.5.1.3 Support the development of the new national airports' policy, which will set the framework within which the industry can plan for the future with greater certainty.</p> <p><i>3.5.2 In the meantime the policies for air transport are:</i></p> <p>3.5.2.1 Improvement of cargo handling at Hazrat Shahjalal International Airport and Hazrat Shah Amanat International Airport through the creation of Cargo villages with streamlined procedures to assist export competitiveness particularly aimed at perishable goods;</p> <p>3.5.2.2 Improve access to airports by all modes of transport;</p>	Yes	N/A	N/A

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	<p>3.5.2.3 Immigration services at international airports will be improved through the recruitment and training of staff dedicated to the task, and the introduction of improved IT systems;</p> <p>3.5.2.4 Fostering the operation of more international flights at Chittagong and Sylhet, subject to relevant agreements on commerce and trade between Bangladesh and respective countries;</p> <p>3.5.2.5 Greater private sector participation in the operation of air flights on both international and domestic routes; and</p> <p>3.5.2.6 Operation and expansion of air transportation services through private operators in areas where there are airports under civil aviation</p> <p>3.5.2.7 Modernization and expansion of Cox’s Bazar Airport to develop the tourism sector;</p> <p>3.5.2.8 Introduction of helicopter services with district towns and important places under government and private operators; and</p> <p>3.5.2.9 Greater private sector participation in the activities of CAAB.</p>			
	<p>3.6 Human Resource and Professional Development</p> <p>3.6.1 Commission research into the human resources requirements in the public and private sectors;</p> <p>3.6.2 Identify training needs for Government and agency staff;</p> <p>3.6.3 Encourage training and professional development improvements in the private sector, and</p> <p>3.6.4 Promote the establishment of transport planning and management institutes.</p>	N/A	<ul style="list-style-type: none"> • Creation of a Transport Sector Centre of Excellence (CoE) to handle transportation training and R&D and within existing learning institutions to support transportation-related programs and R&D. • Ensuring that appropriate transportation agencies provide suitable training, upskilling, and skills through training schemes, qualification courses, and certification. 	<ul style="list-style-type: none"> • Creation of a program for managing and operating airports, trains, ports, and land transportation to increase the quality and efficiency of the transportation service sector. • Inclusion of provision for increasing the transport industry's capabilities and knowledge. • Action plan for Raising public awareness of transportation careers as an appealing option that provides a diverse variety of work and business possibilities.

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Chapter Four Cross-cutting issues	4.1 Investment Criteria 4.1.1 Integration- ensuring that all decisions are taken in the context of the integrated transport network development under the NIMTP; 4.1.2 Safety- to improve safety for all transport users; 4.1.3 Economy- supporting sustainable economic activity in appropriate locations and getting good value for money; 4.1.4 Environmental impact- protecting the built and natural environment; 4.1.5 Accessibility- improving access to everyday facilities for the poor and those without a car and reducing community severance; 4.1.6 Poverty reduction- emphasizing projects that have beneficial effects on the poor or in areas of high poverty concentrations; 4.1.7 Social inclusion- meeting the needs of women, the elderly and the physically challenged and providing access to basic health and education facilities.	N/A	<ul style="list-style-type: none"> The adoption of technology and digitalization in transportation will improve current infrastructure and assets, speed up the use of automation, and reduce environmental impact. Prioritization of public transportation connectivity while integrating the development of transportation infrastructure with land use planning. Improve Big Data capabilities at the MoT, other transportation agencies, and local governments. Create an integrated, market-driven aviation expansion strategy. Improvement of collaboration among government agencies, universities, and businesses to utilize research work. 	<ul style="list-style-type: none"> To increase opportunities and engagement for cruise tourism by private local and international cruise operators, ports should optimize their facilities. Establishment of a centralized transportation database, geospatial data, and modelling to aid government agencies in evidence-based and strategic planning. Creation of a centralized, publicly accessible database to facilitate more and better analytics, monitoring, and evaluation.
	4.2 Multimodal Transport Operation 4.2.1 Alignment of domestic legislation, rules and regulations in line with international norms, advocated by the Multimodal Transport Convention of UNCTAD; 4.2.2 Foster the training of Multimodal Transport Operators (MTOs) to undertake the task of the multimodal transport operation, and to provide on-time, door-to-door services; 4.2.3 Support to the private sector transport operators, and freight forwarders as well as to other government and semi-government entities to establish themselves as MTOs' and	N/A	<ul style="list-style-type: none"> Assigning monitoring authority to regulate the progress 	N/A

