

Multimodal Connectivity for Shared Prosperity

Towards Facilitating Trade in the BBIN Subregion



Multimodal Connectivity for Shared Prosperity

Towards Facilitating Trade in the BBIN Subregion

Multimodal Connectivity for Shared Prosperity Towards Facilitating Trade in the BBIN Subregion

Published by



Consumer Unity & Trust Society

D-217, Bhaskar Marg

Bani Park, Jaipur 302016, India

Tel: +91.141.2282821, Fax: +91.141.2282485

Email: cuts1@cuts.org, Web site: www.cuts-international.org

Supported by



In Partnership with



© CUTS International, February 2023

This Report has been published as a part of the CUTS project entitled, 'Enabling a Political Economy Discourse for Multimodal Connectivity in the BBIN (Bangladesh, Bhutan, India, Nepal) Subregion (MConnect)' undertaken with the support of the Foreign, Commonwealth and Development Office, UK and in partnership with Unnayan Shamannay, Bangladesh; Bodhi Media and Communications Institute; and Nepal Economic Forum.

The views expressed here are those of the authors and can, therefore, in no way be taken to reflect the positions of the United Kingdom's Foreign, Commonwealth and Development Office (FCDO), or of partners.

The material in this publication may be reproduced in whole or in part and in any form for educational or nonprofit purposes without special permission from the copyright holders, provided the source is acknowledged. The publishers would appreciate receiving a copy of any publication which uses this publication as a source.

ISBN 978-81-8257-289-8

Printed in India by MS Printer, Jaipur

#2301

Table of Contents

<i>Abbreviations</i>	7
<i>Contributors</i>	10
<i>Acknowledgement</i>	12
<i>Preface</i>	14
<i>Executive Summary</i>	16
1. The BBIN – An Enabler to Regional Connectivity and Cooperation Initiatives	29
The BBIN Subregion	29
The Emergence of the BBIN as a Concept.....	30
Overview and Current Status of the BBIN MVA.....	31
Momentum for Multimodal Connectivity in the BBIN Subregion	32
Need for the Study	33
Objectives	36
Methodology	36
Limitations	37
Structure of the Report	37
2. Intra-Regional Trade and Connectivity Prospects in the BBIN Subregion	40
Factors Guiding Trade and Connectivity Scenario.....	40
Relationship between GDP and Intra-regional Trade	42
Trend in GDP and Future Potential	42
Trend in Intra-regional Trade and Future Potential	45
Realising GDP and Intra-regional Trade Potential in the BBIN Subregion	51
3. Policy, Practice, and Institutional Framework for Transport Connectivity in the BBIN Subregion	60
Policy, Practice and Institutional Framework for Transport Connectivity	60
Country-Level Transport Infrastructure and Connectivity Initiatives	67
Initiatives for Connectivity within the BBIN Subregion.....	71
Initiatives for Connecting the BBIN Subregion with other Regions.....	74
Initiatives Towards Paperless Trade, ECTS System and Single Window Compliance	76
Efforts in Moving to Environment-friendly Supply Chains.....	81
Public/Private Efforts Towards Improving Sustainability and Resilience of Supply Chains.....	84
4. Logistics and Transport Infrastructure in the BBIN Subregion – Issues and Challenges ...	86
Corridor 1: Connecting Nepal to Bangladesh through India	86
Corridor 2: Connecting Kathmandu in Nepal to Kolkata/Haldia and Visakhapatnam in India	94
Corridor 3: Connecting Bhutan to Bangladesh through Northeast India	106
Corridor 4: Northeast India to the Rest of India via Bangladesh	115

5. Multimodal Connectivity: Stakeholders' Engagement and Perspectives.....	145
Bangladesh	146
Bhutan	150
India	155
Nepal	160
6. Building Consensus for Connectivity and Trade	168
Existing Level of Political Consensus and Its Implications on Connectivity	168
Need for Building Political Consensus in the Subregion	171
Challenges and Opportunities of Building Political Consensus in the Subregion	172
7. Conclusion and Recommendations.....	177
Conclusion	177
Recommendations	178

List of Tables, Figures and Maps

Tables

Table 1.1: Country-wise Matrix of the Corridors Studied.....	35
Table 1.2: Country-wise Locations with a Focus on Prominent Infrastructure Types/Significance	38
Table 2.1 GDP Trends in the BBIN Subregion	44
Table 2.2 Projected GDP in the BBIN Subregion	44
Table 2.3 Global Trade of the BBIN Subregion and Trade-to-GDP Ratio in 2019	45
Table 2.4 The BBIN's Intra-regional Trade (Export) in 2019.....	47
Table 2.5 Increase in Intra-regional Trade in the BBIN Subregion	48
Table 2.6 Share of Intra-regional Export in Country's Total Export in 2019	48
Table 2.7 Intra-regional Trade Projections of the BBIN Countries.....	50
Table 4.1: Country-wise Positioning of Corridor-1	87
Table 4.2: Some Important Development Works in the Area	124
Table 7.1 Consolidated List of Priority Interventions in the BBIN Subregion.....	192

Figures

Figure 1.1: Comparative Analysis of the BBIN Countries <i>vis-à-vis</i> Global Average Based on their Logistics Performance Indicator	34
Figure 2.1: Sector-wise Allocation of Funds under the SASEC Programme	41
Figure 2.2: Relationship between GDP and Intra-regional Trade in the BBIN Subregion	42
Figure 2.3: Trend in GDP Growth: World v/s BBIN Subregion.....	43
Figure 2.4 Comparison of GDP Growth Rate: World v/s BBIN Subregion (2011-2019)	43
Figure 2.5: Trend in Bangladesh's International Trade	46
Figure 2.6: Trend in Bhutan's International Trade	46
Figure 2.7: Trend in India's International Trade	46
Figure 2.8: Trend in Nepal's International Trade	47

Maps

Map 1.1: Countries in the BBIN Subregion	29
Map 1.2: Geographical Proximity of the BBIN Subregion	33
Map 2.1: SASEC Road Corridors.....	54
Map 2.2: SASEC Rail Corridors.....	55
Map 3.1: Potential of Eastern Waterway Grid	83

Map 4.1: Corridor 1 Route Map	87
Map 4.2: Corridor 2 Route Map	94
Map 4.3: Corridor 3 Route Map	107
Map 4.4: Bhutan's Connectivity to the Inland Waterways Network in the Subregion	108
Map 4.5: Corridor 4 Road Route Map	116
Map 4.6: Corridor 4 Water Route Map.....	117

Boxes

Box 2.1: Trend in India's Intra-regional Exports and Imports	49
Box 3.1: Case of Singey Export.....	62
Box 3.2: Gati Shakti Plan for Multimodal Connectivity.....	65
Box 3.3: Nepal to Use Inland Waterways in India, Boost Intra-Regional Connectivity.....	74
Box 3.4: Visakhapatnam Miracle for Nepal Bound Cargo	80
Box 3.5: Eastern Waterways Grid to benefit the BBIN Subregion.....	83
Box 4.1: India and Nepal Sign Accord to Build Raxaul-Kathmandu Rail Connectivity.....	97
Box 4.2: Development of an Extended Gateway (multimodal hub) in Balagarh.....	101
Box 4.3: Operational Challenges of Gai Ghat Terminal	103
Box 4.4: Sahibganj-Manihari Bridge	104
Box 4.5: List of Sub-corridors to Connect Bhutan with Bangladesh and India.....	106
Box 4.6: Trade and Transit through Naopara Port.....	121
Box 4.7: Tamabil-Sylhet 4-lane Road	125
Box 5.1: Regular Trade and Related Opportunities Required to Control Illegal Dealings ...	147
Box 5.2: Journey from a Housewife to an Entrepreneur	151
Box 5.3: Public-Private Coordination in Response to COVID-19.....	154
Box 5.4: Issue of Drinking Water for Workers in Panitanki.....	155
Box 5.5: Livelihood Opportunities Emerging from Infrastructure Developments	156
Box 5.6: Trade Opportunities in Dawki	157
Box 5.7: Informal Labour Challenges in Trade Infrastructure	158
Box 5.8: Kamlasagar Border Haat Halted and Implications of It	158
Box 5.9: Jibondinga, Assam Inland Water Transport Department	159
Box 5.10: Vizag: Rethinking Environment-Friendly Operations	160
Box 5.11: New ICP, But Same Old Issues: Case of Biratnagar ICP	162
Box 5.12: Grievances of Nepali Truckers at Bhairahawa-Sonauli Corridor	163

Abbreviations






ADB:	Asian Development Bank
AFAMT:	ASEAN Framework Agreement on Multimodal Transport
APEC:	Asia Pacific Economic Cooperation
APEDA:	Agricultural and Processed Food Products Export Development Authority
ASEAN:	Association of Southeast Asian Nations
ASIDE:	Assistance to States for Infrastructure Development for Exports
ASYCUDA:	Automated System of Customs Data
BACS:	Bhutan Automated Customs System
BBIN MVA:	Bangladesh, Bhutan, India and Nepal Motor Vehicles Agreement
BBIN:	Bangladesh, Bhutan, India and Nepal
BD-NSW:	Bangladesh National Single Window
BIMSTEC:	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BIWTA:	Bangladesh Inland Water Transport Authority
BOOT:	Build, Own, Operate and Transfer
CAGR:	Compound Annual Growth Rate
CAREC:	Central Asia Regional Economic Cooperation
CBIC:	Customs of Central Board of Indirect Taxes and Customs
CFS:	Concessional Finance Scheme
CFSs:	Container Freight Stations
CONCOR:	Container Corporation of India
CPA:	Chittagong Port Authority
CPC:	Centre for Perishable Cargo
CWC:	Central Warehousing Corporation
DFC:	Dedicated Freight Corridors
DFCCIL:	Dedicated Freight Corridors Company India Limited
DoC:	Department of Customs (Nepal)
DPR:	Detailed Project Report
DTCA:	Dhaka Transport Coordination Authority
ECOWAS:	Economic Community of West African States
ECTS:	Electronic Cargo Tracking System
EDFC:	Eastern Dedicated Freight Corridor
EDI:	Electronic Data Interchange
ERIA:	Economic Research Institute for ASEAN and East Asia

FMCGs:	Fast-Moving Consumer Goods
FNCCI:	Federation of Nepalese Chamber of Commerce
GDP:	Gross Domestic Product
GHG:	Green House Gas
GMS:	Greater Mekong Subregion
GMSRA:	GMS Railways Association
GST:	Goods and Services Tax
GVCs:	Global Value Chains
HDC:	Haldia Dock Complex
IBP:	Indo-Bangladesh Protocol Route
ICD:	Inland Container Depot
ICEGATE:	Indian Customs Electronic Gateway
ICES:	Indian Customs EDI System
ICPs:	Integrated Check Posts
IMT:	Inter-Modal Terminal
ITC:	Information and Communication Technology
IWAI:	Inland Waterways Authority of India
IWT:	Inland Water Transport
JMVP:	Jal Marg Vikas Project
JWGs:	Joint Working Groups
KDS:	Kolkata Dock System
KMMTTP:	Kaladan Multimodal Transit Transport Project
KPD:	Khidirpur Dock
LCS:	Land Customs Station
MMLP:	Multimodal Logistics Park
MMT:	Multimodal Terminal
MoU:	Memorandum of Understanding
MRAs:	Mutual Recognition Arrangements
MTOs:	Multimodal Transport Operators
MVA:	Motor Vehicles Agreement
NIMTP:	National Integrated Multimodal Transport Policy
NITDB:	Nepal Intermodal Transport Development Board
NNSW:	Nepal National Single Window
NOC:	No Objection Certificate
NSD:	Netaji Subhas Dock
NTBs:	Non-Tariff Barriers
NTTFC:	National Transport and Trade Facilitation Committee
NTWCL:	Nepal Transit Warehousing Company

PIWTT:	Protocol on Inland Water Transit and Trade
PPP:	Public-Private Partnership
PQSI:	Plant Quarantine Services of India
PTA:	Preferential Trade Agreement
RCC:	Reinforced Cement Concrete
RIS:	River Information System
RMS:	Risk Management System
RSV:	River Sailing Vessels
RVCs:	Regional Value Chains
SAARC:	South Asian Association for Regional Cooperation
SAFTA:	South Asian Free Trade Area
SAGQ:	South Asia Growth Quadrangle
SARSO:	South Asia Regional Standards Organisation
SASEC:	South Asia Subregional Economic Cooperation
SEZ:	Special Economic Zone
SJDA:	Siliguri Jalpaiguri Development Authority
SPS:	Sanitary and Phytosanitary
SRMTS:	SAARC Regional Multimodal Transport Study
SWIFT:	Single Window Interface for Trade
TBT:	Technical Barriers to Trade
TEUs:	Twenty-foot Equivalent Units
TSF:	Trade Support Facility
UNCTAD:	United Nations Conference on Trade and Development
UNESCAP:	United Nations Economic & Social Commission for Asia and the Pacific

Contributors

	<p>Yatika Agrawal is a Research Associate at CUTS International. She holds a Master's degree in Economics with a specialisation in Development Studies from Symbiosis School of Economics. She has around two years of experience in the field and desk-based research related to trade and regional economic cooperation in South Asia, gender, labour and employment.</p>
	<p>Sugam Nanda Bajracharya is a Research Analyst at Nepal Economic Forum. He is engaged in assignments for the private sector and development partners related to sectoral studies such as trade, tourism, digital economy, access to finance, migration and remittances. He has been involved in economic policy research, policy & strategy development, and consultations with governments and other stakeholders. He is also part of the publication team and contributing author of NEFport (NEF's flagship publication) and a regular contributor for other publications, blogs, articles and research.</p>
	<p>Mihir Shekhar Bhonsale is an Assistant Policy Analyst at CUTS International. He is a strategic affairs analyst, researcher, and consultant and has previously worked with the Strategic Studies Programme of Observer Research Foundation, Kolkata. Bhonsale has extensive reporting and editorial experience with print and electronic media writing on issues of international affairs and geopolitics, India's defense policy, and strategy. He has also published research on the Sino-Indian border, Bhutan's transition to Democracy and its bilateral relations, India's Soft Power Outreach to Southeast Asia, the Rohingya Crisis and India-Myanmar Relations, trade and connectivity initiatives in BBIN and BIMSTEC subregions.</p>
	<p>Sumanta Biswas works as Senior Programme Officer at CUTS International and has been associated with the organisation for 18 years. He has been working in field research, advocacy, networking and overall project management, which has helped him develop his capabilities at various levels of growth. He has undertaken research in more than 30 areas on regional trade and connectivity, energy, water, livelihoods, health, governance, etc.</p>
	<p>Shiva Raj Chhetri is the Co-founder of Bodhi Media & Communications Institute, a media training institute based in Thimphu, Bhutan. Before starting BMCI in 2011, he worked for Bhutan Times, Bhutan's first private newspaper and then with Bhutan Today, Bhutan's first daily newspaper, in the capacity of Marketing Manager. Chhetri is a trained trainer, consultant, and marketing advisor to a couple of companies. Chhetri did his Bachelor in Commerce from Sherubtse College, Kanglung, Bhutan.</p>
	<p>Deepmala Ghosh is a Research Associate at CUTS International. She has around three years of research experience on issues related to international trade and development, gender inequality, transboundary water governance and river management and regional economic integration in Asia. She holds an Integrated Master's degree in Economics from Pondicherry University.</p>

	<p>Robart Shuvro Guda works as a Lead Economist at Unnayan Shamannay. He has more than nine years of experience in social science research and specialises in quantitative analysis and policy research. His research interests include national budget, financial inclusion, development, regional trade, and connectivity. He received his BSS and MSS degrees from the Department of Economics at the University of Dhaka.</p>
	<p>Bijaya Roy is a Senior Research Associate at CUTS International. She has more than six years of experience in trade and development, connectivity, regional integration, transboundary water governance, and political economy. Her recent and current research focuses on physical, institutional and people-to-people connectivity in the Bay of Bengal region, particularly cross-border trade and its impact on regional integration parameters and local economic development. She obtained her Bachelor's in Economics from the University of Calcutta and Master's in Economics with specialisation in Econometrics from the Banaras Hindu University.</p>
	<p>Jithin Sabu is an Independent Research Consultant who previously worked as a Senior Research Associate with CUTS International. He has more than three years of research experience and has worked closely on issues related to cross-border connectivity and regional economic cooperation in the BBIN subregion. His research interests include gender and development, cross-border trade and strengthening of regional value chains, and the geopolitics of the Indo-Pacific region. He holds an MA in Development Studies from the Indian Institute of Technology Guwahati and a BA in Economics from Mahatma Gandhi University Kottayam. Before joining CUTS International, he worked at the Centre for Development Studies, Trivandrum, and Kerala Institute of Local Administration, Thrissur.</p>
	<p>Suresh P Singh is a postgraduate in Economics and has been working as a Fellow with CUTS International since December 2020. This is his second stint, as he worked with CUTS International from 2009-2015. He has more than two decades of experience managing projects and conducting research. His research interests include cross-border trade, transport connectivity, regional value chains and socio-economic research. During the two decades, he has contributed to implementing several development projects and authored several reports and research publications.</p>
	<p>Swati Verma is a Research Associate at CUTS International and has been associated with the organisation for over a year. She holds a Master's in Economics from the Symbiosis School of Economics in Pune, focusing on International Trade. She has two years of experience in the field and desk-based research on regional integration, trade and gender, infrastructural development and connectivity.</p>

Acknowledgement

The conceptualisation and compilation of this report is the result of three years of rigorous work in implementing the project ‘Enabling a Political Economy Discourse for Multimodal Connectivity in the BBIN (Bangladesh, Bhutan, India, Nepal) Subregion’. The report highlights the importance and potential of multimodal transport and transit facilitation on economic development. It also identifies infrastructure policy and regulations gaps that pose hurdles to multimodal connectivity in this subregion.

This report would not have been possible without the support of the Foreign, Commonwealth and Development Office (FCDO), the United Kingdom (UK). We record our sincere thanks to the FCDO. We also offer our thanks to Sutapa Choudhary, Head of Indo-Pacific Regional Development; Duncan Overfield, Deputy Development Director & Head-Prosperity and Economic Growth; Mohit Sippy, Senior Programme and Policy Manager - Asia Regional; and Anu Sareen, Project Manager from FCDO for extending their support, guidance and invaluable inputs during the implementation of the project. We thank the Asian Development Bank as a knowledge partner for this work.

This study has been carried out with the support of three country partners: Unnayan Shamannay from Bangladesh, Bodhi Media and Communications Institute from Bhutan, and Nepal Economic Forum from Nepal. We duly acknowledge their useful contributions in conducting extensive fieldwork, organising meetings, national policy dialogues, awareness generation workshops, facilitating media briefings and reviewing the technical content of the study.

Special thanks are due to Shaheen-ul-Alam, Mahabub Hasan, Robert Shuvo Guda, and Abdullah Nadvi of Unnayan Shamannay; Pushpa Chhetri and Shiva Chhetri of Bodhi Media and Communications Institute; and Sujeev Shakya, Raju Tuladhar, and Sugam Bajracharya of Nepal Economic Forum.

We duly acknowledge the contribution of several experts and policy champions for their valuable contribution in improving the content of this report. Special thanks are due to A Didar Singh, Former Secretary of Overseas Affairs, Government of India and Distinguished Fellow, CUTS International; Gopal Krishna, Former Shipping Secretary, Government of India; Aditya Mishra, Chairman, Land Ports Authority of India; Jayant Singh, Vice-Chairman, Inland Waterways Authority of India; Kuancheng Huang, Professor, Department of Transportation and Logistics Management, National Yang Ming Chiao Tung University Academic Hub, Taiwan; Indranil Bose, Consultant, CUTS International; Syed Monowar Hussain, Former Director, Bangladesh Inland Water Transport Authority; Selima Ahmad, Honourable Member of Parliament and Founder, Bangladesh Women Chamber of Commerce and Industry, Bangladesh; and Pritam Banerjee, Logistics Sector Specialist, Asian Development Bank.

We also thank all the participants of policy dialogues, stakeholder consultations, awareness generation workshops organised at the country level in BBIN. Our thanks are also due to all media professionals who have directly or indirectly contributed to disseminating advocacy messages emerging from the project activities.

We thank our colleagues at CUTS Centre for International Trade, Economics & Environment and CUTS Calcutta Resource Centre who have contributed to writing this report and implementing this project. Special thanks to Aparajita Gupta for editing this report, Madhuri Vasnani, Mukesh Tyagi and Rajkumar Trivedi for proofreading and layout, and Vandana for ensuring the timely dissemination of project's outputs. GC Jain, LN Sharma, Sudhir Kumar and Lokesh Sharma handled financial matter. We sincerely thank all of them for their contribution. The contribution of our ex-colleagues, Prashant Sharma, Kajal Sharda and Srijata Deb, is also appreciated. Many other names deserve special mention but prefer anonymity. We thank them all for their support. Finally, any error that may have remained is solely ours.

Project Team
CUTS International

Preface

Geographical and cultural proximities, considered enablers of intra-regional trade and cooperation, are yet to fully embrace the BBIN subregion comprising Bangladesh, Bhutan, India, and Nepal to integrate more via connectivity and trade. A significant area in these countries bordering others has remained underdeveloped for decades, and people in these areas remain at the lowest strata of most of the development indicators.



Bipul Chatterjee
Executive Director
CUTS International

Significant factors affecting trade and economic integration include the absence of a holistic approach to regional development, manifested in sub-optimal connectivity in different modes of transportation, operational challenges along the identified trade routes, and underdeveloped bilateral and regional value chains.

At the same time, the subregion is witnessing significant political will to invest in infrastructure to strengthen its connectivity ecosystem. Several bilateral agreements have been implemented or are under negotiations to enhance connectivity and trade. For instance, Bangladesh and India are taking initiatives for enhanced bilateral cooperation, promoting multimodal connectivity, institutional cooperation and people-to-people contact. Landlocked countries, namely Bhutan and Nepal, are trying to further their cooperation with Bangladesh via India. In addition, the BBIN Motor Vehicles Agreement (MVA), whose Framework Agreement was signed in 2015 and protocols have been under negotiations since then, has witnessed progress as trial runs have been conducted.

These initiatives, however, may not be enough to realise the subregion's true potential. More political intent and consensus are required for a subregional approach to inclusive development, further substantiated with tangible tools and mechanisms at all levels. It is reasonably quick implementation and realisation of potential benefits, which hold the key to demonstrating political intent and the will to enhance connectivity and cooperation.

To achieve this objective, a clear understanding of potential benefits to the grassroots stakeholders and challenges in infrastructure, policy, and regulatory gaps are pivotal. They are critical for the BBIN subregion to create an enabling environment for a well-informed political economy discourse on the virtues of connectivity and intra-regional trade. This will act as a foundational step for the effective implementation of multimodal connectivity initiatives in the subregion, which combines roadways with inland waterways, coastal shipping and railways.

Thus, this report is an attempt in that direction as it seeks to understand political economy challenges in implementing multimodal connectivity initiatives in the BBIN subregion. It reveals the potential impact of improved cross-border connectivity between and among the four countries on their economy and intra-regional trade. It identifies issues and challenges and policy and investment gaps that need to be addressed to achieve the subregion's economic and trade potential.

In short, for improved connectivity and intra-regional trade, the BBIN subregion needs a more holistic and broader perspective than just physical infrastructure. In a post-COVID world, facilitating innovative and alternative physical and digital infrastructure investment opportunities that are also environmentally and ecologically inclusive is imperative. The COVID-19 pandemic has taught us that the availability of alternative sources and resilient mechanisms are extremely important for the growth and sustainability of a resilient economic system.

Therefore, I thank the Foreign, Commonwealth and Development Office of the United Kingdom for supporting this project. I also thank our country partners, namely Unnayan Shamannay, Bangladesh; Bodhi Media and Communications Institute, Bhutan; and Nepal Economic Forum, for their active support and cooperation in this study. I extend my gratitude to all stakeholders with whom the CUTS Project Team interacted during the project implementation.

Furthermore, I take this opportunity to thank Kuancheng Huang, Professor, Department of Transportation and Logistics Management, National Yang Ming Chiao Tung University, Taiwan; A. Didar Singh, Former Secretary, Government of India, and others for reviewing the Report and sharing their valued inputs. I also extend my gratitude to all members of the Project Advisory Committee and members of the National Reference Groups for their guidance and support during the project implementation. Last but not least, I thank my colleagues at CUTS International who executed it.

I hope this Report will draw stakeholders' attention and lead to critically required policy and infrastructure interventions for seamless multimodal connectivity in the BBIN subregion.

Executive Summary

Introduction

The ever-transitional dynamics of South Asia have always been responsive to multifarious geopolitical demands, in congruence with its ambitions of coping with the emerging global order. Over the past few decades, several cooperative mechanisms and theories have been formulated to strengthen the region's pursuit of trade and economic integration. A remarkable instance of such mechanisms is the BBIN collegial framework. This initiative was conceived against the South Asian Association for Regional Cooperation (SAARC) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). To attain socio-economic development in the four South Asian countries, the BBIN functions through Joint Working Groups, each member state has official representation to formulate, implement and review activities towards this endeavour.

Despite their geographical proximity and linkages, the BBIN countries face connectivity barriers that slacken the provision of cheaper access to goods and services, job creation, and people-to-people contact. To benefit from the immense potential and shared prosperity through improved cooperation and economic integration, there is an urgent need to undertake a concerted initiative towards implementing seamless multimodal transport connectivity in the subregion and expeditious implementation of the BBIN MVA. It is time to move towards a broader agreement encompassing multimodal transport initiatives in the subregion to facilitate holistic connectivity across borders.

Chapter 1 introduces the BBIN as a possible enabler of regional connectivity and cooperative initiatives. The journey from SAARC to the BBIN, along with an overview and status of the MVA, has been narrated in the chapter. It also highlights the current momentum in the subregion towards establishing cross-border multimodal connectivity and the need for this study regarding specific objectives and context. A description of the methodology used in the study has been spelt out in the chapter.

Prospects of Intra-regional Trade and Connectivity Imperatives

Chapter 2 details a set of parameters for setting up a trade and connectivity scenario conducive to the BBIN subregion's flourishing. Out of the total investments of US\$12.5bn under the SASEC Programme¹ during 2002-2019, an estimated 94 per cent has gone into the BBIN countries. Besides, several developments have taken place at bilateral and subregional levels to create an enabling environment for improved connectivity, trade, and economic integration. Comparing the GDP growth rates, the study estimates that the BBIN countries have performed better than the world GDP in proportional economic expansion. Except for Nepal, the other three countries,

¹ Besides, the BBIN countries, Maldives, Myanmar and Sri Lanka are also part of this programme.

Bangladesh, Bhutan, and India have achieved a growth rate of more than 6 per cent during 10 years from 2010 to 2019 compared to a world GDP growth of 1.4 per cent.

A detailed intra-regional trade projection based on a business-as-usual scenario with ongoing interventions in trade facilitation initiatives and connectivity has estimated growth from US\$20.7bn in 2022 to US\$56.2bn in 2030 and further to US\$105.8bn in 2035 at a CAGR of 12 per cent. Chapter 2 further analyses that the country-wise growth rate in the intra-regional framework is expected to be uniform, though there could be substantial variations across countries in terms of values.

India and Bangladesh are expected to realise relatively larger shares of gains as compared to the other two countries, Nepal and Bhutan. However, achieving the targets and figures would require countries in the BBIN subregion to address multiple issues hindering mutual trade and cooperation. Some of the major issues urgently need to be addressed, including tariffs, non-tariff barriers, sanitary and phytosanitary measures, and technical barriers to trade.² Likewise, another area equally critical for achieving the target GDP and intra-regional trade relates to improved inter-modal linkages in transport, transit and connectivity.

Gaps in Policy, Practices and Institutional Frameworks – A BBIN Perspective

BBIN countries have initiated numerous policies and practices to facilitate multimodal connectivity in recent times, although often in silos, and this has been presented in Chapter 3. In this context, the study identifies several lacunae in the policies and practices of these countries, which have surfaced in the course of interactions with relevant stakeholders. Key pointers include:

- Lack of integration in transport and connectivity between Bangladesh and India has adversely affected the logistics sector's productivity and competitiveness in the subregion. Trucks are not allowed to cross borders, which escalates the transit time, cost and effort.
- Poor coordination among border agencies aggravates the complexities in completing procedural and regulatory formalities involved in trade. Clearance procedures are both cumbersome and divergent.
- The absence of transparent taxation and information-sharing mechanisms and the nonexistence of efficient transit mechanisms hinder intra-regional trade among these countries.
- Lack of coordination among ministries and departments within the governments of individual countries. For instance, in India, the state government of Jharkhand not allowing IWAI barges to ply on the river for short distances even when the transporter has a No Objection Certificate (NOC) issued by the IWAI has been reported.
- There is an imminent need to focus on capacity building and knowledge enhancement of officials deployed at various ICPs and LCS on paperless trade initiatives and automation.

² Tariff and non-tariff barriers, sanitary and phytosanitary (SPS) measures, technical barriers to trade (TBT), though highly critical for trade facilitation and regional integration, are outside the scope of the present study. Therefore, our analysis focuses on only transport connectivity and related issues.

Poor coordination among federal, provincial and local governments has affected development initiatives.

- There has been a general dissatisfaction among the private sector stakeholders over trade and transport-related policies. By unrealistic and cumbersome regulations, private players are often discouraged from investing in the sector.

Chapter 3 also lists the recent and ongoing country-level connectivity initiatives. The status and continuous efforts of the four countries in using digital technology, integrating ICT in the transport and logistics sector, and subsequently moving towards paperless trade have also been analysed in detail. It is noteworthy that the BBIN subregion has been gradually adopting the Electronic Cargo Tracking System (ECTS), which promotes the use of high-security electronic seals in sealing containers and has tracking functionality embedded in them. It makes the processes simpler and less time-consuming, enhancing the safety and security of cargo, providing traceability and improving shipment visibility.

The BBIN countries are also improving their national single-window systems to make foreign trade easier and simpler. A ‘single window’ system provides a one-stop solution for the traders, along with greater transparency, thus reducing the chances of corruption and red-tapism. In the last section of the chapter, an estimate based on research is presented on Public/Private efforts towards improving the sustainability and resilience of supply chains in the region.

Logistics and Transport Infrastructure in the BBIN Subregion

Chapter 4 highlights the important trade and transit locations in the BBIN subregion, which were covered in the field visits under the project. Major findings and observations from over 50 trade and transit locations on the four major transport corridors in the subregion are mentioned in the chapter. The four selected corridors include the corridor connecting Nepal to Bangladesh through India; the corridor connecting Nepal to Kolkata and Visakhapatnam ports in India; the corridor connecting Bhutan to Bangladesh through northeast India; and the corridor connecting northeast India to the rest of India through Bangladesh (see Table 1). The report focuses on 50 locations across four corridors in Bangladesh, Bhutan, India and Nepal.

Table 1: Names of Selected Corridors

Sr. No.	Corridor	Details	In Transit Country
1	Connecting Nepal to Bangladesh through India	Kathmandu-Kakarbhitta/Panitanki-Siliguri-Fulbari/Banglabandha-Dhaka-Mongla/Chattogram	India
2	Connecting Kathmandu to Kolkata/Haldia and Visakhapatnam in India	Kathmandu-Birgunj/Raxaul-Biratnagar/Jogbani-Bhairahawa/Sunauli-Kolkata/Haldia and Vishakapatnam (alternative intermodal accessibility for Nepal to India’s NW-1 i.e., from Kalughat to Raxaul, and Sahibganj to Biratnagar; Visakhapatnam to Nautanwa)	-
3	Corridor 3 – Connecting Bhutan	Thimphu/Phuentsholing (Bhutan) to Dhubri and Jogighopa (northeast India) to Chattogram and Mongla	India

Sr. No.	Corridor	Details	In Transit Country
	to Bangladesh through northeast India	Ports (Bangladesh) - (multimodal transport and transit access by road, inland waterways and railways)	
4	Corridor 4 – northeast India to Rest of India to via Bangladesh	Kolkata/Haldia-Chattogram/Matarbari-Akhaura Sabroom/Agartala via mix of modes], [Kolkata-Petrapole-Benapole-Dhaka-Agartala via road], [Sahibganj-Dhulian-Rajshai-Joghicha via IWT], [Kolkata-Ranaghat-Gede- Darsana-Khulna-Dhaka-Akhaura-Agartala via Rail], [Dawki-Tamabil-Sylhet-Dhaka-Mongla/Chattogram-Kolkata/Haldia via mix of modes], [Kolkata-Haldia- Mongla-Pangaong-Narayanganj-Dhaka-Ashuganj-Akhaura-Agartala via IWT and IBP routes with alternatives of Sonamura-Daudkandi (IWT) and; Srimantapur- Bibir Bazar via road	Bangladesh

Chapter 4 highlights the current transport and transit infrastructure status and infrastructural deficiencies across the identified corridors. The current transport infrastructure development and integration to facilitate seamless multimodal connectivity in the BBIN subregion is poor compared to several other subregions worldwide. The countries also differ in terms of infrastructure (both soft and hard). Among all the member countries, India's position is somewhat better regarding infrastructure, but inadequacies are rampant.

Some major infrastructural challenges that hamper the establishment of seamless multimodal connectivity in the subregion include:

- Challenges about the poor condition of roads and bridges (both at the border and off the border) leading to congestion and subsequent detention at border crossings and en route;
- Connectivity hampered by weak regulatory and institutional reforms, absence of testing and standards-related institutions, inefficient customs clearance procedures and excessive documentation in the trade process;
- Inability to complete infrastructure development projects in the scheduled time, thus increasing the expense of infrastructure development and causing hurdles in establishing connectivity. Delays in the construction and repairing of bridges in several places in Bangladesh and India act as a deterrent to the movement of heavy traffic and force trucks to resort to longer and, therefore, economically unviable routes;
- Poor internet connectivity at land ports affecting the proper functioning of Electronic Data Interchanges (EDIs) and creates obstacles for customs officials and other agencies operating at the border points;
- Absence of supporting infrastructure facilities such as cold storage, parking facilities and adequate warehouse facilities at several key places;
- Infrastructure type and capacity asymmetries between the member countries of the subregion;

- Incompatibilities in clearing systems on two sides of the border often cause undue delays in clearance procedures. Unless technological upgrading of clearing processes and equipment on one side of the border is matched by the other side, coordination will remain problematic.

Multimodal Connectivity: Stakeholders' Engagement and Perspectives

Chapter 5 attempts to understand the perceptions of primary stakeholders on completed and ongoing infrastructure projects in the BBIN subregion to promote cross-border connectivity and trade. It also looks into how these projects are helping local people with issues like employment and livelihood generation, skill development, women participation and empowerment, migration and reverse migration.

The chapter reveals that the challenges in the member countries of the BBIN subregion are quite similar. For instance, due to poor infrastructure development and transport connectivity, the livelihood opportunities in the border regions of the BBIN countries are suboptimal and further dampened by inadequate utility services and capacity constraints among the grassroots stakeholders. Further, it is observed that concerns over the low engagement of women in the workforce are prevalent in the countries of the subregion, except Bhutan. The involvement of the private sector stakeholders in infrastructure planning and development is insufficient and without proper coordination in the member countries of the BBIN subregion.

The chapter further identifies a significant lack of communication and access to information among stakeholders regarding the development of multimodal connectivity in the subregion and its importance and potential benefits. The member countries of the BBIN subregion are characterised by a poor focus of the regional and vernacular media on issues regarding cross-border connectivity and trade. This often results in little or no access to information among stakeholders regarding policies, schemes and various work procedures related to cross-border connectivity and trade.

Building Consensus for Connectivity and Trade

Chapter 6 discusses the importance of building political consensus in the BBIN subregion regarding strengthening transport connectivity and transforming transport corridors into economic corridors. It also looks into the existing level of political consensus and its implications on the subregion's cross-border multimodal transport connectivity. The chapter further identifies the major challenges and opportunities for building political consensus in the subregion.

Establishing seamless multimodal connectivity will reduce logistic costs and enhance intra and inter-regional trade and investment efficiency. The study has also observed that non-tariff barriers and inefficient trade practices due to limited political consensus increase the cost of trading, which raises the prices of goods (including essential goods) or even results in the unavailability of goods. This increases informal trade, creates revenue loss for the governments concerned, and further endangers border security. For example, there is no formal connectivity between Mizoram (India) and Bangladesh. But, due to cultural ties among residents on the two sides, complementarities in demand, remoteness of the border areas and unavailability of all-weather roads alongside the absence of formal trade points, border residents have opted to trade through informal routes to ensure their food security.

Table 2 and 3 narrate the major challenges and opportunities in building a political consensus in the BBIN subregion.

Table 2: Major challenges in building political consensus		
<p>➤ Lack of common threat The most successful instances of regional integration have been motivated by the need to protect against some external security threat, which may be regarding territorial, ideological or political dominance. But, in the case of the BBIN subregion the countries lack a common external threat which will unite these countries.</p>	<p>➤ Power asymmetry and unequal gains One of the major challenges to better integration and political consensus in the BBIN subregion is power asymmetry due to their sizes, geographical location and other factors. Smaller countries such as Bhutan and Nepal often consider the increase in intra-regional trade as increasing dominance and greater dependence on larger economies such as India.</p>	<p>➤ Limited existing value chains Due to the historical and cultural ties among the nations of this subregion, there exist complementarities. However, until a few years back, all the countries in the subregion were pursuing import substitution policies. Therefore, the production linkages among these nations have not been able to develop beyond a limit.</p>
<p>➤ Conflict There is a cordial relationship among the BBIN countries, but multiple intra-regional and intra-nation conflicts are common in this subregion. The conflicts are either based on geographic boundaries or narrow considerations of religion, caste, language or ethnicity. There also exist many unresolved issues between the member countries.</p>	<p>➤ Asymmetries in rules and regulations Asymmetries in trade and transport rules and regulations among BBIN countries act as a major hurdle towards better connectivity and effective implementation of different agreements among these countries. For example, the vehicle classifications, axle and gross vehicle weights of a truck vary across the BBIN countries.</p>	<p>➤ Vested interest groups Inefficient trade practices increase trade costs and reduce consumer welfare by increasing the final price of the products. Still, certain groups and stakeholders leverage these trade distortions for profit, and at times they themselves create these hindrances to serve their vested interests. These groups generally do not favour trade facilitation policies that clash with their vested interest.</p>

Table 3: Potential opportunities to emerge from political consensus

<p>➤ Increased intra-regional trade Based on the historical trend, with no intervention and with business as usual, it is projected that intra-regional trade among the BBIN countries will increase to US\$105bn in 2035. The situation can improve further if the subregion builds political consensus for a more integrated subregion.</p>	<p>➤ Economic complementarities There is also potential to forge a regional value chain among the BBIN countries in many sectors. For example, Bhutan and Nepal are home to different medical and aromatic species used to prepare ayurvedic medicines as ingredients in pharmaceutical products. On the other hand, India and Bangladesh are the major producers and exporters of pharmaceutical products. Therefore, Bhutan and Nepal can export these herbs to Bangladesh and India, which can then be used to produce various medicines for re-export to Bhutan and Nepal.</p>	<p>➤ Environmental interdependencies Given the geographical proximity and topography of the BBIN subregion, environmental changes in one country also affect the environment and people in other countries. Therefore, facilitating multimodal connectivity in the subregion and diversion of traffic from roadways to multimodal routes will also reduce the carbon footprint in the subregion, thus benefiting all the countries in the subregion.</p>
<p>➤ Food security Political and economic consensus will result in the effective implementation of different trade facilitation policies, elimination of non-tariff barriers and improved connectivity, which will reduce trade costs intra-regionally and with other parts of the world. Reduced trade costs will decrease the prices of goods along with better availability and more choice. This will help in ensuring food security within the subregion through access to food products at lower prices.</p>	<p>➤ Reduction of costs and benefits to the consumers Better integration and seamless connectivity in the subregion will reduce the time and cost of cargo movement, thus reducing the price of consumables in the countries. It will also increase the competitiveness of the export markets in the subregion and will thus generate more employment opportunities and other economic benefits. Economic integration and a well-connected subregion would invite global investment, owing to the huge market potential.</p>	<p>➤ Disaster mitigation The BBIN subregion is subject to natural calamities and disasters due to terrain and other geographic particularities. Better connectivity and integration of the subregion will help ease disaster mitigation efforts. Connectivity is a form of aid that connects people to the resources critical for survival and enables governments and humanitarian organisations to deliver services and do lifesaving quickly. It will also act as a road to a speedy recovery and rebuilding of the affected areas.</p>
<p>➤ Regional security architecture Building better border infrastructure to facilitate</p>	<p>➤ Tackling financial crisis and poverty reduction The COVID-19 pandemic has resulted in an economic</p>	<p>➤ Increased bargaining power A better connected and integrated the BBIN subregion will have more bargaining power in the international</p>

seamless connectivity will also benefit the countries of the subregion by enhancing security and surveillance. It will also help in keeping illegal cross-border activities in check. Apart from that, a better integrated and economically well-connected subregion is likely to create a forum for peaceful resolution of disputes than any isolated efforts.	slowdown throughout the world, which has altered the developed countries' existing investment and trade priorities. Therefore, it is imperative for the subregion to realign its trade and investment trajectory, to continue the high economic growth path. In this context, the BBIN countries need to connect more and better integrate with Southeast Asian and other South Asian countries to diversify the supply chain and bring more economic opportunities.	negotiations than when the individual countries do isolated negotiations by standing alone. Regional cooperation and integration will give small countries a greater voice and help ensure a place in regional markets. The EU trade blocs are good examples of collective bargaining power.
---	--	--

Conclusion and Recommendations

The BBIN subregion holds enormous economic and trade potential for deeper economic engagement, given the strong historical, cultural and ethnic ties among these countries. However, the integration of this subregion is severely affected by sub-optimal connectivity in different modes of transportation. This limits the formation of Regional Value Chains (RVCs) among these countries and their participation in Global Value Chains (GVCs). Formations of RVC and GVC are highly sensitive to transport and logistic network and trade costs. To participate in GVC and RVC, a country needs to move both inputs and outputs across borders rapidly, at low cost, and with the least possible risk.

Facilitating multimodal connectivity among the BBIN countries will enhance the transport network among these countries. This will increase intra-regional trade, forge RVC and help these countries, especially land-locked counties, become more competitive to participate in GVC. Strengthening multimodal connectivity will also improve the connectivity of northeast India with the rest of India transiting Bangladesh. Moreover, it will also help the BBIN subregion to integrate with other regions and subregions. Additionally, diversifying transport networks and modes provide more resilience in shocks. This is proved after the onset of the COVID-19 pandemic. When land borders between Bangladesh and India were closed due to the pandemic, trade in essential commodities was conducted through railways and inland waterways routes.

Various agreements have been proposed (the BBIN railway agreement), and signed (such as PIWTT, BBIN MVA, and India-Bangladesh coastal shipping agreements); various infrastructures have been built to promote and strengthen multimodal connectivity in this subregion. A few of the prime reasons are poor inter-linkages between modes; rent-seeking activities; poor coordination among agencies; lack of political consensus both inter-country and intra-country; primitive trade practices; absence of required infrastructure; less reliance on automation and mechanisation; and lack of harmonisation of rules, practices, standards and policies among the BBIN countries.

In furtherance of the project's goal to create a political economy discourse for multimodal connectivity in the BBIN subregion, this report has come out with a set of recommendations on creating greater buy-in from stakeholders, and strengthening regional cooperation and interventions in soft and physical infrastructure. The list of required priority interventions by the BBIN countries and multilateral organisations such as the World Bank and the Asian Development Bank (ADB) are provided in Table 4.