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	4.2.4 Support a self-registration system among MTOs to regulate their operations in line with international norms, to ensure that Bangladesh is competitive in this area.			
	<p>4.3 Transport Safety</p> <p>4.3.1 Road Safety</p> <p>4.3.1.1 Review the driving test and driver training, to develop a more effective test, and better training techniques and set up an adequate number of training institutes.</p> <p>4.3.1.2 Improve vehicle fitness through better testing and enforcement;</p> <p>4.3.1.3 Improve the quality of road design, and introduce formal safety audits on road projects;</p> <p>4.3.1.4 Increase awareness of the necessity of safer driving using sociological techniques where appropriate;</p> <p>4.3.1.5 Improve road safety education in schools and by parents, by assessing the effectiveness of existing training aids and developing new ones;</p> <p>4.3.1.6 Assess local measures to achieve safer routes to schools, and produce a best practice guide;</p> <p>4.3.1.7 Survey potential measures to ensure better compliance with speed limits on roads;</p> <p>4.3.1.8 Adopt proven measures to improve vehicle safety and to ensure that they give maximum protection to occupants and minimize injury to pedestrians and non-motorized transport;</p> <p>4.3.1.9 Ban unscientific and risky vehicles (such as Nasiman, Kariman, Bhatbhati, Easy Bike, etc.) on National and Regional Highways;</p> <p>4.3.1.10 Outlaw use of mobile phones when driving;</p> <p>4.3.1.11 Fully enforce traffic rules and regulations;</p> <p>4.3.1.12 Campaign on regular basis to improve awareness of drivers and road users about speeding of vehicles;</p> <p>4.3.1.13 Inclusion of traffic rules and Regulations in the school curriculum</p> <p>4.3.1.14 Campaign in the media to improve awareness of the potential dangers of road traffic and high speeds;</p>	N/A	<ul style="list-style-type: none"> • Introduction of a safety star rating system for new and used cars, as well as commercial vehicles. • Using an appropriate monitoring system and certification, make sure that international safety standards are being followed. • Enhancing vehicle security and safety features to improve the driving experience. • Through efficient and all-encompassing user behaviour improvement programmes, creative ideas, and techniques, raising awareness of safety mobility issues and changing behaviour. • Building research capacity in traffic safety measures. 	<ul style="list-style-type: none"> • Enabling requirements and regulations that prioritize active and non-motorized transportation by making active mobility a major aspect of all transport modes. • Establishment of a standard or set of guidelines for observing, enforcing, and auditing the security and safety of transportation hubs using a centralized system. • Setting safety standards for land transportation infrastructure, especially for heavy goods vehicles (HGVs).

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	<p>4.3.1.15 Regulate the transport of hazardous goods by road with the requirement of prior notification;</p> <p>4.3.1.16 Use data on accidents at the black spots of the Highways to design safety measures;</p> <p>4.3.1.17 Improve accountability of the concerned transport owners, drivers, helpers and officials responsible for road transport operations; and consolidate the legal reform implications of the above acts;</p> <p>4.3.1.18 Include the above issues into pertinent laws;</p> <p>4.3.1.19 Encourage investment in the bus industry. This will, on the one hand, increase public transportation and, on the other hand, ensure the availability of adequate safe transport;</p> <p>4.3.1.20 Install safety barriers at bus bays, bus stops, and growth centres and provide foot over-bridge, and road crossing facilities and encourage road users to use them to reduce the risk of road fatality; and</p> <p>4.3.1.21 Provide truck parking and truck terminal at a suitable location near highways for the resting of truck drivers.</p>			

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	<p>4.3.2 Railway Safety</p> <p>4.3.2.1 Take measures to strengthen human resources responsible for rail safety;</p> <p>4.3.2.2 Ensure that all level crossings on National and Regional Highways are fitted with some form of physical protection;</p> <p>4.3.2.3 Ensure that road-over bridges are constructed at level crossings on National and Regional Highways in accordance with the Road Master Plan;</p> <p>4.3.2.4 Create awareness among people, especially in rural areas of the potential dangers at level crossings;</p> <p>4.3.2.5 Develop a comprehensive safety system through the strengthening of the railway security force;</p> <p>4.3.2.6 Ensure coordination between the Roads and Highways Department, Local Government Division, District Councils and other concerned agencies on level crossing issues;</p> <p>4.3.2.7 Remove all illegal structures adjacent to railway stations and railway lines and recover railway property;</p> <p>4.3.2.8 Create mass awareness about the maintenance of railway tracks, rolling stock and railway infrastructure; and</p> <p>4.3.2.9 Strengthening government inspection of Bangladesh Railway.</p>			
	<p>4.3.3 Inland Water Transport Safety</p> <p>4.3.3.1 Setting up Deck Engine Personnel Training Center (DEPTC) for the training of engine and deckhands;</p> <p>4.3.3.2 Ensuring that water vessels are designed and built following correct design through modernization of design checking and involvement of naval architects;</p> <p>4.3.3.3 Reforming and improving vessel registration system;</p> <p>4.3.3.4 Improving regulations and enforcement to prevent overloading of vessels;</p> <p>4.3.3.5 Ensuring that vessels are provided with sufficient life-saving devices;</p> <p>4.3.3.6 Ensuring adequate vertical clearance in inland waterways for safe passage of vessels and providing Low Tension Lines and High Tension Lines to safe heights;</p>	Yes	N/A	N/A

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	<p>4.3.3.7 Ensuring the addition of necessary equipment including a Differential Global Positioning System to use an electronic hydrographic chart;</p> <p>4.3.3.8 Ensuring the use of Digital Mobile Radio and wireless technology to ensure uninterrupted communication from bank to bank, vessel to bank and vessel to vessel; and</p> <p>4.3.3.9 Strengthening marine guards/marine police and establishing police stations for waterways to ensure the security of passengers and freight.</p>			
	<p>4.4 Women, the Elderly and Physically Challenged and Transport</p> <p>4.4.1 Greater emphasis on integrated transport, including more accessible buses, and better information;</p> <p>4.4.2 Improving the quality of the pedestrians' environment, e.g., making it easier for women, children, the elderly and the physically challenged to move;</p> <p>4.4.3 Giving priority to mass transport projects while considering government investment projects</p> <p>4.4.4 Use of ramps at railway stations and bus stops to aid access and facilitate waterway transportation through some special arrangements.</p> <p>4.4.5 Reservation of seats for elderly people, children, and physically challenged people;</p> <p>4.4.6 Ensuring a more secure system of mass transport through improving security at stations.</p>	N/A	<ul style="list-style-type: none"> Inclusion of security measures to ensure the safety of women 	N/A
	<p>4.5 Private Sector Participation</p> <p>4.5.1 Following the guideline for private sector investment, the Government will encourage private sector participation in the following areas:</p> <p>4.5.1.1 Encouraging private sector participation in acquiring railway rolling stock, particularly high-speed wagons and new generation locos through innovative leasing schemes;</p> <p>4.5.1.2 Encouraging private sector participation in individual passenger train routes, particularly for air-conditioned and first-class rolling stock;</p>	N/A	N/A	Inclusion of appropriate authorities for better logistic support