Table 4: Consolidated List of Required Priority Interventions in the BBIN Subregion

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ³
<i>Interventions for Creating Greater Buy-in From Stakeholders</i>				
1	BBIN-01	In-built mechanism in every infrastructure project to facilitate local people's participation	This will help timely completion of infrastructure projects in all the BBIN countries	P-2
2	BBIN-02	Organise public-private consultation meetings	This will help better understanding of projects and lead to buy-in from private stakeholders	P-1
3	BBIN-03	Awareness generation on development initiatives	This will facilitate the participation of stakeholders in development projects	P-1
4	BBIN-04	Ensuring losers are compensated	This will eliminate the fear of smaller countries and help them participate in regional connectivity initiatives	P-1
<i>Interventions for Strengthening Regional Cooperation</i>				
5	BBIN-05	Establishment of BBIN Research Institute	It will help BBIN countries to have a holistic view of development issues and overcome development challenges	P-3
6	BBIN-06	A geospatial digital platform for the coordination of multimodal transport	It will help BBIN countries in trade integration	P-1
7	BBIN-07	Effective implementations of existing bilateral, multilateral and regional agreements	It will help BBIN countries in trade integration	P-2
8	BBIN-08	BBIN dispute settlement mechanism	It will help BBIN countries in the timely resolution of a dispute and facilitate trade and cooperation	P-1

³ P-1: Immediate Intervention; P-2: Medium Term Intervention; P-3: Long Term Intervention

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ³
<i>Interventions in Soft Infrastructure</i>				
9	BBIN-09	Improvement in coordination among inter-country and intra-country stakeholders	It will bring efficiency to logistics and trade procedures and regulations	P-1
10	BBIN-10	Need for capacity building, sensitisation and skill development of stakeholders	It will help stakeholders participate in trade and related activities	P-1
11	BBIN-11	Harmonisation of rules and regulations among BBIN countries	It will bring efficiency to logistics and trade procedures and regulations	P-1
12	BBIN-12	Facilitating paperless trade, and increased reliance on technology such as ECTS in the BBIN countries	It will bring efficiency to logistics and trade procedures and regulations	P-1
<i>Interventions in Physical Infrastructure</i>				
13	BBIN-13	Refrigerated container handling facility for cargo movements within the subregion	This will help in the safe transportation of perishable products traded in the subregion	P-1
14	BBIN-14	Improved internet connectivity at trade points such as LCS, ICP, ICD	It will make trade efficient and environment friendly	P-1
15	BAN-01	Speeding up Mongla to Khulna Railway link	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
16	BAN-02	Construction of express highways and bypass roads for decongestion at Dhaka	This will ease the congestion and ensure Dhaka's seamless connectivity through the land to the Chattogram and Mongla seaports	P-2
17	BAN-03	Upgradation of existing infrastructure and modernisation of Narayanganj river port	This will help in speedy and efficient cargo handling	P-1
18	BAN-04	Construction of express highways and bypass roads for decongestion at Benapole	This will ease the congestion and ensure seamless connectivity from the land to the ports	P-2
19	BAN-05	Dredging and maintenance of the IBP route in Bangladesh	This will help the movement of cargo vessels	P-1

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ³
20	BHU-01	Proper storage facilities for perishable goods at Phuentsholing	This will help the preservation of perishable products traded by Bhutan	P-2
21	IND-01	Customs office closer to the Dhubri river port	It will smoothen up the cargo movement between India and Bangladesh	P-2
22	IND-02	Upgradation of existing infrastructure, such as Lock Gates in NSD and KPD	This will help in speedy and efficient cargo handling	P-1
23	IND-03	Dredging and maintenance of waterways such as NW-1 and NW-2	This will smoothen up the movement of cargo vessels	P-1
24	IND-04	Shillong-Dawki road widening & wider bridge at Dawki	It will help the speedy movement of heavy load cargo	P-1
25	IND-05	Upgradation of the approach road to Dawki LCS	It will ensure seamless connectivity to land port	P-1
26	IND-06	Rail link to the ICP in Agartala	It will establish multimodal connectivity to ICPs and enhance trade facilitation	P-3
27	IND-07	Expediting construction of ICP in Jaigaon	It will solve the existing issues, such as insufficient parking facilities, testing and quarantine facilities, etc.	P-3
28	IND-08	Speeding up the development of the Motihari-Raxual Highway	Improved connectivity with Nepal	P-1
29	IND-09	Dedicated rail corridor inside the Visakhapatnam port	It will help cargo movement inside the port.	P-2
30	IND-10	Speed-up construction of the bridge between Sahibganj and Manihari	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
31	IND-11	Construction of express highways and bypass roads for decongestion at Petrapole	This will ease the congestion and ensure seamless connectivity from the land to the ports	P-2
32	IND-12	Expediting construction of ICPs Changrabandha and Fulbari	It will solve the existing issues at Bangladesh-India border points, such as insufficient parking facilities, testing and quarantine facilities, etc.	P-3
33	IND-13	Expediting construction of ICP Panitanki	It will solve the existing issues at India-Nepal border points,	P-3

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ³
			such as insufficient parking facilities, testing and quarantine facilities, etc.	
34	IND & NEP-01	Expediting Jogbani-Biratnagar rail link construction	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
35	NEP-01	Upgradation of Birgunj-Pathlaiya Road	This will ensure seamless connectivity from the land to the ports	P-2
<i>Opportunities for Investment in Infrastructure</i>				
36	BBIN-15	Dedicated rail freight corridor connectivity among the BBIN countries	It will strengthen multimodal connectivity in the subregion	P-3
37	BAN-07	Capacity enhancement at Chattogram Port	The port is running at its maximum capacity, the port faces continuous congestion and delays in clearance	P-2
38	BAN-08	A multimodal terminal at Ashuganj	It will strengthen multimodal connectivity in the subregion	P-3
39	BAN & IND-01	Building Hili (West Bengal) - Mahendraganj (Meghalaya) corridor through Bangladesh	Improved connectivity between northeast India and the Rest of India through Bangladesh	P-3
40	BAN & IND-02	Reopening of the closed Shahabazpur-Karimganj rail link through Mahisasan	Improved connectivity between Bangladesh and India	P-3
41	BHU-02	Customs transit/liaison office at Gelephu	It will facilitate trade between India and Bhutan	P-2
42	BHU & IND-01	Upgrading the railway line to Hasimara and extending to Pasakha	Improved connectivity between India and Bhutan	P-3
43	BHU & IND-02	Connecting Gelephu with Jogighopa via railway	It will help the economic movement of low-value, high-volume goods from Bhutan	P-3
44	IND-14	Freight Village at Tribeni	It will facilitate multimodal connectivity and seamless movement of goods across the BBIN countries	P-3
45	IND-15	Multimodal logistics park at Farakka	It will strengthen multimodal connectivity	P-3

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ³
46	IND & NEP-02	Kakarbhatta-New Jalpaiguri rail link	It will facilitate cargo movement through railways from Nepal to the Haldia, Kolkata and Visakhapatnam ports in India	P-3
47	NEP-02	Upgradation of Kakarbhatta ICD	This will improve efficiency and facilitate trade	P-1
48	BAN & IND-03	Burimari-Changrabandha rail connectivity	This will make goods movement through this route cheaper, faster and more environment-friendly	P-2

1

The BBIN – An Enabler to Regional Connectivity and Cooperation Initiatives

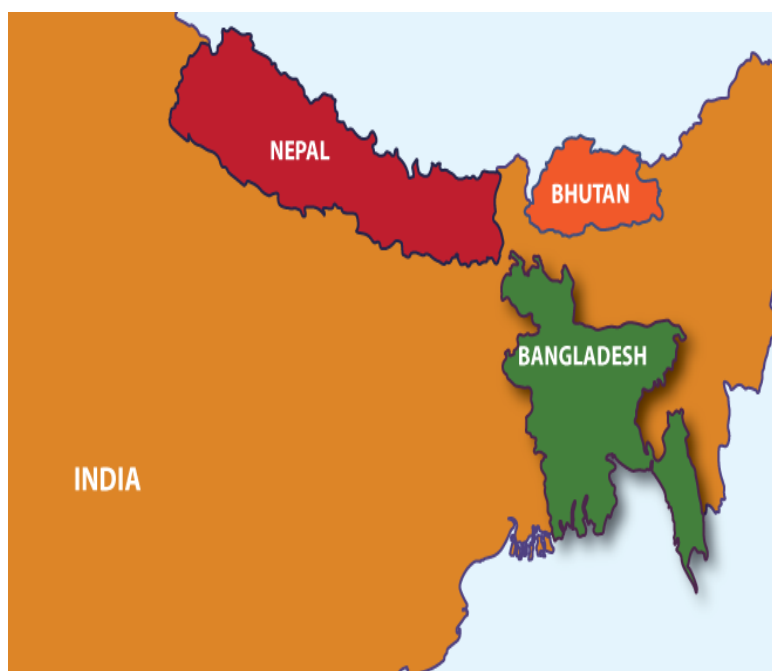
The BBIN Subregion

The BBIN is a subregion in South Asia and consists of Bangladesh, Bhutan, India and Nepal. This subregion houses more than one-fifth of the world's total population. Countries in the subregion share a common heritage, history, and linguistic, cultural and social ties. The subregion has immense potential for economic growth and significant untapped economic potential for intra-regional trade. Nevertheless, they are characterised by modest economic growth coupled with problems of unemployment and poverty problems. The subregion also witnessed low levels of economic integration and transport connectivity.

However, the subregion is now making headlines through its coordinated actions directed at multimodal transport connectivity. While much has been achieved in recent years to improve transport connectivity among member states, there remain significant gaps underscoring the need for a more intense insight into the

political economy factors linked to the development of multimodal connectivity and economic integration in the subregion.

Map 1.1: Countries in the BBIN Subregion



The Emergence of BBIN as a Concept

The foundation of BBIN as a subregional group and as a concept may be traced back to the meeting of the Foreign Ministers of the South Asian Association for Regional Cooperation (SAARC)¹ countries in April 1997. On the sidelines of the meeting, the Foreign Ministers of the four countries, namely Bangladesh, Bhutan, India, and Nepal (BBIN) launched the South Asia Growth Quadrangle (SAGQ) initiative to create an enabling environment for cooperation and prosperity in the subregion. The Ninth Summit of SAARC in May 1997 in Maldives endorsed SAGQ as a subregional initiative under SAARC.

It may be recalled that the move to create a subregional group within a region was prompted by the relative slackness in the promotion and implementation of regional investment projects within the framework of the SAARC on the one hand. On the other hand, remarkable success is achieved by relatively smaller but compact regions² in the growth triangles of South East and East Asia.³

The SAGQ aims to accelerate sustainable economic development among the member countries with the target of promoting multimodal transportation and communication, energy sharing, trade and investment facilitation in areas like tourism, and optimal utilisation of natural resource endowments and the environment. The Asian Development Bank (ADB) was invited to help implement SAGQ cooperation. The launch of the South Asia Subregional Economic Cooperation (SASEC) programme by ADB in 2001 is a direct offshoot of this SAGQ initiative.⁴

The concept of BBIN as a subregion and as a group resurfaced in November 2014 following the failure of the SAARC member states to sign the proposed regional Motor Vehicles Agreement (MVA) among themselves during the 18th SAARC Summit held in Kathmandu, Nepal. As a result of political differences among member states, particularly objections from Pakistan, the SAARC MVA could not be signed. This resulted in other member states sharing common aspirations of economic growth and prosperity and also sharing land borders among themselves in pursuing a similar motor vehicle agreement among the founder countries of the SAGQ initiative, namely Bangladesh, Bhutan, India and Nepal.

The member countries recognised the need for improved transport connectivity to tap the growth potential of the subregion. The framework BBIN MVA was signed in June 2015 in

¹ The SAARC comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. SAARC came into existence in 1985, inspired by the success of economic integration agreements in other parts of the world and the member countries' willingness to reap similar benefits in the South Asian region. The charter of the SAARC was accepted by the then members in mid-1985, and this way, SAARC emerged as the main vehicle for moving towards greater economic and trade integration in the region. Under SAARC, the South Asian Free Trade Agreement (SAFTA) was established in 2006, in succession to the South Asian Preferential Trade Agreement (SAPTA), which came into force in 1993.

² Examples included the Johor State of Malaysia, Singapore and the Riau islands of Indonesia (JSRGT), the South China Growth Triangle, comprising Hong Kong, the Guandong, and Fujian provinces of China and Taiwan.

³ JICA (2013). Economic Cooperation in South Asia. Source: http://jica-ri.jica.go.jp/IFIC_and_JBICI-Studies/jica-ri/publication/archives/jbic/report/paper/pdf/rp16_e09.pdf

⁴ Over the period, the SASEC program has expanded to cover seven countries with the inclusion of the Maldives and Sri Lanka in 2014, and one non-SAARC country, namely Myanmar, in 2017. By now, more than US\$13bn has been spent in the target sectors under the SASEC programme.

Thimphu, Bhutan. Thus, though the BBIN MVA is connected to the original four countries in the SAGQ grouping, it owes its genesis to the uncompleted SAARC Motor Vehicle Agreement that was proposed but remained to be signed during the 18th SAARC Summit.

What appears from the evolution of the BBIN grouping as a concept and a tool to strengthen cooperation in this region is that BBIN has emerged as the facilitator of regional/ subregional cooperation and connectivity initiatives. Whenever there is some challenge to regional cooperation, the usefulness and prominence of BBIN are appreciated, and it has emerged as a standard for regional cooperation.

Overview and Current Status of BBIN MVA

The primary goal of the BBIN MVA, signed in June 2015, is to enhance intra-regional trade and cooperation among the countries of the subregion through subregional connectivity. The Agreement seeks to enable the seamless movement of vehicles that can help in the faster and more economical movement of goods and people across their territories. This implies that passenger or cargo vehicles of one country would be able to enter into the territories of the other member nations without the need for changeover or trans-shipment of goods from one country's truck to another. The Agreement also provides for tracking of cargo vehicles electronically, online issue of permits and fulfilling other requirements to facilitate the seamless movement of vehicles across borders in the subregion.

However, for its implementation, the Agreement requires ratification by all four countries, followed by signing the two protocols – cargo and passenger- separately. In this connection, while Bangladesh, India and Nepal have ratified the Agreement, Bhutan has withheld its ratification citing environmental concerns. However, Bhutan consented in 2017 to implement the Agreement among the other three countries: Bangladesh, India and Nepal.

From the meeting of the transport ministers of BBIN countries in 2015



Bhutan's withdrawal from the Agreement, on the one hand, and its consent to allow the other three countries to implement the same amongst themselves, on the other, has created some complications for the Agreement. For this purpose, a tool in the form of a tripartite MoU has reportedly been worked out.

Three meetings have been held following Bhutan's temporary withdrawal from the Agreement –in January 2018, February 2020, and March 2022. In the last meeting of the BBIN officials in March 2022, the proposed MoU was put forward for discussion along with two protocols. During the meeting, member states agreed to the concept of an MoU for implementing the Agreement. Member states also agreed to complete their internal consultations and take forward the negotiations and signing of the Agreement.

Momentum for Multimodal Connectivity in the BBIN Subregion

While the implementation of the BBIN MVA is perceived as a stepping stone to successful connectivity and economic integration in the BBIN subregion, a lot has also been happening in other areas of transport connectivity in the subregion. Slow but significant progress is happening on the inland waterways and railways front. There is also an increased momentum in the subregion to establish multimodal connectivity through various transportation integration and digital connectivity initiatives.

Countries in the subregion are now focusing more on building multimodal terminals, and logistics parks, enhancing bilateral railway and waterways connectivity, building dedicated freight corridors, digitising trade initiatives, and adopting real-time electronic cargo tracking systems. The multimodal connectivity in the subregion will provide integrated and seamless connectivity for the movement of people, goods and services across the subregion from one mode of transport to another. It will facilitate the last-mile connectivity of infrastructure and reduce the cost and travel time of goods, thus promoting the growth of international trade in the subregion.

There are several initiatives at individual country levels for building multimodal connectivity. For example, India has developed PM Gati Shakti-National Master Plan for Multimodal Connectivity⁵ by setting up a digital platform to bring 16 ministries, including Railways and Roadways, together for integrated planning and coordinated implementation of infrastructure connectivity projects. Similarly, Bangladesh has built a 6.15-km long rail-road multipurpose bridge over the Padma River, which will enhance multimodal transport connectivity in the country⁶.

Apart from the individual country-level initiatives, other collective regional-level developments aim to boost the establishment of multimodal connectivity. One such recent development is the adoption of the BIMSTEC Master Plan for Transport Connectivity, along with the BIMSTEC Charter⁷, by the leaders of the Bay of Bengal Initiative for Multi-Sectoral Technical and

⁵ More details of this are given in Chapter 3 of this report.

⁶ The 6.15-km long multi-purpose bridge over the Padma River was inaugurated by PM Sheikh Hasina on June 25, 2022.

⁷ Transport connectivity is one of the seven reconstituted priority sectors under the BIMSTEC Charter. Each of these sectors is led by one member state, with Thailand leading the transport sector. Other priority sectors are

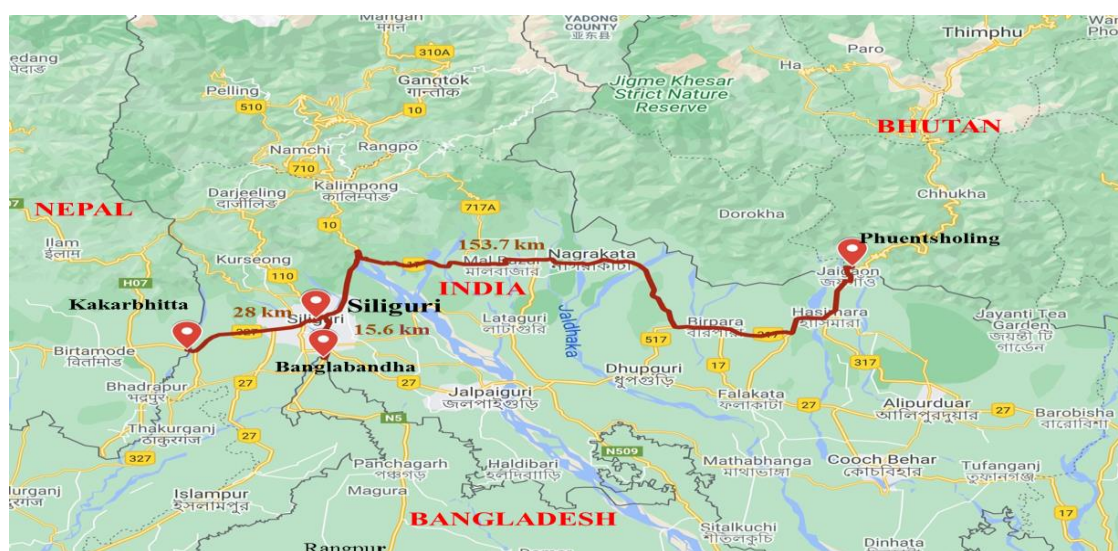
Economic Cooperation⁸ (BIMSTEC) at its 5th Summit held in Sri Lanka in March 2022. The BIMSTEC group comprises four members of the BBIN subregion, along with Myanmar, Sri Lanka and Thailand. The BIMSTEC Master Plan is a comprehensive 10-year strategy with an action plan (2018-2028) to promote all-inclusive transport connectivity and trade. It contains 267 projects covering roads, railways, maritime and inland waterways, civil aviation and multimodal infrastructure. Of these, 141 ongoing and planned flagship projects are estimated to cost US\$47.8bn.

There are also multiple bilateral agreements between countries of the BBIN subregion that aspire to promote multimodal connectivity and seamless transport integration.⁹

Need for the Study

In terms of closeness, the subregion has a very close geographical proximity. The nearest border of all four countries falls within a radius of 200 km. And the central point that connects all four countries is Siliguri in the West Bengal state of India. Siliguri borders Nepal to its west and Bangladesh to the east. Siliguri and Bangladesh's border at Banglabandha just about 19 km, 28 km from the India-Nepal border of Panitanki-Kakarbhitta. It means Bangladesh and Nepal can cross over to each other's territories through India in about an hour with a smooth transit. The nearest border of Bhutan at Phuentsholing is about 150 km from Siliguri. These BBIN countries share multiple border points with India at the bilateral level and have established functional transport corridors.

Map 1.2: Geographical Proximity of the BBIN Subregion



Trade, Investment and Development led by Bangladesh; Environment and Climate Change led by Bhutan; Security, including energy security, led by India; Agriculture and Food Security, led by Myanmar; People-to-People Contact, led by Nepal; and Science, Technology and Innovation, led by Sri Lanka.

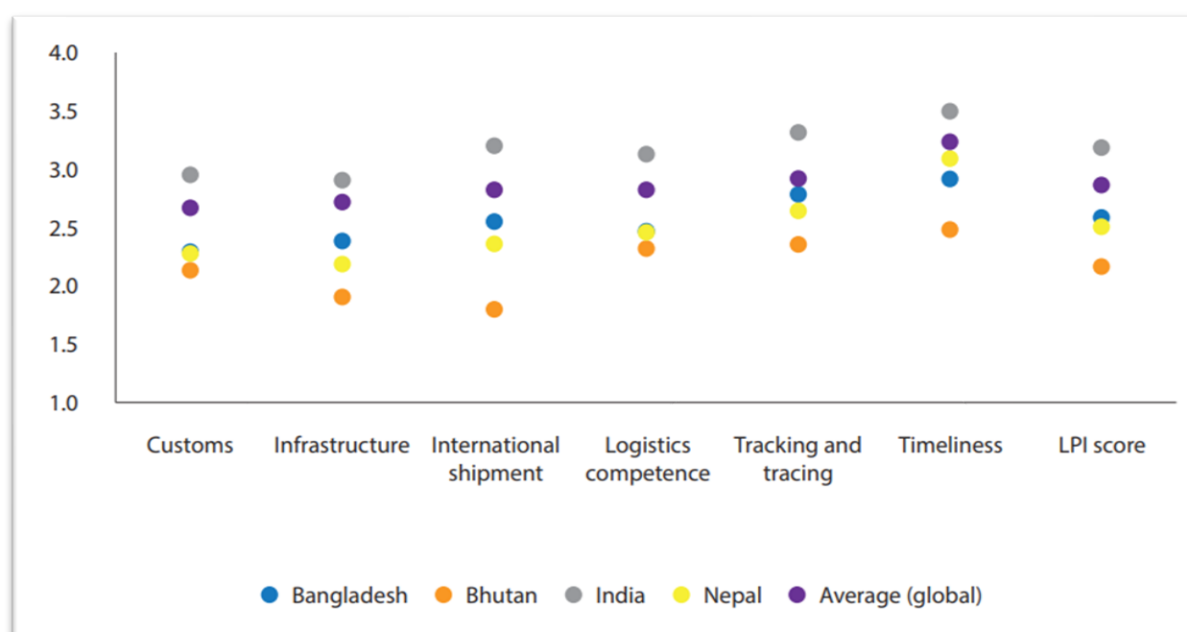
⁸ The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), comprising Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand, was established in 1997 with the aim of promoting active collaboration and mutual assistance in matters of common interest in the economic, social, technical and scientific fields.

⁹ More details of this are given in Chapter 3 of this report.

This geographical proximity has not been able to contribute much when it comes to trade, economic integration, and transport connectivity at the subregional level. The subregion has not succeeded in working collectively to promote a regime of shared prosperity. The outcome is that the BBIN subregion remains one of the least integrated regions globally, accounting for less than three per cent of total trade. As per a World Bank report¹⁰ of 2021, bilateral trade between Bangladesh and India, the two largest economies in eastern South Asia, is about 10 per cent of Bangladesh's trade and 1 per cent of India's trade. The subregion compares poorly even with East Asian and Sub-Saharan African economies, where intraregional trade accounts for 50 per cent and 22 per cent of total trade, respectively.

In addition to the low level of intra-regional trade, the subregion is also burdened by the high cost of trade compared to other regions due to several factors, with poor infrastructure and logistics as major contributing factors. In the Logistics Performance Index 2018 of the World Bank, India ranks 44th globally, Bangladesh 100th, Nepal 114th and Bhutan 149th. Other than India, the performance of countries in the subregion is below the global average in all the indicators. Based on their logistics performance indicators, the comparative analysis of the BBIN countries *vis-à-vis* the global average is demonstrated in Figure 1.1.

Figure 1.1: Comparative Analysis of the BBIN Countries *vis-à-vis* Global Average Based on their Logistics Performance Indicator



Source: World Bank Logistics Performance Index, 2018

Thus, to benefit from the immense potential for improved cooperation and economic integration, there is an urgent need to undertake a collective initiative towards subregional connectivity. This includes expeditious implementation of the BBIN MVA and a collective

¹⁰ World Bank (2021), Connecting to Thrive – Challenges and Opportunities of Transport Integration in Eastern South Asia.

undertaking of a broader agreement encompassing multimodal transport initiatives to facilitate a holistic regime of connectivity across borders.

As mentioned in the previous section, in recent times, several bilateral and subregional developments have taken place, which has helped to generate a consensus for subregional cooperation and integration. However, at both the BBIN and BIMSTEC levels, the needed intent and efforts, along with building political consensus, require tangible tools and methods to implement the plans and proposals. Quick implementation, the realisation of expected benefits, and effectively addressing anticipated risks and losses are the ingredients to demonstrate political intent and the will to enhance connectivity effectively.

For progress in this direction, it is imperative to have a clear understanding and perceptions of ground-level challenges in terms of infrastructure, policy and regulatory gaps and the extent of ownership at the sub-national and national levels for larger connectivity plans.

For the BBIN subregion to embark upon large-scale multimodal connectivity initiatives, the participating countries must establish an enabling environment for a properly informed political economy discourse. The pivotal step would be evaluating the scenario and identifying the key factors for enabling regional/subregional/bilateral connectivity initiatives.

Such a conducive environment for discourse will help project advocacy messages for multimodal connectivity combining roadways with inland waterways, coastal shipping, railways and airways, and also address implementation challenges of the BBIN MVA.

In this regard, CUTS International, along with its country partners in Bangladesh, Bhutan and Nepal and with the support of the UK's Foreign, Commonwealth Development Office, conducted this study. The aim is to establish a better-informed political economy discourse for efficient multimodal connectivity, including expeditious implementation of the proposed MVA in the BBIN subregion.

The study focuses on four crucial transport corridors (for details, see Table 1.1), namely (i) Kathmandu (Nepal) to Mongla and Chattogram Ports (Bangladesh) via India, (ii) Kathmandu (Nepal) to Kolkata/Haldia and Vishakhapatnam (India), (iii) Bhutan to Dhubri and Jogighopa (Northeast India) to Chattogram and Mongla Ports (Bangladesh) and (iv) Northeast India to rest of India via Bangladesh.

Table 1.1: Country-wise Matrix of the Corridors Studied

	Bangladesh	Bhutan	India	Nepal
Corridor 1	●		●	●
Corridor 2			●	●
Corridor 3	●	●	●	
Corridor 4	●		●	

Objectives

The objectives of the study include:

- (i) Addressing implementation challenges of the BBIN MVA in the BBIN subregion;
- (ii) Identification of gaps in infrastructure, policy and regulations, which pose hurdles to multimodal connectivity in this subregion;
- (iii) Understanding the possible impact of multimodal transport and transit facilitation on local economic development parameters, with an emphasis on how it can enhance women's economic empowerment;
- (iv) Identification of possible livelihood generation opportunities through the development of regional/subregional/bilateral value chains and their facilitation through multimodal connectivity;
- (v) Contribution towards the formulation of inclusive transport and transit protocols for effective multimodal connectivity in the subregion through a participatory approach; and
- (vi) Organising multi-level, multi-stakeholder advocacy and awareness generation events to push for identified infrastructure development and policy, regulatory and procedural changes.

Methodology

- Extensive field research was conducted across major trade, transport and connectivity points such as railheads, river ports, sea ports, major roads, Land Customs Stations (LCS), Integrated Check Posts (ICPs), multimodal terminals (MMT), logistics parks and Inland Container Depots (ICDs) that are capable of functioning as nodes of multimodal connectivity in the BBIN subregion.
- Data was gathered through one-to-one interviews, focused group discussions with relevant stakeholder groups, and surveys using questionnaires and close observations. Qualitative data analysis through discourse mapping and thematic analysis was undertaken. Corridor-specific case study analyses were also carried out to better understand the corridor and prepare corridor-specific recommendations.
- Quantitative data analysis regarding the current and potential trade in the subregion was done for the purpose of this report. Raw data for this has been taken from the ITC Trade Map. Bilateral trade data till 2020 was available at the time of preparation of this report. However, this study has used bilateral trade data till 2019, as the trade was severely affected by the COVID-19 pandemic in 2020. Hence, the year's data is significantly different from that of the preceding years. Historical data available at ITC Trade Map for the last five years preceding the COVID-19 pandemic (2015-19) has been used to understand trends in bilateral trade between member countries. The trend derived from the historical data for each select product has been applied to arrive at projection figures covering the period up to 2035.
- Knowledge creation and exploration of multimodal connectivity-related topics by engaging with and involving subject experts, academicians and policy practitioners.

- Virtual scoping visits were conducted to identify factors responsible for the success of connectivity initiatives in Central Asia, the Greater Mekong Subregion (GMS), the Association of Southeast Asian Nations (ASEAN) Framework Agreements, and the India-Bangladesh Coastal Shipping Agreement. Approaches and enabling factors to address implementation challenges of connectivity initiatives were looked into, along with marking the existing and potential complementarity of the connectivity initiatives in these regions with those in the BBIN subregion.
- Generating a thorough understanding of the BIMSTEC Master Plan for Transport Connectivity with a focus on BBIN countries and establishing how activities under this study converge and complement the BIMSTEC Master Plan for Transport Connectivity.
- Policy dialogues were organised physically and virtually among the relevant stakeholders to gather information, generate a better-informed political economy discourse and chart an action agenda for multimodal connectivity in the BBIN subregion.

Limitations

- As the fieldwork of the study was conducted in the subregion during the COVID-19 pandemic, many transport and connectivity offices were working with restricted capacities. Therefore, several interviews with relevant stakeholders were conducted virtually.
- Scoping visits to other regions, such as Central Asia, Southeast Asia and Greater Mekong Subregion, were conducted virtually, as physical visits were impossible due to the international travel restrictions imposed by the Covid-19 pandemic.
- There were also restrictions regarding people allowed for focused group discussions at some study locations. However, in carrying out such interactions, participants for the discussions were selected with utmost care to make them as inclusive and representative as possible.
- As international trade and transport volumes were affected by the pandemic, the trade and transport data of the year 2020 could not be used for this study. This is because the cross-country trade and transport volume in 2020 was minimal and much less than the average in preceding years.

Structure of the Report

The report has seven chapters. Following the present Chapter, which is an Introduction, Chapter 2 analyses Intra-regional Trade and Future Prospects in the BBIN Subregion. Chapter 3 presents a synopsis of the Policy, Practice, and Institutional Framework for Transport Connectivity in the BBIN Subregion. The availability of Logistics and Transport Infrastructure and gaps are analysed in Chapter 4. The study spans all four corridors included in the study (Table 1.2), namely (i) Kathmandu (Nepal) to Mongla and Chattogram Ports (Bangladesh) via India, (ii) Kathmandu (Nepal) to Kolkata/Haldia and Vishakhapatnam (India), (iii) Bhutan to Dhubri and Jorhat (Northeast India) to Chattogram and Mongla Ports (Bangladesh) and (iv) Northeast India to rest of India via Bangladesh.

Table 1.2: Country-wise Locations with a Focus on Prominent Infrastructure Types/Significance

Corridors	Locations
i. Kathmandu (Nepal) to Mongla and Chattogram Ports in Bangladesh via India	Kathmandu- Kakarbhitta/Panitanki-Siliguri-Phulbari/Banglabandha-Dhaka- Mongla/Chattogram primarily road with emerging linkages to rail connectivity). This is a transit corridor of importance for Bangladesh, Bhutan and Nepal.
ii. Kathmandu to Kolkata/Haldia and Visakhapatnam in India (alternative intermodal accessibility for Nepal to India's NW-1 i.e., from Visakhapatnam to Nautanwa, Kalughat to Raxaul and Sahibganj to Biratnagar)	Kathmandu- Birgunj/Raxaul- Biratnagar/Jogbani-Bhairahawa-Sunauli-Kolkata/Haldia and Vishakapatnam Emerging linkages between road and IWT as well as railways and waterways between Raxaul- Kalughat, Jogbani-Sahibganj, Sunauli-Varanasi
iii. Bhutan and Northeast (NE) India to Dhubri and Jogighopa, Assam (India) to Chattogram and Mongla Ports (multimodal transport and transit access by road, inland waterways and railways)	1)Thimphu-Phuentsholing-Jaigaon-Hashimara-Kolkata/Haldia 2)Thimphu-Phuentsholing-Jaigaon-Chandrabangha-Burimari(Bangladesh)-Mongla/Chattogram Emerging Road- IWT: Thimpu- Samdrup Jongkhar-Guwahati (Pandu NW-2)-Joghighopa-Dhubri on IBP 2: Gelephu-Jogighopa-IBP/ Rail-Pasakha-Toribari-Hashimara
iv. Northeast India to the Rest of India via Bangladesh [Kolkata (West Bengal) to Agartala (Tripura) and Karimganj (Assam) and coastal shipping dimensions for the NE region, India	Coastal: Kolkata/Haldia-Chattogram-Akhaura/Agartala (emerging Sabroom- Chattogram/ Matarbari) with both road/rail linkages Road: Kolkata-Petrapole-Benapole-Dhaka-Agartala Potential IWT: Sahibganj-Dhulian-Rajshahi-Joghighopa Existing/Emerging Rail: Kolkata-Ranaghat-Gede-Darsana- Khulna-Dhaka-Akhaura-Agartala Road: Dawki-Tamabil- Sylhet -Dhaka- Mongla/Chattogram IWT: Kolkata-Haldia-Mongla-Pangaong-Narayanganj-Dhaka-Ashuganj-Akhaura-Agartala IWT: Sonamura Daudkandi (Road: Srimantapur-Bibir Bazar)

Chapter 5 presents country-wise Stakeholder Engagement and Perspectives on development outcomes of infrastructure projects in the Subregion. Chapter 6 outlines a framework for Enabling a Political Economy Discourse for Multimodal Connectivity in the BBIN Subregion through identifying opportunities and challenges. Chapter 7 presents the Conclusion and Recommendations to help the BBIN countries promote multimodal connectivity to strengthen bilateral and regional trade and value chains.

2

Intra-Regional Trade and Connectivity Prospects in the BBIN Subregion

Factors Guiding Trade and Connectivity Scenario

As indicated in the introductory chapter, the BBIN subregion comprising Bangladesh, Bhutan, India and Nepal can be linked to the SAGQ.¹ This subregional initiative was endorsed during the Ninth SAARC Summit in Maldives in 1997. Given the geographical proximity of these countries, there was an expectation that these four countries are more amenable to subregional connectivity, trade and economic integration and could, therefore, serve as an engine of growth with necessary infrastructural innovations and interventions. Following the launch of the SAGQ proposal, several initiatives have been taken by the four countries under the umbrella of the SASEC programme supported by the Asian Development Bank and other initiatives at the national level to create an enabling environment for connectivity, trade, and economic cooperation.

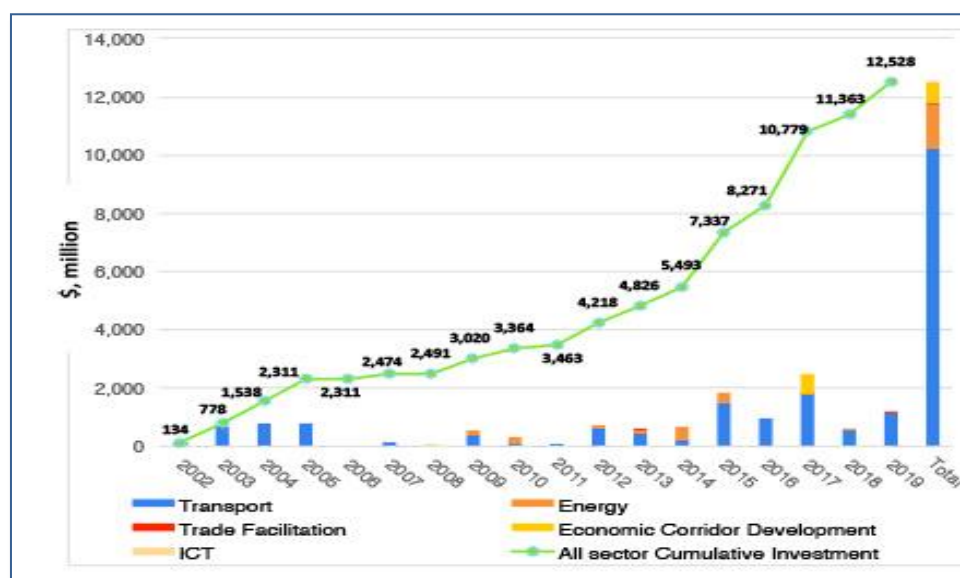
It may be mentioned that under the SASEC programme, more than US\$15bn² has been made in the SASEC priority sectors, namely, transport, energy, trade facilitation, economic corridor development, and Information and Communication Technology (ICT) till August 2020.³ Out of the total investments of US\$12.5bn from 2002 to 2019, about 94 per cent have gone into the BBIN countries. Sector-wise allocation of funds from 2002 to 2019 is provided in Figure 2.1.

¹ For details on SAGQ, its goals, and status, please see Chapter 1 of this report.

² Besides, BBIN countries, Maldives, Myanmar and Sri Lanka are also part of this programme

³ Asian Development Bank, SASEC Programme

Figure 2.1: Sector-wise Allocation of Funds under the SASEC Programme



Besides the SASEC Programme, several developments have taken place at bilateral and subregional levels to create an enabling environment for connectivity, trade, and economic integration. For instance, Bangladesh and India have more than 30 treaties/agreements/MoUs to promote trade and connectivity (see Annexure 2.1). Besides, both countries are part of several regional agreements, including SAFTA, BBIN MVA, BIMSTEC, etc. In addition, while Bangladesh is a signatory to the UNESCAP's Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific,⁴ which came into force in February 2020, India is also in the process of acceding to this Agreement.

Similarly, Bhutan and India signed an Agreement on Trade, Commerce and Transit in 1972, which was renewed in 2006, while both countries remain members of SAFTA, BIMSTEC and other agreements. The Indo-Nepal Treaty of Trade, signed in 1991, was renewed in 2009. The two countries also signed a bilateral motor vehicles agreement in 2014, which has been renewed periodically, with the last renewal in 2019 for two years. In addition, the two countries are also in the process of phasing out paperless trade. At the regional level, India and Nepal are also members of SAFTA, BBIN MVA, BIMSTEC, etc.

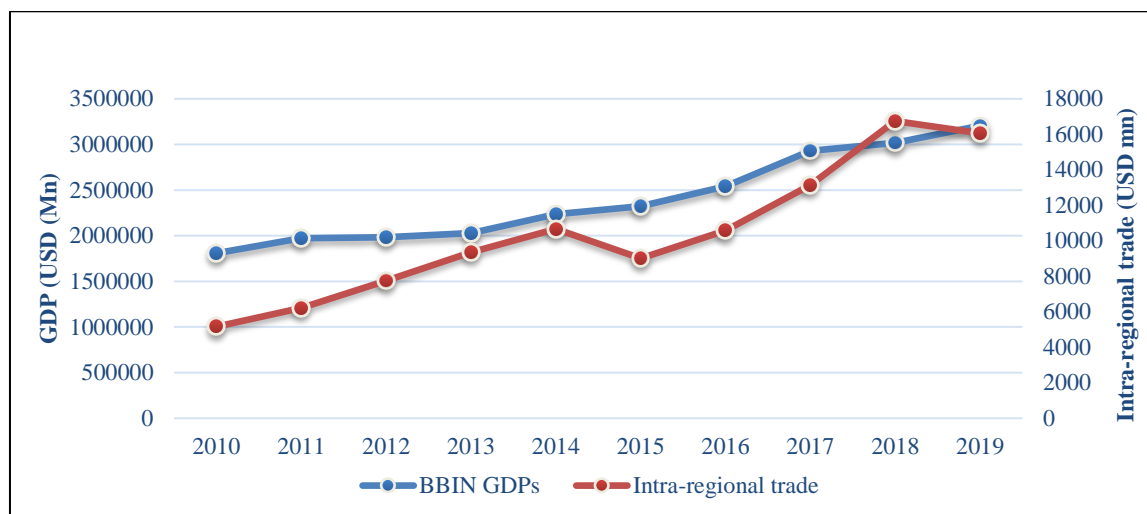
These bilateral, regional, and multilateral initiatives are binding and guiding forces to promote cooperation and connectivity between and among countries in the BBIN subregion. Combined with national-level trade and development initiatives, these appear to have significantly impacted economic and development indicators, including Gross Domestic Product (GDP), employment, and improving the quality of life of people in these four countries.

⁴ UN ESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

Relationship between GDP and Intra-regional Trade

For the present study, we concentrate on the analysis of GDP⁵ growth, intra-regional trade, and their potential to reflect how improved cooperation and connectivity among BBIN countries would help the subregion realise its true potential in terms of GDP growth and trade.

Figure 2.2: Relationship between GDP and Intra-regional Trade in the BBIN Subregion



Estimates show a high correlation between the overall GDP and intra-regional trade with 0.95 per cent confidence level. This is in line with the trend in GDP and intra-regional trade in the subregion. Intra-regional trade has moved in the same direction as that GDP. One exception to this was year 2019, when intra-regional trade declined, despite an increase in GDP value (see Figure 2.2).

Trend in GDP and Future Potential

Comparing Trend in World GDP with BBIN GDP

As indicated in Figure 2.2, the BBIN subregion had a combined GDP of over US\$3.2tn in 2019, per World Bank data. Though the major contribution to this comes from India, which accounts for more than 87 per cent of the total GDP of BBIN countries, other countries in the subregion are also growing fast. The compound annual growth rate (CAGR) of GDP in the subregion was 6.6 per cent from 2010 to 2019 (Figure 2.3). In value terms, it is observed that while the GDP of the BBIN subregion increased by about 1.8 times from 2010 to 2019, the increase in world GDP was relatively lower at 1.4 times during the same period. Sustained GDP growth has helped the subregion steadily increase its global GDP share to 3.7 per cent in 2019 from 2.7 per cent in 2010 (Figures 2.3 and 2.4). It has also helped the subregion to be identified as one of the world's fastest-growing regions.

⁵ GDP measures value added through the production of goods and services, or income earned from that production, or the total amount spent on final goods and services (less imports) in a country during a certain period. This is considered an important indicator of progress achieved by a country in terms of economic activities compared to earlier periods.

Figure 2.3: Trend in GDP Growth: World v/s BBIN Subregion

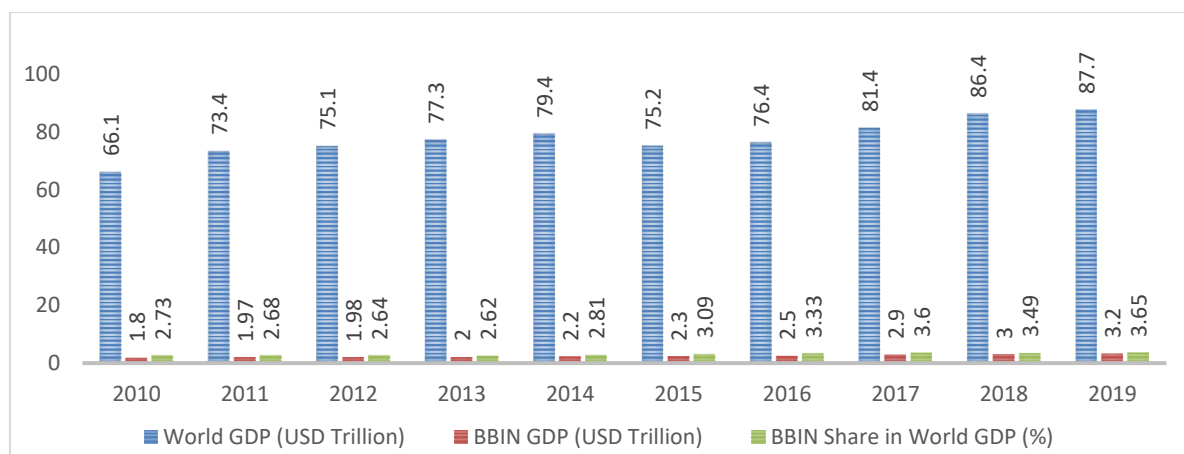
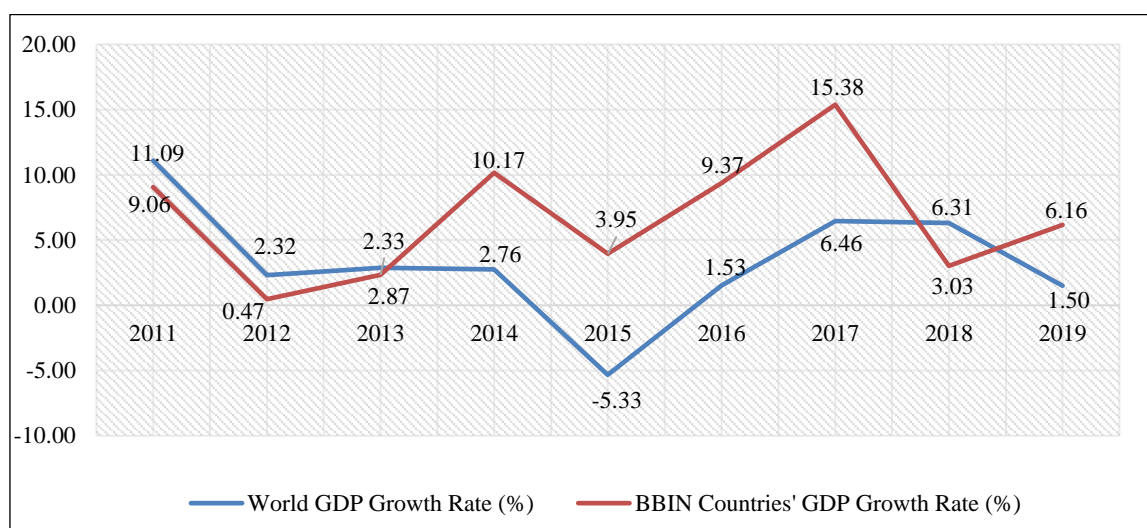


Figure 2.4 Comparison of GDP Growth Rate: World v/s BBIN Subregion (2011 to 2019)



At the individual level, BBIN countries also appear to have performed better than world GDP in growth (see Table 2.1). Except for Nepal, the other three countries, Bangladesh, Bhutan, and India, achieved a growth rate of more than 6 per cent from 2010 to 2019. Country-wise data reveal that while the GDP of Bangladesh increased by 2.6 times (from US\$115.28bn in 2010 to US\$302.57bn in 2019), Nepal's GDP increased by 1.87 times (from US\$16bn in 2010 to over US\$30bn in 2019), India's GDP rose by 1.77 times (from US\$1675bn in 2010 to over US\$2869bn in 2019). Bhutan recorded an increase of 1.66 times in GDP during the 10 years (from US\$1.5bn in 2010 to over US\$2.5bn in 2019). In comparison, the world GDP grew 1.4 times (from US\$66,125bn in 2010 to US\$87,735bn in 2019).

Table 2.1: GDP Trends in BBIN Subregion (US\$mn)

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bangladesh	115279	128638	133356	149990	172885	195079	221415	249711	274039	302571
Bhutan	1548	1777	1781	1756	1907	2004	2159	2450	2447	2531
India	1675615	1823050	1827638	1856722	2039127	2103588	2294798	2652755	2713165	2868929
Nepal	16003	18914	18852	19271	20003	21411	21186	25181	29174	30641
BBIN	1808445.061	1972379.02	1981626.404	2027739.956	2233922.961	2322080.935	2539558.061	2930096.662	3018824.53	3204672.598
WORLD	66125919	73460346	75161779	77316337	79453254	75217723	76369000	81306030	86439423	87734574
BBIN Countries' Share in World GDP (%)*	2.7	2.7	2.6	2.6	2.8	3.1	3.3	3.6	3.5	3.7

*BBIN Countries share in world GDP increases to 8 per cent when measured in terms of purchasing power parity (PPP).
Source: ITC Trade Map, 2021

Future Potential and Prospects

A conservative projection of the GDP of the BBIN subregion has been attempted to understand the potential of the BBIN subregion in terms of prospects. This projection is based on the actual growth rate in GDP achieved by the BBIN countries over 10-year periods. For this purpose, the growth rate of each member country has been computed and applied to estimate the future value of GDPs up to 2035. The combined GDP value of BBIN region would more than double in 2035 and reach a level of US\$6.2tn in 2030 and further to US\$8.3tn in 2035, from US\$3.6tn in 2021 (see Table 2.2 for projections up to 2035), growing at a CAGR of 6.14 per cent. This projection is conservative because it is based on business as usual. The situation can improve if the BBIN countries take appropriate economic reforms, such as interventions to improve the ease of business.

Table 2.2: Projected GDP in BBIN Subregion (US\$mn)

Country	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Bangladesh	368173	393061	419632	447999	478283	510614	545131	581982	621323	663324	708164	756035	807142	861704
Bhutan	3021	3205	3401	3608	3827	4060	4308	4570	4848	5143	5456	5788	6141	6515
India	3425498	3634057	3855313	4090040	4339059	4603239	4883503	5180831	5496261	5830896	6185905	6562529	6962083	7385963
Nepal	35366	37098	38915	40820	42819	44915	47115	49422	51841	54380	57043	59836	62765	65839
BBIN Subregion	3832058	4067421	4317261	4582467	4863988	5162828	5480057	5816805	6174273	6553743	6956568	7384188	7838131	8320021

Source: Authors' Computations

Trend in Intra-regional Trade and Future Potential

Overall Trade of the BBIN Subregion and Merchandise Trade-to-GDP Ratio

The overall trade of the subregion was valued at about US\$922bn in 2019, compared to US\$743bn in 2015, an increase of US\$180bn, or 24 per cent in the four years. It has grown almost at an equal annual pace, as that of GDP, at nearly six per cent. However, countries have no uniformity regarding percentage change in overall trade. While Nepal has recorded an increase of about 78 per cent in its total trade, the change in Bhutan's trade is lowest at 11 per cent in 2019 compared to 2015. For Bangladesh and India, the increase in trade is 22 per cent and 31 per cent, respectively, during the four years.

The merchandise trade-to-GDP ratio of the BBIN subregion, measured by the share of total trade of the country in GDP, is 29 per cent in the BBIN subregion. Bhutan, with 43.5 per cent, has the highest merchandise trade-to-GDP ratio in the subregion. Nepal follows with 38.9 per cent and Bangladesh with 34.7 per cent. India has the lowest ratio in the subregion, with 27.9 per cent.

Table 2.3: Global Trade of BBIN Subregion (US\$bn) and Trade-to-GDP Ratio, in 2019

Country	Import	Export	Total	Merchandise Trade-to-GDP Ratio
Bangladesh	58.03	46.93	104.96	34.7%
Bhutan	0.83	0.28	1.10	43.5%
India	478.88	323.25	802.13	27.9%
Nepal	12.33	0.96	13.28	38.9%
Total BBIN Subregion	550.07	371.42	921.49	28.7%
<i>Source: Authors computation with data from ITC Trade Map, 2022</i>				

Country-wise trend in trade, both import and export, are depicted in the figures below (see Figure 2.5 to 2.8).

Figure 2.5: Trend in Bangladesh's International Trade (US\$bn)

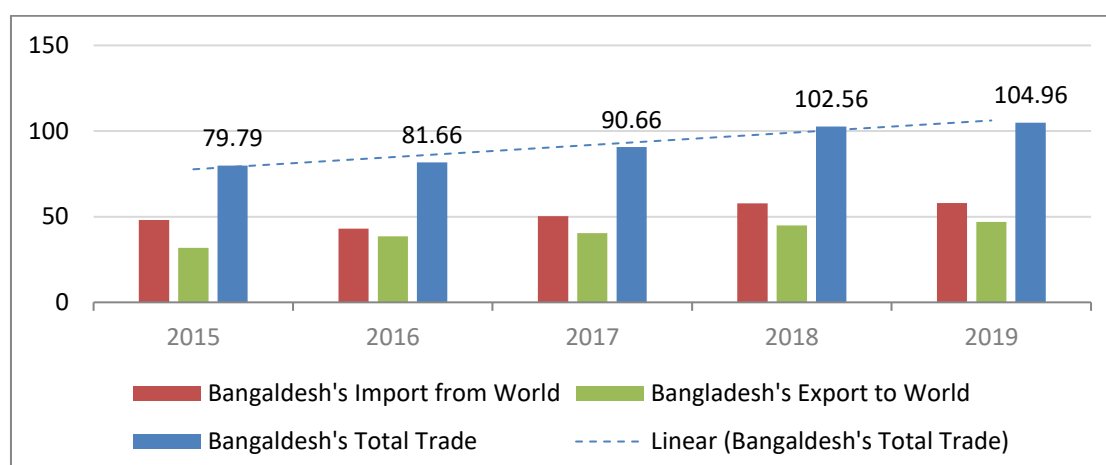


Figure 2.6: Trend in Bhutan's International Trade (US\$bn)

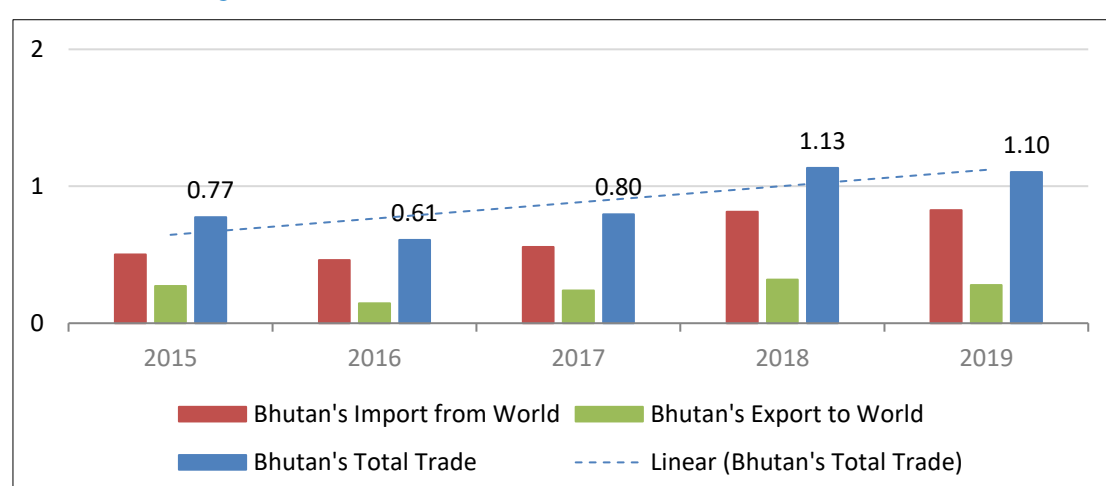


Figure 2.7: Trend in India's International Trade (US\$bn)

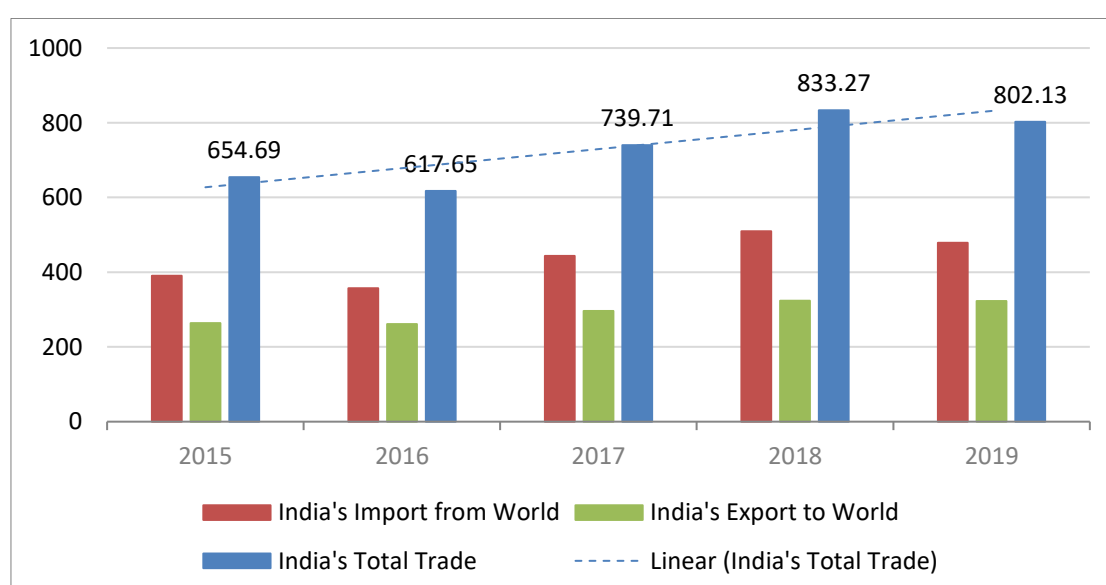
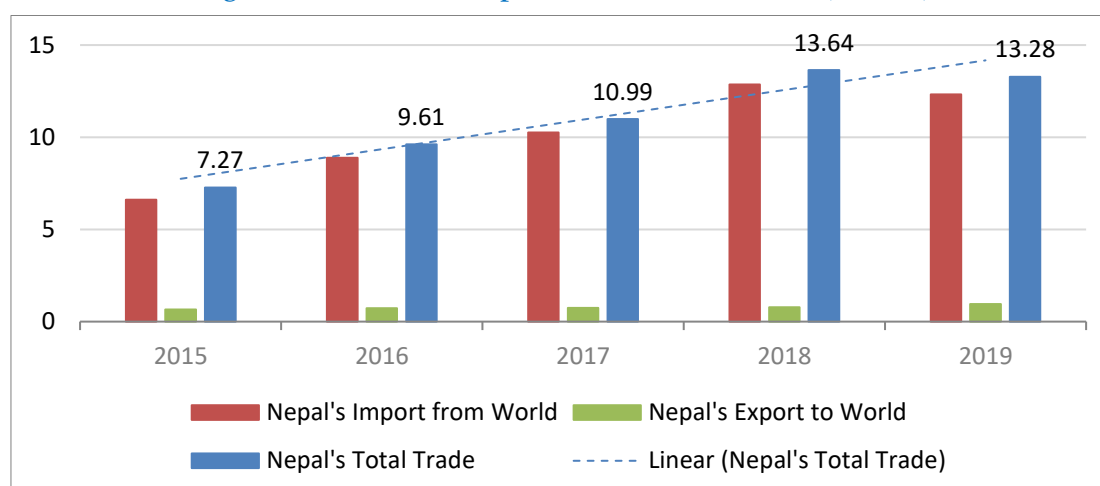


Figure 2.8: Trend in Nepal's International Trade (US\$bn)



BBIN's Intra-subregional trade and potential

Intra-subregional trade among BBIN countries accounted for about five per cent of overall export from the subregion in 2019. The share further declined to about two per cent if the region's total trade is considered instead of export. This share is low compared to other regional groups like the Association of Southeast Asian Nations (ASEAN), wherein intra-regional trade constitutes more than 25 per cent of the total trade. This indicates the low level of trade integration and cooperation among the BBIN countries. The status of intra-regional trade is presented in Table 2.4.

Table 2.4: BBIN's Intra-regional Trade (Export) in 2019

Unit: USD Million

S. No.	Country/Region	World	BBIN	India	Bangladesh	Nepal	Bhutan
1	BBIN	371998.8	-	2122.652	8255.04	7173.51	696.309
2	India	323250.7	16046.1	-	8242.92	7108.86	694.305
3	Bangladesh	31734.16	1267.6	1213.79	-	52.08	2.44*
4	Nepal	959.63	673.7	659.58	12.12	-	2.00
5	Bhutan	531.23	521.6	497.72	21.91**	2.01	-

*denotes Bangladesh's import from Bhutan in 2015; ** denotes Bhutan's import from Bangladesh in 2012.

Source: ITC Trade Map, February 2022

However, there is a silver lining to the low intra-regional trade. Analysis of historical data shows that intra-regional trade has grown at an impressive rate over the last two-decade periods (see Annexure 2.2 for the country-level trend in intra-regional trade). For instance, while India's export to Bhutan and Nepal have grown at a CAGR of 30 per cent and 22 per cent, respectively, from 2001 to 2019, India's import from Bangladesh has also grown at an impressive rate (See Table 2.5). This could be because of growing engagement among BBIN countries over the last two decades and factors such as increasing levels of participation in subregional value chains.

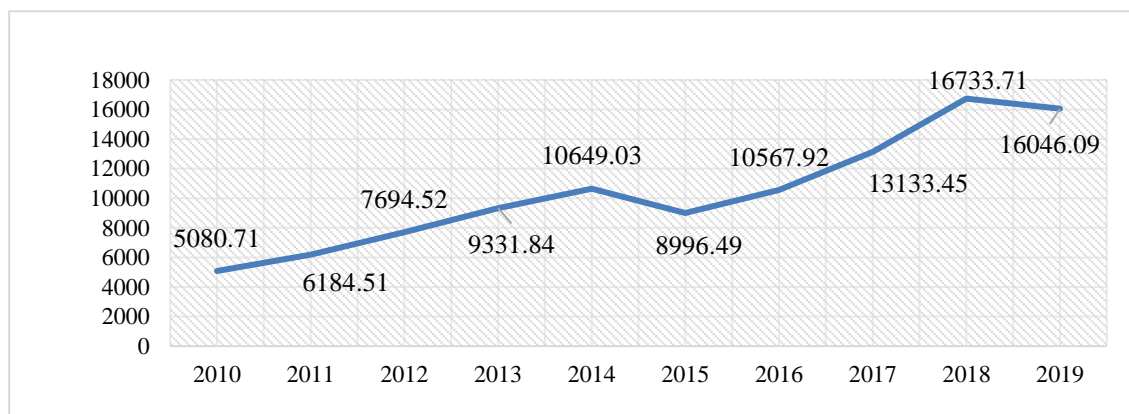
Issue of Trade Imbalance in the BBIN Subregion

Except for India, the other three countries, namely Bangladesh, Bhutan and Nepal, suffer from a huge trade deficit, which has revealed an increasing trend. It is also observed that the share of intra-regional imports in total imports is much higher for Bhutan (94 per cent), Nepal (64 per cent) and Bangladesh (10.26 per cent), compared to India (less than 0.5 per cent). It is expected that improved cross-border connectivity among the BBIN countries and trade facilitation measures will help smaller countries reduce their trade imbalance.

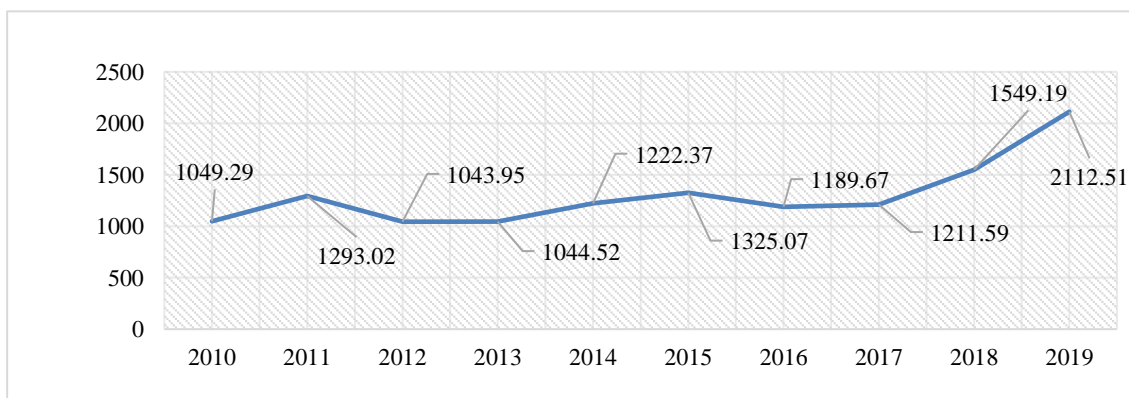
Box 2.1: Trend in India's Intra-regional Exports and Imports

India, because of its economic size compared to other countries and being located at the centre of the subregion, is the most dominant player in intra-regional exports. India accounted for nearly 87 per cent (over US\$16bn) of total intra-regional exports of about US\$18.51bn in 2019, and its exports to the subregion grew by more than 13 per cent compared to 2010. However, India's intra-regional export to the subregion is just about five per cent of its total exports, valued at US\$323bn in 2019. In comparison, India's import from the subregion was valued at US\$2.1bn in 2019. Though over the last ten-year period (2010-2020), it realised a growth of over 8 per cent, there is immense scope for improvement, as its intra-regional imports account for less than 0.5 per cent of its total imports.

Trend in India's Export to Other BBIN Countries (US\$mn)



India's Total Import from BBIN Countries (US\$mn)



Future Potential of Intra-regional Trade and Prospects

In the background of ongoing initiatives at international, regional, and bilateral levels towards trade facilitation (UNESAP's paperless trade initiatives, for instance), one expects the current trend in intra-regional trade in the BBIN subregion will be sustained in the times to come. There is immense scope for improvement in trade relations between these countries if the required interventions are made in infrastructure and subregional connectivity.

An attempt has been made through projections to understand the dynamics of intra-regional trade in the coming period up to 2035, covering six pairs of countries. These include (1) Nepal-Bangladesh, (2) Bhutan-Bangladesh, (3) India-Bangladesh (4) India-Bhutan (5) India-Nepal and (6) Bhutan-Nepal. It is mentioned that the projection is based on the historical data and trend in trade between countries of the subregion.

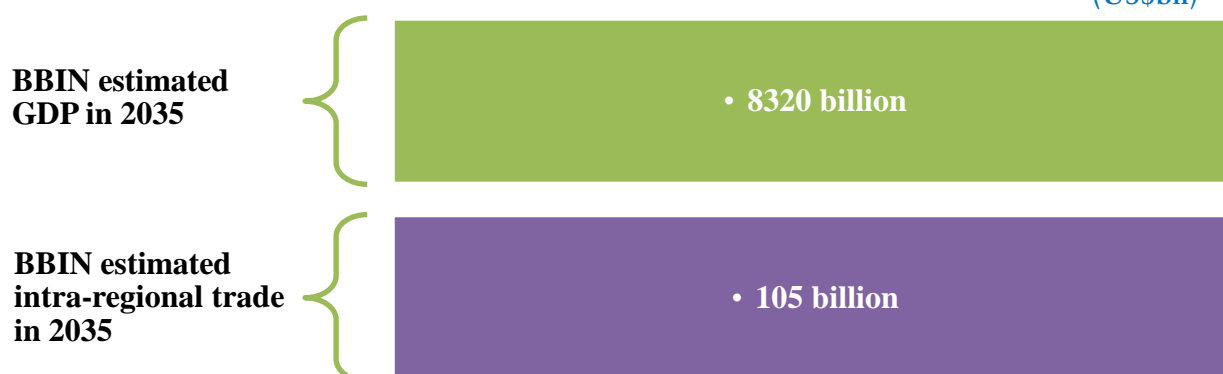
Intra-regional Trade Projections

Based on the scenario of business as usual and with ongoing interventions in trade facilitation initiatives and connectivity, intra-regional trade is estimated to grow from US\$20.7bn in 2022 to US\$56.2bn in 2030 and further to US\$105.8bn in 2035 at a CAGR of 12 per cent. A snapshot of country-wise projections is provided in the table below (Table 2.7). India will account for the largest share in this intra-regional trade (87 per cent), followed by Bangladesh (8.4 per cent). While the country-wise growth rate in intra-regional trade is expected to be almost uniform, there will be huge variations across countries in value terms. Regarding value, India and Bangladesh are expected to realise relatively bigger gains compared to the other two countries, Nepal and Bhutan. (For more details and country-level projections of imports and exports, see Annexures 2.3 and 2.4).

Table 2.7: Intra-regional Trade Projections of the BBIN Countries (Unit US\$mn)

	2022	2025	2030	2035	CAGR (2022 to 2035)
Bangladesh's Export to BBIN Countries	1458.1	2210.1	4422.8	8856.5	12.4
Bhutan's Export to BBIN Countries	365.5	523.1	1002.9	1946.6	13.7
India's Export to BBIN Countries	18171.0	26420.0	49520.0	93221.0	10.4
Nepal's Export to BBIN Countries	710.10	870.31	1221.79	1751.6	6.7
BBIN Intra-regional Trade	20704.8	30023.5	56167.51	105775.8	12.3
<i>Source: Author's computations</i>					

Realising GDP and Intra-regional Trade Potential in the BBIN Subregion (US\$bn)



As indicated above, the BBIN subregion is expected to achieve a GDP of USD 8320 billion and intra-regional trade of USD 105 billion in 2035. This accounts for 1.3 per cent of GDP growth of the BBIN countries in 2035. While GDP is estimated to increase by 2.3 times, the increase in intra-regional trade will be much higher and will increase by more than five times (refer to Table 2.7 above). Though GDP figures and intra-regional trade appear to be a bit optimistic, these are achievable, given the historical trend and ongoing trade facilitation initiatives at international, regional, and bilateral levels.

What Would It Take to Achieve the Target GDP and Intra-regional Trade?

Achieving the above targets would require countries in the BBIN subregion to address several issues hindering mutual trade and cooperation. Major areas of concern which need to be addressed on a priority basis are tariff and non-tariff barriers, sanitary and phytosanitary (SPS) measures, and technical barriers to trade (TBT).⁶

Some non-tariff barriers (NTBs) include complex customs and transit procedures; delay in border clearances; the complexity of documents and procedures; administrative hassles; the requirement of tests and certifications and its unpredictability; lack of appropriate infrastructure at border points; a sudden ban on import and export. Another area which would be equally critical for achieving target GDP and intra-regional trade is transport connectivity encompassing all modes of transport.

⁶ Tariff and NTBs, SPS measures, and technical barriers to trade (TBT), though highly critical for trade facilitation and regional integration, are outside the scope of the present study. Therefore, our analysis focuses on only transport connectivity and related issues.

How Can Connectivity Help in Achieving Target GDP and Intra-regional Trade?

Several studies have been conducted to gauge the impact of transport connectivity on GDP and intra-regional trade, revealing a positive correlation between the two. A paper by Ben Shepherd⁷ using the gravity model shows that by improving multimodal connectivity by five per cent, Asia Pacific Economic Cooperation (APEC) would increase exports by around four per cent, or between two per cent and six per cent per member economy. In dollar terms, this equates to an impact gain of US\$500bn in total, or between US\$850mn and US\$115bn per member economy. Economies that are open, highly integrated into world markets, and have strong connectivity baselines stand to gain the most. The paper also finds that, of the elements of multimodal transport connectivity, logistics services performance generally has the strongest impact on trade.

In their research, Elen Dede Tetteh (et.al),⁸ finds a positive connection between transport connectivity and infrastructure and international and intra-regional trade. The study concludes that transport connectivity and infrastructure impact the overall growth and performance of trade in the Economic Community of West African States (ECOWAS) region and the level of impact is statistically significant. The analysis shows that including a rail connection between trading country partners in the study area will increase trade performance by 3.5 per cent.

Similarly, the results also prove that a 10 per cent decrease in the distance between sea and air increases trade by 0.52 per cent and 0.31 per cent, respectively. Likewise, improving the rail and road density of the trading partner countries ranked as the second factor contributing to improving trade performance in the study area. Similarly, the performance of logistics (indicated through measures such as LPI⁹) indicates a substantial and comparatively robust impact on the flow of international and intra-regional trades.

Empirical findings in another paper¹⁰ reveal that corridor-based development may lead to a spurt in economic activity and development of that particular area. Intuitively, corridors would influence GDP growth through higher production and consumption. Research findings also demonstrate that improvements in transport infrastructure (i.e., the road density network, air transport, railways, ports, and logistics) result in increased trade flows¹¹. It is well-recognised that sound infrastructure lowers the costs of moving people and goods and increases economic productivity, leading to a higher standard of living.¹² Further, well-designed infrastructure facilitates economies of scale, reduces trade costs, and acts as a catalyst for efficient production and consumption of goods and services. It is a vital ingredient for economic growth and development.

⁷ Ben Shepherd. The Trade Impact of Enhanced Multi-modal Connectivity in the Asia-Pacific Region. *Journal of Economic Integration* 26(4), December 2011.

⁸ Elen Dede Tetteh, Zhang Diping, Ngozi Helen Oguchi, The nexus of transport connectivity and infrastructure with trade growth in the ECOWAS region. *Mathematical Theory and Modeling*. Vol 11, No 1 (2021).

⁹ Logistics Performance Index

¹⁰ Prabir De, Sunetra Ghatak Durairaj Kumarasamy. RIS. Assessing Economic Impacts of Connectivity Corridors in India: An Empirical Investigation with Special Focus on Northeast India.

¹¹ ADBI Working Paper Series. The Impact of Infrastructure on Trade and Economic Growth in Selected Economies in Asia. December 2015

¹² Martin Wachs (2016), *Transportation, Jobs, and Economic Growth*

The findings of the studies cited above reflect that improved transport connectivity has a positive impact on both GDP growth and intra-regional trade. This holds for the BBIN subregion as well. Strengthening subregional transport connectivity could go a long way and contribute to achieving the targets of GDP and intra-regional trade by 2035.

Transport and Connectivity Infrastructure Investments in the BBIN Subregion

Visible and potential gains from all the bilateral, regional and multilateral initiatives critically hinge on sound transport infrastructure within and across borders, particularly in the BBIN subregion.

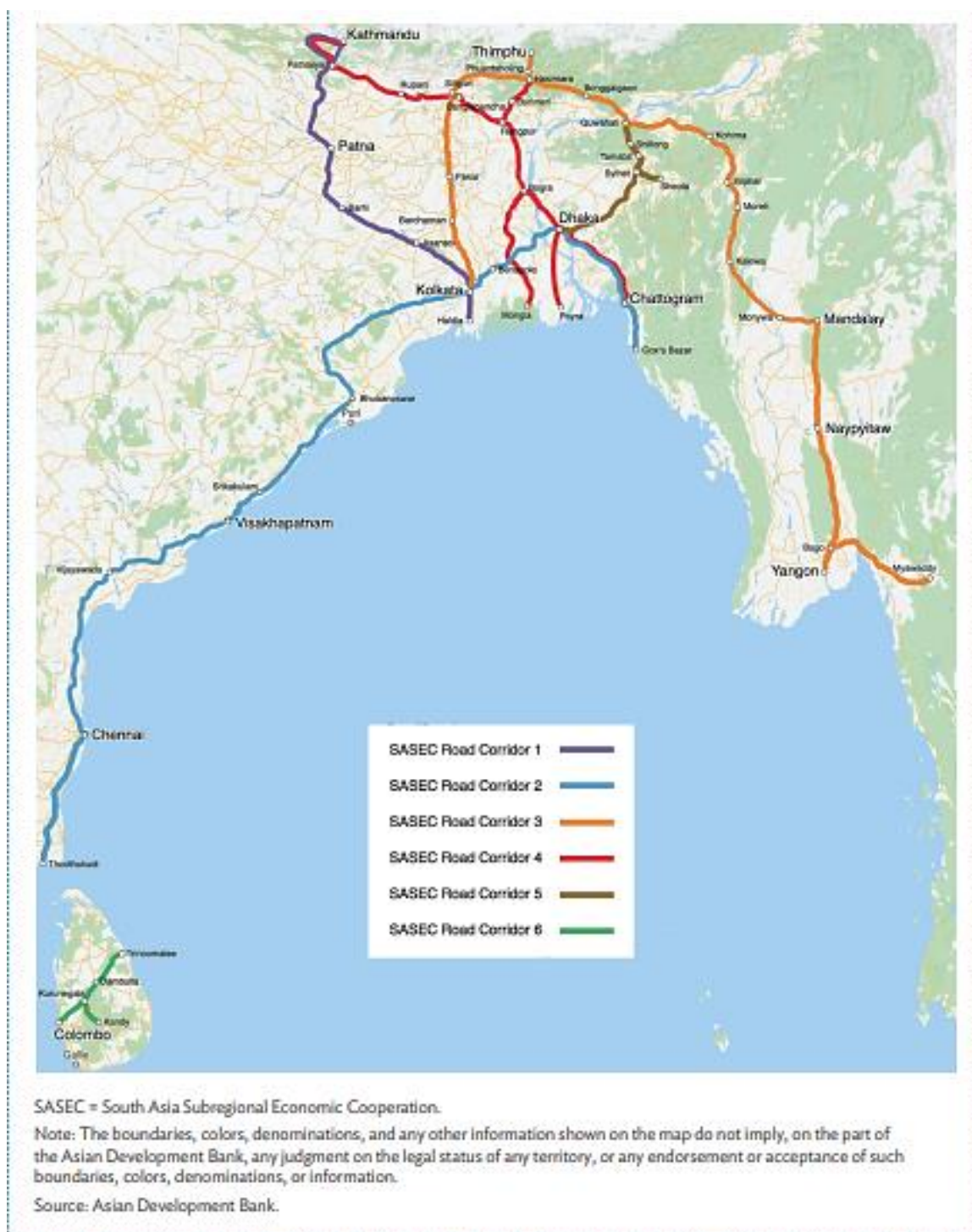
The BBIN countries recognised the need for connectivity within and across borders and investments in infrastructure for sustainable growth. These countries are implementing many transport projects to improve connectivity and trade between and among these countries. For instance, as revealed in the SASEC Operational Plan, the BBIN countries have implemented/or are implementing a total of 51 (out of 58) projects costing US\$19.3bn on road corridors (for SASEC Road Corridors, see Map 2.1) alone. In addition, 37 (out of 47 projects in the SASEC Plan) proposed and potential road projects are estimated to cost about US\$14bn to be implemented in the BBIN countries. Regarding rail connectivity, four railway projects are complete or ongoing on SASEC Rail Corridors (for SASEC Rail Corridors, see Map 2.2), while some others are at the proposal stage. Two port-related projects seek to strengthen connectivity among these countries.¹³

Under the BIMSTEC Master Plan for Transport Connectivity, adopted by the BIMSTEC Leaders during the 5th BMSTEC Summit in March 2022 in Colombo, the importance of connectivity and investments in infrastructure have been emphasised. There are 179 planned and ongoing transport projects covering roads, railways, ports and inland waterways in the BIMSTEC region, and these projects are estimated to cost about US\$107bn. Interestingly, most of these are in the BBIN countries.

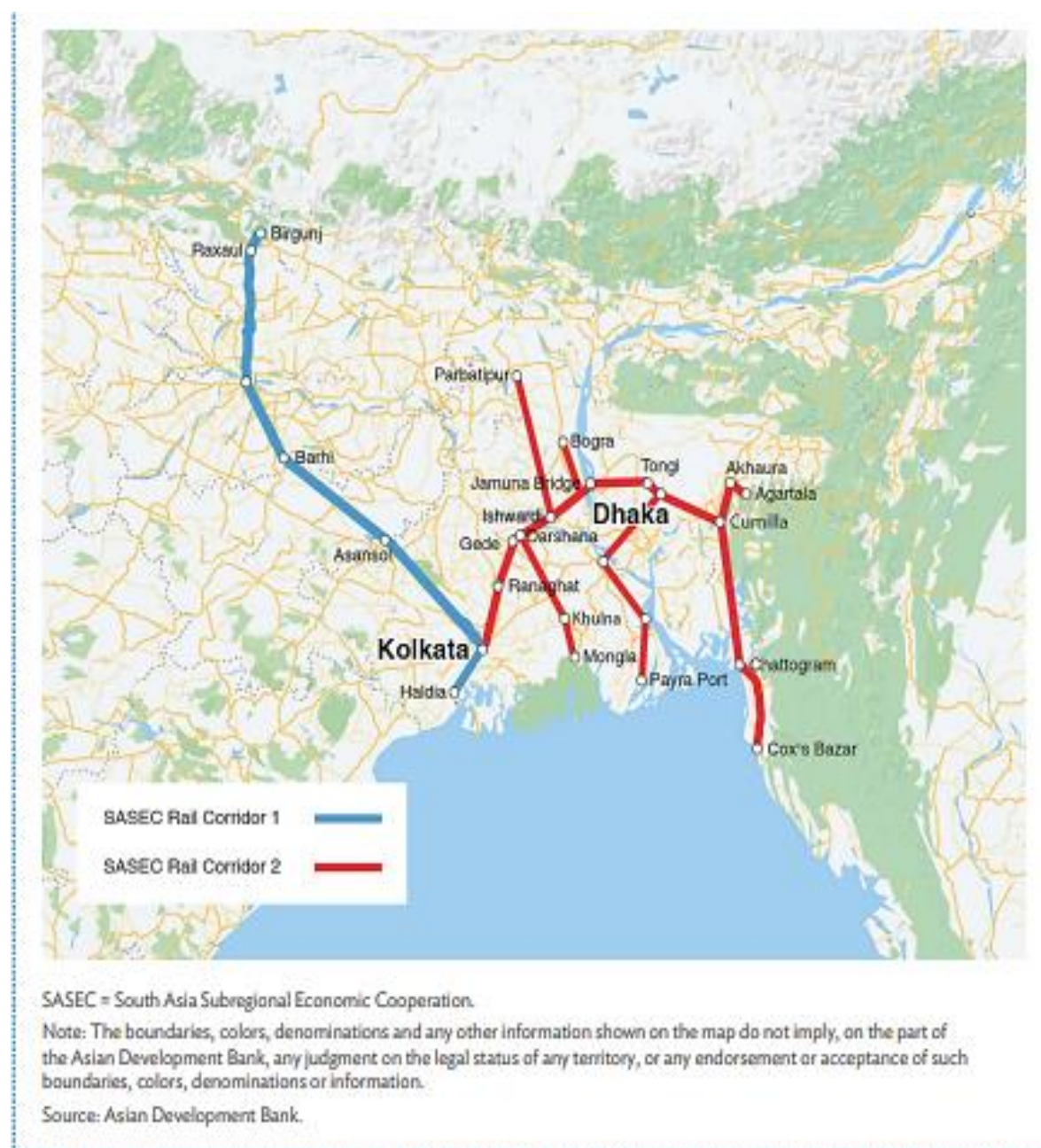
This study has attempted to understand the dynamics of transport connectivity—its current status, major issues and challenges, identifying connectivity gaps, and making policy and investment-related interventions. About 50 entry-exit and other locations encompassing different modes of transport and infrastructure between and among all four countries critical to connectivity and trade have been identified along four select corridors (for corridors and locations, see Chapter 1). The purpose is to develop a holistic approach to strengthen existing connectivity routes and explore new routes to facilitate increased trade and cooperation. The following chapters (Chapters 3, 4, and 5) are devoted to this purpose.

¹³ South Asia Subregional Economic Cooperation Operational Plan 2016–2025 Update

Map 2.1: SASEC Road Corridors



Map 2.2: SASEC Rail Corridors



Annexure 2.1: Some Important Bilateral Treaties/Agreements between India and Bangladesh Relating to Trade and Transport Connectivity

1. Agreement on the Use of Chattogram and Mongla Port for Movement of Goods to and from India between India and Bangladesh, October 25, 2018
2. Addendum to the Protocol on Inland Water Transit and Trade Between Bangladesh and India Signed on 6 June 2015, October 25, 2018
3. SOP of MoU on Passenger and Cruise Services on the Coastal and Protocol Route between India and Bangladesh, October 25, 2018
4. MoU between India and Bangladesh for Construction of the India-Bangladesh Friendship Pipeline between Siliguri (in India) and Parbatipur (in Bangladesh), April 09, 2018
5. MoU between India and Bangladesh on Establishing Border Haats Across the Borders between India and Bangladesh, April 08, 2017
6. MoU between India and Bangladesh on Passenger and Cruise Services on the Coastal and Protocol Routes, April 08, 2017
7. MoU between India and Bangladesh on the Development of Fairway from Sirajganj to Daikhowa and Ashuganj to Zakiganj on Indo-Bangladesh Protocol Route, April 08, 2017
8. MoU between India and Bangladesh for the Regulation of Motor Vehicle Passenger Traffic between the Two Countries, April 08, 2017
9. Agreement between India and Bangladesh for the Regulation of Motor Vehicle Passenger Traffic between Guwahati in India and Dhaka in Bangladesh, June 06, 2015
10. Trade Agreement between India and Bangladesh, June 06, 2015
11. MoU between India and Bangladesh for Cooperation on Establishing Indian Economic Zone in Bangladesh, June 06, 2015
12. Agreement between India and Bangladesh on Cooperation in the Field and Standardisation and Conformity Assessment, June 06, 2015
13. MoU between India and Bangladesh in the Field of Blue Economy and Maritime Cooperation in the Bay of Bengal and the Indian Ocean Region, June 06, 2015
14. Agreement on Coastal Shipping between India and Bangladesh, June 06, 2015
15. Protocol on Inland Water Transit between India and Bangladesh, June 06, 2015
16. MoU between India and Bangladesh Relating to the Use of Chittagong and Mongla Ports for Movement of Goods to and from India, June 06, 2015
17. Agreement between India and Bangladesh for the Regulation of Motor Vehicle Passenger Traffic from Agartala to Kolkata via Dhaka and vice versa, June 06, 2015
18. MoU between India and Bangladesh for Development of Railway Infrastructure, February 16, 2013
19. Protocol Amending the Convention between India and Bangladesh for Avoidance of Double Taxation, February 16, 2013
20. MoU between India and Bangladesh to Facilitate Overland Transit Traffic Between Bangladesh and Nepal, September 06, 2011
21. Agreement between India and Bangladesh for the Promotion and Protection of Investments, February 09, 2009
22. MoU between India and Bangladesh to Facilitate Technical Cooperation in the Fields of Standardisation and Certification, June 26, 2007
23. Agreement between India and Bangladesh for the Regulation of Motor Vehicle Passenger Traffic between the Two Countries, June 17, 1999
24. Trade Agreement between India and Bangladesh, October 04, 1980
25. Agreement on Trade Between India and Bangladesh, July 05, 1973
26. Trade Agreement Between India and Bangladesh, March 28, 1972

Annexure 2.2: Intra-Regional Trade in the BBIN Region

[illegible]

Annexure 2.3: The BBIN Countries Intra-regional Trade Projections for the Period 2022 to 2035 (US\$mn)

Pair 1: India and Bangladesh															
	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
India's Export to Bangladesh	8243	9232	10340	11581	12970	14527	16270	18222	20409	22858	25601	28673	32114	35968	40284
India's Import from Bangladesh	1214	1396	1605	1846	2123	2441	2808	3229	3713	4270	4910	5647	6494	7468	8588
Pair 2: India and Bhutan															
India's Export to Bhutan	694	764	840	924	1017	1118	1230	1353	1488	1637	1801	1981	2179	2397	2637
India's Import from Bhutan	249	287	330	379	436	501	577	663	763	877	1008	1160	1334	1534	1764
Pair 3: India and Nepal															
India's Export to Nepal	7109	8175	9401	10812	12433	14298	16443	18910	21746	25008	28759	33073	38034	43739	50300
India's Import from Nepal	649	695	744	796	851	911	975	1043	1116	1194	1278	1367	1463	1565	1675
Pair 4: Nepal and Bangladesh															
Nepal Export to Bangladesh	12	13	14	15	16	17	18	19	21	22	24	26	27	29	31
Nepal Import from Bangladesh	52	58	65	73	82	92	103	115	129	144	162	181	203	227	255
Pair 5: Nepal and Bhutan															
Nepal Export to Bhutan	2	2	3	3	3	4	4	4	5	6	6	7	8	9	10
Nepal Import from Bhutan	13	14	15	17	18	20	22	24	27	30	33	36	39	43	48
Pair 6: Bhutan and Bangladesh															
Bangladesh Export to Bhutan	4	4	4	5	5	6	6	7	8	8	9	10	11	12	14
Bangladesh Import from Bhutan	52	56	60	64	69	73	79	84	90	96	103	110	118	126	135

Annexure 2.4: Bangladesh's Projected Trade with BBIN Countries (US\$mn)

	2022	2025	2030	2035	CAGR (2022 to 2035)
Total	10759.22	15265.07	27399.69	49306.97	11.49
Export	1458.12	2210.11	4422.83	8856.54	13.75
Import	9301.10	13054.95	22976.87	40450.42	11.07
Bhutan's Projected Trade with BBIN Countries					
	2022	2025	2030	2035	CAGR (2022 to 2035)
Total	1126.47	1547.99	2654.01	4606.64	10.58
Export	365.55	523.07	1002.89	1946.65	12.69
Import	769.91	1024.92	1651.12	2659.99	9.26
India's Projected Trade with BBIN Countries					
	2022	2025	2030	2035	CAGR (2022 to 2035)
Total	20548.43	29830.58	55844.39	105247.82	12.38
Export	18171.00	26420.00	49520.00	93221.00	12.39
Import	2377.43	3410.00	6340.88	12026.89	12.28
Nepal's Projected Trade with BBIN Countries					
	2022	2025	2030	2035	CAGR (2022 to 2035)
Total	8957.44	13404.10	26403.93	52318.06	13.44
Export	710.10	870.31	1221.79	1751.62	6.66
Import	8247.34	12533.79	25182.14	50602.44	13.83

3

Policy, Practice, and Institutional Framework for Transport Connectivity in the BBIN Subregion

As indicated in Chapter 2, the BBIN subregion has immense trade and economic potential, which can only be realised by developing seamless multimodal connectivity within and without the subregion. Acknowledging this need for subregional integration through the amalgamation of the various modes of transport, the governments in the BBIN subregion have started taking initiatives in the transport and connectivity sector.

Policy, Practice and Institutional Framework for Transport Connectivity

The BBIN countries have developed numerous policies and practices to facilitate multimodal connectivity in the recent past. Various regional cooperation initiatives and multilateral development organisations such as the Bay of Bengal Initiative for Multi-Sectoral Trade & Economic Cooperation (BIMSTEC), South Asian Association for Regional Cooperation (SAARC), South-Asia Subregional Economic Cooperation (SASEC), and United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) are playing important roles in the development of multimodal connectivity in the BBIN subregion by providing broader frameworks and models to emulate.

The South Asia Subregional Economic Cooperation Action Plan 2016-2025¹ by SASEC, Connecting to Thrive: Challenges and Opportunities of Transport Integration in Eastern South Asia² by the World Bank, SAARC Regional Multimodal Transport Study (SRMTS)³, SAARC

¹ SASEC. 2016, South Asia Subregional Economic Cooperation Action Plan 2016-2025. Mandaluyong City. ADB. © ADB <https://www.adb.org/sites/default/files/institutional-document/193351/sasec-operational-plan2016-2025.pdf>

² Herrera Dappe, Matias; Kunaka, Charles. 2021. Connecting to Thrive: Challenges and Opportunities of Transport Integration in Eastern South Asia. International Development in Focus, Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/34916>

³ SAARC Secretariat (2006), SAARC Regional Multi-modal Transport Study (SRMTS), Kathmandu, SAARC http://www.sasec.asia/uploads/publications/m..SRMTS_Final.pdf

Regional Multimodal Transport Study (SRMTS)⁴ and BIMSTEC Master Plan for Transport Connectivity⁵ are some notable studies among others about transport connectivity in the subregion.

Bangladesh

Bangladesh approved a National Integrated Multimodal Transport Policy (NIMTP) in 2013, which aims to make the country's multimodal transport system more cost-effective, safe and efficient. The policy has the vision to remove the overdependence on road transport and shift to rail and waterways. The NIMTP had the objectives of reducing the cost of transport of goods and aiding export competitiveness; improving safety; ensuring that transport meets social needs about cost accessibility to all sectors of society; improving the integration of the overall transport network; taking advantage of Bangladesh's geographical position to trade in transport services and induce efficiency in the transport sector; increasing alternative options for passenger and freight transport; and reducing the negative environmental effects of transport.

However, issues and challenges continue to hamper the implementation of transport connectivity projects. For instance, inter-agency coordination issues were reported from various locations covered in the survey undertaken during this project. For example, the river port area in Daudkandi (Gumti River) is under the jurisdiction of BIWTA, Narayanganj office, and the roads surrounding the port area are under the jurisdiction of Roads and Highways Department, Narayanganj, Dhaka division. The monitoring and maintenance of the Daudkandi river port and the surrounding infrastructure is hampered by the lack of coordination between the local government and BIWTA authority, according to the stakeholders.

In the case of connectivity with neighbouring countries, particularly India, there is sub-optimal transport integration between Bangladesh and India, adversely affecting trade, transit, productivity and the competitiveness of these countries in the subregion. Cargo trucks are not allowed to cross the border, so they have to transfer their cargo at border points, which increases time, cost and effort while also leading to spillages and wastages during the transfer of goods.

Bhutan

The long-term strategic vision of Bhutan regarding transport development is guided by the 'Bhutan Transport 2040 Integrated Strategic Vision,'⁶ which comprises an overall target, auxiliary objectives, and a series of combined strategies to guide government policy and investment planning. The strategic vision document identifies the private sector as the potential driver of new developments in transport connectivity in Bhutan. It supports the development

⁴ Asian Development Bank. 2003, SAARC Regional Multi-modal Transport Study (SRMTS), Tokyo, ADB Institute. ©ADB <https://www.adb.org/sites/default/files/project-document/70534/tar-reg-36462.pdf>

⁵ Asian Development Bank. 2022, BIMSTEC Master Plan for Transport Connectivity. Manila, ADB. Accessed from: <https://www.adb.org/sites/default/files/institutional-document/740916/bimstec-master-plan-transport-connectivity.pdf>

⁶ ADB. 2011, Bhutan Transport 2040 Integrated Strategic Vision, Mandaluyong City, Asian Development Bank. ©ADB <https://www.adb.org/sites/default/files/publication/30268/bhutan-transport-2040.pdf>

of inter-modal transport facilities such as inland container depots, dry ports, warehouses and cold storage. It also recommends establishing a management information system and global positioning system tracking.

The National Transport Policy of Bhutan 2017⁷ is the latest in Bhutan. The objective of the policy is to establish an ecosystem that provides everyone access to a transport system which is affordable, efficient and safe. It tries to provide social equity and promote gender inclusion, and it particularly mentions enabling an environment for freight transport.

At the same time, it also recommended a Logistics Cell within the Ministry of Information and Communications for coordinated logistics planning that will take Bhutan to the path of multimodality. With roadside checks, weigh stations, and the signposting of load limits, procedures are in place for monitoring and regulating trucks to ensure that they conform to specified weight-carrying limits. The Transport Policy 2017 also mentions developing critical physical infrastructure at land customs stations. It envisages the augmentation of physical infrastructure at Phuentsholing land customs station through the seamless combination of ICT/digital infrastructure and the development of automated customs processing systems.

It recognises the need to develop Inland Container Depots at land customs stations to facilitate fast clearance and prevent congestion. The policy underlines the need to simplify and harmonise the regional trade facilitation environment to promote intra-BBIN/BIMSTEC trade. Connectivity to seaports in Bangladesh and India, and connection to the Asian road network, was to be included as a strategic part of Bhutan's transport network to enhance the quality of transport services.

However, much must be done on the ground to facilitate inclusive connectivity and trade with neighbouring countries. This is especially true regarding the cross-border movement of goods and people-to-people contact. Stakeholders who interacted during the field survey opined that while the Government-to-Government dialogues take time, People-to-People exchange or dialogues, which is an efficient strategy in making the connectivity and trade more efficient in the BBIN subregion, is not being optimally facilitated. Without any common law and act for cross-border trade, the officials involved feel there is limited scope for realising full trade potential between Bhutan and other countries in the subregion.

Box 3.1: Case of Singey Export

Singey Export in Bhutan has been exporting cardamom to India since 2016. The business was good. However, just one year later, in July 2017, the cardamom export to India came to an abrupt halt. This was primarily due to the introduction of the Indian Goods and Services Tax (GST). Thereafter, the computerised system called the ICEGATE system was installed in Jaigaon customs office. The system requires quarantine clearance for cardamom. The Plant Quarantine Services of India (PQSI) did not issue the clearance for Bhutan cardamom as cardamom was not listed in India's import list.