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	<p>4.5.1.3 Establishing a separate agency under the Ministry of Shipping for container handling;</p> <p>4.5.1.4 Encouraging private sector participation in the operation of inland water depots and investment in equipment;</p> <p>4.5.1.5 Short-term, mid-term and long-term contracts for river maintenance dredging;</p> <p>4.5.1.6 Continuing and expanding initiatives already taken to involve the private sector in the port sector;</p> <p>4.5.1.7 For better management of the air transportation sector, the policy is to split the Civil Aviation Authority, of Bangladesh into two agencies: Civil Aviation Authority as a regulatory body and Airport Development Authority as a service-providing body; the Regulatory Body will monitor air transportation and the overall security of the airport and implement the relevant rules and regulations. On the other hand, Service Providing Body will develop all the airports and will be responsible for the management of the airport providing services for the passengers;</p> <p>4.5.1.8 Entrusting an integrated agency with the responsibility of airport security, and the Civil Aviation Authority will be responsible for coordination;</p> <p>4.5.1.9 Encouraging private sector investment in building bridges, expressways, flyovers and bypasses;</p> <p>4.5.1.10 Giving priority to the private sector in dredging for improvement of navigability and conservation of rivers by ensuring full utilization of earth/sand (spoils). In order to involve the private sector in the development of highways, public sector funds should be used in the form of equity and/or grant so that projects become more attractive to the private sector.</p> <p>4.5.2 Many infrastructure facilities and services have monopoly characteristics. There is a need for the formulation of laws, rules and regulations to ensure that the operator does not exploit its market power to serve its ends.</p> <p>The Policies to achieve this objective are:</p> <p>4.5.2.1 Regulatory practices will be improved so that the transport modes are truly competitive and responsive to user demand;</p>			

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	<p>4.5.2.2 Regulatory practices will address consumer grievances such as quality of services, safety etc;</p> <p>4.5.2.3 The regulator will also be required to act as an arbitrator in disputes between service providers or between the concessionaire and the concession authority; and</p> <p>4.5.2.4 To ensure that the regulatory authorities function freely.</p>			
	<p>4.6 Social Equity and Poverty Reduction</p> <p>4.6.1 Labor-intensive methods in the construction and maintenance of transport projects will be encouraged where appropriate;</p> <p>4.6.2 Transport facilities and services will be designed in future to take into account the special needs of women, children, the elderly and physically challenged people;</p> <p>4.6.3 Programs will be developed to ensure that professionals, administrators and decision-makers in all transport sectors, deliver services that are attractive and usable by women and girl-children;</p> <p>4.6.4 Environmental, social and resettlement impact analyses will be made mandatory for all significant transport projects. Mitigation measures will be identified and implementation will be monitored, and</p> <p>4.6.5 Initiatives will be taken to ensure that transport projects and services are designed to maximize benefits to the poor.</p>	Yes	N/A	N/A
	<p>4.7 Regional Cooperation</p> <p>4.7.1 The Government will seek cooperation from neighbouring countries in the regional issues of water management and regional transport that can improve the efficiency of multimodal transport in Bangladesh.</p> <p>4.7.2 Bangladesh will continue to be an active member of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and will promote cooperation in trade, transport, communications, and people-to-people contact;</p> <p>4.7.3 The Government recognizes that future cooperation under BIMSTEC requires the development of key infrastructure, in particular transportation and communication linkages, to facilitate tourism, trade and investment and accordingly agreed to strengthen</p>	N/A	<ul style="list-style-type: none"> •Encouraging the implementation of international standards and the ASEAN Economic Community Blueprint. •Expediting the implementation of international and regional agreements that facilitate transportation. •Implementation of all air transportation agreements with ASEAN and the Dialogue Partners. Continue to represent Bangladesh in international forums. 	<ul style="list-style-type: none"> •Establishment of effective communication channels between Bangladeshi ports and ports throughout Asia and ASEAN. •Establishment of proper cross-border connectivity