⁷ Ministry of Information and Communications (2017). *National Transport Policy of Bhutan 2017*. Retrieved from <http://www.moic.gov.bt/wp-content/uploads/2017/08/Second-Draft-National-Transport-Policy-Bhutan.pdf>

Singey Export house was caught unaware and huge investments were at stake. However, towards the end of 2018, after several dialogues between the governments of Bhutan and India — the issue was resolved.

Following this, the four exit points (Jaigaon in Phuentsholing, Chamurchi in Samtse, Hathisar/Dathgiri in Gelephu, and Darranga in Samdrup Jongkhar) from Bhutan to India were also included as points of entry for import of plants and plant materials. Cardamom export resumed thereafter.

This is one example of how the change in policies without adequate preparation, consultation and capacity building, can affect bilateral trade badly.

According to stakeholders, coordination among the various agencies involved in the trade process has to improve. During the COVID-19 pandemic, this inter-agency coordination significantly improved as Bhutan devised a one-stop committee where the problems are thrashed out and solutions identified. One such example was the mechanisation of loading, unloading and transshipment at mini dry port in Phuentsholing. This needs to go beyond the pandemic.

India

The introduction of multimodal freight transport in India dates back to when Indian railways started containerised cargo movement in the 1960s. In 1993, the Indian parliament passed a Multimodal Transportation Act⁸ to standardise the regime for Multimodal Transport Operators (MTOs). The act was able to give a boost to the inland movement of traffic under a single authority. Information Technology encouraged the use of multimodal transport in India. The Indian Customs department uses the Electronic Data Interchange (EDI) system -- ‘Indian Customs EDI System’ (ICES) – to provide a paperless and seamless system to transact/exchange custom clearance-related data.

Private companies were given licences to operate their freight trains in the early 2000s until the Container Corporation of India (CONCOR) held a monopoly over multimodal transport. India also started using the road-railer⁹ system, which encouraged multimodal transportation.

The Government of India has recently launched *Gati Shakti*, the National Master Plan for multimodal connectivity, to coordinate the planning and execution of infrastructure projects to reduce logistics costs. It also focuses on expediting work on the ground, saving costs and creating jobs. Besides cutting logistics costs, the scheme aims to increase cargo handling capacity and reduce the turnaround time at ports to boost trade.

⁸ Government of India (1993). The Multi-modal Transportation of Goods Act 1993. Retrieved from <https://legislative.gov.in/sites/default/files/A1993-28.pdf>

⁹ The road-railer unit (RRU), which will run as a semi-trailer lorry on road and as a wagon on rail, is aimed at shifting the cargo transport from road to rail.

Indian Prime Minister launching Gati Shakti Master Plan for Multi-modal Connectivity



While the *Gati Shakti* Master Plan may take some time to be fully effective, poor coordination between the Centre and state governments in India is rampant in multimodal transportation. For example, the State Government of Jharkhand is not allowing IWAI barges to ply on the river for short distances even when the transporter has a No Objection Certificate (NOC) issued by the IWAI authority. The same is the problem in West Bengal, where the coordination between the State and Central Government is poor regarding new development initiatives.

For instance, a private firm that got the letter of award for developing an ICD at Siliguri in 2015 could not make it fully functional by 2021. The land provided for the construction by Siliguri Jalpaiguri Development Authority (SJDA) for the structure of an ICD was leased from railways for 35 years. But railways terminated the SJDA lease agreement in 2016, which delayed the opening of the ICD. It compelled the private party to put in a lot of extra effort to solve the issue to make the ICD functional. The private firm even had to court against the railways to get the required permissions and approval.¹⁰

Such instances (where inter-agency and inter-governmental coordination are poor) critically affect new transport and connectivity development projects.

Further, interactions with stakeholders revealed that corruption was common at most locations surveyed.

¹⁰ Legitquest (2019, December 11). PRISTINE HINDUSTAN INFRAPROJECTS PVT. LTD v. NORTHEAST FRONTIER RAILWAY AND ORS. Retrieved from <https://www.legitquest.com/case/pristine-hindustan-infraprojects-pvt-ltd-v-north-east-frontier-railway-and-ors/1B7C62>

Box 3.2: Gati Shakti Plan for Multi-modal Connectivity

The Government of India launched Gati Shakti Master Plan for Multimodal Connectivity for integrated planning and coordinated implementation of infrastructure connectivity projects. The plan aims at bringing down logistics cost alongside increasing cargo handling capacity and reducing the turnaround time at ports to boost trade.

A digital platform will be created, bringing 16 ministries and departments of the Government of India together, including the Railways and the Roadways. The creation of this common umbrella platform will help in planning and implementation of infrastructure projects in an efficacious manner, by way of improved coordination between various ministries/departments on a real-time basis.

This integrated approach will help in removing long-standing issues such as disjointed planning, lack of standardisation, problems with clearances, and timely creation and utilisation of infrastructure capacities. The existing infrastructure schemes under various ministries will be incorporated into this plan, including Sagarmala, Bharatmala, UDAN scheme, inland waterways among others.

The master plan will also cover economic zones such as pharmaceutical clusters, textile clusters, defence corridors, industrial corridors, electronic parks, fishing clusters, and agri zones. The master plan will usher in seamless movement of goods and people all across India. PM GatiShakti will provide the public and business community information regarding upcoming connectivity projects, other business hubs, industrial areas and the surrounding environment.

Nepal

The government in Nepal established National Trading Ltd in 1961 and Nepal Transit Warehousing Company (NTWCL) in 1971, which were major government interventions in the trade logistics sector. Nepal initiated a multimodal transit and trade facilitation project in 1993. The project's objective was to expand trade logistics services in the major land customs stations of the country. The project led to the formation of ICDs and the modernisation of the trade logistics sector of Nepal through various institutional and legal reforms. National Transport and Trade Facilitation Committee (NTTFC) and Nepal Inter-modal Transport Development Board (NITDB) were formed after the reforms to improve the export-import experience in Nepal.

The Nepal-India Transit Treaty signed in 1991 made the modality of operation of transit traffic between gateway ports in India and Nepal customs much smoother. The treaty was renewed in 2006. Nepal made a National Transport Policy¹¹ in 2001 to manage the transport infrastructure and means in Nepal. In 2004 a Rail Service Agreement was signed between the governments of Nepal and India, which laid down the modality of train service operations between gateway port/rail stations in India and Birgunj ICD. Additionally, Nepal has a transit agreement with India signed in 1997, allowing Nepal to use the Kakarbhitta-Phulbari-Banglabandha route for exports and imports with Bangladesh and beyond. Nepal also has agreements with Bangladesh to use the Chittagong port and other border crossings of Bangladesh.

In Nepal, a landlocked mountainous country, the dominant mode of transport is through roadways. Recently, it has been trying to move away from the heavy dependence on roads to transport cargo by integrating other modes of transport such as railways, waterways and airways.

Consultations with stakeholders during the field surveys revealed that the officers at the Land Customs Stations (LCSs) and Integrated Check Posts (ICPs) require more capacity building and enhanced knowledge about the paperless trade initiatives and automation. Stakeholders believe that poor coordination between federal, provincial and local governments is retarding new development initiatives.

It is also noted that the private sector is unhappy with how trade and transport policies are framed without adequate consultation with them. The private sector is discouraged from investing in the sector due to various reasons, among which are unrealistic regulations. For instance, the Bhairahawa Special Economic Zone was constructed to boost regional trade and commerce. However, even after over 20 years of construction, infrastructural and policy-level challenges have kept the private sector from operating in the SEZ. The private sector and industries have lamented that the lease for the SEZ is extremely high, and pertinent issues such as lack of electricity and water supply accentuate the difficulties.

Further exacerbating the situation is the policy to export at least 60 per cent of the production. Although the government reduced it from 75 per cent to 60 per cent, the private sector claims that the number is still high and is unfavourable to them.

¹¹ Ministry of Physical Planning and Works, Govt. of Nepal (2001). National Transport Policy. Retrieved from <https://dor.gov.np/home/law/force/national-transport-policy-2058#:~:text=The%20principal%20objective%20of%20the,of%20Nepal%20as%20a%20whole.&text=4>.

Country-Level Transport Infrastructure and Connectivity Initiatives¹²

Initiative	Significance
Bangladesh	
Bangabandhu railway bridge	This will be a dual gauge, double-track railway bridge over the Jamuna River that will improve the rail connectivity of Bangladesh's capital with the country's northwestern regions.
Haldibari-Chilahati railway line	This project is complete and has increased the number of operational railway lines between Bangladesh and India to five.
Akhaura-Agartala railway link	This project will move trains possible from Northeast India to Bangladesh.
SASEC Dhaka-Northwest Corridor Road Project	This project is to upgrade Dhaka–North-west international trade corridor, strengthening regional connectivity and boosting trade between and among the BBIN countries.
Five new ports of call between Bangladesh and India under the Protocol on Inland Water Transit and Trade	Rajshahi, Sultanganj, Chilmari, Daudkandi and Bahadurabad are in Bangladesh, while Dhulian, Maia, Kolaghat, Sonamura and Jogigopha are in India. This render 11 ports of call on each side under the protocol.
Mongla-Khulna Rail Project	It will be possible for Bangladesh to establish a railway network linking the country's second-largest seaport Mongla with neighbouring countries, namely Bhutan, India, and Nepal. The Rupsha railway bridge will be the longest in Bangladesh.
Matarbari deep sea port	This will be the fourth port in Bangladesh and will help handle the increasing export and import requirements of the BBIN subregion. Also, it will help in decongesting the Chittagong port.
Four ports of call with India under the Bilateral Coastal Shipping Agreement	Matarbari Port (Cox's Bazar) and Muktarapur Port (Munshiganj) in Bangladesh, and Dhamra Port (Odisha) and Kamarajar Port (Chennai) in India are the ports of call on talk between the two countries. Each country has seven ports of call under the Coastal Shipping Agreement.
Asian Highways Network	Bangladesh has three AH Networks of 1741 km comprising AH 1 (492 km), AH 2 (517 km) and AH 41 (762 km). These AHs connect Bangladesh to India and through India to Nepal
The Padma bridge	This 6.15 km bridge will connect Bangladesh's Capital City with 21 southwestern districts and is expected to boost the GDP of Bangladesh by 1.2 per cent.
Trans-Asian Railway Network	Trans-Asian Railway Network passes through Bangladesh, connecting it with Central and South East Asia.

¹² This is not an exhaustive list. The objective of this list is to bring out the relevant recently completed and ongoing transport connectivity initiatives in the BBIN countries, that will have an overall impact on the intra-regional and inter- subregional connectivity.

Initiative	Significance
Bhutan	
Construction of a mini dry port in Phuentsholing	Bhutan's first mini dry port. It is complete and ready for use. The port, which has customs clearance for imports and exports, can station more than 45 trucks simultaneously. This will help to decongest Phuentsholing, which is Bhutan's commercial hub.
Dry port at Pasakha	This dry port is being constructed through the Trade Support Facility (TSF), which the Government of India is providing to Bhutan. This dry port will smoothen the movement of heavy vehicles to the Pasakha industrial estate, a major industrial establishment in Bhutan with over 33 establishments.
SASEC Road Connectivity Projects in Bhutan	These projects aim to boost international and regional trade. This includes the construction of 68.3 kilometres of road along the Southern East-West Highway, 1.2 km of access road from the border crossing point near Pasakha, and approximately 2.7 km of a bypass road around Phuentsholing City.
Rail links with India	Bhutan and India are fast-tracking a railway link between Mujnai in West Bengal and Nyoenpaling in Bhutan. Feasibility studies for up to five rail links between Bhutan and India are being conducted. This includes a 57 km line from Kokhrajhar (Assam) to Gelephu (Bhutan), a 51.15 km line from Pathsala (Assam) to Nanglam (Bhutan), a 48 km line from Rangiya (Assam) to Samdrup Jongkjar (Bhutan), a 23 km line between West Bengal's Banarhat to Samtse in Bhutan, and a 17.52 km line between Hasimara in West Bengal to Phuentsholing in Bhutan.
SASEC Air Transport Connectivity Projects in Bhutan	These projects aim to develop safe, reliable, and efficient air transport systems in Bhutan. The project improved passenger convenience and service and strengthened safety and security at Bumthang, Gelephu, and Yonphula domestic airports in Bhutan.
SASEC Transport, Trade Facilitation, and Logistics Projects in Bhutan	These projects seek to promote mobility and regional connectivity in the Phuentsholing area of Bhutan, close to the border with India, and enhance trade opportunities by linking to the Southern East-West Highway network of the country. The project also focuses on infrastructure improvement and provision to border crossing points of equipment to facilitate cross-border traffic and transit of goods and services, trade, and commerce.
Asian Highway 48	This Asian Highway connects Bhutan's capital Thimphu to the Changrabandha border point between India and Bangladesh.
India	
Multi-modal Logistics Park (MMLP) in Jogighopa, Assam	This MMLP will be India's first international multimodal logistics park. It will offer multimodal connectivity through rail, road, and waterways to the states in the northeast region and beyond. This will be the first among the 35 identified multimodal logistics parks to be constructed in India.

Initiative	Significance
Eastern and Western Dedicated Freight Corridors of India	Dedicated Freight Corridors (DFC) is one of the largest rail infrastructure projects undertaken by the Government of India. Spanning a total length of 3,360 route km, these corridors that pass through many states of India will make the freight movement in India through railways cost and time efficient.
Kaladan Multi-modal Transit Transport Project (KMMTTP)	This is a strategic project signed between the Government of India and the Government of Myanmar in 2008, which provides an alternate route to landlocked NE states, reducing the distance from Kolkata to Assam by almost 50 per cent. It connects the Kolkata seaport in India with the Sittwe seaport in Rakhine State, Myanmar, by sea. In Myanmar, it then links the Sittwe seaport to Paletwa in Chin State via the Kaladan river boat route and then from Paletwa by road to Mizoram state in Northeast India. All project components, including Sittwe port and power, river dredging, and Paletwa jetty, have been completed except Zorinpui-Paletwa road, which is under construction.
India-Myanmar-Thailand Trilateral Highway	This highway is a 1,360 km long cross-border network connecting Moreh in India to Mae Sot in Thailand through Myanmar. This project is expected to establish and strengthen transport connectivity between South and Southeast Asia.
The Asian Highways	India has several Asian Highways passing through, which include AH 1, AH 2, AH 42, AH 43, AH 45, AH 46, AH 47, and AH 48.
India-Myanmar rail connectivity via Bangladesh	There is a proposal to connect Belonia in Tripura with the Sittwe port of Myanmar via Feni in Bangladesh through the railway. This will facilitate cargo transportation in India's northeast and boost South Asia–Southeast Asia rail connectivity.
Development of multimodal terminals in India	India is boosting its multimodal connectivity by constructing terminals in Varanasi, Uttar Pradesh, Sahibganj, Jharkhand and Haldia, West Bengal. This is part of the Jal Marg Vikas Project to develop the Varanasi-Haldia stretch, jointly funded by the Government of India and the World Bank. These projects will facilitate the movement of cargo vessels from India to Bangladesh and other countries in the region.
Dhubri – Phulbari bridge	This bridge will be India's longest bridge over a river, spanning more than 19 km. This four-lane bridge passes through two northeast Indian states, Assam and Meghalaya and will increase connectivity in northeast India and boost trade and commerce in the region.
Raxaul-Kathmandu rail line	This will connect the Indian city Raxaul in Bihar with the capital city Kathmandu of Nepal through railways.
ICD at Siliguri	This ICD developed in Siliguri facilitates the region's domestic and international cargo movement. This ICD has road and rail connectivity.

Initiative	Significance
ICPs at major border points	India is building 14+ ICPs at its major border points with neighbouring countries. This includes Hili, Changrabandha, Ghojadanga, Mahadipur, Phulbari, Kawripuichhuah, Sutarkandi, Sabroom, Dawki, Akhaura, Jobgani, Sunauli and Rupaidiha/Nepalgunj.
Maitri Sethu	This bridge built over the Feni River connects Tripura in India with Bangladesh. This bridge will make the Chittagong port of Bangladesh accessible to India's northeast.
Trans-Asian Railway Network	Trans-Asian Railway Network passes through India, connecting it with Central and South East Asia.
Nepal	
The Nepal Strategic Road Connectivity and Trade Improvement Project by the World Bank	The project includes improving the Nagdhunga-Naubise-Mugling road and upgrading the Kamala-Dhalkebar-Pathlaiya road, which is crucial to Nepal's connectivity and trade with India and other countries in the region. Enhancing infrastructure, facilities, and sanitation provision at border crossing points to ease trade constraints and spur agricultural exports are also targets under the project.
Facilitating water transportation in the Karnali, Narayani, Kaligandaki and Koshi Rivers	This will help Nepal to connect with India through waterways.
The Asian Highways	The AH 2 extends from Bramhadev Mandi-Mahendranagar-Kohalpur-Narayanghar-Pathlaiya-Kakarbhitta, covering 1,321 km.
Kathmandu-Kulekhani-Hetauda Tunnel Road	This project will reduce the travel time from Hetauda to Kathmandu by 1 hour.
Upgrading of four important trade routes to six-lane highways	These include: (i) Pathalaiya-Birgunj (Nepal)-Raxaul (India) Road; (ii) Dharan-Biratnagar (Nepal)-Jogbani (India) Road; (iii) Belhiya (Nepal)-Sunauli (India) to Bhairahawa-Butawal Road; and (iv) Suryabinayak-Dhulikhel Road and this will facilitate bilateral trade with India.
Airport Enhancement Project	Upgradation of Tribhuvan International airport and other domestic airports to increase regional connectivity. A new international airport is being constructed at Nijgadhi.
ICD at Korala pass area	This is beneficial for Nepal to improve bilateral trade with China.
Upgrading of the Kathmandu-Kolhu-Trishuli-Syabrubesi-Rasuwa Gadhi corridor	This is to upgrade Kathmandu-Kolhu-Trishuli-Syabrubesi-Rasuwa Gadhi stretch to a high-quality road and connect it to the fast-track Kathmandu-Birgunj road.
ICP at Nepalgunj	Nepal with India is building a new ICP at Nepalgunj to boost bilateral trade.

Multimodal Terminal, Varanasi



Initiatives for Connectivity within the BBIN Subregion

The BBIN MVA was signed in 2015 to smoothen cross-border road transit for vehicles. While the Framework Agreement was signed in 2015 and Bangladesh, India and Nepal ratified the Agreement, Bhutan withheld its ratification for environmental reasons. Bhutan, however, has given its consent to implement the Agreement among BIN (Bangladesh, India and Nepal) countries. At present, member countries are negotiating the protocols (one for passengers and the other for cargo vehicles) to implement the MVA. Once the protocols are signed, the MVA will be implemented.

The South Asian Subregional Economic Cooperation (SASEC) programme is vital in promoting subregional connectivity initiatives between Bangladesh, Bhutan, India and Nepal.

Trial run under the BBIN MVA in 2016



Source: The Daily Star

Bangladesh

Bangladesh's strategic vision of enhancing inter-regional and intra-regional connectivity will benefit its export-oriented economy. In its 2013 National Integrated Multi-modal Transport Policy (NIMTP), Bangladesh prioritised the improvement of regional connectivity.

Bangladesh and India signed a Memorandum of Understanding (MoU) in 2015 that allows Indian cargo ships to carry goods to and from the northeastern parts of India to its other regions through the Chittagong and Mongla ports of Bangladesh.¹³

Bangladesh signed a Preferential Trade Agreement (PTA) with Bhutan in December 2020¹⁴ and is close to signing PTAs with Nepal and Indonesia. Bangladesh is in dialogue with Bhutan to establish cargo flight connectivity between the Gelephu town of Bhutan and the Lalmonirhat and Saidpur cities of Bangladesh. Both countries also explore possible railway connectivity through India's recently launched Chilahati-Haldibari railway connection.

Bangladesh and India, in March 2021, decided to explore subregional connectivity initiatives that could lead to higher volumes of trade in the BBIN subregion, along with strengthening the Indo-Pacific construct. Bangladesh and India are working together to re-establish the abandoned railway links that will improve the connectivity within the subregion and other regions of the world by linking it with the Trans-Asian Railway Network and SAARC network.

Bhutan

As a landlocked country, Bhutan recognises the importance of seamless connectivity to the neighbouring countries, namely India and Bangladesh seaports. It is exploring options to increase its accessibility to the Kolkata/Haldia ports of India and Mongla/Chittagong ports of Bangladesh to augment its international trade.

The Bhutan Transport 2040 Strategic Vision identifies increasing air connectivity in Bhutan as a strategic means to connect with South and Southeast Asia. In its 2017 National Transport Policy, Bhutan recognises the importance of strengthening regional connectivity.

Bhutan is upgrading the border roads and road connectivity enhancement under SASEC, BIMSTEC and other regional connectivity initiatives. It plans to eliminate any bottleneck in border entry points by constructing bypasses and implementing traffic management measures. It also aims to reduce the cost of the transaction associated with cross-country trade.

Bhutan is also exploring and coordinating with Bangladesh and India on the feasibility of developing waterways as an alternative to freight transport, as referred to in the policy. This includes the long-term possibility of linking Bhutan through the Manas/Sunkosh rivers via Dhubri and Daikhawa to Mongla/Chittagong. Bhutan had an MoU with Bangladesh in 2017 on using inland waterways for transit and trade cargo.

The double-lane Pheuntsholing-Thimphu National Highway is upgraded to the Asian Highway 48 [AH48]. It connects Bhutan to the larger Asian Highway Network at Phulbari, Siliguri area in India. Rail connectivity up to border crossing points is identified in the policy as important for Bhutan, trade and social development, and the need to collaborate with Indian Railways.

¹³ Ministry of External Affairs (2015). The Use of Chittagong and Mongla Ports for Movement of Goods to and from India. Retrieved from <https://www.mea.gov.in/Portal/LegalTreatiesDoc/BG15B2423.pdf>

¹⁴ SASEC (2020, December 6). Bangladesh, Bhutan Sign the Preferential Trade Agreement. Retrieved from <https://bit.ly/3ygHSqT>

Bhutan signed a bilateral agreement with India in 2016 on trade, commerce and transit.¹⁵ This agreement provides transit rights for trade with third countries- for which there are identified entry/exit points for bilateral trade with India and transit trade with Bangladesh and Nepal.

India

India is building ICPs at major border points with its neighbours to facilitate seamless connectivity within and outside the subregion.¹⁶ Multiple ICPs are being constructed on Bangladesh, Bhutan, Myanmar and Nepal borders. This includes the Hili, Changrabandha, Ghojadanga, Mahadipur, Phulbari, Kawripuichhuah, Sutarkandi, Sabroom, Moreh, Dawki, Akaura, Jobgani, Sunauli and Rupaidiha/Nepalganj ICPs. The establishment of these ICPs will have a positive impact on the inter-regional trade and connectivity of the BBIN subregion.

India is operationalising the use of inland waterways with Nepal and Bangladesh for cargo transportation. India is also allocating a separate zone for Nepal-bound cargo in Syama Prasad Mukherjee port in Kolkata to boost cargo movement and reduce handling time for consignments headed to Nepal. Since Nepal, as a landlocked country, depends on India for some of its third-country trade, this initiative will make foreign trade in Nepal less costly and time-consuming.

Under the Border Area Development Programme,¹⁷ the Indian government increased financial allotments to develop critical infrastructure in the border states and incentivised fostering of cross-border economic relations. Apart from this, India is assisting the neighbouring countries in South Asia by providing financial and technical assistance for building infrastructure that boosts subregional transport connectivity.

Financial incentives are also put in place by the Indian government to enhance regional connectivity. Delhi announced a new Concessional Finance Scheme (CFS) in 2015, renewed in 2018 to support Indian companies winning bids for strategic infrastructure projects in neighbouring countries.

Nepal

Nepal has a Treaty of Transit with India, which was renewed in 2006 and 2013. This treaty gives transit rights to each country through other's territory with mutually agreed routes and modalities.

Nepal has a Rail Services Agreement with India that allows the movement of containerised railway cargo between all ICDs and Integrated Check Posts (ICPs) between Nepal and India. According to this agreement, Nepal is authorised to carry out third-country trade through

¹⁵ The Hindu (2020, July 31). India-Bhutan trade & transit pact come into force. Retrieved from <https://www.thehindu.com/news/national/india-bhutan-trade-transit-pact-come-into-force/article19397378.ece>

¹⁶ Land Ports Authority of India (2018, July 18). Road map of ICP's. Retrieved from <http://www.lpai.gov.in/content/innerpage/next-phase.php>

¹⁷ Ministry of Home Affairs, GoI (2021). Border Area Development Programme. Retrieved from <https://badp.mha.gov.in/>

these points. Both governments made a further amendment in 2021 that allows private railway operators to transport cargo to Nepal.¹⁸

Another agreement in 1997 between Nepal and India allowed the transit route of Kakarbhitta-Phulbari-Banglabandha for the passage of exports and imports with and through Bangladesh.

Nepal has a bilateral transit agreement with Bangladesh,¹⁹ which allows Nepal to use the points of entry and exit for the movement of traffic in transit through Bangladesh ports and border crossings.

Box 3.3: Nepal to Use Inland Waterways in India, Boost Intra-Regional Connectivity

India and Nepal came to an agreement regarding the utilisation of the untapped potential of inland waterways in the region for boosting intra-regional connectivity. Taking cognisance of their geographies and noting the development of inland waterways in both countries, the Prime Ministers of both countries took the landmark decision to develop the inland waterways for the movement of cargo, within the framework of trade and transit arrangements, providing Nepal with the additional access to the sea. This new initiative would enable cost-effective and efficient cargo movement within the BBIN subregion.

The operational modality of inland waterways is finalised between the two countries for using three routes on the Ganges River - Kolkata-Kalughat-Raxaul, Kolkata-Sahebgunj-Biratnagar and Kolkata-Varanasi-Raxaul. India has already developed waterways on the Ganges, connecting Varanasi and the seaport of Haldia. Nepal's access to Indian waterways will not only ease the movement of cargo imported from third countries but will also help reduce the transportation cost of imported goods.

Initiatives for Connecting the BBIN Subregion with other Regions

The BBIN subregion has initiated multiple steps to establish connectivity with other regions. The Asian highway network passes through the four the BBIN countries, increasing its connectivity with Central and Southeast Asia. Several Asian Highways pass through the subregion, which includes the AH 1, AH 2, AH 42, AH 43, AH 45, AH 46, AH 47 and AH 48. This highway network traversing the subregion is crucial for its connectivity with the rest of the world through roadways.

¹⁸ The Kathmandu Post (2021, July 4). Revised railway service deal with India to facilitate Nepal's trade, officials say. Retrieved from <https://kathmandupost.com/national/2021/07/04/revised-railway-service-deal-with-india-to-facilitate-nepal-s-trade-officials-say>

¹⁹ Ministry of Industry, Commerce and Supplies, Govt. of Nepal (1976). Nepal's Trade & Transit Agreement. Retrieved from <http://tepc.gov.np/pages/transit-agreement-bangladesh>

On the way from Siliguri to Panitanki on Asian Highway 02



The BBIN subregion is part of the larger Trans-Asian Railway network that connects Europe with Asia through an integrated freight railway network. The southern corridor of the Trans-Asian railway will connect Southeast Asia with Europe through South Asia. This railway network will enhance the railway connectivity of the BBIN subregion with Southeast Asia, Northeast Asia, Central Asia and the Caucasus.

As members of the South Asian Association for Regional Cooperation, the BBIN countries are part of the South Asian Free Trade Area (SAFTA) Agreement, which aims to strengthen economic cooperation and realise the maximum economic potential. The BBIN countries are part of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), which identified trade and investment, technology, transport and communication, among others, as areas of cooperation. Being members of these regional connectivity initiatives, members of the BBIN subregion are establishing connectivity with their immediate neighbours.

India, with its Neighbourhood First policy, is prioritising regional connectivity. India's India-Myanmar-Thailand Trilateral highway is an initiative that will boost the BBIN subregion's connectivity with Southeast Asia. The highway has chances of being extended to Lao PDR and Cambodia. Recently, Bangladesh also showed interest in joining the initiative.

India has developed the Chabahar port in Iran along with a railway track from Chabahar to Zaranj in Afghanistan via Zahedan. The BBIN subregion can connect with Central Asia by connecting to Chabahar port from the Mumbai and Kandla ports in India. From Chabahar port, the multimodal connectivity through the Zahedan-Zaranj-Delaram-Herat route can be used by the BBIN countries to connect with the rest of central Asia.

In 2015, India and Japan adopted Vision 2025,²⁰ which focused on a "Free and Open Indo-Pacific". The vision focused on regional connectivity and joint projects in third countries to increase connectivity. India also established a trilateral infrastructural financing group with

²⁰ Ministry of External Affairs, GoI (2015, December 12). Joint Statement on India and Japan Vision 2025. Retrieved from <https://bit.ly/3hsxRRJ>

Japan and the United States. India and Japan are cooperating to build a container terminal at Columbo port in Sri Lanka.²¹ In 2017, India signed and ratified the Transports Internationaux Routiers/International Road Transports (TIR) convention that facilitates international container movement across the regions.²²

Nepal has an agreement with China to construct all-weather road connectivity between Kathmandu and the Tibet autonomous region. This is part of the trans-Himalayan multi-dimensional connectivity network understanding Nepal with China. Nepal and China are doing a feasibility study on building a trans-Himalayan railway network which will connect Kathmandu with the major commercial centres in Tibet and mainland China. This can also be extended to other regions of the world, which can eventually build railway connectivity of the BBIN subregion with the rest of the world.

Initiatives Towards Paperless Trade, ECTS System and Single Window Compliance

The use of digital technologies and integration of ICT in the transport and logistics sector is imperative for seamless connectivity in the subregion. It gains more relevance during unexpected crises, such as the COVID-19 pandemic. Digital connectivity in the transport sector will make the subregion competitive in the domains of trade and logistics while also providing resilience against future shocks.

Even though the BBIN subregion is gradually moving to a paperless trade system, there are many areas where the trade is paper-heavy, requiring the traders to submit various hard copies of documents to different governing bodies. The COVID-19 pandemic gave a fillip to the paperless trade initiatives in the subregion. India introducing a ‘faceless assessment’ programme to assess declarations online irrespective of the port of arrival is an apt illustration in this regard.

The BBIN countries should ratify the frameworks and arrangements, such as UNESCAP’s Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, which will help the subregion improve the paperless trade environment. This will also help the subregion to get the required capacity-building and technical assistance from international development organisations.

The BBIN subregion is slowly adapting to Electronic Cargo Tracking System (ECTS) use. The ECTS offers the facility of sealing containers using high-security electronic seals with embedded tracking functionality. It makes the process simpler and less time and cost-consuming. It also enhances the safety and security of the cargo while providing traceability through improved shipment visibility.

²¹ The Hindu (2019, May 28). Sri Lanka, Japan, India sign deal to develop East Container Terminal at Colombo Port. Retrieved from <https://www.thehindu.com/news/international/sri-lanka-japan-india-sign-deal-to-develop-east-container-terminal-at-colombo-port/article27273794.ece>

²² The Hindu (2017, June 20). India ratifies United Nations TIR Convention. Retrieved from <https://www.thehindu.com/news/national/india-ratifies-united-nations-tir-convention/article19106007.ece>.

The BBIN countries have developed and are improving their national single-window systems to simplify foreign trade. The single window system provides a one-stop solution for the traders and provides more transparency, thus reducing the chances of corruption and red-tapism.

Bangladesh

Bangladesh, in 2017, signed the Agreement on Cross-border Paperless Trade, an initiative of the UNESCAP. Bangladesh is the first country in the BBIN subregion to ratify the UNESCAP's Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific.

Bangladesh ratified the Trade Facilitation Agreement (TFA), which was concluded at the World Trade Organisation's 2013 Bali Ministerial Conference. The TFA contains provisions for expediting the movement, release and clearance of goods, including goods in transit. The TFA creates a trading system where the single window system facilitates the exchange of information in dematerialised structural trade documents based on open and agreed norms. It is an integrated platform where traders submit all required import, export and transit information through a single electronic gateway.

The Bangladesh National Single Window (BD-NSW) system facilitates faster and more transparent international trade procedures through an electronic, online system. It reduces costs and provides consistency and certainty to the total process, from the start of the regulatory requirements to the clearance of goods. This electronic system streamlines and automates procedures for registered private sector stakeholders and government agencies for international trade-related permits, licenses, certificates and customs declarations.

Bangladesh uses the Automated System of Customs Data (ASYCUDA), the computerised customs management system developed by the UN Conference on Trade and Development (UNCTAD), to make customs procedures and formalities simpler, more transparent and efficient. Bangladesh allowed India to use its Mongla and Chittagong ports for cargo movement to and from the northeast region of India. But no transit module is available in the ASYCUDA system for realising duty and other related works of this type of cargo movement. Bangladesh has limited use of the ECTS sealing system. The ECTS has been deployed to transit Bangladesh cargo for export to global destinations through Indian gateways.

On the ground, however, the use of a seamless single window system and paperless trade were limited, as experienced during the field survey under the project. The printed hard copies of major documents are used at most trade-related offices. This further chances of corruption in the form of illegal money collection from the service users. Lack of skilled manpower, absence of coordination and cooperation, and irregularities and corruption in different agencies are some of the challenges faced by the government and businesses.

However, the digitisation and paperless initiative undertaken by the banking sector, establishment of trade portal, enhancement in the paperless capacity of the customs department and continuous innovations by the private sector in the electronic system provide the requisite boost for the successful implementation of the Trade Facilitation Agreement.

Bhutan

Paperless trade and single window systems have been receiving importance in Bhutan lately, especially to reduce the impact on the environment, reduce costs and improve service efficiency via digital platforms. The process has already begun with support from the UNESCAP and ADB, and it has, however, got delayed due to the enormous funding requirement.

The initiative of paperless trade is currently mandated by the Department of Trade under the Ministry of Economic Affairs but has several stakeholders, which delays the process. Paperwork is prevalent extensively, resulting in late clearance and other bureaucratic hurdles. Private sector stakeholders, in particular, are requesting the government to expedite this programme as it will significantly impact getting the services on time and uniformly, with limited manual intervention.

Custom (import/export) clearance is undertaken using Bhutan's BACS system (Bhutan Automated Customs System). Bhutan Automated Customs System (BACS) is incompatible with similar systems in India or Bangladesh. The system does not provide single window clearance or online services for all required clearances. This is an issue that needs to be addressed urgently.

The Bhutan government introduced a national [Single Window Company Registry System](#) with the help of the World Bank Group in 2020. Bhutan also launched a [Trade Information Portal](#) in November 2020 to provide entrepreneurs instant access to essential and strategic trade information needed to secure deals in the international markets. This Trade Information Portal serves as a gateway to reliable information resources and updated databases of the United Nations. Information such as potential export indicators, customs tariffs, tariff preferences, trade agreements, export procedures, non-tariff measures, voluntary standards, market access requirements, world trade flows, latest WTO notifications, contact details of potential buyers and local export-related service providers are all available at the click of a button.

For Bhutan to establish a National Single Window for Trade Facilitation, there is a need to put in place a one-stop solution for trade-related transactions, which is to be addressed with priority. The single windows system in Bhutan should integrate and link banks, licensing agencies and trade clearance agencies into a unique platform and allow a digital exchange of information in real-time, speeding up approvals. Regarding ECTS, Bhutan and India did a pilot along the Kolkata-Jaigaon-Phuentsholing route. This should be an encouraging development for charting the way forward.

Indian Customs use the Indian Customs Electronic Gateway (ICEGATE), the national portal of Indian Customs of Central Board of Indirect Taxes and Customs (CBIC) that provides e-filing services to Trade, Cargo Carriers and other Trading Partners electronically. A host of services, including electronic filing of the Bill of Entry (import goods declaration), Shipping Bills (export goods declaration), e-Payment of Customs Duty, a free-of-cost web-based Common Signer utility for signing all the Customs Documents, facility to file online supporting documents through e-Sanchit, end-to-end-electronic IGST Refund are done through this ICEGATE system of Indian Customs.

India has the Single Window Interface for Trade (SWIFT), which would reduce interface with Governmental agencies and reduce time and the cost of doing business as it covers nine agencies, with six agencies involved in the vast majority of cases involving the requirement of NOC. SWIFT enables exporters/importers to file a common electronic 'Integrated Declaration' on the ICEGATE portal.

India uses the ECTS at ICDs/Container freight stations (CFSs) and for containers destined for export to Nepal and Bangladesh. It uses the ECTS system for the cargo moving to Nepal from its Kolkata and Visakhapatnam ports.

The problem of poor electricity and internet facility at many border points in India negatively affects its paperless trade initiatives. Since the LCS/ICPs at some borders are located at remote locations with no internet facility, initiating efforts at paperless trade is challenging. For example, the Dawki LCS in the state of Meghalaya in India and Sutaunkandi LCS in the state of Assam in India (both are being upgraded to ICPs) lack sufficient internet connectivity and electricity facility, which is leading them to use the manual form of trade processing. This issue requires immediate attention from the Government of India.

Physical documents related to trade stacked in Dawki LCS office



During field visits under the project, multiple stakeholders revealed that they carry all physical copies of the documents and records to avoid unnecessary hurdles while transporting their cargo. As all the officials are unaware of the rules and new changes in paperlessness, transporters experience difficulty if they do not carry physical documents. There were concerns that the officials charged fines (illegally) for not taking the documents.

Nepal

In the past three years, Nepal has made significant progress in implementing trade facilitation measures, such as enabling a single window system in moving towards paperless trade. The Nepal Government, on January 26, 2021, launched the Nepal National Single Window (NNSW) system. This digital platform allows the integration of trade procedures between the Department of Customs (DoC) and several government agencies/stakeholders involved in foreign trade. Nepal has implemented e-Customs nationwide. Nepal is implementing the single

window and paperless trade system as part of the Trade Facilitation Agreement under the World Trade Organisation. The Nepal National Single Window (NNSW) is helping Nepal to establish an integrated paperless trade system. e-Customs system by the Department of Customs has the basic technical readiness for cross-border paperless trade.

Nepal has a long way to go in cross-border paperless trade, as its international trade and transit arrangements are almost entirely paper-based. The requirement of several paper-based documents, signatures and clearances at multiple levels of bureaucracy makes international trade in Nepal more complex and expensive. However, paperless customs declarations are in operation for international transit with the Port of Kolkata, Haldia and Visakhapatnam in India. The future, therefore, looks promising.

Box 3.4: Visakhapatnam Miracle for Nepal Bound Cargo

Visakhapatnam port has overtaken Kolkata port in handling Nepal-bound cargo. The Indian government allowed Nepali importers to use Visakhapatnam port besides Kolkata and Haldia from February 2016. Container shipping liner Maersk delivered the first rake of cargo from Visakhapatnam to Birgunj in Nepal in mid-June 2017.

Even though Visakhapatnam is located 1,400 km from Birgunj, twice as far as Kolkata, lower sea freight costs from Chinese ports to Visakhapatnam and efficient port handling compensate for the relatively higher rail freight costs to Birgunj.

High detention and demurrage and long container dwell time are the main complaints Nepali importers have against Kolkata port. It takes up to 30 days for importers to return the container to Kolkata, and traders said they had to pay penalties for the time. The delay is primarily due to capacity constraints at Netaji Subhas dock to load containers onto cargo trains. While Kolkata port authorities have undertaken a project to increase the capacity, importers are forced to take the costlier road option.

In Kolkata, the middlemen play an important role in moving the cargo. Unlike in Kolkata, Vizag CONCOR takes all the responsibility till the consignment reaches the Birgunj ICP. Importers can track the movement of goods as the containers are ECTS-enabled, thus offering greater safety assurance and transparency. The procedural formalities and process are simpler and more friendly in Vizag compared to Kolkata.

Nepal uses the ECTS system for transit traffic from India's Vizag and Kolkata ports. Since Nepal is a land-locked country, it depends heavily on these two Indian ports for its third-country trade. Using the ECTS system helped Nepali traders save time and cost. Earlier, approximately six documents, 21 signatures and 30 procedures had to be undertaken at Kolkata Port for clearance, and sensitive goods required an insurance policy and bank guarantee for approval. By introducing the ECTS system, these complexities have been removed and the entire process is simple.

Efforts in Moving to Environment-friendly Supply Chains

Bangladesh

National Integrated Multi-modal Transport Policy 2013 of Bangladesh mentions about making the transport system in the country more environment friendly and fuel efficient.

Bangladesh is now integrating climate considerations into the national development planning, as it is facing a high risk of climate change.²³ This is reflected in the transport and connectivity development initiatives too. Bangladesh is developing a low-carbon strategy to its inland waterway transport sector. It is also preparing a Green House Gas (GHG) inventory and a monitoring, reporting and verification system to support low pollutant emitting and resilient supply chains.

Bangladesh plans to optimally utilise the IWT connectivity for the stretch from Chittagong to Dhaka. This stretch, which accounts for almost 60 per cent of Bangladesh's commercial traffic, is heavily dependent on roadways and is a cause of high emissions. Now moving to the IWT means this Dhaka-Chittagong corridor will significantly cut carbon emissions and decongest the highways.

Bhutan

Bhutan is conscious of protecting its environment while developing a modern transport system. Bhutan introduced fiscal actions such as tax rebates for electric vehicles to decarbonise supply chains. It also encourages using bicycles in urban centres as an environment-friendly initiative.

At the moment, however, there is heavy dependence on the road transport network in Bhutan. Opening the IWT port at Nakuguan in India is a step to make trade practices more environmentally friendly.

Exploring IWT ports near Gelephu International gate for sustainable transportation of goods has become an urgent call. Dutch Engineers and Bhutanese counterparts have completed a pre-feasibility study across three different rivers of Bhutan. The study has shown that smaller vessels of about 250 to 300 tonnes capacity may be viable in the Manas river basin to Brahmaputra River in Assam. At the same time, Punatshangchu (Sunkosh) also has a similar capacity. The third study was conducted for the Moa River basin, Gelephu. Exploring IWT is expected to make transportation environment-friendly and reduce transportation costs. The private sector is exploring all such possibilities.

The National Transport Policy of Bhutan 2017 mentions that the Royal Government of Bhutan will explore the use of ropeways and cable car networks in ecologically sensitive areas to minimise the environmental impact of road construction. Bhutan has developed regulatory standards to reduce vehicle emissions, which are updated from time to time, according to the need. There are appropriate standards for fuel quality as well.

²³ Almost 28 per cent of population lives in coastal areas of Bangladesh which faces the risk of rising sea levels, cyclones and other climate-induced disasters

As an environment-friendly initiative, Bhutan has a huge demand to implement paperless trade. One way for Bhutan to promote environment-friendly trade is adherence to paperless trade through single-window facilities.

India

India is maximising the use of inland waterways and railways in cargo transportation to make the supply chains less polluting and less carbon emitting. Inland Water Authority of India (IWAI) has declared five national waterways, which cover more than 4,400 km on the rivers of Ganga, Brahmaputra, Krishna, Godavari, Mahanadi and backwaters of Kerala, among others. The inland water system integrated with the coastal waters providing space for environment-friendly cargo transportation in the subregion. The Sagarmala²⁴ and Jal Marg Vikas,²⁵ projects are consolidating India's efforts to decarbonise the supply chains.

The establishment of Eastern and Western dedicated railway freight corridors exemplifies India's efforts to decarbonise the supply chain by increasing railways' use and replacing higher dependence on roadways.

India is making the trade and logistics sector operations digital as a measure to avoid the use of paper. Apart from making the process simple and less resource-consuming, the initiative is also an environment-friendly move.

In addition to the national-level initiatives, some location-specific green initiatives were also observed in the field survey. One good case is Visakhapatnam port, which depends entirely on solar power for its energy requirements. Visakhapatnam Port Trust is generating 17 million units of power per annum from its 10 MW captive solar power plant set up with an investment of Rs 60 crore.

Nepal

In 2014, Nepal set a target of increasing the share of environment-friendly vehicles to a minimum of 20 per cent of the total vehicle fleet as part of its Environment-Friendly Vehicle and Transport Policy. This included encouraging the use of electric vehicles.

Nepal has a National Sustainable Transport Strategy (2015-2040),²⁶ which aims at promoting the use of electric vehicles in Nepal and electrification of the entire rail system, among other environment-friendly transport policies. Nepal is trying to maximise the use of its waterways and railways for cargo transportation.

Air pollution is a matter of concern for Nepal and the transport sector is a major contributor to atmospheric pollution. Even though there are provisions to control emissions in Nepal, in the field survey, it was understood that there is no proper emission checking or implementation of the pollution control laws on the ground.

²⁴ Ministry of Ports, Shipping and Waterways, Govt. of India (2021). Sagarmala- Port-led Prosperity. Retrieved from <http://sagarmala.gov.in/>

²⁵ Ministry of Ports, Shipping and Waterways, Govt. of India (2021). Jal Marg Vikas Project. Retrieved from <http://jmvp.nic.in/>

²⁶ United Nations Centre for Regional Development (2015). National Sustainable Transport Strategy for Nepal (2015–2040). Retrieved from [https://www.uncrd.or.jp/content/documents/3377Background%20Paper%20-EST%20Plenary%20Session%202%20\(No.%201\).pdf](https://www.uncrd.or.jp/content/documents/3377Background%20Paper%20-EST%20Plenary%20Session%202%20(No.%201).pdf)

In a random emission test in 2018, it was found that 51 per cent of the diesel-run vehicles and 37 per cent of the petrol-operated vehicles in Kathmandu Valley exceeded the emission limits.²⁷ Stakeholders believed that the private sector should be incentivised and provided awareness for decarbonising the supply chains.

Box 3.5: Eastern Waterways Grid to benefit the BBIN Subregion

Bangladesh and India are reviving the defunct waterways in the Ganga-Brahmaputra-Meghna delta. In this delta, where once 70 per cent of the total cargo and passengers were moved through waterways, only around 2 per cent of the cargo is transported through water now.

Both Bangladesh and India are consolidating their investments into a comprehensive ‘Eastern Waterways Grid’ by interlinking their rivers and connecting them with roads and rail to reach the last mile. The grid will be built on the existing network of Indo-Bangladesh Protocol Routes (IBP) - a series of waterways, which both countries can use as transit routes or to trade with each other.

Linking the rivers in the region to form a water connectivity grid will benefit the entire BBIN subregion to reduce the over dependence on roadways, to reduce the carbon footprint, make the cargo movement cheaper and to reduce the expenses and complications of land acquisition for expansion of roadways.

Map 3.1: Potential of Eastern Waterway Grid



Source: World Bank Blogs

²⁷ The Kathmandu Post (2020, December 12). Experts call for controlling vehicular emissions for improving air quality in Kathmandu Valley. Retrieved from <https://kathmandupost.com/national/2020/12/12/experts-call-for-controlling-vehicular-emissions-for-improving-air-quality-in-kathmandu-valley>

Public/Private Efforts Towards Improving Sustainability and Resilience of Supply Chains

The COVID-19 pandemic has alarmed the world about the need for sustainable and resilient supply chains. The involvement of the private sector and enabling government policies is important in ensuring resilient and sustainable supply chains in the BBIN subregion. Public-Private Partnership (PPP) will be the best option for building commercially viable infrastructure in the BBIN subregion.

The Government of Bangladesh identifies PPP as a strong catalyst in implementing infrastructural projects. It has recently issued a set of guidelines to select and approve projects under the PPP initiative and the government is taking steps to set up an office for PPP.²⁸ Bangladesh received a US\$50mn loan from ADB to finance Public-Private Partnership infrastructure projects.²⁹ In addition, Bangladesh received assistance from ADB in developing a PPP Act and creating an institutional framework for PPPs.

The Bhutan government's policy has supported the development of the private sector since 1988 to develop the economy through private sector participation in trade, commerce and industry. In 2010, the Royal Government of Bhutan issued a PPP Framework to promote private investments in strategic infrastructure, including the transport sector. It was then superseded by a PPP Policy issued in 2016. With the support from the Government of Bhutan, the private sector is exploring the use of IWT and the introduction of Electric vehicles, which is expected to diversify Bhutan's supply chain into more energy-efficient and economically advantageous ways.

India has many PPP projects at the Central and state government levels. Transport is one sector where PPP is allowed, and it is also observed that a majority of the PPP projects in India are in the transport sector. Projects such as airports, inland waterways, railways and roads contributed 69 per cent of the total PPP projects in India in 2015.³⁰

The Government of India 2021 announced a new policy to appraise and approve PPP proposals and monetise core infrastructure assets. According to the government, the new process would safeguard the quick clearance of projects to help the private sector's efficiency in financing construction and management of infrastructure. The Government of India has policies such as allowing private companies to operate their freight trains and encouraging the private sector to invest in sustainable supply chains.

²⁸ Ahmad and Islam (2021). Public-Private Partnership Projects in Bangladesh: The Performance of Public Sector. *Journal of Economics, Finance and Management Studies*. Volume 4 Issue 05 May 2021, Page No.- 429-437. Available from <https://ijefm.co.in/v4i5/Doc/9.pdf>

²⁹ Asian Development Bank (2020, August 18). ADB Approves \$50 Million to Finance PPP Projects in Bangladesh. Retrieved from <https://www.adb.org/news/adb-approves-50-million-finance-ppp-projects-bangladesh>

³⁰ Patibandla and Sethi (2018). An Analysis of Public-Private Partnerships in Infrastructure of Provision of Public Goods through E-Governance in India. IIMB.WP no:564. Available from <https://www.iimb.ac.in/sites/default/files/2018-06/An%20Analysis%20of%20Public-Private%20Partnerships%20in%20Infrastructure%20of%20Provision%20of%20Public%20Goods%20through%20E-Governance%20in%20India%20564.pdf>

Nepal introduced the concept of Build, Own, Operate and Transfer (BOOT) in its plan document in 1992. The Eighth Development Plan of Nepal (1992-1997) envisioned making necessary arrangements for the construction of private sector viable infrastructure projects such as the Hetauda-Kathmandu tunnel on the basis of the BOOT system. The Tenth Development Plan of Nepal (2002-2007) took up the policy to promote private sector participation in the construction and maintenance of road networks. The Three-Year Interim Plan (2007/08-2009/10) of Nepal stated the creation of an autonomous national transport board to strengthen the partnership and cooperation with the private sector to bring about effectiveness in the development and management of the transport sector. Nepal Intermodal Transport Development Board is a successful collaboration between the public and private sectors in Nepal for developing resilient supply chains.

Unfortunately, despite the policy of governments in the subregion to encourage private sector participation, there is a low presence of the private sector in the infrastructure and connectivity development and in ensuring sustainable supply chains. During consultations, stakeholders understood that the private sector is not adequately motivated by governments in the subregion to invest in building environment-friendly, sustainable and resilient supply chains.

There is no incentive for the private sector, whether in the form of financial support or building capacity for facilitating integrated freight transport, which is important for promoting private sector participation in economic development. The private sector is often caught up in red-tapism and the fight between various governments and government agencies, which have an adverse impact on a large amount of capital the private sector has invested in particular projects.

An example of this is the case of the Siliguri ICD, where a private consortium was given a letter of award for ICD construction in 2015 and it took more than five years to get it functional due to the coordination issues between SJDA and Indian Railways. After investing crores of rupees in the ICD construction project, the company even had to recourse to the judiciary for necessary permissions.³¹ This incident demotivates the private sector investing in resilient and sustainable supply chains.

The long time taken to acquire land, along with other procedural issues, also discourages private sector participation in infrastructure development projects. Land acquisition-related issues delay the project for years in some cases. Robust policies that ensure transparent and implementable processes for land acquisition while ensuring fair compensation and rehabilitation to the locals must be ensured by the governments in the subregion.

The general opinion from the stakeholders in the subregion was that the governments have to provide a supportive environment including cheaper leasing fees, subsidies and tax benefits along with ensuring the availability of basic requirement such as electricity and internet, that will motivate private players to invest in strengthening the supply chains.

³¹ Legitquest (2019, December 11). *Pristine Hindustan Infraprojects Pvt. Ltd v. northeast Frontier Railway and ORS*. Retrieved from <https://www.legitquest.com/case/pristine-hindustan-infraprojects-pvt-ltd-v-north-east-frontier-railway-and-ors/1B7C62>

4

Logistics and Transport Infrastructure in the BBIN Subregion – Issues and Challenges

This chapter presents corridor-wise and location-wise observations and findings from the field visits, interactions and consultations with stakeholders on logistics and transport infrastructure along the four select corridors (mentioned in Chapter 1 of this report). These corridors are also included in the SASEC Road Transport Corridors and BIMSTEC Master Plan for Transport Connectivity (See Annex 4.1). For instance, Corridor 2 under this report is SASEC Road Corridor 1 and its extension. This is because this project covers other modes of transportation, such as railways and waterways, in addition to roadways.

Almost 50 locations along the identified four corridors have been covered to understand the current status of transport infrastructure and logistics, issues and challenges, infrastructure gaps and interventions required in policy and regulatory interventions. Most of these locations are also part of BIMSTEC and SASEC connectivity projects. The selected locations include existing and proposed roadways, railways and waterways, transit routes, and trade-related infrastructure covering all four countries, namely Bangladesh, Bhutan, India and Nepal, in the BBIN Subregion. Corridor-wise findings are presented below.

Corridor 1: Connecting Nepal to Bangladesh through India

[Kathmandu-Kakarbhitta-Panitanki-Siliguri-Fulbari-Banglabandha-Dhaka-Mongla/Chattogram]

Nepal, a landlocked member of the BBIN subregion, shares 1,868 km of its borders with India and has 20 entry and exit points for trade. It is critically dependent on India for trade with India and other countries.

This corridor comprising Kathmandu-Kakarbhitta/Panitanki-Siliguri-Fulbari/Banglabandha-Dhaka-Mongla/Chattogram, connects Nepal to Bangladesh through India. It starts at Kathmandu and uses the Prithvi Highway and East-West Highway to reach the border at Kakarbhitta (Nepal)/Panitanki (India) (600 km). It follows NH 31 and SH 12A to reach Fulbari (India)/Banglabandha (Bangladesh) (54 km). From Banglabandha, the corridor follows N 507, N 6, N 704 up to Hatikumrul and then bifurcates into two different routes – one to

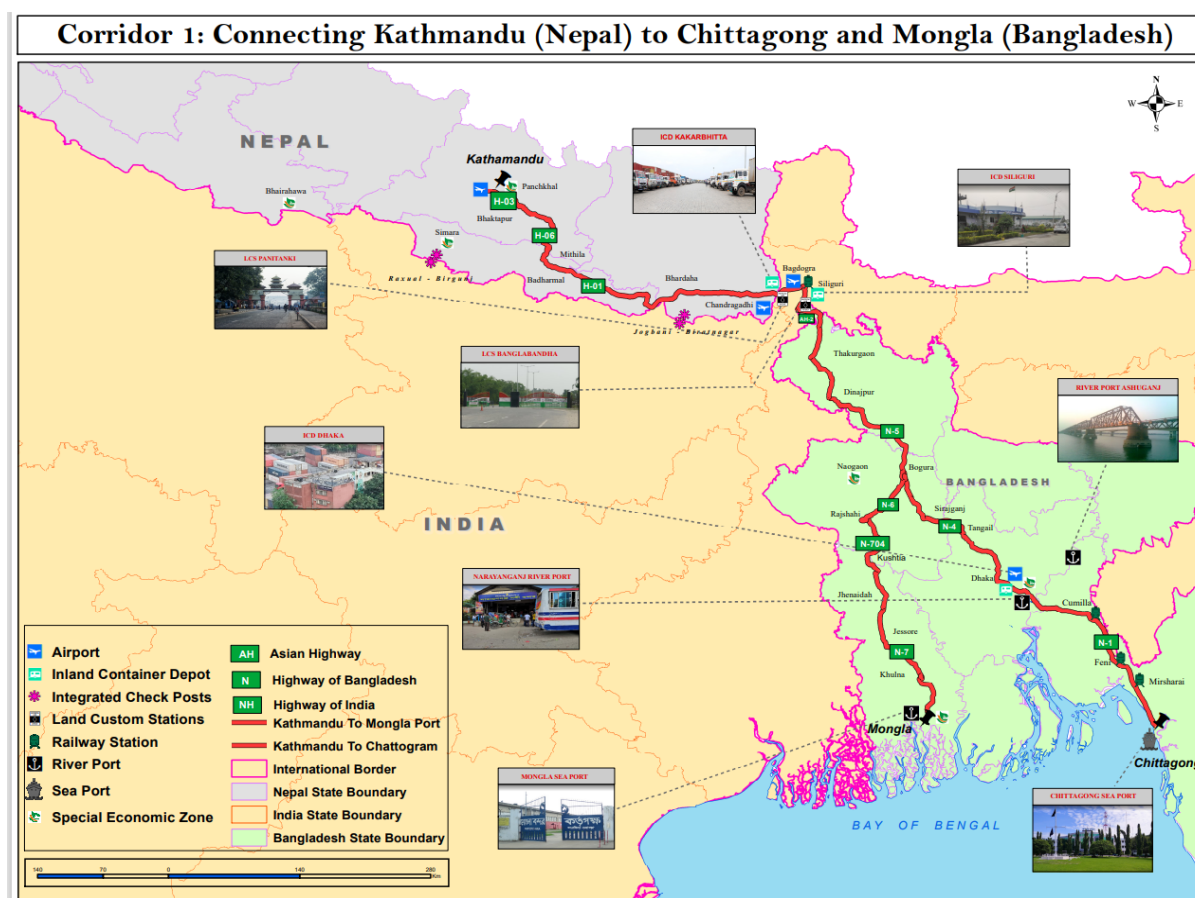
Mongla and another to Dhaka (498 km). This stretch is part of the Asian Highway 2. From Dhaka, the corridor further goes to Chittagong port. The total length of this corridor is 1,152 km (Kathmandu to Dhaka).¹

The corridor also constitutes one of the three stretches of the Asian Highway-2 in India (Fulbari-Siliguri), the other two stretches being Moreh-Imphal-Kohima-Dimapur-Nagaon-Jorabat-Guwahati-Shillong, and Banbasa-Rampur-New Delhi-Attari.

Table 4.1: Country-wise Positioning of Corridor-1

Country	Locations	Approx. Length (km)
Nepal	Kathmandu-Kakarbhitta	600
India	Panitanki-Siliguri-Fulbari	54
Bangladesh	Banglabandha-Dhaka- Mongla/Chattogram	498
Approx. Length of Corridor-1 (all three countries)		1152

Map 4.1: Corridor 1 Route Map



¹ ADB – ESCAP BPA Study SASEC Trade and Transit Corridors, 2012.

Details on the importance of locations for connectivity and trade are delineated below. It may be reiterated that as the corridor connects three countries and has immense potential for the promotion of connectivity and trade in the BBIN subregion, ensuring the smooth traffic flow along this corridor is, in fact, imperative for a better-integrated subregion (*See Map 4.1*). A consolidated list of location-wise existing and required infrastructure, gaps and need for policy and investment interventions is presented in Annex 4.2 to this Chapter.

Kakarbhitta

Kakarbhitta is a border town in the eastern part of Nepal in the Jhapa district of Province 1, with the Indian town of Panitanki on the other side. Kakarbhitta houses a land port that caters to the trade requirements of Nepal. The Kakarbhitta-Panitanki border between India and Nepal falls in the route of Asian Highway 2. It is the main entry point to Nepal from the eastern front of India and is the seventh-largest border crossing point. Kakarbhitta is connected to Kathmandu through the East-West Highway and Prithvi Highway.

The Kakarbhitta-Panitanki-Fulbari route is the shortest way to Bangladesh from Nepal through India. This land port is linked to the East-West Highway that connects the corridor to other major land ports such as Birgunj and Biratnagar. The railway project (East-West Railway) connecting Kakarbhitta to Kanchanpur is in progress. Once complete, it would further augment trade and commerce in the region and create opportunities for the private sector to facilitate integrated freight transport solutions.

As trade volume is relatively lower through this customs station compared to other land ports, it is understood that the current infrastructure is just about enough to cope with the existing trade, as congestion has not been reported so far. However, upgrading and maintaining the current infrastructure is required as trade gradually increases with India and the rest of the subregion.

The part of the East-West Highway stretching from Kakarbhitta to Bharatpur is a single lane in each direction. From Bharatpur to Mugling, vehicles travel through the Madan Ashrit Highway and from Mugling to Naubise through the Prithvi highway. The stretch from Kakarbhitta to Bharatpur is smooth and less congested, as most of this section of the East-West highway falls under the Terai section.

Panitanki

Panitanki is located on the Indo-Nepal border along NH-327, about 18 km southwest of Bagdogra. It falls under the Siliguri Sub Division of Darjeeling district in West Bengal. India and Nepal are connected here by the Maitri bridge on the Mechi river, on the Asian Highway 2.

On the Nepal side, the Nepalese Customs Office at Kakarbhitta is known as Mechi Customs. A 37 km road project covering ‘Panitanki-Naxalbari-Shivmandir-Fulbari’ has been completed (November 2019) as part of the SASEC Tranche-I project. This has the potential to accelerate the cross-border trade between India-Nepal, Nepal-Bhutan and Nepal-Bangladesh.

There has been a proposal for constructing an Integrated Check

Post (ICP) at Panitanki, but this may take a few years to be made operational. Currently, Panitanki has a Land Customs Station (LCS). At the station, customs officials claimed clearances take the shortest time. Still, various other relevant stakeholders informed us that there is some unnecessary clearance delay at the LCS. It usually takes an average time of 6-8 hours for clearances; ideally, it should be 2-3 hours.

A view of the newly constructed Mechi river bridge from the existing one



Siliguri

Siliguri is a point of great importance because of its proximity to Bangladesh, Bhutan and Nepal. The location has ready rail, road and air connectivity. The Bagdogra Airport, the second International Airport of West Bengal, is at a distance of 12 km. The Asian Highway-2 (AH2), connecting Bangladesh, India and Nepal, passes through Siliguri.

Continuing traffic congestion is a big concern in Siliguri. Most of the roads are narrow and the absence of availability of land hinders the expansion of roads in the city. The Siliguri & Jalpaiguri Development Authority (SJDA) is taking steps to remove the congestion on the roads of Siliguri city.

A view inside the Siliguri ICD



An Inland Container Depot (ICD) at Siliguri is operated through an SPV called Pristine Hindustan Infraprojects Pvt. Ltd. It is spread over approximately 29 acres. It has road and rail connectivity with the major ports in the subregion and has the geographical advantage of moving cargo to different parts of the subregion.

The SJDA is developing a Centre for Perishable Cargo (CPC) on its land beside the Bagdogra airport in collaboration with the State Food Processing Industries and Horticulture Department and with financial assistance from the Agricultural and Processed Food Products Export Development Authority (APEDA) and Assistance to States for Infrastructure Development for Exports (ASIDE). The SJDA has also developed a North Bengal Tea Park at Siliguri.

Fulbari

Fulbari is a road on the India-Bangladesh border enabling people and vehicles to cross from one side to the other and comes under the Jalpaiguri district in the Indian state of West Bengal. The Bangladesh side of the border crossing is Banglabandha. The nearest rail station is New Jalpaiguri (10 km) and the nearest Airport is Bagdogra (26 km).

Fulbari has an LCS, which the Government of India notified in 1989 for clearance of In-Transit goods for the Bhutanese trader operating to and from Bangladesh. But Bhutan-Bangladesh trade actually started through this land customs station (LCS) in January 2017. In 1997, as per notification dated September 1, 1997, Fulbari LCS was appointed to extend facilities to Nepalese In-Transit cargo from Nepal to

A view from ICP Fulbari

Bangladesh and vice-versa. Clearances of In-Transit cargo from/to Nepal and Bangladesh have been undertaken in pursuance of the protocol's provisions in the Treaty of Transit, signed between the Governments of Nepal and India.



The LPAI is setting up an ICP at Fulbari, and the land for this construction has been identified and notified to the state government for the acquisition process.

Banglabandha

Banglabandha in Bangladesh has a land port mirroring Fulbari land port in India. Banglabandha is on the Asian Highway 2 stretch in Bangladesh, from Tamabil to Banglabandha through Sylhet, Dhaka, Joydebpur, Tangail, Elenga, Hatikumrul and Rangpur inside Bangladesh.

Banglabandha land port is connected by road through Rangpur, Khulna to Mongla port via National Highways 5 and 7 and to Chattogram via National Highways 2 and 1 through Rangpur and Comilla. The land port here is strategically located for tourists to go to Nepal, Bhutan, or Sikkim via road. There is no direct cross-border passenger bus service through Bangla-bandha, and passengers have to walk about 200 yards to cross the border.

A project for widening the road up to 33 feet, from Banglabandha to Panchagarh and from Panchagarh to Boda Upazila up to 28 feet, is under progress. Upgrading roads from Rangpur to Elenga to four-lane is currently under construction under the SASEC Dhaka-Northwest Corridor Road Project, Phase 2.

The Ministry of Railways, Bangladesh, has approved a project for a 48 km extension of the broad-gauge rail line from Panchagarh to Bangabandhu. This will enhance rail communication with India and Nepal and Bhutan. The nearest railway stations in India- New Jalpaiguri and Rangapani, is about 6.5 kilometres.

Dhaka

Dhaka, the capital of Bangladesh, is the largest and most densely populated city in Bangladesh. The districts of Gazipur, Tangail, Munshiganj, Rajbari, Narayanganj and Manikganj surround Dhaka. The city is connected to other parts of the country through roadways, railways and airways. Five of Bangladesh's eight major national highways start from the city: N1, N2, N3, N5 and N8. Dhaka is also directly connected to the two longest routes of the Asian Highway Network: AH1 and AH2, as well as to the AH41 route. The highways link Dhaka to the Indian cities of Kolkata, Agartala, Guwahati and Shillong.

The 46.73 km long Dhaka Elevated Expressway, to be completed by June 2023, would run from Shahjalal International Airport-Kuril-Banani-Mohakhali-Tejgaon-Saatrasta-Moghbazar Rail Crossing-Khilgaon-Kamalapur-Golapbagh and connect to Dhaka-Chittagong Highway at Kutubkhali Point. Regular express train services connect Dhaka with other major urban areas, such as Chittagong, Rajshahi, Khulna, Sylhet and Rangpur.

Dhaka has an ICD, which is a railway-based ICD. It is located near Kamalapur Railway Station Dhaka, about 320 km from Chittagong Port. There are two regular dedicated train services for container carriage to and from Chittagong port. Currently, cargo movement from Chittagong port to Pangaon river port is being done using inland waterways.

The Padma Bridge, Rail Link Project, is being constructed under a contract agreement between the Governments of Bangladesh and China. The project, expected to be complete by June 2024, will connect Jashore with Dhaka via railways (approximately 169 km new broad-gauge track). That means it will connect the South-West part of Bangladesh with other parts, including the Mongla Port.

Mongla

Mongla is the second largest seaport in Bangladesh, situated in Salebunia Mouza of Mongla Upazila. Its long-retained local name is Chalna port. It is 48 km south of Khulna town and 100 km north of the Bay of Bengal. The sea port is connected with Khulna by the Rupsa bridge. It is connected with National Highway 7 and Asian Highway 41. Mongla is also the gateway to two major UNESCO heritage sites: Sundarbans and the mosque city of Bagerhat. Also, it hosts the Mongla EPZ. Mongla seaport is a major hub in the connectivity map of the subregion, as it is connected with all three Asian Highway Routes crisscrossing through Bangladesh.

Mongla Port is situated at the Pasur River's confluence, a part of the complex lower deltaic river system with traits typical of rivers flowing through mangrove forests. The commercially important portion of the river begins at Chalna and extends about 80 km up to Akram point and then up to Fairway Buoy, which adds another 70 km length of the navigation channel. The maximum draft of vessels which can enter the port varies between 6 m and 8 m, depending on the tide and weather conditions. Regular dredging is an operational activity of Mongla Seaport due to the nature of the Pasur River.

Mongla Port Authority has taken up a landmark project to dredge the Pasur River in March 2021. Nineteen-kilometre inner bar from Jaymonir Ghol of Pashur Channel to Port Jetty will be excavated, which is expected to address the navigability issue of the port. At present, the depth of the inner bar channel is less than 5.5 meters, which can handle ships with a draft of 7 meters to 7.5 meters during high tide. The dredging is expected to facilitate ships with a draft of 9.5 meters to 10 meters to anchor at Mongla Port Jetty directly.

A rail line connecting Mongla to Khulna is being constructed under the first line of credit from India. The project includes a 21.11 km loop line, eight stations, 716-metre Rupsha Bridge and 31 major and minor bridges. The under-construction Rupsha Rail bridge was identified as the main bottleneck in completing the project.

Chattogram

Chattogram, the commercial hub and the maritime gateway of Bangladesh, is of immense importance to the Bangladesh and the BBIN subregion due to its strategic and geographical location.

Chattogram Port is situated in the estuary of the river Karnaphuli around 11 km from the Bay of Bengal. Approximately 94 per cent of the international trade in Bangladesh is carried out through the port. Nonetheless, it is plagued by low draft as the maximum permissible draft of vessels ranges from 8.50 meters to 9.50 meter. The approximate tidal range is between 2.0 meters and 5.5 meters and pilotage is compulsory in this port. The port is well connected with Bangladesh's road, rail and inland waterways network.

Cargo being unloaded in Chattogram



The seaport allows unstuffing of the containers right at its jetty. About 65 per cent of shipped containers are opened and loaded into trucks at the port before being transported to their final destinations. Domestic lighter container vessels loaded at Chattogram Seaport are unloaded at Pangaon ICD. The lighter container vessels carrying 120-150 twenty-foot equivalent

units (TEUs) can berth at Pangaon ICD. Due to the small size of these lighter vessels, Inland Waterways lose out on the competitive edge over roadways.

The under-construction expressway project, which is expected to be operational in June 2023, will commence from Lalkhan Bazar and reach Shah Amanat International Airport. Bangladesh Railway has a huge port terminal yard consisting of a six-line down receiving yard, six-line up dispatch, 16-line down sorting yard and 17-line up sorting yard and sick line for goods stock, running maintenance facilities, and a locomotive maintenance shade over an area of about 1.5 square kilometres. The railway yard is located close to the Chittagong port access road, which is dedicated to port traffic. Currently, there is a rail connection at Chittagong Container Terminal with two lines accommodating one full train.

The proposed Chattogram Bay Terminal is to be built nearly 10 miles north of the estuary and will comprise one 1,500-metre multipurpose terminal, one 1,225-metre container terminal and two 830-metre container terminals. It will have 13 jetties and accommodate vessels of up to 280 metres in length.

Summary: Corridor 1
<p>This corridor connects Nepal with Bangladesh through India and facilitates Nepal's access to Bangladesh ports. It has immense potential to promote intra-regional trade in the subregion. Further, the corridor includes a section of Asian Highway 2, thus showing its importance and potential to integrate with Asia's larger trade and transit network.</p> <p>This corridor's cargo movement from Nepal to Bangladesh through the Fulbari-Banglabandha border is low. However, there has been a growth in the Nepal-Bangladesh cargo movement through this border in recent years and is expected to rise further. Currently, most cargo crossing the Fulbari-Banglabandha border in this corridor is from India, and throughout the entire corridor, there is a high level of domestic cargo movement.</p> <p>The infrastructure in the corridor has improved in the recent past but requires further upgrading in terms of border infrastructure.</p>
Priority Interventions Required
<ol style="list-style-type: none"> 1. There should be a refrigerated container handling facility throughout this corridor, as significant volumes of vegetables, fruits and other agricultural cargo moves through this corridor. 2. There is a need to expedite the construction of ICPs with all the attached facilities in Kakarbhitta/Panitanki and Fulbari/Banglabandha. This will solve the issues at these border points, such as insufficient parking facilities, testing and quarantine facilities. 3. Construction of express highways and bypass roads around periphery of Dhaka city to ease congestion and facilitate smooth cargo movement through the capital during the day. 4. Speeding up Mongla to Khulna Railway line:- Post completion, this important project can increase intra-regional trade of the countries in the subregion by using the second largest port in Bangladesh-Mongla sea port, which was initiated in 2010, but is yet to be completed. 5. Siliguri can be utilised as an important intermodal transition junction, with the ready road, rail and air connectivity. The infrastructure at Siliguri needs to be upgraded to ease the cargo movement and there is an ICD in Siliguri, which can be optimally utilised for the purpose. This ICD is expected to support the movement of export-import cargo traffic from Northeast India and neighbouring landlocked countries of Nepal and Bhutan. This calls for the development of hinterland logistics networks and their integration with the Siliguri ICD network. 6. Capacity enhancement at Chattogram Port: Running at its maximum capacity, the port faces heavy congestion and delays in clearance.

Corridor 2: Connecting Kathmandu in Nepal to Kolkata/Haldia and Visakhapatnam in India

[Kathmandu-Birgunj/Raxaul-Biratnagar/Jogbani-Bhairahawa/Sonauli-Kolkata/Haldia and Vishakhapatnam (alternative intermodal accessibility for Nepal to India's NW-1 i.e., from Kalughat to Raxaul, and Sahibganj to Biratnagar; Visakhapatnam to Nautanwa)]

This corridor connects Nepal with India's Kolkata/Haldia and Visakhapatnam port systems. Nepal, a landlocked country, has 20 entry and exit points for trade and transit with India.

As per data, about 60 per cent of Nepal's trade (imports and exports) are handled by Haldia and Vishakhapatnam ports in India. Haldia's proximity to Birgunj ICP in Nepal is a huge facilitator to the trade requirements of Nepal. On the other hand, Vishakhapatnam is Nepal's gateway to several countries, including China, Singapore and other countries in Southeast Asia, US, and Europe. This corridor is, therefore, of immense significance to Nepal both for its bilateral trade with India and trade transit for its other partners.

Map 4.2: Corridor 2 Route Map



Transport routes to both Haldia and Vishakhapatnam ports are multimodal, as both the ports are connected to India-Nepal border entry/exit points by roads and railways. While Haldia port is located about 650 km away from Birgunj in Nepal, Vishakhapatnam is about 1,500 km from Nautanwa, a railway station near the India-Nepal border at Sonauli in Uttar Pradesh.

Besides, this Corridor can extend waterways from Kalughat to Raxaul and Sahibganj to Biratnagar if the two countries take the necessary steps to establish and strengthen waterways connectivity through alternate intermodal routes.

The location-wise matrix of existing and required infrastructure and policy details of this corridor are provided in Annex 4.3.

Kathmandu

Kathmandu is the capital city of Nepal. This city, which is the largest in Nepal, is a major hub of the nation's economic activity. Tribhuvan International Airport, about 6 kilometres from the city, serves air connectivity for the capital city. It has air connectivity with more than 30 cities of the world.

Major towns and cities in Nepal are well connected to the capital city via roadways and airways. Kathmandu is connected with Birgunj through highways such as the Tribhuvan highway, Kanti Highway, Ganesh Man Road, and Madan Bhandari Road. Kathmandu is also connected to Kakarbhitta by road and by air through a nearby airport located at Bhadrapur. Kakarbhitta is the starting point of the east-west corridor of Nepal and is an entry and exit point for trade with India and for the transit of cargo to and from Bangladesh and Bhutan. It falls under two international corridors:

- Kathmandu – Kakarbhitta – Fulbari – Banglabandha – Mongla (1,362 km) and
- Kathmandu – Kakarbhitta – Phuentsholing – Thimphu (1,011 km)

Further, Kathmandu is well-connected with Biratnagar via road and airways. The stretch from Kathmandu to Bharatpur could be considered the busiest and most heavily congested, considering that all the container trucks and heavy passenger vehicles from the east, west and south of the country converge here to reach Kathmandu.

Ropeways were also being operated in Kathmandu. A ropeway used to operate between Kathmandu and Hetauda over a length of 43 km carried 25 tonnes of goods per hour but has been discontinued due to maintenance issues. Another ropeway existed between Mathatirtha in Kathmandu to Dhorsing in Makawanpur, over 22 km in length, carrying eight tonnes per hour of cargo.

Birgunj

Birgunj is a border city located south of Kathmandu and is the primary entry point to Nepal from India in terms of land routes from Kolkata and Patna. Birgunj falls in the Parsa district of Province 2 and lies in the south-central part of Nepal, sharing a border with Raxaul of India. Birgunj has direct air connectivity with Kathmandu through the neighbouring Simara airport. Although numerous highways connect Birgunj to Kathmandu, cargo and heavy vehicles, along with large passenger vehicles, still diverge at Hetauda (a major junction) to connect with the East-West Highway to reach Bharatpur. From Bharatpur, the container trucks and passenger

vehicles travelling to Kathmandu from Birgunj follow the same route as container and passenger vehicles en route to Kathmandu from Bhairahawa, mirroring Sunauli in India.

Birgunj is a major industrial and commercial hub with a large volume of trade through its customs, thus a primary revenue contributor. Birgunj has a fully functional ICP with rail

A view inside the ICD Birgunj



connectivity with neighbouring Raxaul in India. There are separate provisions for containerised and non-containerised cargo, and also priority clearance is accorded to perishable goods at Birgunj ICP.

The ICD at Sirsiya of Birgunj, commonly known as Birgunj dry port, is the only terminal in Nepal linked by rail-road to India. Nepal's busiest border town, through which a large volume of cross-border trade takes place.

Raxaul

The Raxaul ICP, spread over 235 acres, serves as an important trade and transit point for cargo import and export from/to Nepal. It works in close coordination with the Birgunj ICP on the Nepal side. The ICP is well connected by road and rail connectivity from Kolkata, and there is also a railway line up to Birgunj ICP in Nepal.

The ICP handles more than 50 per cent of India-Nepal trade. Total trade through this ICP in 2019-20 was valued at nearly INR 25,000 crores. During the year, more than 152,000 cargo movements took place through this route. Nearly 2.5 million people used this route to cross the India-Nepal border during 2019-20. However, trade and cross-border movement of people was badly affected by the Covid-19 period.

The export vehicles take about eight hours for clearance to move from Raxaul ICP to Birgunj ICP. Though this ICP is operating at a good capacity and has adequate infrastructure, there is a need for improvement. It is observed that the Motihari-Raxaul highway construction, which started in 2014, is yet to be complete. In 2017 the project was first cancelled and then restarted by the Government of India. Recently, the highway has picked up pace in construction and traffic.

Trucks waiting to cross border at Raxaul



Box 4.1: India and Nepal Sign Accord to Build Raxaul-Kathmandu Rail Connectivity

The Government of Nepal has signed an MoU with India in 2018 to prepare a detailed project report for constructing an electrified broad gauge rail link between Raxaul and Kathmandu. The broad-gauge line will give Kathmandu a direct connection with the Indian railway network, enabling travel to all Indian cities.

Once this railway is constructed, goods can be transported directly to Kathmandu from India and third countries. Currently, shipments originating overseas are brought to the inland container depot in Birgunj by rail and transferred to Kathmandu and other locations by road. The final location survey for this rail route is under process.

Biratnagar

Biratnagar is a city located in south-eastern Nepal, mirroring Jogbani in the Indian state of Bihar on the other side of the border. It is located in the Morang district under Province 1 and is an industrial and foreign trade hub. Biratnagar is located 399 km (248 miles) east of the capital, Kathmandu, and 6 km (3.7 miles) north of the bordering town of Jogbani in India.

Biratnagar has air connectivity through the domestic Biratnagar airport. The town has two modes of connectivity ready -- road and air. Biratnagar will also have rail connectivity to Indian cities. There is an upcoming 18.6 km long broad-gauge rail line construction from Jogbani to Biratnagar, the estimated cost of which is INR 374 crores².

After Birgunj and Bhairahawa, Biratnagar ranks third in Nepal's overall trade volume passing through its customs. After Birgunj, it is the only border city in Nepal to operate an ICP. Spread over 129 bighas of land, the ICP at Biratnagar is equipped with a cargo building, cold storage, terminal building, CCTV, restaurant, customs, immigration, quarantine, banks, currency exchange, warehouse, litigation shed and parking that are required for the clearance of goods and movement of people from a single location, thereby reducing trading cost for traders. The ICP was initially functioning partially, but full-fledged operations are on from February 01, 2020.

Jogbani

Jogbani is an important trade and transit town in India's Bihar state. It has good road connectivity with the rest of India. NH 527 starts from Jogbani and connects it to Forbesganj. Forbesganj is well connected to different parts of India by NH 27. Jogbani connects to Purnia, Katihar, Bhagalpur, Saharsa, Patna, Siliguri, Guwahati and Gorakhpur.

Jogbani has rail connectivity with north and east India, and Jogbani is an important railway station of the Barauni-Katihar, Saharsa and Purnia sections. Across the border, there is an upcoming broad gauge rail connectivity project between Jogbani and Biratnagar in Nepal.

² <https://www.metrorailnews.in/ircon-invites-tender-for-civil-works-at-biratnagar-station-on-jogbani-india-to-biratnagar-nepal-railway-line/>

Jogbani has an ICP, which is fully functional from 2016. Jogbani ICP receives a maximum number of Nepal-bound cargo from northeast India and Kolkata. On average, a total of 350 export trucks from India cross the India-Nepal border every day, whereas 50 export trucks from Nepal enter the Indian border. Here cargo trains from India are unloaded and loaded onto trucks for transport to Nepal. The location of the customs office close to the railway yard helps speedier clearance of Nepal-bound trucks.

Bhairahawa

Bhairahawa is a border town in Nepal mirroring Sunauli in the Indian state of Uttar Pradesh and an important entry point from India. It is located about 265 kilometres southwest of Kathmandu. The town falls in the major international transport corridor Kathmandu-Bhairahawa -Sonauli-Lucknow (663 km). Bhairahawa is a prominent trading corridor with several small- and large-scale industries. It lies to the north of the Indian city of Sonauli. It has a fully operational ICD, which is always busy and often congested.

Bhairahawa is connected both by road and by air with the capital city and is also connected to the port of Kolkata (India) by road. Two major highways of Nepal, namely East-West Highway (also known as Mahendra Highway) falling on AH2 and Prithvi Highway, connect Bhairahawa by road to Kathmandu. These highways are single lanes in each direction. The terrain from Bharatpur to Kathmandu is mostly steep and hilly; thus, the roads have numerous turns and sharp bends. Therefore, large cargo container trucks often move at a slow speed causing the slowing of all moving traffic as the road is narrow and single lane. Additionally, the trucks carrying large and bulk cargo are often overloaded, which causes severe damage to the already narrow and vulnerable roads.

The majority of items are transhipped at the border with India. However, other cargo such as heavy equipment, breakable and delicate materials, are not transhipped. Environmental concerns remain high in the region and infrastructure development and planning should be done with an eye to such concerns.

Sonauli & Nautanwa

Sonauli (also Sunauli) is a town area near Maharajganj in Uttar Pradesh, located on the Indo-Nepal Border. It is a well-known trade and transit point between India and Nepal. The nearest station is Nautanwa Railway Station, around 7 km away and is well connected with the Indian Railway Network. Sonauli has a proposed ICP to be built on a total area of 115 acres³.

Due to the lack of ICP on the Indian side, trucks are sent to Bhairahawa ICD for unloading. Only Nepalese trucks entering India require a shipping bill. On average, 350 trucks from India cross the border daily, and almost 50-60 trucks from Nepal cross over to India. This border also facilitates third-country cargo movement for Nepal.

³ The status as of September 2021 is that Architectural & Design Consultant has been appointed for providing engineering services at the ICP and the construction work is expected to commence once land acquisition is complete.

The railway station at Nautanwa is a major link to Vishakhapatnam Seaport and several industrial belts in India, including Andhra Pradesh, Jharkhand, Maharashtra, Gujarat, Rajasthan, Tamil Nadu and several other states. Nepal-bound freight reaches this railway station from any corner of India. For instance, fertilisers from China are unloaded at Vishakhapatnam port and sent by rail to Nautanwa en route to Nepal. This station has tracks for the movement of containerised cargo, but presently only non-containerised cargo and closed cargo move from this station. Cranes for loading/unloading cargo from trains and trucks are available here.

Varanasi

Varanasi is located on the banks of the river Ganges in Uttar Pradesh and 320 km south-east of the state capital, Lucknow. The city draws its name from the rivers Varuna and Assi, which flow into the river Ganges. The National Waterway 1 (NW-1) or Ganga-Bhagirathi-Hooghly river system, which starts from Prayagraj in Uttar Pradesh, runs through Varanasi and passes through Patna and Bhagalpur in Bihar to Haldia in West Bengal. It is the longest waterway in India.

Varanasi is connected to Allahabad by road through NH-19, which is a part of the Asian Highway 1 (AH-1). The Ring Road of Varanasi, which is part of NH-7 (connecting Kolkata - Kanyakumari), connects Varanasi with Gorakhpur. Varanasi Railway Junction, also known as Varanasi Cantt, is the main railway station serving the city of Varanasi. The station is partially controlled by the Lucknow Division of the Northern Railway Zone and the Varanasi Division of the North Eastern Railway Zone of the Indian Railways.

The nearest airport is Lal Bahadur Shastri International Airport, located at Babatpur. It is India's 18th-busiest airport in terms of passenger movement and the second-busiest airport in Uttar Pradesh.

The IWAI has developed a Multimodal Terminal (MMT) at Ramnagar in Varanasi. This terminal is connected with NH-7 and NH-2. This MMT is being constructed in two phases under the Jal Marg Vikas Project and is expected to be complete by 2023. It has the potential to provide a huge boost to the transport network in the country as it seeks to facilitate transport connectivity through road, rail and waterways. Further, in 2018, the Ministry of Shipping approved the development of a freight village worth INR 156 crores in Varanasi, which would be adjacent to the Inland Waterways Terminal. This freight village, a one-of-its-kind infrastructure platform, will serve as a cargo hub and a centre for aggregation and value addition. The freight village will have warehouses, cold storage, packing-wrapping, cargo storage and other modern facilities.

For railway connectivity, there is a proposal for extending the rail tracks from Jeonathpur Railway Station to the MMT. Besides, the development of dedicated rail corridors for cargo movement by the Dedicated Freight Corridors Company India Limited (DFCCIL) is also in progress. The Eastern Dedicated Freight Corridor (EDFC), which passes through Pt Deen Dayal Upadhyay Railway Station, is about 18 km from Varanasi.

Approximately 1,337 km of the EDFC (excluding the Sonnagar-Dankuni PPP section) was targeted to be commissioned by June 2022. However, it has been delayed due to the outbreak of the COVID-19 pandemic. As of January 2022, 35 per cent of the EDFC has been completed and the required land has been acquired for successful completion of the project. It is mentioned that the partly operational Eastern Corridor starts from Ludhiana in Punjab and goes up to Dankuni in West Bengal.

Kolkata Port

Syama Prasad Mookerjee Port Kolkata is a major riverine port of India, located in West Bengal, around 203 kilometres (126 mi) from the sea. The Kolkata port facilitates the movement of goods to a vast area, including the entire Northeast region of India, Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh and two landlocked neighbouring countries, namely, Nepal and Bhutan, besides West Bengal.

Kolkata Dock System (KDS) is located at a distance of 10 km from the junction of NH2 and NH6 and 25 km from the junction of NH34 and the airport. Various city roads cover these distances. Sealdah-Budge Budge Branch Line of Eastern Railway connects KDS with the railway track at Majherhat Junction. Railway connections are available for serving three berths.

Kolkata port dock system comprises 1) Khidirpur dock (KPD), 2) Budge Budge jetties (BB), 3) Netaji Subhas dock (NSD).

A view from Kolkata Port



infrastructure is improved, it will be difficult for large vessels to reach the port because of the sharp turns on the way to the port.

Netaji Subhash Dock has a container holding capacity of 17,000 TEUs, a facility to handle 20-, 40- and 45-foot and refrigerated containers. The refrigerated containers are transported to Nepal and across India through roads due to the lack of facilities to transport them through railways.

The draft of the port is adequate for barges or River Sailing Vessels (RSV), but being a riverine port, mother vessels cannot enter the port with a full load. Even if the lock gate is expanded or the

Box 4.2: Development of an Extended Gateway (multimodal hub) in Balagarh

Over the last three years, container handling has significantly increased at the Kolkata Port. At the same time, the number of vehicles and congestion on the roads around the Kolkata Port has also increased. Due to heavy congestion in the city traffic, Kolkata City Police has imposed restrictions on the movement of cargo vehicles during the daytime in the Port area. Given this, it is decided that an extended gateway will be established at Balagarh, about 83 km from the Kolkata Port, to take care of the growth in container traffic of the Kolkata Dock System.

Balagarh Island on River Hooghly is located on the Inland Waterway-1, on the right-side of the river bank of Hooghly, and is well connected by NH 34 and Howrah-New Delhi railway line at a distance of 30 km from Bandel Station. The island is separated from the mainland by a river channel of 100 meters, which is connected by an over bridge. The development of extended gates at this place does not require any land acquisition except for rail connectivity. Balagarh has a natural draft of 5 meters and a minimum operational draft of 3.5 meters from Kolkata.

In the case of import cargo, containers will be transferred from the mother vessel to barges at Sagar. Then the mother vessel will attain optimum draft to enter Kolkata port and the barges carrying those containers will ply to Balagarh. In the case of export cargo, barges will carry containers from Balagarh to Sagar and then transfer them to mother vessels. The trailers moving in or out of Balagarh port will not face traffic restrictions, thereby saving time and logistic costs.

Haldia Dock Complex

Haldia Dock Complex (HDC), located about 125 km from the Kolkata Port, is situated on the right bank of River Hooghly and has been built at the meeting place of the Haldi River and Hooghly River. The HDC, a modern dock complex of Kolkata Port Trust, came into existence in 1977 to handle large vessels with higher drafts and mechanised systems to handle dry bulk cargo with high productivity. HDC is linked with the rest of the country through multiple modes - National waterways, roadways and railways. NH-41 connects Haldia with NH-6 and the rest of the country. Haldia Port is connected to National Waterway-1 (Ganga), and National Waterway-2 (Brahmaputra) through the Sundarbans. It is connected to Trunk Railways through the South Eastern Railway by Panskura-Haldia Broad Gauge Electrified Railway Section.

The draft at Haldia port is 7.8-8 metres, which is low as this port is a riverine port. Given this draft, a full-load vessel cannot enter Haldia dock and only vessels with cargo loads between 32,000 to 39,000 tonnes can enter the dock. Therefore, vessels reach Haldia Port after lighterage at Vizag or Dhamra Port. At present, a few large vessels get anchored at Sandhead (128 Km from Haldia) where the draft is much higher and goods are transhipped to lighter vessels. These lighter vessels ply between Haldia and Sandhead. This port is congested as vessels/barges can only enter the dock through the lock gates. The opening of these lock gates is based on tide timings.

The multimodal terminal at Haldia



The IWAI has acquired 61 acres in Haldia to construct a multimodal terminal, especially for inland vessels. Construction work is going on, and once complete, it would enable commercial navigation of vessels with a capacity of 1500-2,000 Deadweight Tonnage (DWT).

The proposed infrastructure of Haldia Terminal:

- The terminal will connect with Durgachowk railway station, which is 6 km away. It also has road connectivity with NH-41.
- The construction of terminal equipment and the railway link is yet to be initiated.
- The terminal will play a crucial role in the growth of National Waterways 1 and 2 as it can connect the two major waterways and act as the gateway for the protocol route of Bangladesh.
- The terminal will have 4 berths and its capacity will be 3.07 Million Metric Tonne Per Annum.
- The berth length will be 465 m.
- Facilities will include berthing space for four vessels, a stockyard for storing, a conveyor belt system with fixed hoppers, a barge loader, shore protection works, roads, ramps and parking area, and other terminal buildings.

Visakhapatnam

Visakhapatnam in Andhra Pradesh is a port city between the eastern ghats and the coast of the Bay of Bengal. This city is the second largest city in the east coast of India and is well connected with roadways, railways and airways and is a living case for port-led industrialisation in India. The Government of India has declared Visakhapatnam as the second gateway port to Nepal-bound cargo, after Kolkata-Haldia. The port is located only 12 km away from the Golden Quadrilateral. It has direct rail linkages to major industrial regions such as Jharsuguda and Kalinganagar in Odisha, Nagpur in Maharashtra, Raipur in Chhattisgarh, and ICDs in Hyderabad and New Delhi.

Infrastructure available at the Container Terminal, the deepest terminal of the country:

- Facility to accommodate main line vessels up to 14.50 mts draft.
- Dedicated rail facility to handle full rake of 45 wagons.
- Potential to handle 6 lakh TEU's in coming years.
- Ideally situated to serve as "Container Hub Port" on the East Coast of India.
- Work for extending berth length from existing 450 metres by another 395 metres is in-progress.

Gangavaram Port: The port is in the northern part of Andhra Pradesh, next to Vizag Port and is the deepest port in the country with a depth of 21 metres. It is the second-largest non-major port in AP, with a 64 MMT capacity. Covering an area of about 1,800 acres, the port has nine berths, of which three berths are completely mechanised. This multipurpose port can handle fully loaded super cape-size vessels up to 200,000 DWT. The port does not handle liquid and containerised cargo but is suitable for dumping bulk cargo. Fifteen rail sidings are available, along with nine large godowns and a customs office operating inside the port.