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>and accelerate cooperation for developing concrete project proposals;</p> <p>4.7.4 Government is also committed to considering the recommendation of the SAARC Regional Multimodal Transport Study (SRMTS) concerning transport connections by road, rail, and IWT, and will implement those which are in the national interest as well as serve the interests of other countries in the region;</p> <p>4.7.5 Government will take appropriate steps to improve transport routes of the Asian Highway, Bangladesh-China-India-Myanmar Forum, and South Asia Subregional Economic Cooperation (SASEC).</p> <p>4.7.6 The Government will continue to promote the development of the Asian Highway and Trans-Asian Railway in Bangladesh through cooperation with neighbouring countries and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP);</p> <p>4.7.7 The Government will take steps to improve regional cooperation on water management not only for flood control but also for ensuring a regular and steady flow in the major rivers which can assist navigation;</p> <p>4.7.8 Standardize road signs in line with the Vienna Convention of Road Signs and Signals, 1968 to facilitate the safe movement of regional traffic;</p> <p>4.7.9 Government will investigate ways to minimize the transshipment of cross-border goods, reduce transport costs; and</p> <p>4.7.10 Government will take rational steps to provide improved rail links with neighbouring countries.</p>			
	<p>4.8 Environment-Friendly Efficient Transport</p> <p>4.8.1 In order to discourage the use of cars, innovative measures will be promoted for bus services so that they are cleaner, more comfortable, and more reliable, and hence they are considered an attractive alternative to cars;</p> <p>4.8.2 Innovative measures will be encouraged so that bus routes can be franchised to private sector operators in a transparent way that meets environmental objectives;</p> <p>4.8.3 Encouraging CNG-driven vehicles;</p>	N/A	<ul style="list-style-type: none"> • Acceleration of the Implementation of Low Carbon Mobility Initiatives. • Introduction of a fuel economy policy and putting it into action for environmental safety 	<ul style="list-style-type: none"> • Introduction of The Low Carbon Mobility Blueprint Action Plan • Inclusion of provisions and measures for energy-efficient vehicles (EEVs) for the people as their primary mode of transportation. • Creation of the infrastructure for EEVs

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>4.8.4 Solar-powered refrigeration units for trucks carrying perishable items will be encouraged;</p> <p>4.8.5 Adequate waste management system needs to be ensured to accommodate waste matters from vessels to prevent it from being dumped in waterways;</p> <p>4.8.6 Laws must be enforced in case of dumping of industrial wastes through sewerage lines or direct throwing of solid wastes by people and any other organizations; and</p> <p>4.8.7 Environmental standards for road transport will be established including rigorous emission standards in Motor Vehicle Act;</p>			<p>that is environmentally friendly and profitable, such as EV charging stations as well as Consideration of different EEV models and offer incentives to EEV producers and users.</p>
	<p>4.9 Transport and Land Use</p> <p>4.9.1 Transport and land use are closely interrelated issues. Since land use generates transport movements, the transport system must be planned well to handle the needs that various land uses generate. The research will be undertaken to assess the special impacts of transport on land use in Bangladesh so that:</p> <p>4.9.1.1 Land use policies can be adopted that encourage local services, reducing the need to travel;</p> <p>4.9.1.2 Transport planning can be integrated with land use planning, especially in urban areas, including Upazila towns. The Government will provide instructions to responsible local government agencies to draw up town and city transport plans accordingly; and</p> <p>4.9.1.3 Implementation of Transport Policy can integrate with the government's Land Use Policy 2001.</p> <p>4.9.2 In addition, the following issues will be considered:</p> <p>4.9.2.1 Any proposal for change in land use will not be approved unless the traffic impact analysis is done and mitigation measures to address the adverse impacts due to increased transport demand are proposed;</p> <p>4.9.2.2 Massive improvement activities are to be implemented adjacent to metro stations and other public transport stations; and</p> <p>4.9.2.3 Steps will be taken to provide barriers and service lanes to separate local traffic from long-distance traffic.</p>	Yes	N/A	N/A

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
Chapter Five Policy Initiative within the NIMTP Framework	5.1 Pedestrians 5.1.1 The Government will launch a ‘Pedestrian First’ program designed to ensure that all concerned agencies remove unauthorized encroachment from footpaths in urban areas; 5.1.2 Promotion of road safety; 5.1.3 Construction of pedestrian-friendly footpath including widening of the footpath; 5.1.4 Improving footway, maintenance and cleanliness; 5.1.5 Provision of ramps to facilitate access for the physically challenged; 5.1.6 Provision of more protected pedestrian crossings, where pedestrians want to cross; 5.1.7 Reducing waiting times for pedestrians at traffic signals and giving them priority in the allocation of time at junctions where this supports more walking; and 5.1.8 Introducing traffic calming and sound-reducing measures.	Yes	N/A	N/A
	5.2 Non-motorized Transport 5.2.1 Provision of separate lanes for non-motorized traffic; 5.2.2 Gradual restriction on movement of non-motorized traffic including rickshaws to feeder roads connecting main roads; 5.2.3 Provision of separate bicycle lanes on urban roads; 5.2.4 Ensure the use of lights and reflectors on rickshaws; 5.2.5 Improvement of design of rickshaws so that they can be easily run with little manual labour; 5.2.6 Selective bans on the use of rickshaws on roads more suited to bus operations;	Yes	N/A	N/A
	5.3 Urban Transport 5.3.1 The Government will strengthen concerned institutions for transport [City Corporation as well as Dhaka Transport Coordination Authority (DTCA) and Bangladesh Road Transport Corporation (BRTC)] to facilitate more coordinated planning and take more effective measures in the light of ground reality; 5.3.2 Strategic Transport Plans will be drawn up for all major cities, in which the role of public transport will be emphasized. Such plans	N/A	<ul style="list-style-type: none"> Plans for encouraging people to use public transportation instead of their cars. Greening the transportation network is part of the effort to repair the urban environment's damage and create a sustainable city. 	<ul style="list-style-type: none"> Development of an Effective Communication, Education and Public Awareness (CEPA) to Create Behavioural Change Towards Practices of Sustainable Transport Placement of transit-oriented developments