Gai Ghat & Kalu Ghat

Gai Ghat in Patna is located on the southern bank of the river Ganges and is approximately nine km away from the city centre. It is one of the most important sites on the Allahabad-Haldia stretch of the Ganges, Bhagirath and Hooghly River System NW-1, connecting Allahabad and Varanasi in the west to Farakka and Haldia in the east.

The movement of vessels on this route has drastically reduced over the last few decades. Recently, the government with the IWAI has taken several projects and initiatives to revive the waterways route on this stretch. One such initiative is the Jal Marg Vikas Project (JMVP), financially supported by the World Bank, which is expected to be complete by 2023. Under the project, the development of multimodal IWT terminals, navigation aids for day and night navigation, River Information System (RIS) with all hardware and software, Ro-Ro jetties, bank and slope protection, river training works, installation of equipment like tow barges, inland vessels, survey vessels including rescue boats and survey equipment and maintenance dredging of the navigation channel, are in progress to augment the navigation capacity of the NW -1.

Box 4.3: Operational Challenges of Gai Ghat Terminal
<p>This part of the NW-1 is not fully navigable throughout the year. There was water up to 2-3 meters depth till January 2021. Navigation through this route at this stage has limited traction because of a lack of economic viability, as vessels return empty from the other side, which increases the cost of transportation. Other challenges are preserving perishable commodities for a longer time, no last-mile connectivity, lack of ease of business, and mind-set inertia.</p>

Kalu Ghat is located about 15 km from the Patna city centre and lies between Varanasi in the west and Gai Ghat in the east. The NW-1 passes through Kalu Ghat. It is also directly connected to NH-19. The location has been identified for the development of an Inter-Modal Terminal (IMT) spanning some 25 acres. Land acquisition for the project site is almost complete. The terminal will be used for the transportation of containerised cargo. The maximum container handling capacity of the terminal proposed is 77,000 TEU per annum. Vessels of size 3,000 DWT can ply through this waterway. The terminal will be developed in Phase-1 of the project. The shore of the proposed IMT has water of more than 3 meters throughout the year. This ghat meeting Ganga in the main NW-1 currently facilitates cargo movement from Kalu Ghat (Bihar) to Gidhe (West Bengal).

Sahibganj & Dhulian

Sahibganj is a district town in the state of Jharkhand and is one of the most important districts in Jharkhand for trade and commerce. Mining and related quarrying constitute the major economic activities. The Ganges, Gumani and Bansloi rivers flow through this region. There are ferry services across the Ganges between Sahibganj ghat on one side, Manihari on the other, and Rajmahal ghat in the Sahibganj district and Manikchak ghat in the Maldah district of West Bengal. Country boats also ply in the river.

The district, lying on the Howrah-Bhagalpur loop line, is deprived of adequate railway communication. The area is approachable by train from Bhagalpur (Bihar) and Dhanbad (Jharkhand) via West Bengal. The nearest airports are Bagdogra Airport, Patna Airport and Ranchi Airport, all at a distance of more than 300 kilometres.

Box 4.4: Sahibganj-Manihari Bridge

The construction of a bridge between Sahibganj and Manihari of Katihar at the cost of Rs 1,900 crore on the Ganges River is in progress and is expected to be complete by October 31, 2024. The soil investigation is currently underway. Work was stopped in between due to flooding in the Ganges and resumed in late December 2020-early January 2021. Apart from being an option for direct road connectivity between Jharkhand and north Bihar, the bridge will cross a four-lane road connecting Purnia and contribute to the larger objective of connecting Jharkhand with the north-eastern states via the east-west four-lane corridor. Currently, a local ferry service operates between Manihari and Sahibganj, catering to both cargo and passenger movements daily.

The second of the three Multimodal Terminals under the Jal Marg Vikas Project (JMVP) has been built at Sahibganj. The project aimed to facilitate navigation of large vessels up to 1,500-2,000 tonnes weight on this stretch of Ganga River between Varanasi and Haldia by maintaining a draft of 2-3 metres and setting up other systems required for safe navigation. This MMT can open up Jharkhand and Bihar's industries to the global market and provide Indo-Nepal connectivity through the waterway route. It is also expected to play an important role in the transportation of domestic coal from the local mines in the Rajmahal area to various thermal power plants located along NW-1.

The Dhulian-Rajshahi route was extended up to Aricha in Bangladesh in the Second Addendum on Protocol on Inland Water Transit and Trade between India and Bangladesh, executed in May 2020. The operationalisation of the Dhulian-Rajshahi route and its extension up to Aricha will help in the augmentation of infrastructure in Bangladesh as it would reduce the transportation cost of stone chips and aggregates to the northern part of Bangladesh through this route. This would also decongest the Land Customs Stations on both sides. However, the issue is the winding nature of the river. The river exits and enters India five times on this route. The river draft is not suitable near Putimari and the Bangladesh discharge points via waterways are poor.

If Maia Port, located about 140 km from Sahibganj, is developed, the cost and time of transportation to Rajshahi in Bangladesh will reduce significantly. Feasibility of creating a single-window system for vessels plying through the Inland waterway stretch of Dhulian-Rajshahi – Dhulian with a proposition of ‘one cargo – one seal’ movement can be thought of as a viable alternative.

Summary: Corridor 2
<p>This corridor connects Nepal with the ports in India and is of immense significance to Nepal for its bilateral trade with India and transit to its other trading partners. Haldia’s proximity to Birgunj ICP in Nepal is a huge facilitator to the trade requirements of Nepal. Vishakhapatnam is also Nepal’s gateway to several countries, including China, Singapore and other countries in Southeast Asia, the US and Europe. This corridor has the inter-modality potential of road, rail and waterways.</p> <p>The corridor has witnessed significant developments in infrastructure in recent years, particularly in regard to multimodal connectivity. The multimodal terminals in Haldia, Varanasi and Sahibganj are being developed by the Inland Waterways Authority of India (IWAI). These three terminals on the NW-1 of India fall in this corridor. Apart from this, the corridor has the potential to take benefit of other major infrastructure development initiatives in India, such as the Dedicated Rail Freight Corridors.</p> <p>However, a lot more in terms of soft and hard infrastructure development is to be done in the corridor, both in India and Nepal. Some priority interventions required in the corridor are listed below.</p>
Priority Interventions Required
<ol style="list-style-type: none"> 1. Cold storage and rail facility inside Raxaul ICP. 2. Speedy and efficient cargo handling in Kolkata port; Improvement of approach road to the port; Upgrading of lock gates in NSD and Kidderpore Dock (KPD). 3. Speedy Completion of Motihari-Raxaul Highway Construction- Started in 2014. 4. Expediting Jogbani- Biratnagar rail link construction. 5. Dedicated rail corridor inside the Visakhapatnam port. 6. Using Sahibganj for Nepal-based cargo; Speed-up construction of a bridge between Sahibganj and Manihari (foundation laid in 2017). 7. Dredging and maintenance of navigability in the National Waterways 1 of India.

Corridor 3: Connecting Bhutan to Bangladesh through Northeast India

[Thimphu/Phuentsholing (Bhutan) to Dhubri and Jogighopa (Northeast India) to Chattogram and Mongla Ports (Bangladesh)-(multimodal transport and transit access by road, inland waterways and railways)]

For promoting multimodal connectivity in the BBIN subregion, connecting Bhutan to India and further to Bangladesh through the Northeastern states of India, this corridor comprising multiple origins and destinations holds the key.

Further, this corridor can be divided into sub-corridors and extended to include several other important trade and transit points (Box 4.4)

Box 4.5: List of Sub-corridors to Connect Bhutan with Bangladesh and India

1. Thimphu-Phuentsholing-Jaigaon-Hasimara-Kolkata/Haldia (road with possible rail linkages)
2. Thimphu-Phuentsholing-Jaigaon-Changrabandha-Burimari (Bangladesh)-Mongla/Chattogram (road with possible rail linkages)
3. Thimphu-Samdrup Jongkhar-Guwahati (Pandu NW-2)-on IBP, Gelephu-Jogighopa-IBP/Rail and Pasakha-Dhubri on IBP (Road & IBP)
4. Pasakha-Hasimara-Toribari (West Bengal)-Siliguri ICD (Rail and Road linkage)

Bhutan can be directly connected to both Bangladesh and India through different sub-corridors. For instance, sub-corridor-1, about 978 km, starts from Thimphu and ends at Kolkata/Haldia. This has the potential to be connected both by road and railways.

Sub-corridor-2, also part of Asian Highway 48, connects Thimphu to Mongla and Chattogram port by road in Bangladesh. The operationalisation of this sub-corridor could facilitate Bhutan's access to ports in Bangladesh.

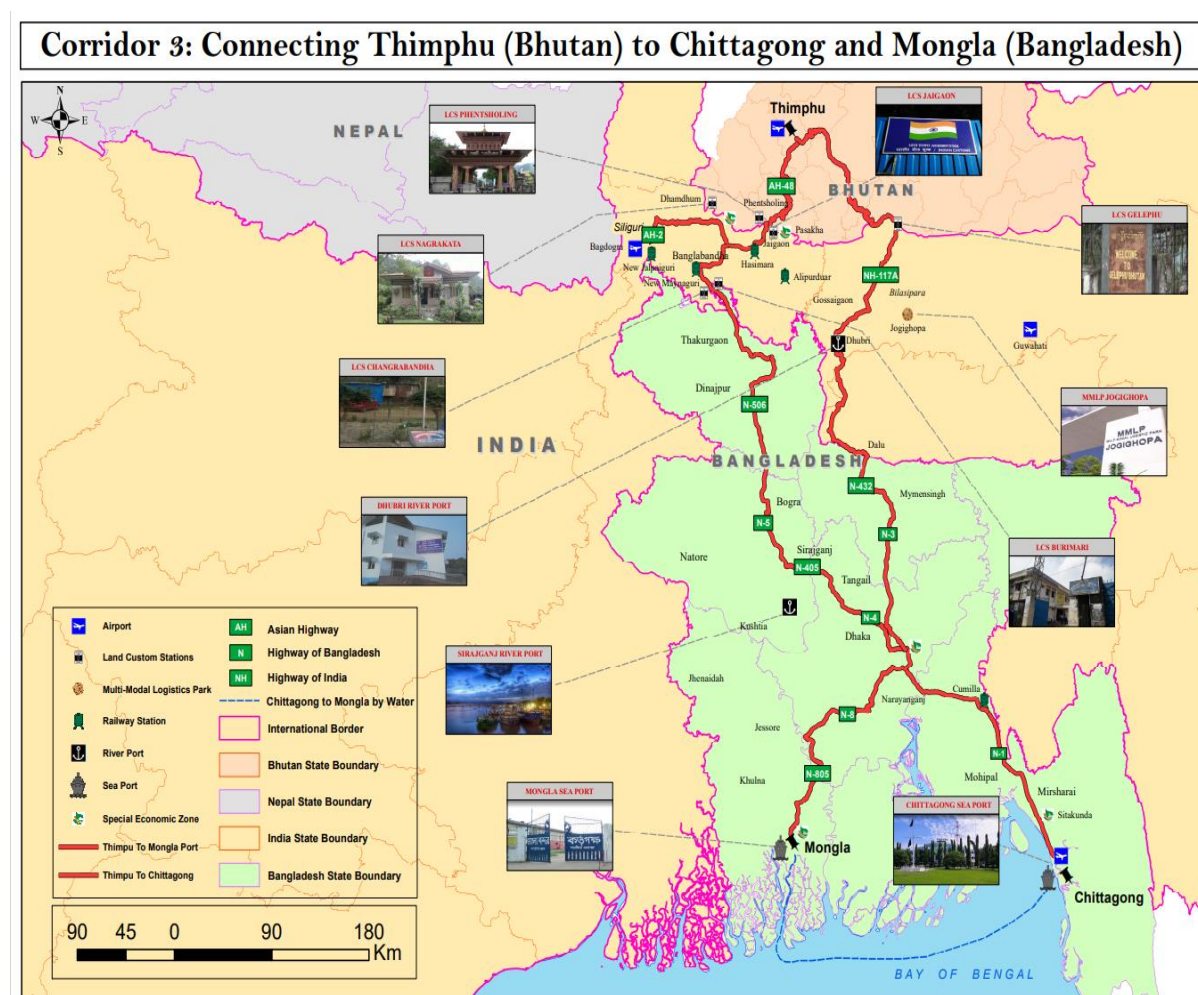
Sub-corridor-3 can connect Thimphu to Guwahati in Assam by road and then connect to Pandu at India-Bangladesh Protocol (IBP) route for further connectivity to Bangladesh through waterways. Sub-corridor-3 can connect Samdrup Jongkhar in Bhutan to Pandu in India, Gelephu in Bhutan to Jogighopa in Assam by road (89km), and to the upcoming Jogighopa Multimodal Logistics Park (MMLP). The MMLP at Jogighopa is connected by railways and waterways on the IBP route for further connectivity to Bangladesh and connects Phuentsholing/Pasakha to Dhubri in Assam by road.

The Brahmaputra flows parallel to Bhutan; thus, the three points in Bhutan can be connected to three points in India, from where it can be further taken to Bangladesh.

Sub-corridor-4 can connect Phuentsholing/Pasakha to Hasimara and further to Siliguri Inland Container Depot (ICD) in West Bengal (145km) by road is connected to both Nepal and Bangladesh.

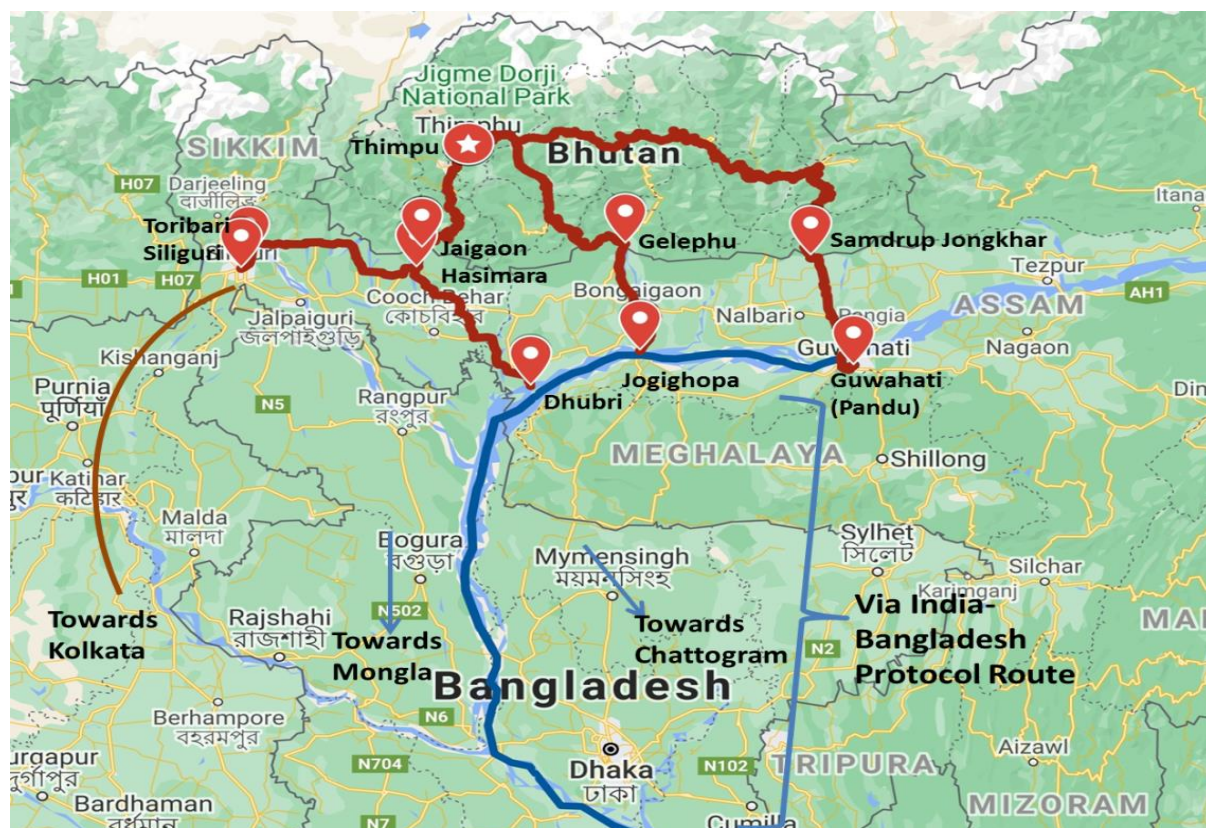
Given its spread and potential outreach, it is an understatement to term this as a corridor, rather, it can be termed as a concept and model to connect the BBIN subregion keeping the northeastern states of India at the centre.

Map 4.3 Corridor 3 Route Map



While location-wise details are provided below, the matrix of location-wise existing and required infrastructure and policy details of this corridor are provided in Annex 4.4.

Map 4.4: Bhutan's connectivity to the inland waterways network in the subregion



Gelephu

Gelephu is a growing commercial centre located in the south-central region of Bhutan. Gelephu is connected by road as well as by air, and it is the gateway to export business for the south central region of Bhutan. The town has a Land Customs Station and Mini Dry Port (not operational yet). Connectivity to the Mini Dry Port would be developed as per international standards to withstand heavy-duty vehicles. The third-country export services will be made available at the Mini Dry Port. The Jigmeling Industrial Park in Bhutan is also in the vicinity of Gelephu.

Exploring IWT ports near Gelephu International gate has become imperative for the sustainable transportation of goods. Dutch Engineers and Bhutanese counterparts have completed a pre-feasibility study in three different rivers of Bhutan. The study has shown that smaller vessels of about 250 to 300 tonnes capacity may be viable in the Manas River basin to Brahmaputra River in Assam. At the same time, the Punatshangchu River (Sunkosh) also has a similar capacity. The study was also conducted for the Moa River basin, Gelephu. Exploring IWT would bring economically better results and benefits for everyone. The private sector is exploring all possibilities.

Phuentsholing & Pasakha

Phuentsholing is a border town in southern Bhutan and it adjoins the Indian town of Jaigaon. Phuentsholing has ready road connectivity but does not have airport or railway facilities. Indian Railways has stations nearby, which can be accessed by Bhutan easily. A 20 km railway track has been planned from the nearest railway station Hasimara in North Bengal to Phuentsholing. Siliguri is the nearest large city in India. New Jalpaiguri and New Alipurduar are the nearest large railway junctions. Phuentsholing has ready road access to all the major towns in Bhutan and nearby towns of India.

Phuentsholing has a Land Customs Station and Mini Dry Port, and it is the main border crossing point, where over 84 per cent of Bhutan's international trade takes place. Bhutanese vehicles also travel between two places in Bhutan via Indian Highway (for example, Phuentsholing-Samdrup Jongkhar and Gelephu, Samdrup Jongkhar-Gelephu, Phuentsholing-Samtse), all of which are located near the Indo-Bhutan border.

Land Customs Station at Ahalay, Pasakha



To avoid congestion in Phuentsholing, another entry-exit point has been established 15 km away from Jaigaon LCS named Pasakha (Bhutan) – Khokla Basti (India). India approved a permanent trade and transit route from Pasakha in 2020, which eased congestion and facilitated trade activities. It doesn't seem easy to manage increased trade volumes with the current infrastructure, suggesting the need for infrastructure upgrading over time as cross-border trade increases.

Samdrup Jongkhar

Samdrup Jongkhar is located in the south-eastern part of Bhutan and borders the Indian state of Assam. Samdrup Jongkhar is a far-flung, eastern border town with an estimated population of 10,000. Samdrup Jongkhar facilitates the movement of Bhutan's major export goods, such as gypsum, coal, potatoes, oranges, ginger, cardamom, and betel nuts and import of major goods like rice, oil, garments and clothing-related products, iron and steel products, essential household and kitchen items, meat and its products and leather goods.

Transshipment of goods at Samdrup Jongkhar



The international entry-exit gate is situated in Samdrup Jongkhar- Daranga town. Daranga or Darranga Mela, better known as Mela Bazar, is the border town in Assam on the Indian side. There is a highway connecting Bhutan-India that passes through the main town of Samdrup Jongkhar and reaches its first Indian town, Daranga, within 1 km of the main gate. The nearest railway station is 50 km away in Rangia, Assam, and Guwahati airport in India is the nearest airport.

Jaigaon

Jaigaon Land Customs Station falling under Dinhata Customs Division, is a major LCS with limited resources and infrastructure. It is the lifeline of EXIM trade with Bhutan as approx. 90 per cent of India's trade with Bhutan flows through this LCS. The counterpart LCS on the Bhutan side is Phuentsholing.

The Jaigaon LCS is located 2 kms away from the actual entry exit point, surrounded by a busy market. Export-import cargo and other vehicles pass through the road leading to Jaigaon LCS, making it congested. Out of the total movement, 90 per cent is non-containerised (stone boulders) and 10 per cent containerised cargo.

Trucks moving through Jaigaon- Phuentsholing border



On average, 150 export trucks per day pass through Jaigaon port and 20 trucks come from Bhutan daily. Goods come here from the nearest railway station, Hasimara (approximately 17 km away), as no customs is available at Hasimara, and customs proceedings are done at Jaigaon LCS.

To avoid congestion in Phuentsholing, another entry-exit point has been established 15 km away from Jaigaon LCS named Pasakha (Bhutan) – Khokla Basti (India). For seasonal cargo, another LCS Nagrakata is also there.

Bhutan to Bhutan cargo goes through Jaigaon LCS for easy access to other parts of Bhutan due to the topographic features of Bhutan. No documentation is done for this owing to the India-Bhutan treaty regarding such cargo. The vehicles are only checked in case of special communication from intelligence agencies for security or other reasons.

Hasimara

Hasimara is a small town in the Alipurduar district of West Bengal in India, near the border with Bhutan. Hasimara is the nearest railway station to the Jaigaon-Phuentsholing border between India and Bhutan. The Hasimara railway station lies on the New Jalpaiguri-Alipurduar-Samuktala rail line. This railway line was metre gauge and was converted to broad gauge in 2003.

Cargo train moving through Hasimara Railway station



The distance to Hasimara railway station from Jaigaon is approximately 17 km. Cargo coming through rail is unloaded at Hasimara and transported to Jaigaon through roadways. There is a proposed new railway line between Hasimara and Pasakha. Before COVID-19, Hasimara station received three cargo trains each day, but the daily average currently varies between one and two.⁴

Siliguri

Details about Siliguri are available from the report of Corridor 1

Kolkata/ Haldia

Details of Haldia and Kolkata can be availed from the report of Corridor 2

Changrabandha

Changrabandha is an Indian border town close to Bangladesh. There is an LCS in Changrabandha, which corresponds to Burimari on the Bangladesh side. Changrabandha LCS started functioning in 1989 for export/ import between Bhutan and Bangladesh. Thereafter, Indian cargo was also permitted to be exported to Bangladesh regularly through this route w.e.f. 1991 and this route was declared as a port on November 21, 1994.

⁴ As per the data available at the time of the field visit in 2021.

AH 48, which connects Bhutan and India, running 276 kilometres, starts from Changrabandha and ends at Thimphu. The LCS at Changrabandha is situated in AH 48. Changrabandha is also an important port for facilitating the transit of Bhutanese merchandise trade with third countries. The LPAI is setting up an ICP at Changrabandha. The current status as of September 2021 is that LPAI has prepared the Detailed Project Report (DPR) and has identified 87.5 acres for the development of the ICP. The Government of West Bengal has been requested to initiate the land acquisition process.

Bhutan (Phuentsholing) and Bangladesh (Burimari) trade through Jaigaon to Changrabandha transit route. The LCS falls under Mekhliganj Sub-Division in the district of Cooch Behar under the administrative control of the Siliguri Customs Division. The nearest airport is Bagdogra, at a distance of 93 km. The nearest railway station is New Maynaguri, located at a distance of about 18 km.

Guwahati (Pandu port and Amingaon ICD)

Guwahati is the business hub of Northeast India, and serves as the gateway to various states in Northeast India. It is well connected with the rest of India via roadways, railways, waterways and airways. The river port at Pandu, on the Brahmaputra River, provides connectivity through waterways with the rest of India and Bangladesh. Pandu port is a natural river harbour which falls under Dhubri-Sadiya NW-2. It is an important terminal cum transit point for cargo and passenger and tourist's vessels.

There is a rail-linked ICD in Amingaon, North Guwahati, which is connected to NH 37. This ICD is operated by CONCOR India and is connected through the nearest railway station, Agthuri (AGT).

Inside ICD Amingaon



Jogighopa

Jogighopa is an important point in this corridor where a new Multimodal Logistic Park (MMLP) is being constructed. Dhubri and Guwahati are at a distance of 115 and 153 kilometres, respectively from Jogighopa via NH 17. Barpeta, 55 kilometres from Jogighopa is Assam's nearest major trade centre. Tura, 122 kilometres from Jogighopa via NH 217 is Meghalaya's nearest major trade centre. Jogighopa is located at a distance of 93 km and 175 km by road from Gelephu and Phuentsholing, respectively, the major trade and transit points along the Indo-Bhutan border and 300 kilometres from Kakarbhitta, a major trade and transit point on the Indo-Nepal border.

The MMLP foundation stone at Jogighopa was laid in October 2020. The proposed MMLP is being developed on 317 acres along the Brahmaputra. The site is located in the Boitamari tehsil of Bongaigaon district and it is close to the village Kareia, near Jogighopa town. The distance from the nearest river port (Jogighopa on NW-2) is 6 km. A MoU between India and Bangladesh for developing the Dalu-Tura-Goalpara-Gelephu multimodal trade route has been signed.

Dhubri

Dhubri is another important point on this corridor, where there is an inland waterway terminal on the bank of River Brahmaputra. Dhubri is also an old commercial centre. The nearest customs office on the Bangladesh side is Chilmari in Kurigram district, approximately 84 km from Dhubri.

Dhubri has road, rail and water connectivity. Dhubri multimodal waterways terminal on Brahmaputra is being developed as part of the Bharatmala and Sagarmala projects. Dhubri has an airport at Rupsi, about 15 km from the main city. Dhubri has rail connectivity to Guwahati and, thus, to other parts of India.

A view from Dhubri river port



Mongla

Details of the location are provided in Corridor 1.

Chattogram

Details of the location are provided in Corridor 1.

Summary: Corridor 3

This corridor connects Bhutan to India and further to Bangladesh through multiple transportation modes. It facilitates Bhutan's third-country trade through Bangladeshi and Indian sea ports. Moreover, the corridor connects Bhutan to Nepal via the Siliguri corridor.

This route's multimodal connectivity potential will help Bhutan transport goods to Bangladesh via India more economically. For example, suppose Bhutan transports cargo to Bangladesh via the inland waterway from Dhubri port in India to Narayanganj port in Bangladesh. In that case, it will reduce the travel time between Bhutan and Bangladesh to 10 days and reduce the transportation cost by about 30 per cent.

With the right of infrastructure connectivity backed up by policy changes, the corridor can radically change the logistics scenario in the subregion. Even though the current infrastructure level seems sufficient to meet the cargo movement demand in the subregion, infrastructure upgrading is desired given the growing demand for cargo movement in the route.

Priority Interventions Required

1. **Establishment of rail connectivity** from Hasimara railway station in the Indian side to Pasakha in Bhutan.
2. **Ensuring sufficient draft** in the NW2 and IBP route along with **night navigability and river signalling**.
3. **Infrastructure upgrading and modernisation** of Narayanganj river port in Bangladesh.
4. **Proper storage facilities for perishable goods** at Phuentsholing.
5. **Common customs transit/liaison office** at Gelephu.
6. **Expedite the ICP construction** at Changrabandha and Jaigaon.
7. **Customs office** closer to Dhubri river port.

Corridor 4: Northeast India to the Rest of India via Bangladesh

[Kolkata/Haldia-Chattogram/Matarbari-Akhaura-Sabroom/Agartala via a mix of modes], [Kolkata-Petrapole-Benapole-Dhaka-Agartala via road], [Sahibganj-Dhulian-Rajshai-Joghighopa via IWT], [Kolkata-Ranaghat-Gede-Darsana-Khulna-Dhaka-Akhaura-Agartala via Rail], [Dawki-Tamabil-Sylhet-Dhaka-Mongla/Chattogram-Kolkata/Haldia via a mix of modes], [Kolkata-Haldia-Mongla-Pangaong-Narayanganj-Dhaka-Ashuganj-Akhaura-Agartala via IWT and IBP routes with alternatives of Sonamura- Daudkandi (IWT) and; Srimantapur-Bibir Bazar via road]

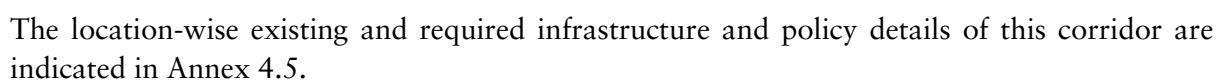
The connectivity of northeast India to the rest of India depends on the ‘Chicken Neck’, a very narrow strip of land with a width of about 22 km. Even this 22 km connectivity route is not smooth, as it has difficult terrain and is prone to landslides. The country, which separates these two parts of India, is Bangladesh. Therefore, any effort to enhance the connectivity of the Northeast to the rest of India must have a subregional approach encompassing Bangladesh. One way to do this is restoring the pre-independence routes connecting the north-eastern states to the rest of India through Bangladesh and opening mutually beneficial transit facilities between the two countries. It may be mentioned that besides West Bengal, four northeastern states of India share borders with Bangladesh. These are Assam, Meghalaya, Mizoram and Tripura.

Any agreement between the two countries to restore and operationalise pre-independence routes would go a long way for connectivity and catalyse economic cooperation and trade integration. It would also significantly impact people-to-people connections, livelihood generation and trust-building between the two countries.

Initiatives to improve connectivity have been taken by the two countries in the recent past. Some of these include:

- In October 2019, both governments decided to commence Dhaka-Siliguri-Gangtok-Dhaka and Dhaka-Siliguri-Darjeeling-Dhaka bus services to enhance people-to-people connections between both countries. However, bus services on this route are yet to commence.
- Feni Bridge (Maitree Setu) connecting LCS Sabroom (Tripura) and LCS Ramgarh (Bangladesh) has been inaugurated by both countries. Both countries are also developing ICPs for better connectivity and trade.
- In December 2020, the two countries restored the railway link between Chilahati (Bangladesh) and Haldibari (India).
- To enhance people-to-people contact, the frequency of two passenger trains, Maitree Express and Bandhan Express, has been increased from four days a week to five days a week and from one day a week to two days a week, respectively, from February 2020. Moreover, a third passenger train service was started between the two countries, named the Mitali Express between New Jalpaiguri and Dhaka Cantonment. This train service will be available two days a week.
- Both countries started using side-door container and parcel trains to maintain and ensure uninterrupted supply chains during the ongoing COVID-19 pandemic.

- ### Map 4.5: Corridor 4 Road Route Map



Map 4.6: Corridor 4 Water Route Map



Kolkata

Details of the location are provided in Corridor 2

Chattogram

Details of the location are provided in Corridor 1

Matarbari

There is a deep sea port under construction at Matarbari in Maheshkhali Upazila of Cox's Bazar District, Bangladesh. Matarbari deep sea port is a major development project of the Government of Bangladesh. The project is to be completed in 2023. It is located across Matarbari and Dhalghata mouza under Moheshkhali Upazila and is located at the mouth of the Bay of Bengal. Nearly 18.5-meter depth (measuring from Mean Sea Level) will be available in the channel. The maximum location of the Matarbari deep draft sea port belongs to the Dhalghata union and less than 20 per cent area falls under Matarbari Union. The location is about 27 km from National Highway-1 and Asian Highway-41. The nearby municipality area is Chokoria and the major tourist attraction place, Cox's Bazar, is about 89 km via the Asian Highway-41. If the port area is accessed via Moheshkhali channels (waterways route), then the distance to the location will be about 50 km.

Matarbari area also has some other developmental projects such as Special Economic Zones, Coal-fired Power Plants, LNG-based combined cycle power plants, proposed private ICD and land-based LNG terminals. There are two jetties available near the Matarbari sea port area

(currently being used for transporting the infrastructure development materials and equipment for the development of the Matarbari Super Critical Coal-Fired Power Plant).

This deep-sea port will be close to India's Tripura, Assam and Meghalaya states (248 km, 711 km, and 535 km, respectively). It means that northeast India can avail of the opportunities to trade with third countries via the Matarbari sea port. Further, the railway connection (under construction) with Cox's Bazar will be advantageous for Tripura. The scope for multimodal connection will be available in the northeast region of India. If Nepal or Bhutan wants to export via Matarbari deep sea port, then the distance will be nearly 850 km via Burimari land port.

Akhaura

Akhaura was declared a land port in 2010. Cargo unloaded at Ashuganj river port is transported by road for the last mile connectivity via Akhaura land port to Agartala in India. PIWTT Protocol provides scope for exploring multimodal connectivity (waterways and land) options.

Several infrastructure projects are under implementation in this area to improve subregional connectivity. Some of these include the construction of the Akhaura-Agartala rail link (new 12-km line); conversion of meter gauge double line to dual gauge between Bhairab Bazar and Akhaura including the rebuilding of the existing Bhairab and Titas bridges to be completed in 2025; construction of dual gauge,

double rail line and conversion of the existing rail line into dual gauge between Akhaura and Laksham; improvement of the Ashuganj River Port–Sarail–Dharkhar–Akhaura Land Port Road as a four-lane national highway (50.6 km).

Integrated Check Post at Akhaura



Sabroom

Sabroom is a potential hub for transport, logistics and manufacturing, which will have a multi-sector special economic zone (SEZ), a logistics hub and an ICP, all within the range of 10 km. The recently completed Feni Bridge gives the proposed ICP access to the Chattogram port, which is 75 km from Sabroom. The land acquisition for the ICP is almost complete and the area has been notified as ICP. Trade through this ICP will commence with the temporary set-up of facilities for customs and other border agencies on both sides.

The Maitri Setu Bridge over river Feni is complete. This bridge connects Sabroom in South Tripura to Ramgarh in Bangladesh. The bridge is 412 metres long with a load capacity of 385 tonnes, thus, allowing easy movement for heavy-load vessels.

The state government is also establishing a logistics hub in Sabroom. The 84 acres of land for the same have already been acquired. The total cost of the project is Rs 118 crore. The proposed hub will have two warehouses, a terminal station of 10 acres and a solid disposal plant. Furthermore, the connecting road from Sabroom-Agartala National Highway is only 900 meters.

Agartala

Agartala is strategically located as its approximate distance from Dhaka is 130 km, Chattogram and Sylhet are within 200 km, *and* Comilla and Ashuganj are within 60 km.

Agartala is well connected to Kolkata through Bangladesh. There is a direct bus service from Agartala to Kolkata via Dhaka, and people from Bangladesh can enter India multiple times over a visa of a minimum of six months validity. The cross-border movement of people through Agartala ICP in 2019-20 was 328,000 (approx.). Besides other infrastructure, Agartala has a functional ICP mirroring Akhaura in Bangladesh, which is used for EXIM and transit purposes. There is one point for entry and exit of EXIM and transit cargo.

The Agartala-Akhaura rail project, which is expected to be completed by September 2022 will facilitate the movement of goods and passengers through rail between the Indian state of Tripura and Bangladesh. It could connect Gangasagar in Bangladesh, Nischintapur in India (10.6 km), and Nischintapur to Agartala railway station (5.46 km).

Akhaura-Chattogram rail connectivity is in existence. The completion of the Akhaura-Agartala rail link can potentially facilitate inbound and outbound movement of Indian transit and EXIM cargo via the Chattogram port in Bangladesh.

Petrapole

Petrapole in India, mirroring Benapole in Bangladesh, is an important location for trade and transit for subregional trade. It has a functional ICP reciprocated by another ICP in Benapole. The distance from Kolkata to Dhaka through the Petrapole-Benapole border is approximately 347 km. The route is congested and trucks' movement in most places is restricted to daylight hours, thereby increasing travel time. Along with the bulk cargo movement by truck through the Petrapole ICP, the railway cargo movement from Petrapole to Benapole has become popular particularly in the COVID-19 period. Additionally, perishable goods get priority in such cargo movements. It takes a minimum of 15-25 days for an Indian truck to complete the entire export procedure and return to the country, which incurs a huge amount of detention cost for the exporters, thereby decreasing their profit margin.

A view from ICP Petrapole



Several projects relating to this ICP are under implementation to improve trade and transit infrastructure. Some of these include the development of rail siding logistics hubs within Petrapole land ports; and upgrading the road between Kolkata and Bongaon near Petrapole.

Benapole

Benapole is a township in Sharsha Upazila in the Jessore District of Bangladesh. The Petrapole Land Port of India is situated across the border. Benapole is on Asian Highway 1. It is the busiest land port to enter and exit Bangladesh. On average, 77,890 passengers per month crossed this port in the 2019-2020 fiscal year. The port has an international bus terminal and an international passenger terminal for immigration. The port offers an on-arrival visa for entering Bangladesh. There are direct bus services between Kolkata and Dhaka through this border.

From Bhanga to Dhaka, the road is under the Dhaka-Mawa-Bhanga expressway – a 54.7 km long, four-lane (with two service lanes) expressway, the first one in Bangladesh. The soon-to-be-completed Padma Bridge is the only missing link in this expressway. Currently, a project to upgrade the 135 km long road from Bhanga expressway to Benapole is in its proposal phase. The project aims to upgrade the road into another expressway of 4 lanes (with two service lanes).

Cargo rail wagons at Benapole Railway Station



Benapole Land Port operates under the Bangladesh Land Port Authority, which is under the Ministry of Shipping, Bangladesh. There is a railway line through the Benapole Land Port area, connecting Benapole and Petrapole and currently, it is being used for container transport. The railway line in this section now has 4 lanes – 2 lanes for passenger trains and 2 lanes for cargo transport. Cargo rail, container trains, side door cargo rail and parcel vans usually carry the goods using this mode. The cargo is either unloaded inside the Benapole Land Port area or is rebooked for other stations inside Bangladesh and is unloaded there. The unloading area inside the land port is alongside the rail line and is under the Ministry of Railways.

There is a river port at Naopara on the banks of the Bhairab river, located about 64 km from the Benapole Land Port. The river port unofficially started its operations in the early 1990s. The port has been brought under Bangladesh's Bangladesh Inland Water Transport Authority (BIWTA) and officially started its operations in 2017. Currently, BIWTA authorises private companies to make jetties alongside its banks.

Box 4.6: Trade and Transit through Naopara Port

The vessels usually start from Naopara on the Bhairab River towards Charerhaat in Khulna and enter the Rupsha river. Then it reaches Kalibari Ghat in Khulna. From there, it travels farther south on the Rupsha river to Mongla. Between Kalibari Ghat and Mongla, there is Chalna Launch Ghat. Any ship that wants to go towards Kolkata can enter the Chunkuri river towards the east. If not, the ships continue towards Mongla. From Mongla Ferry Ghat, the ships turn north-eastwards and enter the Mongla River. Along this course, they can also proceed towards Maitree Power Plant in Rampal. If not, they continue along the Mongla river and reach Ghoshiakhali Launch Ghat near the meeting point of the Mongla, Dharatana and Pangunchi rivers. They follow the Pangunchi river towards the southeast, reach Sannasi Launch Ghat, and enter the Balaswar River. They follow Balaswar towards the North and enter the Katcha river beside Charkhali Launch Ghat. They then proceed northwards and enter the Sadhna River alongside Chirapara. The course thereafter follows the Sadhna River to Kaukhali and then the usual river route to reach Chandpur, from where they may go to other parts of the country.

Dhaka

Details of Dhaka are provided in Corridor 1.

Sahibganj & Dhulian

Details of Sahibganj & Dhulian are provided in Corridor 2.

Jogighoppa

Details of Jogighoppa are mentioned in Corridor 3.

Ranaghat

Ranaghat is a city in Nadia district in West Bengal, India, and is located less than 10 miles from Duttapulia Gram Panchayat along the India-Bangladesh border. Ranaghat is one of the most important railway junctions in the Sealdah–Lalgola railway section. The Sealdah-Ranaghat-Gede line connects the Sealdah Main and North terminus of Kolkata with Ranaghat and Gede of Nadia district. The Maitree Express linking Kolkata and Dhaka passes through Ranaghat. There are two cross-border railway routes here, including Gede-Darshana and Petrapole-Benapole. The Ranaghat Customs station deals with mandatory checking and inspection of the goods moving through the routes.

Gede

Gede has a Land Customs Station and railways office. Perishable goods are not transported by rail. Containerised cargo movement is minimal; however, open, covered and tank wagons also move through this route as and when required.

Cargo train inside Gede Railway Station



Darshana

Darshana situated in Damurhuda upazila of Chuadanga District in the Khulna Division of Bangladesh, shares its border with Gede in India. It is connected to other parts of Bangladesh through rail and roadways. Darshana to Jagotee, Kushtia rail line was first opened in November 1861. It was the first railroad in erstwhile East Bengal. This rail line facilitated the establishment of a robust sugarcane supply chain between Darshana (Carew) and Jagotee Sugar mills. Later, this railroad was extended to Goaland Ghat, Rajbari District, during the service period of Eastern Bengal Railways. Darshana was the first entry point towards Kolkata via railways.

The Darshana rail port was established in 1852. The Roads and Highways Department is creating a 4-lane road straight from zero point (Darshana Joynogor check post) to the bus stand. People of Rajshahi use Darshana to go to Kolkata instead of Shonamasjid since Kolkata is nearer via this route.

Frequently imported goods through Darshana railway port are maize, black stones, boulder, rice bran, soybean, bhushi, wheat, small amount of onion and other food items. The Indian wagons come to Sirajgonj, Ullapara, Ishwardi, Singia, Nawapara, Khulna, Fulbari, Fultala, Shantahar, Joypurhaat and Hilli to directly offload the goods.

Dawki & Shillong

Dawki is connected by NH 44 (extension) and NH 40 (erstwhile Shillong-Sylhet road) and is about 84 km from Shillong. This route falls under the Asian Highway 1 and 2, which connects Myanmar and Bangladesh through Northeast India. There is an LCS at Dawki, which corresponds to Tamabil on the Bangladesh side.

Under the jurisdiction of Dawki LCS, there are three authorised trade routes: Shillong Sylhet Road, Rangpani river and Piyang River.

There is no third-country import through Dawki. On average, around 400 passengers were cleared through this LCS before COVID-19. International tourists regularly come from Bangladesh to visit Shillong through this route.

India-Bangladesh Friendship Gate at Dawki-Tamabil Border



To facilitate passenger movement, a friendship bus service on the Dhaka- Guwahati route and vice versa was officially flagged off by the Prime Minister of India in 2015 at Dhaka. The first trip of passengers entered India through Dawki on June 7, 2015. The facility has been suspended since the COVID-19 outbreak.

Several projects are under implementation to improve transport connectivity with neighbouring countries. There is a widening road from Shillong to Dawki, funded by Japan International Cooperation Agency (JICA), scheduled to be completed in 2023. The land acquisition for the Rs 1,251 crore project is complete and the work is in its early stage. This project is strategically important as it connects Shillong to Tamabil of Bangladesh. Due to the

narrow roads and consequent travel restrictions, trucks are taking the Jowai road to reach Dawki, which takes an extra 30 km. The Shillong- Dawki Road widening project includes the construction of a new bridge over the Umngot River at Dawki, replacing the present old single-lane suspension bridge, which cannot support heavy load trucks. The cantilever bridge over the Umngot river supports only 9 MT capacity. The new bridge will be 12.5 meters wide and 368 meters in length.⁵ An ICP is also under construction at Dawki.

Congested Approach Road to Dawki LCS



Tamabil & Sylhet

Tamabil is important for subregional connectivity when one considers connecting Northeast India to the rest of India through Bangladesh. Tamabil has been a functional land port at the India-Bangladesh border since 2017. On the Sylhet to Tamabil route, only the Jaintiapur municipal area to Tamabil port highway is under construction and post-construction work in this portion of the highway is wider. Some of the important development projects on the route as listed in the Ministry of Planning document, are highlighted in the following table.

Table 4.2: Some Important Development Works in the Area	
<i>Project Name (FY 2020-21)</i>	<i>Amount in Crores (BDT)</i>
Improvement Road from Jaintia to Jaflong (including Tamabil Land Port Connecting Road and BallaGhat Connecting Road) of Dhaka-Sylhet-Tamabil-Jaflong National Highway	60.00
Improvement of Important Zilla Highways under Sylhet Zone to Appropriate Level of Standard & Width (under Sylhet Zone) Project	170.00
Improving the Jessore-Benapole National Highway to the appropriate	60.00

⁵ <https://theshillongtimes.com/2020/12/06/construction-of-shillong-dawki-road-to-begin-soon/>

Table 4.2: Some Important Development Works in the Area

level and width	
Widening and Improvement of Important Regional Highways to Appropriate Standards (Sylhet Zone)	95.83
Total	385.83
<i>Source: Annual Development Programme (ADP), Ministry of Planning, GoB</i>	

In addition, project for four-laning of the Sylhet to Tamabil Highway (65 km) and modernisation of customs facilities and trade facilitation are in progress.

There will be an economic zone not far from the land port. Land acquisitions for the Economic zone are already complete, and a few bridges and culverts have been improved.

Rail connectivity exists from Sylhet to Chhatok, Sunamganj. There is scope for connecting Tamabil through Railways with other parts of Bangladesh.

Box 4.7: Tamabil-Sylhet 4-lane Road

The upgrading project has been approved for the Sylhet to Tamabil road (Kachpur to Tamabil via Sylhet). The highway project will be implemented by June 2025 at the cost of Tk. 3,586.05 crore. Once this project is completed it will not only enhance transport connectivity of Tamabil Land Ports with Dhaka, but also develop communication with the economic zone, export processing zone, develop tourism and improve the socio-economic status of the people living there. Land acquisition for the 4-lane road is complete.

There are no cold storage facilities, as no perishable goods traverse via this route. The negligible amount of perishable goods that arrives does not have to wait too long at the port as transshipment occurs from Indian trucks to Bangladeshi trucks almost instantly.

Cargo shipments do not occur through this land port, as less than 20 tons of stones per truck are allowed. Goods cross the border only through trucks. Once the trucks are on this side, Bangladeshi workers unload and load the goods from Indian trucks to Bangladeshi trucks.

Mongla

Details of Mongla are provided in Corridor 1.

Pangaon

The River port of Pangaon, located at a distance of 157 nautical miles from Chittagong Port, is an inland port with a riverfront and an ICT on the Buriganga River in Dhaka district. It was opened in December 2013. The port is located 20 kilometres from Dhaka Metropolitan Area in Keraniganj upazila. It is the first river port of its kind in Bangladesh. Pangaon Port is

authorised by the Chittagong Port Authority and maintained by both Chittagong Port Authority (CPA) and Bangladesh Inland Water Transport Authority (BIWTA).

The imported products first come to Chittagong Port on mother vessels having capacity to carry around 25,000 tonnes. Thereafter the goods travel to the Pangaon Port via waterways in lighter ships. The Pangaon Port is expected to play a positive role in the country's economic development by opening up a new horizon in transporting exported and imported goods through waterways. This will help ease the pressure of cargo movement on the Dhaka-Chittagong railway and highway corridor.

A new ship channel near Hatiya (locally known as *Akter Banu Duba*) is being used to navigate ships from Chittagong port to Pangaon. Ships use this new channel to move to Selimbazar, Patar Chor, Chandpur, Kalampur, Mohanpur, Gajaria (Munshiganj), Muktarpur and Pangaon.

Narayanganj

Narayanganj is adjacent to Dhaka, an important Bangladesh trading hub. It is situated in Dhaka division, on the banks of river Shitalakshya, which is a distributary of the river Brahmaputra. It is connected to the capital city of Dhaka via National Highway 1 (N1).

Narayanganj River Port facilitates the import of fly ash from India via Mongla Seaport in Bangladesh. The raw materials are transported from Mongla via the inland waterway route through Ghashikhali-Morolganj-Shannashi-Pirojpur-Gabkhan Channel-Jhalokathi-Barisal-Shayestabad-Bamoner Chor-Hijla to Mollikpur to Chandpur (Meghna) and finally to Narayanganj (Shitalakshya).

Narayanganj is well connected with the rest of the country by the river route, roads, and railway. The Dhaka Transport Coordination Authority (DTCA) is overseeing matters pertaining to multimodal connectivity in Narayanganj.

Ashuganj

The Ashuganj River Port is a crucial transit station in terms of foreign trade with India and its role as a hub for local trade. The riverport is well connected with Chittagong Port via the inland water route of Chittagong Port to Swandip Channel, Swandip channel to Hatiya (Noakhali), Hatiya to Ramgoti (Noakhali), Ramgoti to Ghashiarchor (Bhola), Ghashiarchor to Choukighata (Bhola), Choukighata to Ilishia, Ilishia to Chandpur, Chandpur to Gozaria, Gozaria to Narshingdi, Narshingdi to Maniknagar, and finally Maniknagar to Ashuganj River Port.

Similarly, it is connected to the Mongla Port via the inland water route of Mongla Port to Rampal, Rampal to Ghashiakhali canal, Ghashiakhali to Morolganj channel (Bagerhat), Morolganj to Shonnashi (Bagerhat), Shonnashi to Kaukhali (Barisal), Kaukhali to Jhalokathi (Gabkhan Canal), Jhalokathi to Barishal (Charmonai Hujurer Bari), Barisal to Shayestabad (Bhola), Shayestabad to Kaliganj (Bhola), Kaliganj to Ilishia, Ilishia to Chandpur and finally Chandpur to Ashuganj through the Meghna-Gozaria route. This route acts as a transit point between Haldia and Agartala.

Another viable route is from is the Ashuganj to Meghalayas via Surma River. The route is Ashuganj to Dulalpur, Mithamain, Itna to Golakpur, Sunamganj to Chashna to Chatak to Bholagonj.

Ashuganj River Port area is connected with Dhaka via N2 and further connects with Brahmanbaria using N102. This road is prominently known as the Comilla-Sylhet highway. The connection extends to Akhaura land port using N102 through Brahmanbaria Bishwa road and Bara Sultanpur. The road connecting Ashuganj and Akhaura is being developed and a project to convert the single-lane road into a 4-lane road is currently underway. In this regard, the Governments of Bangladesh and India signed an agreement to upgrade the 50-kilometre-long road between Ashuganj River Port and the Akhaura Land Port. The project will be developed under the US\$2bn line of credit extended by India to Bangladesh in 2016. Completion of the project will boost connectivity while further promoting international trade between India's northeastern region and Bangladesh and between South Asian and Southeast Asian countries. The project is expected to be completed in 2023. Dhaka to Ashuganj railway connection is also useful and can be further extended to Brahmanbaria to Akhaura railway junction.

Sonamura

Sonamura is a town in the Indian state of Tripura and lies on the border with Bangladesh to the east of Comilla. Under India-Bangladesh Protocol on Inland Waterways Transit and Trade, vessels ply from Haldia in India to Daudkandi in Bangladesh. 80 km from Sonamura (river Gomati) in the northeastern Indian state of Tripura's Sipahijala district. Sonamura is close to the ICP in Srimantapur.

A small temporary jetty, which is integral to the ICP, has been built and will be included in the list of protocol routes between India and Bangladesh in May 2020. The river's depth is insufficient for a big vessel to ply on the Sonamura- Daudkandi stretch. It is, however, expected to cater to small feeder vessels during peak time and with dredging during the lean season. A permanent jetty should be constructed over river Gomti, connecting the Sonamura-Daudkandi stretch.

Daudkandi

Daudkandi is important for connecting Tripura and the adjoining states in India with Bangladesh's economic centres. For improving connectivity, a new river port near the Bibir Bazar land customs station has been established by BIWTA to connect the Daudkandi river port to Sonamura through IWT. Currently, the Daudkandi river port is connected with both Mongla and Chittagong seaports of Bangladesh through the IWT routes. The Mongla (Harbaria) route to Daudkandi is Mongla-Ghasiakhali-Barisal-Chandpur-Mohanpur-Shatnol-Kalir Bazar-Daudkandi.

The time to reach Daudkandi from Mongla is approximately three days through waterways. The riverport is well connected with both Dhaka and Comilla via N1. The 11 km long Meghna- Gomti bridge connects Dhaka with Chittagong through Daudkandi and the connection extends to Cox's Bazar and then to Teknaf.

Road connectivity in this region is adequate. The Meghna- Gomti bridge was recently upgraded to a 6-lane thoroughfare and the road to Dhaka-Chittagong, Chittagong-Cox's Bazar highway, is broad and not congested. Asian Highway 41 passes beside Daudkandi through Kanchpur. Two additional bridges are proposed to be constructed alongside the Meghna- Gomti bridge. One is for the Dhaka Chittagong high-speed bullet train and the other is for the expressway. The area can also be connected with Brahmanbaria to Sylhet via N102 from Comilla.

Srimantapur

Srimantapur is a town in Tripura located about 4 km from Sonamura Sub-Division town and 63 km from the city of Agartala in Tripura along the international border between India and Bangladesh. Srimantapur has an ICP covering 3.51 acres, located 8-10 km from the Comilla district of Bangladesh. Its strategic location makes it an extremely viable and cost-efficient route for trade between India and Bangladesh.

The ICP Srimantapur terminal also has one floating jetty on the Gomati River, which flows through Tripura and the district of Comilla in Bangladesh. With the floating jetty's opening, Tripura has joined the map of Inland Water Transport, which is expected to boost India's trade with Bangladesh further.

However, the river's depth is low and insufficient for big vessels. Dredging and/or release of water from nearby dams will be required to utilise the jetty and the river for further trade effectively. It is expected that a permanent jetty will be installed soon over river Gomti that connects Sonamura-Daudkandi.

At present, there is no container movement through this ICP. Mostly, the goods are transported in open wagons and body-covered trucks.

Sutarkandi & Karimganj

Sutarkandi, located approximately 14 km from the Karimganj district of Assam, is on the international border of India and Bangladesh. Sutarkandi has an ICP, which is mostly used to export fruits, silicon and coal. The ICP at Sutarkandi is strategically located and has a river (Kushiara) connectivity at Lakhi Bazar just three km away from ICP and rail connectivity about 10 km away at Mahishasan- Kalaura route, which is to be developed soon. The nearest airport is Silchar, which is approximately 100 km from ICP Sutarkandi.

Two national highways run through Sutarkandi that is National Highway 151 (old) and National Highway 7 (new). Sutarkandi is situated 45 km away from Sylhet town of Bangladesh.

While Sutarkandi is connected to Karimganj through the above two highways, Karimganj is connected to other parts of India by NH-44 and NH-53. Karimganj is linked through NH-44, which starts from Shillong, passes through Karimganj and goes up to Agartala. This district is connected with Silchar by NH-53, and it is connected with Sutarkandi through NH-151 and with Sylhet through NH-7.

There is a direct rail connection with Agartala, Guwahati, Silchar, Mizoram and Lumpding. Though various modes of transportation are available, due to the remoteness of the district, bottlenecks prevail with regard to transport and communication facility.

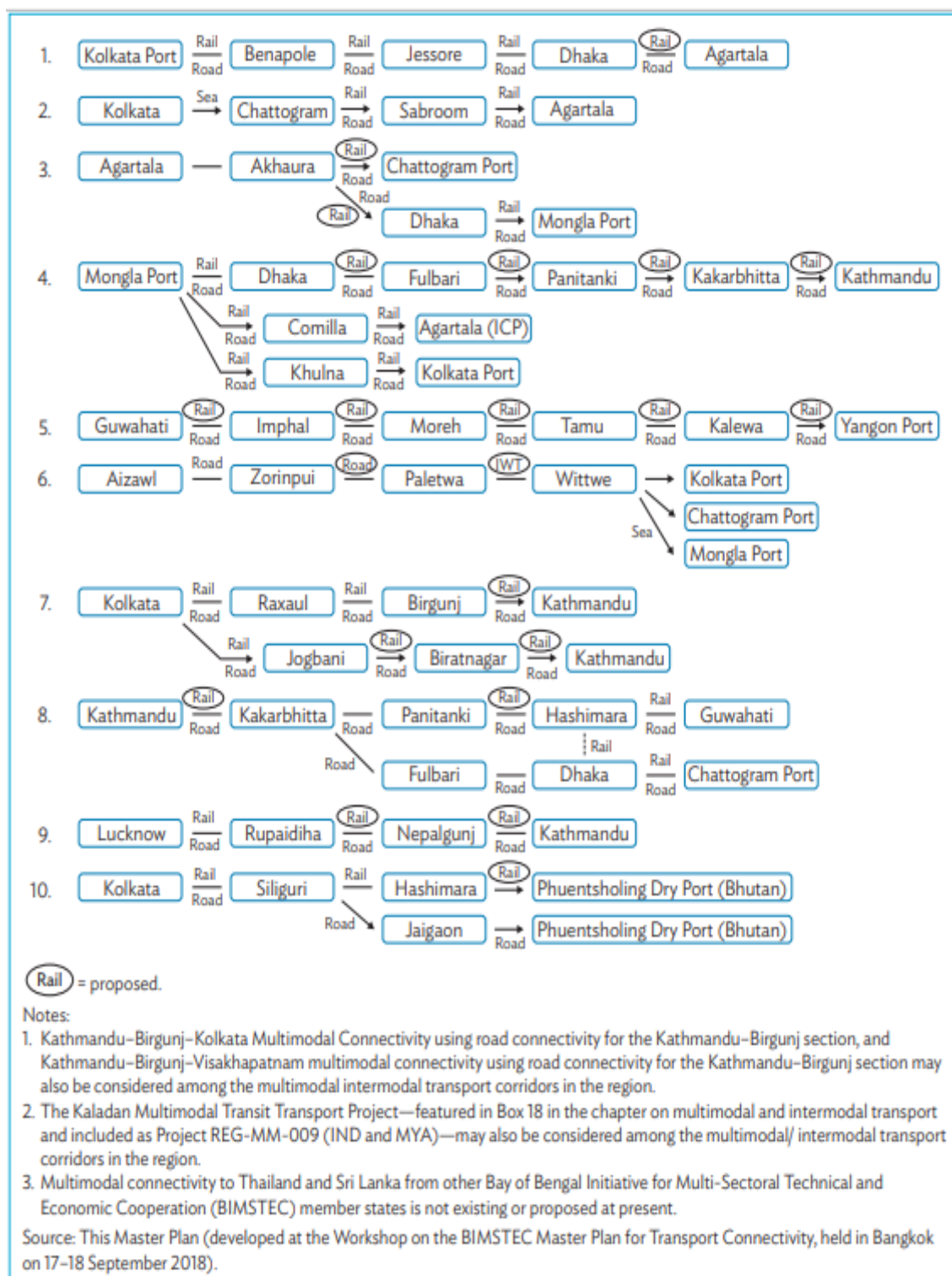
Weight test of a loaded cargo truck at ICP Sutarkandi



There is a broad-gauge railway track from Karimganj to the border station Mahisashan on the Indian side, which connects to the Shahbajpur in the Sylhet district of Bangladesh. This track has importance for the Trans Asian Railway Network, which enters India through Moreh-Tamu route from Myanmar, connecting with Bangladesh through the Mahisasan – Shahbajpur route. Work for the revival of the Mahisahan- Shahbajpur railway line is underway, and the track laying along this route is expected to be completed by December 2022.

Summary: Corridor 4
Priority Interventions Required
<ol style="list-style-type: none"> 1. Inter-modal gateway at Karimganj- connecting road, rail and river routes. 2. Shillong-Dawki road widening & wider bridge at Dawki; Upgrading of the approach road to Dawki LCS. 3. Building Hili (West Bengal) – Mahendraganj (Meghalaya) Corridor through Bangladesh to decongest the Siliguri Corridor. This corridor can also be extended and linked to the India-Myanmar-Thailand trilateral highway. 4. Reopening the closed Shahabazpur (Bangladesh) – Karimganj (India) rail link through Mahisahan. 5. Decongestion of Petrapole-Benapole route; expedition of Padma river multi-purpose bridge. 6. A multimodal terminal in Ashuganj. 7. Rail link to the ICP in Agartala and set up required infrastructure there.

Annexure 4.1: Existing and Proposed Multimodal and Intermodal Transport Corridors in the BIMSTEC Region



Source: Adapted from BIMSTEC Master Plan for Transport Connectivity

Annexure 4.2: CORRIDOR 1

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
01	Kakarbhitta	Land Port, ICD, Terminal building, Customs inspection sheds, warehouse buildings, weighbridge, cemented parking area, ECTS, Space for EXIM cargo operations and management, electricity and internet. <i>Asian Highway (AH) 2 passes through this location</i>	Railway connecting Kakarbhitta to Kanchanpur (in progress), larger warehouses, storage facilities, mechanised handling equipment, freight stations (CFS), refrigerated container stations, quarantine facilities, and single window compliance with supporting infrastructure (stable internet, 24*7 electricity).
02	Panitanki	Land Customs Station, newly constructed double lane bridge over the Mechi river, Customs office, plant quarantine, EDI system, Risk Management System, Customs House Agents (CHA) office <i>Asian Highway (AH) 2 passes through this location</i>	Integrated Check Post (under process), Parking space, warehousing facility, quality assessment lab, banks and ATMs, cargo terminal building, foreign exchange office, public health office, office space for operating agencies, fumigation shed, scanning facility, watch tower, weighbridges, accommodation facilities and restrooms, animal quarantine building, automated trans-shipment facility, 24*7 electricity and internet facility.
03	Siliguri	ICD with rail connectivity to the ICD, bonded area for handling and delivering export/import containers, customs warehouse, empty container park, Infrastructure for EXIM containers, two reach-stackers and one empty container stacker, non-bonded space for open storage, 50 + trailers for first/last mile connectivity, railway track, electricity and internet connectivity, GPS enabled containerised cargo. Centre for Perishable Cargo and North Bengal Tea Park. <i>Asian Highway (AH) 2 passes through this location</i>	Road traffic management in Siliguri, washrooms for workers and gender-friendly infrastructure in the ICD.
04	Fulbari	Land Customs Station, Transshipment/packing place, weighing scale, passengers' hall equipped with X-Ray machine, R.M.S, passengers' lobby, passenger terminal, Immigration check post,	ICP (under process), Parking space, Separate sheds for storing of goods, warehousing facility, security personals and scanners, plant and animal quarantine

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
		<p>CCTV cameras, two godowns, weighbridge, EDI system, CHAs and Carrying & Forwarding agents, Cotton quality testing facility.</p> <p><i>Asian Highway (AH) 2 passes through this location</i></p>	<p>facility, Rail connectivity with automated container transshipment facility</p>
05	Banglabandha	<p>Land Port, Warehouses, weighing scales, trans-shipment shade, open yard, and closed circuit cameras for security enforcement.</p> <p><i>Asian Highway (AH) 2 passes through this location</i></p>	<p>Specialised storage facilities, cold storage, cargo handling equipment, full body truck scanner, rest rooms for drivers, 24*7 electricity, a separate lane for perishable cargo, and gender-inclusive infrastructure.</p>
06	Dhaka	<p>Connectivity between Ghoshiakali Channel of Mongla and Chittagong port, railway-based ICD, Kamalapur Railway Station, Private ICT, two regular dedicated trains for carrying containers from Chittagong port. Ready road, rail and air connectivity.</p> <p><i>Asian Highway (AH) 1, 2 and 41 passes through this location</i></p>	<p>Systematic dredging at river ports, Padma Bridge Rail Link, upgraded road connectivity from Chittagong Port (conversion of existing road into 6 lanes and 4 lanes), Dedicated freight line at Dhaka ICD, warehouse facility for containerised and non-containerised cargo, cargo storage facility at ICD, women inclusive infrastructural facilities.</p>
07	Mongla	<p>Seaport with jetty, 33 berths (5 alongside the jetty, 7 at mooring buoy, 14 at anchorage and 7 at private jetties), Reefer facilities for refrigerated containers, open area for loading and unloading, Mobile Harbor Crane, Straddle Crane, Forklift, Reach stacker, Jetty Deck Crane, Terminal Tractor, Empty Container Handler, Transit Sheds, Warehouse, Container Yard, Reefer Plug Point, Car Parking Yard, Open Dumps, Vessel Traffic Management and Information System (VTMS), Use of ASYCUDA World, GPS tracking of a container, dredging facility, manual mobile inspection units, separate washroom for women, Rampal Coal Power Plant, Khan Jahan Ali Airport.</p> <p><i>Asian Highway (AH) 41, and National Highway 7 pass through this location</i></p>	<p>Enhanced railway connectivity, including Mongla to Khulna Railway line, ECTS facility, Trans-shipment facility, dedicated RO-RO service, Padma Bridge (under construction), banking facilities, adequate shipping lines, Inland Container Depot, warehouse facility for perishable goods, full body truck scanners.</p>

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
08	Chattogram	<p>Seaport, Chattogram Dry Dock, Export Processing Zones, Pilotage facility, Night Navigation facility, Mobile and various other types of Cranes, Forklift Trucks, Industrial Tractor, Trailers, Tele Handler, Car Carrier, Container Freight Stations, Railway Container Siding, Storage Yards, Reefer Points, Generators, Fire Brigade, Reach Stacker, Automatic Bagging Machine, Pipe Handler, Container Mover, Custom House, Plant Quarantine Station, Atomic Energy Center, private depot, integrated freight transport system, Inland Container Depots, road, rail and inland waterways connectivity, container scanners, mobile scanners, weighbridges, container tracking and tracing systems and CCTV cameras, Separate washrooms facilities in the port area, watchtowers, waste disposal facility (two ships dedicated to picking up solid and oily waste), Hazrat Shah Amanat International Airport.</p> <p><i>National Highway (N-01) links Chattogram to Dhaka located at a distance of about 250 km.</i></p>	<p>Bay Terminal, Patenga Container Terminal, Complete adaptation to ASYCUDA World system, Use of Vessel Traffic Management Information System (VTMS), cargo scanning facilities, Separate washrooms at the container terminals, modern facilities to clean up spillage of waste oil, facility for disposing of the ballast water of ships</p>

Annexure 4.3: CORRIDOR 2

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
01	Kathmandu	Road and air connectivity, Upcoming rail connectivity to India ⁶ , Storages and quarantine facilities, 24*7 electricity and internet facilities.	Inter-modal infrastructure facilities, Develop and upgrade the road infrastructure, Upgradation of warehousing capacity, Full body truck scanners, Mobile inspection units, Gender- friendly infrastructure at trade and transport related offices, Parking spaces, 24*7 uninterrupted electricity and internet, adequate storage and quarantine facilities.
02	Birgunj	Integrated Check Post (ICP) with rail connectivity, Dry port terminal, Inter-modal infrastructure trans-shipment facilities, Broad gauge railway yard, Container stacking yard, Covered container freight station goods platform, Covered goods shed Electric substation, Fire alarm system, Parking area, Full body truck scanners, Mobile inspection units, Conveyer belts, Automated cranes, Weighbridges, Tracking and tracing devices and cameras, Single window compliance and inspection software, Warehouse, Parking facilities and Restrooms.	24*7 electricity and internet, Digitisation of all trade-related processes, supporting infrastructure such as cold storage, security, roads, and washrooms to be made for women and differently-abled people.
03	Raxaul	ICP, Office infrastructure for housing all relevant government departments and agencies, Space for Passenger Terminal Building, Cargo Terminal Building, Warehouse, Customs Service Building, Parking Area, Rummaging Sheds, Weigh Bridges, Quarantine Building, Fumigation Shed, Public Health Office, Public Utilities Block, and Watch Tower.	The improved link road between railway yard and ICP, Cold storage facility, 24*7 Internet connectivity, sanitation and drinking water facilities, and gender-friendly infrastructure.
04	Biratnagar	Integrated Check Post, Truck scanners, Mobile inspection units, Conveyer belts, Automated cranes, Weighbridges, Tracking and tracing devices and	Infrastructure including adequate cold storage and larger parking facilities, upgraded road connectivity (4/6 lane highway),

⁶ https://www.business-standard.com/article/current-affairs/nepal-agrees-to-fast-track-rail-connection-from-kathmandu-to-india-120120900429_1.html

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
		cameras, Electronic weighbridges, Single window compliance/inspection software, Facility for inter-modal transportation for seamless last-mile delivery, 24*7 Electricity and internet	Robust risk management framework, Relevant Security and safety infrastructure, restaurants, accommodation services, warehousing and parking facilities with functional restrooms
05	Jogbani	ICP, Customs office, railway yard, RFID scanner and 24*7 internet facility, Passenger Terminal Building, Cargo Terminal Building, Warehouse, Customs Service Building, Parking Area, Rummaging Sheds, Weigh Bridges, Quarantine Building, Fumigation Shed, Public Health Office and Watch Tower	Full-body scanners and other security infrastructure, Plant and animal quarantine, warehousing facilities, gender-friendly infrastructure, Rail links between Jogbani, Biratnagar (and Kathmandu)
06	Bhairahawa	ICD, Full body truck scanners, Mobile inspection units, Conveyer belts, Automated cranes, Weighbridges, Tracking and tracing devices, ECTS system and cameras.	Inter-modal trans-shipment facilities, Parking facilities, Warehousing, Cold storage facilities, National Single window compliance system, internet, gender-friendly infrastructure, sufficient security personnel, and basic amenities such as washrooms and restrooms. <i>An ICP is proposed at this location, and this is expected to address most of the issues highlighted above</i>
07	Sonauli & Nautanwa	Customs office, 24*7 electricity, hard and soft infrastructure facilitating online paper works, tracks for the movement of containerised cargos, cranes for loading and unloading, Nautanwa railway station located at a distance of 7 km from Sonauli.	ICP, 24*7 Internet connection, Plant quarantine facility, Truck scanner, Warehousing and parking facility.
08	Varanasi	A dedicated rail freight corridor passing through nearby Pt. Deen Dayal Upadhyay Railway Station, Multimodal Terminal at Ramnagar with Operating Control Centre, 50 tonnes cranes, administrative building, ship tracking building, electronic systems- RIS (River Information System) and DGPS (Differential Global Position System) for tracking vessels, Automatic Information System, GPS system for	Freight village and extended railway connectivity from Jeonathpur railway station to MMT (ongoing), intermodal transshipment facility, 24*7 electricity supply, Dedicated track at the Deen Dayal Upadhyay railway station for cargo (in progress).

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
		tracking the position of the vessel, 24*7 internet connection.	
09	Kolkata	Kidderpore Dock, Netaji Subhas Dock, Customs office, Budge budge jetties, refrigerated container handling facility, software such as Port Community System (PCS) and Program Operations Manual System (POMS) to exchange information, ICEGATE software system, 24*7 Electricity and internet facilities, restrooms, Separate and clean washrooms, Budge jetties for handling liquid cargo, underground discharge pipelines, Cantilever crane, Mobile Harbor Cranes, gear cranes, reach stackers, RTGs, Intermodal transportation and rail facility inside NSD, ECTS seal (with GPS facility), RFID seal, wagons	Improvement of the approach road, Berth no. 13 – 21 are defunct, Facility for document verification at NSD to be conducted at terminal gates, Upgradation of lock gates in Netaji Subhas Dock (NSD) and Kidderpore Dock (KPD).
10	Haldia Dock Complex	Riverine port, lock gates, Vessels Traffic Monitoring System (VTMS), 17 berths divided into- Liquid bulk cargo Terminal; Container Terminal; Multipurpose Terminal and Dry bulk cargo Terminal, one Barge Jetty for handling POL products and three Barge Jetties for loading Fly Ash, mobile harbour cranes, mechanized conveyor belt, underground discharge systems, four storage sheds, open storage areas behind the berths, railway sidings of both Indian railways and CONCOR, 24*7 electricity with generator backup, separate washrooms for women and ICEGATE system.	24*7 Internet connectivity, multimodal terminal (under construction)
11	Visakhapatnam	Second gateway port for Nepal bound cargo, all-weather and 24*7 operating port, ECTS seal with GPS-based tracking tool, Separate washrooms and other major trade facilitation infrastructure, ICEGATE software system, 24*7 electricity and internet, DG sets in all offices, containerised cargos, facility to accommodate mainline vessels, dedicated rail facility to handle full rake of 45 wagons, potential	Dedicated rail corridor inside the port

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
		to handle 6 lakh TEU's.	
12	Gai Ghat & Kalu Ghat	Ready road and water connectivity	Multimodal Inland Water Transport (IWT) Terminal, Navigation aids for day and night navigation, River Information System (RIS) with all hardware and software, Ro-Ro jetties, Bank and slope protection, River training works, installation of equipment like tow barges, inland vessels, survey vessels including rescue boats and survey equipment.
13	Sahibganj & Dhulian	Land Customs Station, Road network, ferry services, four-lane road connection, Multimodal Terminal, and Ro-Ro services from Rajmahal to Manikchak.	A bridge between Sahibganj and Manihari, a new navigation lock at Farakka Barrage, a freight village, and a barrage at Nimtita,

Annexure 4.4: CORRIDOR 3

Sr. No	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
01	Gelephu	Mini Dry Port, Nakugaon land port, Land Custom Station, Domestic airport, double lane Asian Highway and primary and secondary national highways connecting other parts of the country, Boulder Stock Yard, Road transport availability till Jogighopa MMLP, Railway Station, Jigmeling Industrial Park, 24*7 Electricity and Internet, Functional restrooms, Parking and warehouse.	Inter-modal infrastructure, Food and grain storage facilities, Truck body scanners, Automated cranes and cameras, and Common security checkpoints.
02	Phuentsholing & Pasakha	Land Customs Station, Mini Dry Port, Mega Dry Port, 24*7 Electricity, Warehousing and parking facilities and Cold storage.	Riverine routes and railway links, Mechanisation of loading-unloading and transshipment, Common customs transit/liaison office, 24*7 internet facility, Full body truck scanners, Mobile inspection units, Automated cranes, Weighbridges, Tracking and tracing devices, single National window, Separate infrastructures for perishable goods, Basic facilities such as washroom for women and drivers.
03	Samdrup Jongkhar	Open dry port, Road connectivity, Weighbridges, recovery vehicles and vehicles repair and maintenance workshops, separate storage facilities, cold storage facility, and goods quarantine station	Rail connectivity, cranes for handling cargo, roadside cameras, storage facilities for containerised and non-containerised cargoes, Systemic storage system, Facility for inter-modal transportation, and Mechanised loading and unloading facilities.
04	Jaigaon	Land Customs Station, DG Set for power backup, ICEGATE software, private parking facilities, gender-inclusive infrastructure.	Intermodal and automated transshipment facilities, 24*7 internet and electricity, Plant and animal quarantine facilities, Weighbridge, Cold storage facility and warehouse, Separate restrooms and public toilets, banks and ATMs, Fumigation

Sr. No	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
			Shed, Scanning facility and CCTV cameras, Watch Tower, Accommodation facility, Currency exchange facility
05	Hasimara	Railway station, Road connectivity, Broad gauge rail line, Electricity, Power backup DG system	Railway connectivity, Internet, goods shed, double lined rail line along with electrification, Automation of loading and unloading activities.
06	Siliguri	See Corridor 1	See Corridor 1
07	Kolkata/ Haldia	See Corridor 2	See Corridor 2
08	Changrabandha	Land Customs Station, Road and railway connectivity, Private parking area, Internet and electricity, DG set for power backup.	Necessary infrastructure facilities for remote EDI System, Upgradation of the Customs office, Staff quarters, Four-storeyed office building and residential quarters (in plan), accommodation facility for staff, Separate rest rooms and washrooms, Warehouse, Specific loading unloading area and examination shed quarantine facility, Parking area, Gender-inclusive infrastructure.
09	Guwahati	Pandu river port, Amingaon Inland Container Depot, Rail and road connectivity, Low-level and high-level jetty of the fixed terminal, Bonded warehousing and EDI service centre, Testing Lab, CHA, Terminal to Terminal movement, ECTS facility.	Jetty to connect to Pandu port, Low bedded trailers
10	Jogighopa	Multimodal Logistic Park (under construction), connectivity with NH 17	Customs office, the 4-lane road between Jogighopa and Guwahati (an ongoing process), a 3-km rail line to connect Jogighopa station to the MMLP and MMLP to Inland Water Terminal, Road from Dalu on the Indo-Bhutan border.

Sr. No	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
11	Dhubri	IWAI terminal, Steamer ghat, EDI ports–ICD at Amingaon, Darranga, Kamardwisha, and Guwahati airport, Non-Electronic Data Interchange port, warehousing facility.	Customs office closer to the terminal, cold storage or testing lab, River signalling and night navigation for barges plying on NW2 and the PIWTT, Electricity, internet connectivity, System for paperless trade, 19 Km bridge connecting Dhubri-Fulbari, 3-4 Km flyover connecting NH17 and IWAI terminal
12	Mongla	See Corridor 1	See Corridor 1
13	Chattogram	See Corridor 1	See Corridor 1

Annexure 4.5: CORRIDOR 4

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
01	Kolkata	See Corridor 2	See Corridor 2
02	Chattogram	See Corridor 1	See Corridor 1
03	Matarbari	Deep Sea Port (under construction), Cox's Bazar Airport, National Highway-1, jetties <i>Asian Highways (AH) 41 passes through this location</i>	Special Economic Zones, railway connections, multi-purpose terminals, container terminals, and tracking and tracing facilities for cargo.
04	Akhaura	ICP, Customs Office, Immigration office, Quarantine facility, Warehouse, Weight scale (needs upgradation)	Improved infrastructure at the ICP, Cold storage facilities, Electricity and internet, Gender-inclusive infrastructure, Shedding space, CCTV cameras, Scanners and other security enhancement facilities, and Dedicated container yard
05	Sabroom	Maitri Setu Bridge over river Feni, Multi-sector special economic zone (SEZ) and logistics hub	ICP (upcoming) and integrated services, warehouses, terminal station, solid disposal plant
06	Agartala	ICP, Rail connectivity, Immigration, Customs, Quarantine station, Goods yard, two weigh bridges (each having a capacity of 80MT), two warehouses, one inspection shed, ammonia based cold storage, generator and fumigation services, and solar power infrastructure.	Rail link to the ICP (to enable single point clearance and inter-modal transfer of EXIM and transit goods), quarantine facility and inspection labs, gender inclusive infrastructure, product specific warehouse and cargo handling station, EDI port facility, additional passenger terminal, containerisation, ICEGATE, ICT Infrastructure.
07	Petrapole	ICP, A passenger terminal building, bank and ATM, cargo terminal building, foreign exchange bureau, separate inspection cum warehouse, customs services building, public health office, fumigation services, electric substation and pump house, driver restroom, rummaging sheds and watch tower, Quarantine Station and Single-window system	24*7 stable internet connection and sufficient parking space for trucks.

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
08	Benapole	ICP, Railway Station, Noapara River Port, containerised cargo, international bus terminal and international passenger terminal, separate entry point, Plant Quarantine facility, ASYCUDA system, container transport, jetties, privately owned warehouses, open yards, trans-shipment yard and shades, 2 truck terminals, weighbridges, chassis yard, export terminal, fire hydrant system with water reservoir, administrative office, cameras, forklifts and cranes, private ICDs, moisture meter, seed germinator, laboratory incubators, hot air oven, florescent microscopes, stereo microscopes, handy microscopes, distil water plant, seed analyser, microplate reader, autoclaves, designated trans-shipment yard for perishable goods, generators, stable internet and electricity, a full body truck scanner. <i>Asian Highway (AH) 1, National Highway 706 and National Highway 7 connect this location</i>	Infrastructures for e-single window system, specialised storage capacity, container depot for rail, infrastructural facilities at the railway station, cargo handling equipment, river port facilities, cargo vehicle terminal, cargo handling equipment, parking space, Inland Container Depot, specialised equipment for handling hazardous goods, cold storage facility, GPS trackers, and gender-inclusive infrastructure.
09	Dhaka	See Corridor 1	See Corridor 1
10	Sahibganj & Dhulian	See Corridor 2	See Corridor 2
11	Jogighopa	See Corridor 3	See Corridor 3
12	Ranaghat	Customs station, railway cargo movement, Risk Management Software, ICEGATE system	Dedicated platform, warehouse, office space, over bridge, internet and electricity, washrooms, GPS enabled ECTS seal
13	Gede	Land Customs Station and railway station	A dedicated building for Customs, a dedicated platform for cargo train, warehouse, proper shed, ECTS seal, power supply, internet, water supply, and washrooms.
14	Darshana	Darshana-Gede International Railway Port, Dual-Gauge double Track Bangabandhu Sheikh Mujib Railway Bridge over the Jamuna river.	Single window system, Roads from zero point to the rail yard, Double line rail tracks, Passenger train connection

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
			with Rajshahi, Rail cargo scanner, Warehouses, GPS tracking system, Internet and electricity facilities, Restrooms, Washrooms and other Gender inclusive infrastructure.
15	Dawki & Shillong	LCS, Two weighbridges, generator, baggage X-ray scanner, desktop computer, printer, CCTV cameras, nationalised bank at Dawki	ICP, 24*7 electricity and internet, Scanners, Quarantine facilities, staff quarters, restrooms, public toilets, Godowns, parking spaces, warehouses and dumb yards, inspection yards, Gender friendly infrastructure, and foreign currency exchange facility.
16	Tamabil & Sylhet	Tamabil Land port, Dawki River, Piyain River (which connects with Surma River in Sylhet), trans-shipment facility, non-containerized bulk cargo, Warehouse, Banks, tracking device, scanner, digital weight scales, Office Quarter, Logistical support, rest room, Open stack truck parking yard I, quarantine facilities, Immigration facility, Toilet facilities inside the port areas. <i>Asian Highways (AH-1 and AH-2), and National Highway (N-2) pass through these two locations.</i>	Economic Zone, Rail connectivity, passenger waiting room, washrooms, Office for the C&F Agents, ATM, currency exchange facility, Parking shed, electricity and internet, Gender and labour friendly infrastructure, Upgradation of Customs office, containerized cargo handling facilities.
17	Mongla	See Corridor 1	See Corridor 1
18	Pangaon	Riverport, Inland Container Terminal, Automated System for Customs Data, Customs House, Banking facility, Vessels equipped with navigational equipment such as Global Positioning System (GPS), radar, compass & Automatic Identification System (AIS), 180-meter-long and 26-meter-wide jetty which can handle two ships of 70 to 75 meters, Container Freight Station (CFS), Mobile harbour crane, Straddle carriers, forklifts, tractor trailers and cargo-lifting cranes, Scanning machine, Weight scale, Labs for testing, Warehouse, Generators, Internet facility,	Rail connectivity, Gender inclusive infrastructure, Stable electricity and water supply.

Sr. No.	Locations	Prominent and Other Available Infrastructure	Required Infrastructure
		Pump house, Reefer container plug points.	
19	Narayanganj	Power Plant, Export Processing Zone, Shitalakshya Bridge, Automated System for Customs Data (ASYCUDA), Vessels equipped with navigational equipment like radar, echosounder, GPS & VHF (very high frequency), Manual cranes, Compressor machines, Reinforced Cement Concrete jetty, Electricity, Internet service, Special infrastructure for handling perishable cargo.	Inland Container Terminal (ICT), Axle load control stations, Weighing scale, Infrastructure to facilitate containerised cargo handling, Gender inclusive infrastructure, washroom, refreshment room, and Cold storage.
20	Ashuganj	Riverport, road connectivity, railway connectivity, cargo jetty, container storage warehouse, electricity and internet, private godowns & sheds, and separate terminals.	Mechanised means of loading and unloading, ICT, washrooms, Cold storage facility, Gender inclusive infrastructure.
21	Sonamura	Temporary jetty	Permanent jetty with related amenities, dredging of the river
22	Daudkandi	Riverport, Road connectivity, Mechanised cranes, Manual weight scale platform, Container storage shed.	Stable electricity, restroom and separate washroom for workers, dredging, Containerised cargo handling facility.
23	Srimantapur	LCS, weighbridges, dedicated goods yard, parking space, and staff quarters	ICP (under process), Warehouses, restrooms, canteens, washrooms, stable internet connectivity, dredging in the Sonamura river
24	Karimganj & Sutarkandi	ICP, rail connection, broad-gauge railway track in Mahisashan, Border Trade Centres, steamer-ghat, IWAI terminal with warehousing and container handler facility, two weighbridges and two warehouse facilities (under renovation), generator for power backup, Immigration facility, separate office building for Customs and Immigration purpose, parking plot, baggage scanner, and Private warehouse.	Transshipment facility and shed, truck scanners, CCTV cameras and surveillance system, quarantine facilities, testing labs, staff quarters, restrooms, public toilets, stable internet facility, and gender-friendly infrastructure.

5

Multimodal Connectivity: Stakeholders' Engagement and Perspectives

Stakeholders include people/communities who may – directly or indirectly, positively or negatively – affect or be affected by the outcome of projects or programs. Stakeholders may be grouped into two categories: (a) Primary stakeholders, the beneficiaries of a development intervention or those directly affected (positively or negatively) by it, including the local populace in the project area, in particular, poor and marginalised groups; and (b) Secondary stakeholders, those who influence a development intervention or are indirectly affected by it, including the government implementing a particular project/program, line ministry and project staff, implementing agencies, local governments, civil society organisations, private sector firms, the multilateral agencies (funding the initiative) and its shareholders and other development agencies.¹

It is now globally recognised that for the success of infrastructure projects, stakeholder participation is crucial. Therefore a participatory approach needs to be adopted at all levels of project implementation. Studies show that participatory approaches enhance project quality, ownership and sustainability; empower targeted beneficiaries (particularly women and poor people), and contribute to long-term capacity-building and self-sufficiency.² In practice, this involves employing measures to identify relevant stakeholders, share information with them, listen to their views, involve them in the processes of development planning and decision-making, contribute to their capacity-building and ultimately empower them to initiate, manage and control their development.

This Chapter is an attempt to understand the perceptions of primary stakeholders on completed and ongoing infrastructure projects in the BBIN subregion and how these projects are helping the local people in terms of employment and livelihood generation, skill development, women participation and empowerment, migration and reverse migration, among others. The description is, however, limited to 50 locations on four selected corridors (see Chapter 1), which have been surveyed and where the project team interacted with the primary stakeholders.

¹ Asian Development Bank, Handbook on Stakeholder Consultation and Participation in ADB Operations, 2001.

² *ibid.*

Bangladesh

Employment and livelihood opportunities

Infrastructure projects in Bangladesh have been a major source of employment generation and livelihood opportunities for the locals. Location-wise observations and perspectives of the stakeholders are highlighted below.

At the Ashuganj river port, a large number of manual workers provide their services. These workers usually earn Tk 600-700 per day on average. Besides, pilots, vessel operators, and vessel employees are also earning their livelihood through the shipment and transit of cargo. The truck drivers and owners are affiliated with the port for transporting the cargo to Akhaura land port. There are also people working in workshops adjacent to the river port to repair and maintain trucks that are used for transshipment. It is expected that once the ICT becomes fully functional, more employment will be generated for the local people, including women and it will help the latter to participate in trade-related activities.

At the Daudkandi river port, the available livelihood opportunities include the work of dock workers (both male and female), vessel pilots and operators, local importers and truck drivers, among others.

The ratio of male and female workers in the docks is around 60:40. While male workers get Bangladeshi Tk 500 per day as daily wage, female workers get Tk 400 per day. The presence of migrant workers is also observed in the area, as most workers hail from Sylhet, Sunamganj and Netrakona. The migrants are present primarily because both sides of the river port require manual loading and unloading of cargo throughout the year. Earlier, there was a cement packaging factory near the port, but it has been recently shut down. The major products traded currently are coal, sand, and rocks.

Closed Shah Cement Factory near Gomti-Daudkandi River Port



Workers are engaged here on a daily wage basis and their wages depend on the loading/unloading they carry out. These workers usually earn Tk 300 for offloading goods from Medium Trucks and Tk 400 or 500 if they unload goods from large trucks. There are days when they can offload goods from two to three trucks and also bad days when they earn nothing and have to pay from their pockets for their food and travel expenses.

Furthermore, several workers rent places nearby to reduce transportation costs. Others, who cannot afford accommodation, resort to sleeping on the roadside. Local stakeholders believe that more entrepreneurship activities are needed in the countryside. Enhanced multimodal connectivity and economic integration in the subregion will provide more employment and livelihood opportunities. In addition to this, local people also need capacity building and skill development to find work and participate in cross-border trade and related activities.

At Akhaura, the land port infrastructure has prompted many locals to engage in agricultural work and fish farming as it is an agriculture-dominant area. Locals export fish to Agartala, and some of these fish exporters are also truck drivers.

According to locals, employment opportunities are currently constrained by the lack of commodities traded through the Akhaura land port. These people feel that an increase in trade, particularly imports from Agartala to Akhaura land port, creates an increase in the demand for local labour for loading/unloading, maintenance and housekeeping, managerial tasks and management roles. Furthermore, establishing a special economic zone, which is being planned in this area, is expected to create livelihood opportunities for the local people.

Box 5.1: Regular trade and related opportunities required to control illegal dealings

In Akhaura region, there is a serious problem arising from illegal drug dealings. Illegal drugs are brought into Bangladesh from outside. Youth and locals including fish exporters to auto rickshaw drivers are often found to be involved in drug dealings, which is a major concern in this area. Local people attribute this to a dearth of livelihood opportunities in the area. Experts said that if trade is regular through this land port, the problem will get addressed.

Capacity building and skill development requirements

Bangladesh requires training and capacity-building workshops for youth and women to utilise the emerging opportunities from multimodal connectivity initiatives.

Ashuganj has immense potential to be developed as a commercial hub. However, the employees hired at the river port are not skilled in dealing with emerging commercial opportunities. Most workers are unaware of safety and health-related measures that must be implemented in the port. Thus, a lack of knowledge regarding handling complex machinery often leads to delays and inefficient work management.

The upcoming ICT infrastructure at Ashuganj port will increase the demand for skilled labour, creating employment and livelihood opportunities. However, proper training and workshops will be required to instil and enhance the skills required for efficient operations in the port.

Stakeholders also made similar observations in other locations, such as Daudkandi river port and Tamabil Land port.

Additionally, skill training for truck drivers in Bangladesh has also become pivotal. Such training must address emerging cargo tracking and GPS infrastructure in vehicles, as well as regulatory and procedural operations at various ports.

There is also a need for capacity building and skill development programmes regarding land port security, management of goods, trucks, technical training, and perishable goods management, among others, for the youth and women, as prevalent in the country, for enhanced connectivity and trade.

Environment friendly initiatives

The stakeholders indicated certain concerns regarding the negative impact on the environment inflicted by various development activities.

The operations and procedures at various sea and land ports continue to degrade the environment. For instance, the fertiliser factory at Ashuganj port emits ammonia gas and dumps the chemical waste close to the river. Concerns have been raised over the matter, but no solution has been found yet. Further, the policy planning and implementation over environmental challenges have been inadequate. For instance, there is a lack of dumping stations and thus, the entire waste from the ports is dumped in the rivers. Though Bangladesh has a policy concerning river pollution and regulations on waste dumping by big vessels plying along the country's rivers, rules are hardly followed and the offenders are seldom penalised.

Imported coal and sand being dumped in the open on each side of the river port due to the lack of storage sheds has led to serious environmental hazards. The carbon emission from coal is severely polluting the air in the surrounding areas. There are few awareness generation activities or decarbonising initiatives in this context. Dust particles also saturate the air of the surrounding areas due to a huge amount of sand stored in the open. With the lack of functional restrooms in the river port, workers use the restrooms of the vessel operators stationed in the port and the sewage flows into the river, thus polluting it every day.

Regrettably, the awareness about these issues in the country is suboptimal and decarbonisation initiatives have taken a back seat.

To combat the carbon emissions to a certain extent, use of electric vehicles should be promoted. Additionally, relying on transportation other than roadways can also help. For instance, the Agartala-Akhaura rail connection will significantly reduce road pressure and thus help the environment.

Communication and access to information

The local media in Bangladesh covers most of the trade and connectivity developments. Various government and private sector stakeholders acquire information from the local media channels. However, the stakeholders at the grassroots level seem to be unaware of the development initiatives due to poor outreach of the media.

This has resulted in the individuals concerned losing out on the knowledge of various policy initiatives and implementation that affects them directly. For instance, the BBIN MVA is unknown to most of the on-ground individuals in the region. Furthermore, the local media in the country fail to capture certain unresolved issues regarding the environment and the needs of the people on the ground.

Public Private Consultations and Stakeholder Participation in Meetings

One major example of public-private consultation in the country is the regular meetings conducted by the Bangladesh Inland Waterways Transport Authority (BIWTA). These are exchange meetings with vessel pilots and managers for awareness generation regarding safety guidelines.

Also, consultation meetings organised by the government usually do not have participation from the private sector. Government officials mainly attend such meetings and, on some occasions, representatives from media houses.

Additionally, meetings at the cross-border level are also conducted with India. Participants include representatives from Border Security Force, India's District magistrate, Bangladesh's District Commissioner, among others. These meetings are restricted and the local stakeholders are not permitted to attend these meetings. However, statements and press releases are disseminated through various channels post the consultations.