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>will also make recommendations for institutional reforms to enable the successful implementation of plans;</p> <p>5.3.3 Projects that are not consistent with the ‘Strategic Transport Plan’ approved by DTCA will not be considered for implementation by city corporations in Dhaka City or by any other agency;</p> <p>5.3.4 Transport-related institutions will ensure that adequate coordination is effected between rail, water and road-based modes of city transit systems and these institutions will engage in frequent public consultation so that public opinions are reflected in transport planning;</p> <p>5.3.5 Urban transport plans will prioritize mechanized traffic management to make the best use of existing infrastructure and introduce an Intelligent Transport System (ITS in the long run);</p> <p>5.3.6 The Government will grant powers to appropriate institutions to franchise routes for bus operation and to secure adequate facilities for bus operations;</p> <p>5.3.7 Steps will be taken to improve public transport by increasing high-capacity buses and by improving its services. Along this line, priority will be given to large buses, articulated buses and double-decker buses so that their number increases;</p> <p>5.3.8 Steps will be taken to introduce quality taxicab services;</p> <p>5.3.9 Steps will be taken to create public awareness to limit the use of private cars and to increase the use of public transport;</p> <p>5.3.10 The Government, if necessary, will establish an agency to monitor whether bus route franchising is serving the public interest;</p> <p>5.3.11 Transport plan will be prepared to ensure integrated transport services, eliminating uneven competition between different modes of transport;</p> <p>5.3.12 Different transport agencies will introduce integrated ticketing systems for urban transport to ensure coordination between different modes;</p> <p>5.3.13 The Government will provide guidelines to concerned agencies in order to prepare appropriate plans to ensure transport facilities and services in urban areas;</p>		<ul style="list-style-type: none"> • Provisions to increase the productivity of the transportation industry, and educate operators and service providers about the importance of prioritising quality service delivery. • Creation of communication channels to spread the word about the advantages of taking public transportation. 	<p>(TOD) near public transportation hubs and in urban areas.</p>

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>5.3.14 The Government will attach the highest priority to Mass Rapid Transit (MRT) to reduce traffic congestion in Dhaka City;</p> <p>5.3.15 To reduce traffic congestion, the Government will start Mass Rapid Transit/Bus Rapid Transit lines on a priority basis;</p> <p>5.3.16 In order to limit the entry of traffic to busy and congested parts of the city, concerned agencies with the approval of the Government will consider introducing regulatory measures (e.g., charging levy);</p> <p>5.3.17 The Government will prepare parking policies. The policy will have the provision for the pricing of short-term and long-term parking, both on-street and off-street. The policy will also include rates of parking charges to be recovered from vehicles. Concerned agencies will be given powers to control on-street parking; and</p> <p>5.3.18 While approving plans for building for commercial, residential or educational purposes, the approving authority will require that sufficient car parking and pick-up and drop areas are provided within the boundary of the property.</p>			
	<p>5.4 Public Transport</p> <p>5.4.1 Better and dependable mass transport system will be gradually developed in cities;</p> <p>5.4.2 Improved and high occupancy buses will be added to the public transport system;</p> <p>5.4.3 Routes of the public transport system will be designed to meet the needs of citizens;</p> <p>5.4.4 Low-income people will have access to public transport system;</p> <p>5.4.5 Necessary measures will be taken to improve the public transport system through route franchising;</p> <p>5.4.6 Bus Rapid Transit (BRT) and Mass Rapid Transit (MRT) systems will be introduced as per the recommendation of the Strategic Transport Plan (STP) and transit authorities will be created to run these transit systems;</p> <p>5.4.7 Digital ticketing system will be introduced in the public transport system for easy transfer from one mode to another;</p>	N/A	<ul style="list-style-type: none"> • Prioritization of Public Transport Network As Fundamental Structure In Charting Out Sustainable Spatial And Transportation Growth In Urbanised Areas • Planning public transportation and land use together 	<ul style="list-style-type: none"> • Alignment of the national housing, national urbanization, and national transport policies concerning the long-term planning of urban areas and the public transportation system.

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>5.5 Integrated Public Transport</p> <p>5.5.1 Public transport system will be operated as a network to make it attractive and an alternative to other transport modes. Hence, the policy emphasis will be on the following issues:</p> <p>5.5.1.1 Introduction of thorough tickets for a complete trip by passengers;</p> <p>5.5.1.2 Better facilities at interchanges;</p> <p>5.5.1.3 Better connection and coordination between different services;</p> <p>5.5.1.4 Wider availability and provision of information on timetables, route planning and fares; and</p> <p>5.5.1.5 Introduction of a national public transport information system.</p> <p>5.5.2 Many journeys include an interchange from one mode to another. Hence quick and easy interchange is essential. The adequacy and quality of an interchange within the existing transport infrastructure will be assessed against the following criteria:</p> <p>5.5.2.1 Reliable, punctual and adequate services to provide minimal waiting times at the interchange</p> <p>5.5.2.2 Short walking distances and clear directional signs at interchanges;</p> <p>5.5.2.3 Adequate staff availability;</p> <p>5.5.2.4 Well-maintained infrastructure including public conveniences;</p> <p>5.5.2.5 Good personal security;</p> <p>5.5.2.6 Accessibility;</p> <p>5.5.2.7 Better protection from outdoor weather;</p> <p>5.5.2.8 Instantly readable and relevant information on routes and frequencies;</p> <p>5.5.2.9 Better directional signs between bus stops and between rail and bus stations; and</p> <p>5.5.2.10 Regular cleaning and maintenance;</p>	N/A	<ul style="list-style-type: none"> Ensuring the fact of land use and public transportation are integrated into development guidelines. Assurance of the fact that developments are integrated with the public transportation network to lower the demand for private vehicle travel. 	<ul style="list-style-type: none"> To reduce the need for travel, promotion of self-contained or comprehensive Work-Play-Shop-Stay development concepts.
	<p>5.6 Rural Transport</p> <p>5.6.1 To provide paved connections between all the economic growth centres and the country's road network. Important</p>	Yes	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>destinations in rural areas such as Union Parishad offices, markets, railway and water landing stations, schools, health centres, and social facilities will be connected in phases with the existing road network</p> <p>5.6.2 The Program of bridge and culvert construction on the rural road network will be extended to improve the accessibility of rural people and for generating employment. Adequate gaps and drainage structures should be provided to avoid flooding.</p> <p>5.6.3 To foster a higher level of rural mobility and access to basic transport facilities as well as services. In the medium-term, many of these may continue to be nonmotorized (on roads) and using water transport, e.g. country boats.</p> <p>5.6.4 Nonmotorized transport is especially important in rural areas and special considerations will apply in rural road design, including vehicle segregation and low gradient;</p> <p>5.6.5 A high diversity of vehicles and technologies will be encouraged through appropriate regulations. Transport and rural development policies will be more closely linked to improving economic conditions through improved local markets; labour-based contracting on roads, transport hire facilities, and access to credit.</p> <p>5.6.6 Rural road maintenance management system will be strengthened to ensure the sustainability of the rural road network.</p> <p>5.6.7 Safety of motor vehicles plying on rural roads will be enhanced; and</p> <p>5.6.8 River ports will be gradually connected by road and rail.</p>			
<p>Chapter Six Strategies for Implementing Multimodal Transport Policy</p>	<p>6.1 Institutional</p> <p>6.1.1 The Government will constitute a Cabinet Committee with ministers of the concerned ministries to oversee the implementation of the multimodal transport policy for Bangladesh. The Cabinet Committee will monitor the implementation of targets of the policy and establish new targets from time to time.</p> <p>6.1.2 Roads Division will play the coordinating role in ensuring the implementation of the integrated multimodal transport policy and act as a secretariat to the Cabinet Committee;</p>	N/A	N/A	<ul style="list-style-type: none"> • Inclusion of plans to Increase cooperation with the Ministry of Education (MOE) to educate and promote environmentally friendly behaviour in schoolchildren

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>6.1.3 A National Multimodal Transport Coordination Committee will be constituted to prepare proposals for the implementation and monitoring of the National Integrated Multimodal Transport Policy and will report to the Cabinet Committee. The Cabinet Committee will appoint members of the Multimodal Transport Coordination Committee, including representatives of the private sector.</p> <p>6.1.4 Roads Division will provide secretarial assistance to the National Multimodal Transport Coordination Committee and be responsible for the coordination and sharing of data within the transport sector;</p> <p>6.1.5 The terms of reference of the National Coordination Committee on Multimodal Transport will be to coordinate all agencies involved in multimodal transport to improve efficiency. This will involve the Ministry of Communication (Roads Division and Bridges Division), Ministry of Railways, Ministry of Shipping (including port authorities), Ministry of Civil Aviation and Tourism, Local Finance, Ministry of Planning and Ministry of Home Affairs. New ministry/division will be included, if necessary.</p> <p>6.1.6 Ministry of Communication (Roads Division and Bridges Division), Ministry of Railways, Ministry of Shipping, Ministry of Civil Aviation and Tourism, Local Government Division and Ministry of Commerce will nominate their focal points; and</p> <p>6.1.7 A single independent commission will be constituted to regulate fare structure in the public interest, rescinding the economic regulation of other agencies in the transport sector.</p>			
	<p>6.2 Planned Implementation</p> <p>6.2.1 Problems of transport infrastructure and operations across all modes, including access to ports and airports, will be identified in detail and integrated transport strategies for the country based on the multimodal approach will be developed and implemented.</p> <p>6.2.2 Multimodal transport studies will be undertaken to address the objectives and issues of sustainable development, taking account of forecast demands, and leading to the adoption of investment plans.</p>	N/A	<ul style="list-style-type: none"> • Inclusion of a time-bound action plan in terms of short medium and long term • Implementation of the urban transport plan 	<ul style="list-style-type: none"> • Development of a follow-up mechanism to monitor the progress of the urban transport plan • Assigning a single authority for the monitoring purpose

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	<p>6.2.3 The Government has already prepared a Road Master Plan, Railway Master Plan and Inland Water Transport Master Plan and in future will ensure the development of the following sub-sectoral master plans/strategies/goals;</p> <ul style="list-style-type: none"> i. Transport Safety Strategy ii. Air passenger and freight targets iii. Urban Transport Plans <p>6.2.4 Within the multimodal transport framework, and bearing in mind the recommendation of the above plans, as integrated multimodal transport the investment plan will be drawn up taking into account the</p> <ul style="list-style-type: none"> i. Relative economic costs of various modes; ii. Integration option for the transport network; and iii. Options for the provision of door-to-door services. <p>6.2.5 Action plans to implement the multimodal transport plan will be drawn up to include legal, regulatory and institutional measures to achieve the policy objectives of sustainable multimodal transport. Contradictions within existing policies will be rationalized and enforced through legislative means.</p> <p>6.2.6 Government will continue to support the establishment of Transport Sector Coordination capacity in the Planning Commission and the concerned ministries with capabilities in:</p> <ul style="list-style-type: none"> i. Multimodal transport planning and forecasting; ii. Policy analysis and review; iii. Project appraisal; iv. Monitoring implementation of the NIMTP and sub-sectoral policies; and v. Advanced Geographical Information System, data collection, analyses and support services. <p>6.2.7 Strict implementation of improved project appraisal techniques will be adopted to ensure that primary poverty and social objectives are being met by transport programs as well as economic and environmental concerns. All proposed major transport projects</p>			

Chapter	The National Integrated Multimodal Transport Policy	Unchanged	Proposed Extension	New inclusion
	<p>will be required to include a feasibility study to justify the investment.</p> <p>6.2.8 The Government will promote the implementation of its policy guidelines for private sector participation subject to any capital subsidy ceiling in projects;</p> <p>6.2.9 The scope of project monitoring and evaluation will be widened to test whether investments are meeting economic and social objectives.</p> <p>6.2.10 The advantages of Multimodal Transport will be publicized to concerned organizations.</p>			

Source: Compiled by authors from various sources, KIIs, FGDs

7. Conclusion

Adequate transport infrastructure and services are vital components for sustainable economic and social development. In today's globalized and interdependent world, the development of integrated multimodal transportation systems and networks with regional connectivity and cost-effectiveness is essential for the socio-economic development of any nation.

As countries having efficient transport and communication systems are more suitable to attract investment compared to those with weak infrastructure and services, the transport system in Bangladesh needs to be safe, efficient, clean and cheap. However, an unplanned transport system is damaging towns and cities and harming the environment. Thus, the National Integrated Multimodal Transport Policy 2013 has been prepared following extensive consultations with concerned government agencies and stakeholders to redress this imbalance. Bangladesh's government, through this Policy, has emphasized the importance of developing integrated multimodal sustainable transportation systems by efficiently interconnecting roads, rails, ports (e.g., air, land and sea ports), and waterways.⁴³ Therefore, future planning for the transport sector shall ensure that the system is sustainable and environmentally friendly in the long run.

Being a signatory of Asian highway and Trans-Asian railway networks, Bangladesh should develop its share of road and rail networks for seamless connection with the region and beyond. Furthermore, as a member country of the South Asian Association for Regional Cooperation (SAARC), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), and other regional forums, Bangladesh and other regional countries have shown significant interest to improve transport connectivity among the regional countries for trade, commerce and tourism development purpose.

Geographically, Bangladesh is conveniently located with open access to the sea for ocean shipping which can be best utilized to boost its economy as well as to serve as a regional transportation hub for the land-locked countries (e.g., Nepal and Bhutan) and territories (e.g., northeast India, and some parts of south-western China).

Specifically, India, Nepal, and Bhutan have expressed interest to utilize transport infrastructures (e.g., water, road, rail and ports) of Bangladesh for bilateral trade as well as for transshipment and transit purposes. Furthermore, China has expressed interest to connect its Yungon province with Bangladesh and India through Myanmar via Teknaf of Bangladesh by rails and roads.⁴⁴

For the overall development of all the aspects relevant to the integrated multimodal approach, the National Integrated Multimodal Transport Policy 2013 was published on 26 August 2013. The policy review was conducted by SANEM using in-depth desk research and

⁴³Background of the Policy, The National Integrated Multimodal Transport Policy Unofficial English Version

⁴⁴Md. Shoaib Chowdhury, Developing Integrated Multimodal Transportation Networks in Bangladesh with Regional Connectivity: Key Issues and Challenges, International Conference on Transportation and Development 2016, p 270

in-person interviews with key stakeholders. When assessing the text, the difficulties with implementation, how well the policy might respond to the altering dynamics of the global perspective, and the current international trading climate were considered. In-depth analyses of the transport and the relevant sectors in Bangladesh as well as those of comparable countries like Malaysia, India and China are provided in this essay. The review paper also includes a segment on gender concerns and mainstreaming women traders under the National Integrated Multimodal Transport Policy 2013.

Moreover, the review report provides a thorough analysis of the current National Integrated Multimodal Transport Policy 2013 and lists its main features, goals, subsectors, overarching concerns, institutional policies, and anticipated implementation. The need for substantial investment in the road sector, the current low investment in the railway sector, the underutilization of waterways, the requirement for a sound multimodal transportation planning process, the current lack of collaboration and coordination among ministries as well as public participation, expansion of the capacity of the roads, the lack of funding, the improper application of technology, and intermodal freight transport are just a few of the key points covered in this section. Additionally, there is a further extensive section within the same chapter that compiles a desk analysis of the relevance of the 2013 policy and the evolving dynamics of global trade. The paper outlines the country's inability to properly utilize and benefit from the LDC graduation period and provides information on the strategy for achieving the SDGs. The 8th Five-Year Plan features extensive material on the transportation industry, multimodal transportation in Bangladesh, regional cooperation, and the effects of COVID-19 on the country's total transportation business and trade. Also, there includes a thorough literature study on Bangladesh's whole logistical sector. India, Malaysia and China are two examples of countries with effective multimodal transport policies that support their economies' trading sectors. Consequently, the key lessons learned from the comparator nations are also highlighted.

The study's findings are listed in the fourth chapter of the report. These conclusions were reached after conducting KIIs and FGD. One of the first conclusions is that there is no set rate or fee for moving goods from one location to another during the transportation of goods. Additionally, there have been several instances where products have been reported lost in transit. One of the report's most important conclusions is that the integrated approach, which was one of its goals, is missing. Next, there is a lack of proper connectivity in the nation's transportation network. The inclusion of a time-bound action plan for carrying out the policy's requirements is one of the main recommendations that should be made for the future transportation strategy. For better goods transportation, higher ground security is required; as a result, road maintenance management needs to be improved.

This study includes several recommendations that were the result of extensive consultations with a wide range of stakeholders. The recommendations include developing an action plan for the policy's implementation, introducing an integrated approach to make it easier for people to travel and move goods, placing a high priority on the development of the railway industry, fixing the cost of transportation at the national level, and cooperating appropriately as there are a number of prerequisites for starting a fully operational land port. Additionally, the future policy should include comprehensive guidelines on policy monitoring procedures,

and management of road maintenance. Additionally, the policy has to include measures for port connectivity, improving logistical facilities, and a unique logistic system.

To sum up, the policy paper's review report focuses on the growing integration of all forms of transportation. The paper strives to reduce transportation costs and boost domestic industry's competitiveness in the world market. The policy should be updated to include new requirements to facilitate both domestic and international trading while also taking into account the graduation of LDCs, trade facilitation, and women entrepreneurs.

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Annexe

List of KIIs

Organization/Association	Key informants
Representatives from the Road Transport and Highways Division (1)	<ul style="list-style-type: none"> Md. Anisur Rahman, Joint Secretary, MRT Branch (Additional Charge DTCA & BRT Branch & Connectivity and NA Branch)
B TTC (2)	<ul style="list-style-type: none"> Mamun ur Rashid Askari, Joint Chief S M Sumaiya Zabeen, Deputy Chief
Representative Ministry of Commerce (1)	<ul style="list-style-type: none"> Md. Abdur Rahim Khan, Additional Secretary (Export), Export Wing
BKMEA (1)	<ul style="list-style-type: none"> Mohammad Hatim, Executive President
Bangladesh Land Port Authority (BLPA) (3)	<ul style="list-style-type: none"> Mohammad Jahangeer Kabir, Joint Secretary, Member (Traffic) Md Rezaul Karim, Deputy Director, Admin Md Anisur Rahman, Assitant Director (Traffic)
BIWTA	<ul style="list-style-type: none"> Md. Rofiqul Islam, Director Shormila Khanom, Deputy Director Mr Anis, Assistant Director
Private sector(1)	<ul style="list-style-type: none"> Nusrat Nahid Babi, Transport Specialist, South Asia, the World Bank
Think Tank (1)	<ul style="list-style-type: none"> Dr Kazi Iqbal, Senior Research Fellow, BIDS

Participants of FGD

S.L.	Name and designation	Organization
1	Mohammad Jahangeer Kabir, Joint Secretary, Member Traffic	Bangladesh Land Port Authority
2	Md. Masudur Rahman Bhuiyan, Director (Traffic)	Bangladesh Land Port Authority
3	Md. Hasan Ali, Superintending Engineer	Bangladesh Land Port Authority
4	Md Rezaul Karim, Deputy Director, Admin	Bangladesh Land Port Authority
5	Shamim Shohana, Deputy Director, Traffic	Bangladesh Land Port Authority
6	Mossammat Faizunnahar, Assistant Director, Traffic	Bangladesh Land Port Authority
7	Md Anisur Rahman, Assistant Director, Traffic	Bangladesh Land Port Authority

Team Composition:

Name of staff	Area of expertise relevant to the assignment	Designation for this assignment	Assigned tasks or deliverables
Dr. Bazlul Haque Khondker	Economist, Institutional analysis expert, Survey expert, FGD and KII expert	Team Leader	Finalize questionnaire, FGD, and KII checklists, Evaluation, and analysis, Draft synthesizing summary, Draft short summaries Finalizing reports
Dr Selim Raihan	Economist, Political economy and institutional analysis expert, Survey expert, FGD and KII expert	Co-Team Leader, Trade Expert	Coordinating and monitoring the team, monitoring all the activities performed by the team members, finalizing questionnaire, FGD, and KII checklists, Evaluation, and analysis Draft synthesizing summary and finalising reports.
Mahtab Uddin	Policy analysis and evaluation, Survey expert, FGD and KII expert	Policy Analyst	Monitoring all the activities performed by the team members, finalizing questionnaire, Coordinating FGDs and KIIs,

Name of staff	Area of expertise relevant to the assignment	Designation for this assignment	Assigned tasks or deliverables
			Evaluation and analysis, and Draft synthesizing summary.
Mohammad Golam Sarwar	Legislative consultant, development law practitioner	Legal Expert	Analysing the legal terms and provisions of the study, identifying the possible grounds for alterations, extensions, and exclusion of current legal provisions, and providing legal recommendations.
Afia Mubasshira Tiasha	Data analysts, Survey Experts	Research Associate	Desk review, analysing secondary data, designing survey questionnaires for KIIs, supervising the survey, conducting FGDs, analysing primary data, and drafting the reports.
Samantha Rahman	Data collection and Supervision	Research Associate	Desk Review, developing KII questionnaire, assisting in conducting the KIIs, conducting FGDs, report writing
Abdul Zabbar Sakil	Data collection and Supervision	Research Associate	Assisting in conducting the KIIs and FGD
Farhin Islam	Data collection and Supervision	Research Associate	Assisting in conducting the KIIs and FGDs
Anindita Sejuti Ahammad	Data collection	Research Intern	Desk Review, Transcription