Role of Women in Cross-Border Trade

Women in Bangladesh usually refrain from getting involved in cross-border trade activities or finding employment in the border regions. This has been attributed to the nature of work, security challenges in these regions and the conservative societal perspectives surrounding women. Another major reason is the absence of gender-friendly infrastructure at relevant points of potential employment opportunities. The basic necessity of separate washrooms for women with running water facilities to ensure proper sanitation is absent in many places.

Despite this, a small portion of the population does participate in such activities. For instance, Ashuganj river port has decent female participation, but the facilities provided for these female workers are suboptimal at best. The port lacks gender-inclusive infrastructure, security and general awareness, and this discourages women from actively seeking employment and has also led to increasing dropouts among women employees.

Apart from this, women have been found to be working in stone-crushing mills in various regions of the country. A large number of women work as local vendors in tourist-dominated areas, such as Jaflong,

If provided with proper gender-friendly infrastructure, education, training and skill development, security and social encouragement, women in the country can benefit extensively by engaging in various livelihoods and cross-border trade activities.

Bhutan

Employment and livelihood opportunities

There are opportunities for migrant workers in Bhutan. However, there is very little hope for reverse migration, as the current number of opportunities arising from the transport and connectivity initiatives in the country is low in number, as per the stakeholders surveyed.

Migrant workers from the bordering towns in India are permitted to work during the day in Bhutan. Such opportunities are available for Indian labourers from the opposite side of the Bhutan border. For instance, several daily wage workers from Assam have found employment opportunities in Gelephu. Furthermore, because of free trade between India and Bhutan, especially through Jaigaon and Phuentsholing border posts, thousands of people from Jaigaon come and work in Phuentsholing as daily wage workers and earn their livelihood.

Bhutanese exports of Mandarin require packers, which are not available in sufficient numbers in Phuentsholing. Daily wage earners from Jaigaon make up for this gap. On the other hand, not much Bhutanese work in India, and security challenges have been flagged as a primary reason for this.

It is believed that such concerns can be addressed by establishing proper infrastructure on the Indian side of the border. The workers who have found access to employment, in the form of manual labour, on either side of the border are required to follow due procedures of the Immigration and Labours Act.

These workers are majorly engaged in various works such as loading, unloading, distribution of goods, arranging the goods and as sales representatives in grocery stores. Before the pandemic, workers from outside the area did all the work. However, due to the persistence of the COVID-19 pandemic, most of the outside workers returned home. This has created opportunities for the local unemployed youth to be engaged in various jobs, which the cross-border migrant workers previously did.

Capacity building and skill development requirements

Up-skilling of regular and local workers and officials involved in different cross-border trade activities is critical. These include government officials, private parties, individual traders and other people engaged in the trade.

Vocational training and capacity building for youth and women are the most important priority of government agencies. The trading activities like grading, processing the produce, packaging and obtaining the EXIM clearance from the relevant agencies are all done by youth and women. Managing logistics and clearing the customs documents and trade procedures require know-how and necessary skills, which needs to be provided by the government to the local people.

Meanwhile, a certain number of youth and women have attended the capacity development programmes organised by relevant agencies like the Regional Trade and Industry Department, Regional Revenue and Customs, Bhutan Chamber of Commerce and Industry, Bhutan Export

Association, Municipality, Royal Bhutan Police, Bhutan Agriculture and Food Regulatory Authority in the fields of tailoring and food handling.

Women in Bhutan actively engage in cross-border trade of Fast-Moving Consumer Goods (FMCGs) and are usually involved in the process as importers. Thus, vocational training on general procurement norms and international and bilateral trade laws would prepare Bhutanese women to gain an equal footing in the international market and prevent confusion at customs clearing sites.

Team members interacting with stakeholders at Land Customs Station at Ahalay, Pasakha



The officials involved with trade within and across borders must upgrade and develop skills for efficient service delivery. The capacity-building programmes are there, but the educational institutes providing the people's long-term educational needs are insufficient. There is a need for institutions to develop specific skill-building programs catering to cross-border trade and related activities.

Box 5.2: Journey from a housewife to an entrepreneur

Ms. Chandra M Dhungana (name changed) is a successful entrepreneur in the heart of Gelephu town. She has benefitted from knowledge about cross-border trade and improved connectivity in the border town of Gelephu in Bhutan.

Earlier she was a housewife and dependent on her husband's income. In her quest for financial independence, she started a small grocery business, to meet her expenses and provide some relief to her husband.

In the initial stages, she faced a lot of difficulty managing the business, as she did not have adequate knowledge to procure items from distant markets. She started exploring and attending training workshops, which ultimately helped her to expand her business.

Today despite spread of COVID-19 pandemic she does not find any difficulty in managing and operating the business and has the confidence to plan for any uncertainty. She speaks about the need to build capacity for aspiring women traders in the region, so that they can benefit from the cross-border trade opportunities.

It was highlighted that though capacity-building programmes and trainings for government agencies and officials are provided, the private sector continues to be neglected. At the local level, there is a need for capacity building of the people of Jaigaon and Phuentsholing to engage in trade-related activities. They need more capacity development in public relations and leadership besides learning the required skills for trade activities.

Environment-friendly initiatives

There is a general awareness among the stakeholders at different levels regarding environmental issues and concerns.

The existing infrastructure to address environmental concerns in the country is limited to checking and monitoring various aspects of the trade and transit procedures. For instance, the Department of Trade checks and monitors fuel quality. Further, the Road Safety and Transport Authority enforces and monitors vehicle emission standards and carries out roadworthiness inspections, and private testing agents undertake emission testing.

Infrastructure development remains at the core of decarbonising efforts. At present, diversified supply chains and low-emission vehicles look lucrative. Still, nothing much has been done to sensitise traders and people involved in trading on safer health and environmental aspects.

The high cost of establishing such fuel-efficient and environment-friendly infrastructure is reported to be a major hindrance to adopting green supply chains. There is difficulty in getting low-cost financing to switch over to low-emission trucks/containers. The high investment required for such initiatives has led to the private sector's reluctance to shift from traditional methods to these new environment-friendly modes.

As an alternative, Bhutan could explore the possibility of railway transport for freight movement outside the country. It could probably save billions in fuel imports, contribute globally to pollution reduction, and save time and cost. This would, however, require conducting feasibility studies along identified routes.

Ropeways are yet another possibility within Bhutan. The distance between Thimphu and Pasakha using a straight line in a Google map is approximately 74 km compared to over 150 km road distance between these places. High-tension electric transmission lines are an advantage, and a feasibility study would be useful.

Additionally, regulating the model of vehicles and providing a certain time frame, after which the vehicles must be declared unusable, can substantially reduce pollution and carbon emissions. On several occasions, outdated Indian vehicles enter Phuentsholing for export and import purposes. Due to this, there are several instances of vehicle breakdowns. Apart from hampering the environment, such incidents trigger traffic congestion and accidents.

Role of women in cross border trade

On paper, women in Bhutan are given equal treatment and opportunity under different laws and policies. For instance, the Regional Trade & Industry Office and Regional Revenue & Customs Office's statistics for Gelephu highlights that more than 60 per cent of trade licences are issued to women. However, the situation, in reality, is different. Equal treatment and opportunity are not necessarily provided to women, who also tend to play a smaller role in trade procedures.

A small number of Bhutanese women are involved in customs clearing, freight forwarding and documentation works. They are self-trained and can now work anywhere in export-related work.

As indicated above, women play a minor role in managing cross-border trade. However, there are not many administrative barriers and security issues for women with regard to resources and skills to managing cross-border trade. On the other hand, according to stakeholders, women are efficient in carrying out small jobs with greater focus and concentration. They have proven to be good managers of funds and resources. According to the survey respondents, women are known to possess more business integrity and ethics.

While a small number of women are involved in trade, they largely belong to the informal sector. To be able to participate in formal trade, more awareness programmes, training workshops and exposure visits would be required for them. Besides, there is also a need to establish gender-friendly facilities at their workplaces.

Public-Private Partnerships and stakeholder participation in the meetings

Consultations to formulate new connectivity initiatives take place regularly, after which proceedings are formalised and maintained in government offices for reference and future intervention. For every consultation and meeting, participants from relevant agencies in government and private companies are chosen based on their relevance. These agencies include Regional Trade and Industry, Regional Revenue and Customs, Municipality, Bhutan Agriculture and Food Regulatory Authority, Bhutan Chamber of Commerce and Industry and Bhutan Export Association, Ministry of Foreign Affairs, Customs authorities, Ministry of Information & Communications and Ministry of Economic Affairs.

On certain occasions where cross-border trade, transport connectivity and commerce are concerned, representatives from India, Bangladesh and Nepal are also invited to attend.

In contrast, private sector participation is usually limited. Private sector players include truck operators involved in cross-border transportation and those involved in the export/import business. In most instances, the private sector is unaware of such consultations. There is no system for regular private and public consultations within the stakeholder constituency.

Box 5.3: Public-Private Coordination in Response to COVID-19

In Bhutan, efforts towards recovery from the COVID-19 pandemic witnessed extensive public-private partnerships. The need to enhance supply chains and make them resilient through efficient collaboration between public and private agencies came to the forefront.

Due to the onset of the pandemic, the supply chains were severely disrupted. This resulted in a higher price of commodities. Government interventions became crucial and bilateral collaboration was needed to ensure the uninterrupted flow of commodities to Bhutan. The private sector cooperated in ensuring the continuity of the supply chains.

Currently, the private sector has been able to keep the supply chains seamless with little or no disruption. Further, in terms of improving service delivery, sustainability and resilient services for the export and import of cargo, there are plans for adequate water supply, uninterrupted electricity and internet and good transport facility for the smooth flow of vehicles and separate godowns for hazardous health goods and non-health hazardous goods.

The government has developed SOPs for the private sector and individuals to follow as a recovery measure. As a result, many processes have been streamlined to ensure no disruption of the supply chains during and after COVID-19. Private sector representatives seem to think that third-party logistics (3PL), fourth-party logistics (4PL) and Free Trade Zone infrastructure would address these issues partially and enable readiness to meet emergencies in the future. It will also result in huge savings to the government.

Communication and access to information

In Bhutan, news on major connectivity issues and trade-related matters is usually disseminated through local television channels and other mainstream media. However, media's participation in the consultation and dissemination of public information is very poor. This could be attributed to the fact that only a few media houses cover stories from districts besides Thimphu. Furthermore, it was highlighted that efforts taken by the media groups to understand issues and ground realities have not been optimal.

Thus, the residents of the country, of late, have resorted to acquiring critical information through social media platforms and forums. With social media gaining momentum, sharing of information has become easier. However, the danger is that this usually triggers the spread of misinformation and fake news among the concerned stakeholders.

There is also not much access to connectivity and trade-related information for stakeholders. The relevant updates and circulars often fail to reach the key stakeholders on time. In many export-oriented activities, exporters are unaware and only members of the Bhutan Exporter Association get first-hand information.

A common platform where relevant stakeholders can discuss and share possibilities and problems are suggested. For instance, suppliers of agricultural products from the villages in Bhutan do not have immediate access to the pricing. Therefore, the middlemen and the traders in Phuentsholing tend to manipulate the rate. Farmers are the most important parties in this

export circle, but they are often left at the mercy of the middlemen and traders. This issue needs to be addressed by the government on priority.

India

Employment and livelihood opportunities

In India, many local workers are involved in daily wage employment at the border areas. Apart from the local workers, many people travel from other parts of the country and even from the neighbouring locations across the borders to utilise the employment opportunities on the Indian side. Many local individuals and migrants are engaged in loading/unloading activities at the port, logistical companies and multimodal parks in the country.

For instance, the establishments in Panitanki and Naxalbari witness a lot of migrant workers from different parts of the country and Nepal.

In the context of Dhubri, small mechanised boats with carrying capacities of 15-30 tonnes ply from Dhubri to South Salmara and Hatsinghimari. There are aggregators (locally called *Mahajan*) in Dhubri. These Mahajans buy the goods from wholesalers in Dhubri and then move them to South Salmara and Hatsinghimari via small mechanised boats. So, these aggregators help sell the stocks of wholesalers and provide employment to boat operators.

More than a thousand small mechanised boats with passengers and 15-20 tonnes cargo capacity are operational from Dhubri to South Salmara and Hatsinghimari. Each boat operates with three people -- the pilot, the driver and a *Khalasi* (for loading and unloading goods). Thus, more than 3,000 people depend on these boats for their livelihood. Additionally, the *Mahajans* are running their distribution network based on these boats.

However, the workers at these locations face several challenges. Informal migrant labourers in the border regions expressed concern that improvements in trade have not translated into benefits for the informal workers. Additionally, the poor infrastructure of establishments has been cited as a major concern for the workers. These concerns include challenges regarding poor access to basic amenities. Further, it is believed that establishing ICPs in the regions would create more employment opportunities, thus, increasing livelihood opportunities for the local and migrant workers.

Box 5.4: Issue of Drinking Water for Workers in Panitanki

Local people in Panitanki raised concerns about the area's absence of sufficient drinking water. During the land acquisition for the Asian Highway, the locals were offered a solution for their drinking water issue. But after the construction of the road, nothing happened.

They are aggrieved that without basic facilities such as drinking water and medical facilities, what is the point of having highways in front of their houses? They also raised their concern about the local lost playground due to the construction of this road, the Asian Highway.

The existing and emerging infrastructural developments in the country continue to improve employment opportunities for migrant and local workers. However, any new intervention must not endanger the current employed's livelihood. For instance, concerns over mechanisation and automation of the loading and unloading activities have been expressed, and these developments are anticipated to lead to the loss of jobs for many. Thus, to get them alternative employment, training should be given on the operation of these machines.

Box 5.5: Livelihood Opportunities Emerging from Infrastructure Developments

Jaigaon: As per local stakeholders, converting the Jaigaon LCS to ICP will bring new employment opportunities for the locals. Many people from this area move to Bhutan in search of a job, which is currently not happening because of the restriction of cross border movement due to the COVID-19 crisis. So, they are now moving to distant parts of India searching for jobs.

Hasimara: Stakeholders are optimistic about employment opportunities emerging from enhancing the railway infrastructure in Hasimara and establishing rail connectivity with Bhutan through Hasimara. It will increase the trade between Bhutan and other countries through this route. Besides, as the railway is a more environmentally friendly and cheaper connectivity option than roadways, this will reduce both carbon emissions and the cost of essentials.

Changrabandha: Approximately 350 locals are engaged daily in loading and unloading activities at this port. If this port gets more developed and the business through this port expands, more people will get livelihood opportunities. People who migrated from this part to other parts of the country in search of jobs can return to their homeland.

However, the truck owner's association of Changrabandha raised their concern that if more cargo is going through rail or water, they will lose their businesses, leading to job loss for many drivers employed.

Jogighopa: The Multimodal Logistics Park (MMLP) is believed to generate many employment opportunities directly and indirectly. It is expected that the MMLP would facilitate trade and promote seamless connectivity. But there is a visible lack of industries in and around Jogighopa. Promoting and setting up industrial units and parks near the logistics park would be helpful as exporters would use these facilities only if they were nearby.

Siliguri: In Siliguri, the ICD is expected to employ many in and around the area as it becomes fully operational. The ICD developers plan to build staff quarters inside the ICD and make it operational 24*7. This requires multiple shifts and will generate hundreds of new employment opportunities.

Haldia: The coming of the IWAI multimodal terminal is expected to generate job opportunities for many locals.

Karimganj: The full operationalisation of Sutarkandi ICP would create employment opportunities for many people living in the area and beyond. There will possibly be reverse migration of people, as people will be required to work on alternate shifts, generating employment. Along with the ICP, the Mahisashan railway station and the IWAI terminal will generate employment on a large scale when trade between the two countries flourishes through this border.

Stakeholder interaction during the field survey in India



Box 5.6: Trade Opportunities in Dawki

Meghalaya has a large number of traditional handicrafts, which are made from materials like wood and bamboo. The Meghalaya tea, *Lakadong* turmeric and other similar products of Meghalaya also have good demand in the region.

If equipped with the know-how of doing export business and sufficient connectivity, the scope for cottage and small-scale industries will magnify in Meghalaya. If well integrated through multi-modes of transport, Meghalaya could trade with not only the rest of northeast and neighbouring Bangladesh but also with the far regions of India and the rest of the world. Basic requirements such as electricity, internet connectivity and last-mile connectivity are to be established immediately to provide wings to this region's dreams.

The Northeastern Handicrafts and Handloom Development Corporation Limited, under the administrative control of the Ministry of Development of the Northeastern Region is playing a notable role in developing and promoting handicrafts and handloom in the region. It provides marketing support by procuring directly from the artisans, weavers and Self-Help Groups. These are then sold at various emporiums in Shillong, Guwahati and other parts of the country. Initiatives like this should be strengthened and exhibitions and marketing activities in other countries will help tap other potential markets.

Box 5.7: Informal Labour Challenges in Trade Infrastructure

Infrastructural development in any region is expected to have positive implications on the inhabitants of the area. However, Tripura's experience appears to be different. Despite significant improvement in trade related infrastructure, there are little positives for the locals. This is particularly true with regard to the Srimantapur ICP.

The ICP at Srimantapur seemingly has the necessary infrastructure for conducting seamless trade between India and Bangladesh. Further, officers have been employed by different agencies in the premises, to ensure proper functioning of the ICP and to take care of the needs of other stakeholders. However, working conditions of labourers are appalling. There is no provision for food or even drinking water inside the premises. Workers usually rely on tea and light snacks sold at a makeshift shop adjacent to the establishment.

Stakeholders revealed that they are sometimes even forbidden to use the regular washrooms inside the ICP. In addition to this, they expressed grave concerns over the lack of a designated resting area for them. Their movement is usually limited to the goods yard for the entire day. This implies, even in harsh weather conditions, they have no respite and have to endure the heat, rain and other adversities.

Furthermore, the nature of the work in such establishments is extremely laborious and labourers are prone to injuries and accidents. The integrated development complexes lack the availability of proper first aid or medical services for the labour force. "*The woes of us - informal labourers- fall on deaf ears*", the labour contractor expressed in resignation while speaking about these concerns.

Box 5.8: Kamlasagar Border Haat Halted and Implications of It

The Kamlasagar border haat and its operations have been stopped since March 2020 owing to the COVID-19 pandemic and the preventive lockdown restrictions. This has precipitated immense difficulties for the communities residing on both sides of the border.

The *Praadhan* of the *Panchayat* of Kamalasagar highlighted that a number of residents in the village depended on the weekly haat for their livelihood. The local communities have no alternative source of income and have been resorting to small and informal duties to earn a living. He urged it to be made operational while ensuring health-related protocol for COVID-19.

Box 5.9: Jibondinga, Assam Inland Water Transport Department

“Jibondinga” is an incentive scheme launched by the Assam Inland Water Transport Department, which is the Assam Government’s financial incentive scheme for boat owners who want to operate ferry services in Assam with efficient and safer vessels. Under this scheme, boat owners will be incentivised by the Assam Government to replace old vessels and engines with efficient marine engines, and provision for safety gear and insurance for the boat owners and passengers.

This scheme also aims at gender empowerment by providing training and employment opportunities to budding women entrepreneurs in this sector. The scheme would also extend to all registered service providers, including the country boat owners, employing trained crew and support staff, and adopting the operating guidelines for safe and sustainable operations.

The scheme also envisages the generation of direct and indirect employment, the development of skill sets and competence through capacity building and the expansion of the regulatory base to ensure compliance.

Skill Development and Capacity Building Requirements

Stakeholders at various levels require capacity building and training workshops to understand trade procedures at ports and other trade-related establishments. Awareness generation programs to provide details regarding export procedures could enable small and medium industries to build linkages in the national and international markets. Further, with the persistence of the COVID-19 pandemic, procedures are increasingly becoming digitised. This digital innovation era has rendered a portion of workers involved in manual labour, unemployed. Not all technicians and officials are trained to handle the digital infrastructure. In this context, the labour force needs to be introduced to the new software and policies, along with necessary training sessions to equip them to operate the new technologies.

Consequently, since the ports, logistical companies and other trade-related establishments in the government and private sector have to deal with the local stakeholders, such as exporters, daily, they also need training. The exporters have often expressed concerns regarding the poor dealings on the part of government officials. Thus, basic knowledge of public relations and client dealings needs to be disseminated among these officials.

The capacity-building programmes, if implemented through government support and delivered on a timely basis, can prove beneficial for the youth and women in the country and improve the livelihood opportunities of these individuals, along with harmonising seamless trade and connectivity in the country and the subregion.

Furthermore, capacity-building programmes would also play a vital role in further utilisation of the existing infrastructure and facilities. For instance, Karimganj at the India-Bangladesh border has three connectivity points with Bangladesh -- road, water and rail. But the area is not utilised to its full potential. There is a lack of technical know-how about exporting, and women entrepreneurs and youth need training programmes to know about trade possibilities.

Along similar lines, Agartala in Tripura is the only Indian capital city with a border with Bangladesh at three points. However, the trade with Bangladesh through these points is meagre. Most of India's exports to Bangladesh usually follow the Kolkata-Petrapole-Benapole route, despite the traffic congestion and unavoidable delays along this particular route. This has been highlighted as a lack of industries and entrepreneurship in Tripura. Thus, training to build entrepreneurial skills among the local inhabitants would help efficiently utilise alternate routes to Bangladesh.

Box 5.10: Vizag: Rethinking Environment Friendly Operations

- Visakhapatnam railway station was awarded *green rating*, (third in the country), for adopting green concepts such as energy efficiency, reduced use of fossil fuels, water conservation, waste handling.
- Visakhapatnam port, awarded as the second cleanest port in India in the year 2018, has taken several green measures. It implemented mechanisation programme in a big way. Recycling of 10 million gallons per day of sewage water, commissioning of a 10 MW solar power plant and supply of the surplus power to the state grid, entrusting the maintenance of toilets in port area to Sulabh International and construction of a soccer stadium-type wall around the port to prevent the spread of dust particles are some examples.
- Visakhapatnam port is entirely dependent on solar power for its energy requirements. Visakhapatnam Port Trust generates 17 million units of power per annum from its 10 MW captive solar power plant set up with an investment of Rs 60 crore.

Communication and access to information

The national dailies do cover cross-border and other issues about international relations. However, more often than not, such information is concentrated on defence and security. Trade, connectivity and the development of new routes are often omitted. In many border regions, the on-ground stakeholders, including the truck drivers, were unaware of the BBIN MVA.

Good examples of media spreading information and informing people about the latest trade and transport connectivity developments are visible locally in the country. For instance, there is an industrial fortnightly named Vizag Industrial Scan, which brings all the new developments in the areas under a single umbrella. This publication was visible in most offices and other places the survey team visited as part of the stakeholder survey in Visakhapatnam.

In some cases, it is further observed that even journalists are not aware of significant developments in the sector, such as the coming of a new MMLP in Jogighopa, Assam.

Additionally, certain customs, connectivity and trade developments are uploaded on the Central Board of Indirect Taxes and Customs (CBIC) website. However, poor internet connection and intermittent electricity supply hamper online access to information in several countries.

Public-private partnerships and stakeholder participation in meetings

Most locations in the country that are significant from the perspective of trade, transit and connectivity seem to have no system for regular public-private consultations. The participation of the private sector can be utilised in the transition from physical cargo handling at ports to streamlining logistical procedures. Further, in cities like Guwahati, where the major problem is the unavailability of vessels, the private sector could be encouraged to provide scheduled services and invest and operate vessels.

The provision of insurance and other benefits to private entities can be considered to attract them to invest in logistical, warehousing, shipping and cargo handling sectors.

Despite the emerging collaboration of public and private sectors, there is no system for regular multi-stakeholder meetings where solutions regarding policy gaps and on-ground challenges can be discussed.

Certain locations and agencies in the country do conduct consultations with various stakeholders. For instance, agencies and departments in Raxaul and Jogbani carry on private-public consultation with the stakeholder constituencies. Committees such as the Nepal Transport and Trade Facilitation Committee (NTTFC) have been established by the government to work with the private sector in formulating and executing policies. Although meetings take place and the resultant feedback is transferred to decision-making bodies, they are seldom implemented.

Additionally, stakeholders such as LCS officials, representatives of the local traders' association, exporters'- importers association, and FNCCI, among others, are invited to the government's meetings to discuss cross-border trade and connectivity issues. Formal decision-making bodies do not consider their inputs. In these multi-stakeholder meetings, suggestions to include stakeholders from all supply chains, particularly the grassroots level, have been made but not implemented.

At the cross-border level, the Customs department organises routine meetings with Bangladeshi and Nepalese Customs and discusses matters on which action must be taken mutually. Also, there are bilateral meetings conducted by the governments of the countries where customs officials from both countries are invited to participate. These are useful and probably need to incorporate private-sector participation as well.

Role of women in cross-border trade

Women in India do not play an important or equal role in cross-border trade compared to their male counterparts. It was found that women are marginally employed in office-related documentation work in Customs and Immigration offices, housekeeping staff in offices and, on some occasions, BSF guards.

Several on-ground challenges discourage women from entering the workforce and engaging in cross-border trade activities. These include the lack of gender-inclusive infrastructure at Land Customs Stations (LCS), Integrated Check Posts (ICP) and gateway ports. Many women wish to trade as exporters but remain sceptical owing to poor access to financial resources and a lack of knowledge about market trends and export/import procedures.

To address the aforementioned problems, it is imperative to provide training to women about trade and marketing opportunities. They have to be assisted with the procedural formalities regarding exporting their products. Also, the lack of viable financing options is a deterrent to women entrepreneurs. Cheap and easy loans should be made available to more women entrepreneurs on priority, encouraging them and involving them in trade activities. Gender-friendly infrastructure is another requirement to encourage the participation of women. Adequate restrooms, washrooms and other basic requirements should be available at government offices and other centres.

However, to make trade gender inclusive, there is a need to address the problem from all sides. Gender inclusivity is a multifaceted problem that cannot be solved by improving infrastructure and providing financial assistance. Efforts focussing on including women in trade procedures and attempts to break free from societal barriers like patriarchy should be in place.

Nepal

Employment and Livelihood Opportunities

Workers residing in Nepal's border areas have few employment and livelihood opportunities arising out of cross-border trade. Employment concerns of these workers are further aggravated by the tendency of these establishments to hire Indian migrants who are believed to be more skilful.

The survey also found that there is a lack of awareness among the local Nepal workers regarding opportunities that are available to them. They also need better training in skills.

Box 5.11: New ICP, But Same Old Issues: Case of Biratnagar ICP

The Biratnagar ICP is a fairly new one and the latest achievement of the Government of Nepal in its effort to boost trade and connectivity in the region. However, despite all efforts to enhance trade and connectivity, familiar issues have highlighted policy gaps regarding inclusive progress and development.

For instance, the Biratnagar ICP is still not gender friendly as the male-dominated sector holds a bias that this sector is unsafe for women. There is unsurprisingly minimal participation of women in various roles in the ICP, and women's presence and participation are limited to desk jobs or low-skilled administrative tasks. The working environment is not considered safe, particularly outside women's desk jobs; thus, they refrain from other cross-border trade-related tasks.

Another issue is broken promises wherein the locals had assured jobs at the ICP when the government took their lands to construct the ICP facility. However, these promises have not been honoured, and it appears that even getting jobs as labourers requires recommendations from high officials.

Another issue highlighted was the presence of rampant corruption and nepotism, and this creates an uneven playing field for various stakeholders and unfair competition leading to rent-seeking activities. Nonetheless, it is understood that multimodal connectivity has the potential to increase employment opportunities not only in trade and transport but also in other sectors.

Box 5.12: Grievances of Nepali Truckers at Bhairahawa-Sonauli Corridor

The Nepali truck drivers lamented that their trucks' weight/load limit was strictly regulated, whilst the Indian trucks were allowed to carry loads freely beyond their capacity and enter Nepal through Bhairahawa. Upon crossing the India border checkpoint, Nepali trucks must immediately unload their cargo into Indian trucks as they are not allowed to go any further. The COVID-19 induced mobility restrictions have further exacerbated these issues.

Further, Nepali transporters highlighted that the Nepali trucks were subject to informal payment by border security forces on the Indian side as well as harassment by local goons. On the other hand, Indian trucks are given 72-hour permits, which allow them to travel anywhere in Nepal with the cargo. Indian trucks do not need to unload cargo into Nepali trucks to carry consignments.

The result of Indian trucks carrying cargo beyond the standard weight and capacity is reported to be taking its toll on the already poor and dusty roads in the Bhairahawa customs area. Another issue truckers face from both sides of the border is the long waiting period to cross the border point, further worsened by the lack of basic facilities such as bathrooms and refreshment centres.

Furthermore, concepts such as border 'Haat', applied in India-Bangladesh and India-Myanmar border, could also be adopted in the India-Nepal border. This would provide economic opportunities to small entrepreneurs, particularly women living near the border.

Skill development and capacity-building requirements

There is a requirement for skill development and capacity building in the country for public and private sector stakeholders in different agencies, institutions and companies. During the field study, officials handling key responsibilities regarding cross-border trade lacked the knowledge and skills to handle the digital infrastructure. Capacity building for officials handling cross-border trade and transport duties will help efficiently handle procedures.



Figure 5.4: Survey team interacting with a truck driver in the subregion

Local and regional governments acknowledge the role of enhanced cross-border trade in generating employment opportunities and increased revenue and business opportunities for local stakeholders. Multiple training programmes and skill development workshops are being organised to impart necessary knowledge. But a lot more needs to be done in this regard.

There is a need for vocational training for youth and women to increase their participation in cross-border trade. Women respondents interested in cross-border trade mentioned that they lack the necessary knowledge regarding trade procedures. Thus, the government needs more initiatives to promote women's involvement in cross-border trade and allied activities.

Public-private collaboration and stakeholder participation in meetings

Representatives from the private sector mentioned that the government needs to beef up basic infrastructure and establish seamless cross-border connectivity to facilitate trade. Furthermore, there is also a need to facilitate private and public sector coordination at multiple levels. Proper incentives must be provided to increase coordination and collaboration between public and private agencies. Through effective and efficient communication strategies, the private sector must be aware of new policies and programmes.

It has been noted that in Nepal, there has been no coordinated effort by the private and the public sectors to improve the sustainability and resilience of supply chains neither during the pre-COVID-19 times or post. This is despite the willingness on the part of both sectors to make supply chains more resilient and environmentally friendly, thus highlighting the lack of coordinated initiatives and efforts.

The government must encourage more private-public sector dialogue by promoting PPP model projects. Regular dialogues with relevant stakeholders should be organised and their needs and concerns have to be identified so that inclusive policies and working modalities can be devised to facilitate greater engagement.

Usually, public-private consultations take place rarely and on an ad-hoc basis. For instance, the Nepal Transport and Trade Facilitation Committee (NTTFC) was set up by the government to work with private stakeholders to execute policy reforms, track trade initiatives, and recommend new trade facilitation measures. Stakeholders such as the Federation of Nepalese Chamber of Commerce (FNCCI), Siddhartha Chamber of Industry and Commerce, and Bhairahawa Customs Agents' Association participate in national, state and/or cross-border level public-private consultations organised by the government on trade and connectivity issues.

However, these committee meetings are not effective and the frequency is low. Additionally, the inputs from the participant stakeholders are not considered by the formal decision-making bodies in several cases. The central government seems unwilling to consider the inputs and suggestions provided. According to the stakeholders, the primary focus is invariably in favour of issues big business houses face, and the concerns of small and medium enterprises are ignored.

Communication and access to information

Nepal is landlocked and relies heavily on its neighbours, such as India, for trade and transit. This has been reinforced through the numerous confidence-building measures between the two countries to enhance cross-border trade and connectivity. The national dailies in the country, on some occasions, capture and report such developments. However, regional newspapers often fall behind in this regard, thus affecting access to information at the grassroots level. Furthermore, the national newspapers and media houses cannot provide continuous information flow to the relevant stakeholders. Information regarding new infrastructural and technological interventions that would contribute extensively to harmonising and simplifying trade procedures for Nepal and its trade partners is often missed.

For instance, the on-ground stakeholders conveyed a lack of awareness regarding the benefits of using containerisation or tamper-proof cargo movement. This has translated into the limited use of the Electronic Cargo Tracking System (ECTS) in the country since its effective launch. The lack of awareness and access to information has hampered the adoption of improved technology that could further boost connectivity.

It has been highlighted that the media houses and research organisations cannot provide the required focus on cross-border trade and related issues. The media focuses more on other sectors, such as agriculture, hydropower and defence. The mass media seldom investigate and report on the issues and developments in the ICDs and ICPs in the country.

Therefore, more robust information dissemination and communication need to be done by media at all levels regarding ongoing national, cross-border connectivity and trade facilitation initiatives.

Role of women in cross-border trade

Women's representation in cross-border trade is minimal in low-skilled activities. According to many, there is a lack of a women-friendly environment in cross-border trade-related offices. Various agencies, including the ICP's, ICD's and customs houses, are dominated by male employees. Furthermore, the traditional societal norms around gender stereotyping and prejudices often limit the participation of women in cross-border trade and transportation sectors.

Unless the government takes proactive steps, women's representation in the sector will remain low. Civil society organisations should also advocate increased participation of women in cross-border trade. Women's participation can be encouraged by easing financial access, training, capacity building and generating wider awareness. In addition, there is a need to make cross-border trade and transportation-related spaces more women-friendly by augmenting safety and security. In addition, export promotion councils can be established to focus on strengthening exports of women-centric sectors. For instance, textile and apparel exports from the country can be considered.

Summing up

In general, the BBIN subregion is characterised by poor stakeholder engagement regarding trade and connectivity development. This Chapter aimed to highlight the concerns and perceptions of the individuals who will directly or indirectly benefit from the initiatives to enhance connectivity in the subregion. These insights were gathered from on-ground stakeholder interactions on trade and commerce in the member countries of the subregion.

The Chapter further reveals that the challenges in the member countries of the BBIN subregion are largely similar. The existing livelihood opportunities at these countries' border regions are suboptimal and further dampened by inadequate utility services and infrastructure. In addition, people in all four countries in the BBIN subregion require training, skill development, and capacity-building programmes, particularly for the youth and women, including workshops for emerging entrepreneurs.

Concerns over women's engagement in the workforce are prevalent in all the subregion countries except Bhutan. Women's role in trade and trade-related procedures in Bhutan is significant owing to their participation as customs agents, ministry officials and small entrepreneurs. However, in other member countries, women's participation is low and they face unequal opportunities and scope of employment, particularly in cross-border trade and related sectors such as transportation. The reasons for the same include conventional norms that hinder women from being employed in such jobs, security challenges at borders and a lack of gender-inclusive infrastructure at key offices and other trade and transport-related spaces. Furthermore, issues regarding awareness about opportunities for women and initiatives to increase female labour force participation have been identified.

Public-private partnerships (PPP) and initiatives are minimal in the member countries of the BBIN subregion. Efforts to facilitate collaborations between public-private stakeholders are required to better derive the benefits from connectivity initiatives.

The study identified a significant communication gap and lack of access to information among stakeholders, particularly at grassroots levels. The member countries of the BBIN subregion are characterised by poor focus by the national and regional media on cross-border trade and connectivity issues. This often leads to little or no access to information regarding policies, developments, new schemes and procedures related to cross-border trade and connectivity.

It is noteworthy that the stakeholders' perspectives align with the BIMSTEC Master Plan for Transport Connectivity. The Master Plan has clearly identified critical factors for the success of transport connectivity initiatives in the Bay of Bengal Region, including the four BBIN countries. These are:

- (i) Political will and commitment by the member states, which may be demonstrated by cooperation between and among participating states, budgeting for identified projects, and including projects in national development plans;
- (ii) Creation of an appropriate policy and regulatory framework for implementation- for instance, transport agreements and access agreements for developing coastal shipping services between and among member states;

- (iii) Development of a pipeline of bankable projects with economic and financial viability, accelerate the implementation of infrastructure projects;
- (iv) Addressing social and environmental concerns;
- (v) Development of human resources and associated capacity;
- (vi) Partnership with the private sector in infrastructure development, given budget constraints and the needs of other socioeconomic sectors; and
- (vii) Robust monitoring.

Given the above, it is pivotal for the relevant policymakers and agencies in the member countries to address challenges faced by different stakeholders. The member countries can contemplate a common framework to address these issues to enhance trade and connectivity in the subregion.

6

Building Consensus for Connectivity and Trade

Existing Level of Political Consensus and Its Implications on Connectivity

The concept of the BBIN subregion emerged due to the failures of SAARC member states to reach a consensus and slow-paced developments on critical agreements about regional integration in South Asia (VIF, 2016).¹ A detailed account of the evolution of BBIN is provided in Chapter 1.

The BBIN countries share cultural, religious and social-economic similarities bilaterally, multilaterally and regionally. There are cultural similarities between the northeast Indian States, Bhutan and Nepal. On the other hand, there are deep cultural and socio-economic linkages between Bangladesh and states like West Bengal and Tripura of India. Apart from sharing a colonial past, a rich cultural heritage, and huge heterogeneous resource endowments, this subregion arguably possesses various economic complementarities.

Various trade agreements are signed bilaterally, multilaterally and regionally among the BBIN countries to facilitate connectivity and trade, which are listed in Chapter 3 of this report. BBIN Motor Vehicles Agreement, India-Bangladesh Coastal Shipping Agreement, India-Nepal Treaties of Trade and Transit, etc., are some of them. The BBIN countries are also signatories to SAFTA. These agreements allow trade among these countries through different modes and different ports. Moreover, as indicated above, agreements are also in place to allow transit trade. Nepal and Bhutan being land-surrounded countries, India acts as a transit country for Nepal and Bhutan to trade with Bangladesh and third countries.

On the other hand, Bangladesh acts as a transit country for the movement of commodities between Northeast India and the rest of India through inland waterways. Additionally, to strengthen physical connectivity among BBIN countries, these countries are making various infrastructural investments with support from multilateral organisations such as the ADB, the World Bank, etc.

¹ VIF (2016). BBIN: Paradigm Change in South Asia. Vivekananda International Foundation (VIF). Available at https://www.vifindia.org/sites/default/files/bbin-paradigm-change-in-south-asia_0.pdf

However, despite having historical and cultural ties, numerous agreements and connectivity initiatives, intra-regional trade is abysmal in the BBIN subregion. One of the prime reasons is sub-optimal connectivity, which inhibits the development of bilateral and regional cross-border value chains.

As Roberto Azevêdo, Director General of the World Trade Organisation, asserted, *“connectivity is a combination of the physical infrastructure of essential roads and ports, the soft infrastructure of rules, institutions and skills that help players take part in trade, and the digital infrastructure to connect people to the global marketplace at lower costs”* (WTO, 2017).² In the BBIN subregion, although physical connectivity has improved considerably, there is scope for improvement in the institutional and procedural aspects of connectivity.

Among various components, the political consensus among nations and stakeholders plays a vital role in effectively implementing connectivity initiatives and efficient trade operations in this subregion. The BIMSTEC Master Plan further corroborates the argument on the need for political consensus for Transport Connectivity. The Master Plan mentions political will and commitment on the part of the member states, demonstrated by cooperation between and among participating states, as one of the critical success factors for connectivity initiatives.

Implications of lack of political will could be huge for the participating countries in the regional connectivity initiatives. In the BBIN subregion, one such implication is the member countries' inability to implement BBIN MVA, signed in June 2015, to facilitate the seamless movement of cargo. The Agreement is expected to enhance intra-regional trade, bring efficiency to trade logistics, and reduce trade costs.

In April 2017, Bhutan pulled out of the MVA due to a lack of consensus among the stakeholders and the apprehensions flagged by them. A few major concerns of the stakeholders (in Bhutan) are: a) MVA will lead to deterioration in the quality of the environment in Bhutan; b) The Agreement will not resolve issues faced by Bhutanese transport operators and passengers in other the BBIN nations, such as the requirement of informal payments, unauthorised levies and coerced donations; c) MVA is likely to open up the danger for the influx of more foreigners with different backgrounds and intentions in Bhutan which could have both direct and indirect impacts on the peace, security and sovereignty of Bhutan; d) As MVA permits opening of branch offices or appointing of local agents as well as employing foreign workers under work permits issued by authorised operators, employment of foreign workers might aggravate the issue of unemployment in Bhutan; and e) As MVA will open up competition from foreign cargo and passenger operators, this could dampen the business opportunities of local cargo operators.

² WTO (2017). AID for Trade Global Review 2017. Retrieved from World Trade Organisation: https://www.wto.org/english/news_e/news17_e/gr17_11jul17_e.htm

The other three countries (Bangladesh, India and Nepal) have decided to go ahead with the Agreement. The respective national governments are still negotiating two protocols (one for cargo movement and another for passengers). CUTS study (2018A)³ has identified that even in these three countries, some on-the-ground political economy factors need to be addressed to implement the Agreement effectively. For example, one of the apprehensions among small transport operators and truck owners is that MVA will favour large logistics companies that enjoy economies of scale and will drive the smaller ones out of business. Such apprehensions stem from one of the provisions of this Agreement, which states that only containerised cargo will be allowed to move between the concerned countries (ET 2020).⁴

Furthermore, each government will be required to prepare a list of authorised operators that would be exchanged among them for cargo movements. There are also concerns among local transport bodies in Bangladesh and Nepal regarding the provision (in the Agreement) which allows the carrying of return cargo to the home country (ET 2020⁵). Transport operators in smaller countries believe that this provision will favour Indian transporters. This apprehension stems from the imbalance of the trade volume among the countries.

Some of the observed political economy factors which continue to frustrate smooth trade and cross-border connectivity, thereby increasing trade costs in the BBIN subregion, are recurrent rent-seeking activities on behalf of the public officials, law and order problems in and around the LCSs and ICPs, local political influence on trade, presence of pressure groups, insurgency problems along specific stretches; the invasive behaviour and over-activeness of the security personnel on the Indian side towards drivers of the neighbouring countries; charging a higher amount of informal payments from non-Bangla speaking Indian drivers in Bangladesh; low level of coordination between the border management agencies; lack of harmonisation of procedures, non-recognition of certificates issued in one country by other country and non-tariff restrictions such as port restrictions, etc. (CUTS 2018 A,⁶ CUTS 2018B).⁷

Despite efforts by the Governments of Bangladesh, Bhutan, India, and Nepal to resolve or eliminate these factors, they continue to exist at multiple levels.

It is also to be noted that while addressing stakeholders' concerns is critical, the need for building political consensus is equally important, as in the case of ASEAN and CAREC regions.

³ CUTS (2018A). *Connecting Corridors beyond Borders – Enabling seamless connectivity in the BBIN subregion*. CUTS International, Jaipur.

Available at: https://cuts-citee.org/pdf/Report-Connecting_Corridors_beyond_Borders.pdf

⁴ ET (2020). "Time to Implement the BBIN Motor Vehicles Agreement", *The Economic Times*, February 12, 2020. Available at: <https://economictimes.indiatimes.com/blogs/et-commentary/time-to-implement-the-bbin-motor-vehicles-agreement/>

⁵ *ibid*

⁶ CUTS (2018A). *Connecting Corridors beyond Borders – Enabling seamless connectivity in the BBIN subregion*. CUTS International, Jaipur.

Available at: https://cuts-citee.org/pdf/Report-Connecting_Corridors_beyond_Borders.pdf

⁷ CUTS (2018 B). *Bridging the East – Trade and Transport Connectivity in the Bay of Bengal Region*. CUTS International, Jaipur. Available at: <https://bit.ly/3gPk1pa>

Need for Building Political Consensus in the Subregion

The political consensus in the subregion, among concerned nations and stakeholders, is imperative to strengthen connectivity in the subregion and transform the transport corridors into economic corridors.

According to a study by UNCTAD, two-thirds of global trade occurs through global value chains (GVCs).⁸ Traded goods moving through the GVCs undergo multiple border crossings, raw and/or intermediate forms, before reaching the final consumer. There is a need for realisation at the political level that such an exchange of goods through a complex network of producers, intermediate suppliers and assemblers would not be commercially viable without time-and-cost-efficient logistics and transport networks. A country's participation in GVC as a supplier of raw materials, intermediate producers and assemblers depend on the efficient clearance of goods at border points, which underpins the importance of robust trade infrastructure and transparent trade regulatory procedures. Transport and logistics become even more crucial to move up in the value chain as the manufacturing process becomes more complex at higher layers of a GVC. Then it becomes even more important to be able to move both inputs and outputs across borders rapidly, at low cost, and with as little risk as possible (CUTS 2019 A).⁹

Transport and logistic networks and efficient clearance of goods are even more crucial for land-locked countries to participate in GVC. Thus, better connectivity in the BBIN subregion and reduced trade cost will facilitate intra-regional trade, forge Regional Value Chains (RVCs), and help these countries become more competitive in participating in GVC.

It has also been observed that non-tariff barriers and inefficient trade practices due to limited political consensus increase the cost of trading, which, in turn, raises the prices of goods (including essential goods) or even results in the unavailability of goods in certain regions. This induces people to indulge in informal trade, which not only creates a loss of revenue for respective governments but also endangers border security.

For example, there is no formal connectivity between Mizoram (India) and Bangladesh. But due to cultural ties between the residents on both sides, complementarities in demand, remoteness of the border areas, unavailability of all-weather roads, and absence of formal trade points, border residents have opted to trade through informal routes to ensure food security for themselves.

⁸ UNCTAD (2012): *Political Economy of Regional Integration in South Asia*. Background Paper No. RVC 5. United Nations Conference on Trade and Development (UNCTAD). Available at: https://unctad.org/system/files/official-document/ecidc2013misc1_bp5.pdf

⁹ CUTS (2019 A). *Role of multimodal connectivity in fostering value chains in the BBIN subregion*. CUTS International, Jaipur. Available at: http://cuts-citee.org/pdf/dp-role-multi_modalconnectivity-in-fostering-value-chains-bbin-sub-region.pdf

Challenges and Opportunities of Building Political Consensus in the Subregion

Challenges

Major challenges in creating political consensus among the BBIN countries are discussed below.

a) Lack of a common threat

It has been observed that most successful instances of regional integration have been motivated by the need to protect against some external security threat of territorial, ideological or political dominance. For example, the growing power of the Soviet Union in Eastern Europe and the emergence of the United States after the 2nd World War were major considerations pushing Western Europe towards integration, even between previously adverse nations such as Germany and Italy. The increasing power and influence of China and communist regimes caused the smaller East Asian nations to come together to form ASEAN (UNCTAD, 2012).¹⁰ But, in the case of the BBIN subregion countries, no common external threat will unite these countries.

b) Power asymmetry and unequal gains

One of the major challenges to better integration and political consensus in the BBIN subregion is power asymmetry due to their sizes, geographical location and other factors. Smaller countries such as Bhutan and Nepal often consider increased intra-regional trade as increasing dominance and greater dependence on larger economies such as India. In this subregion, other countries have a significant trade deficit with India. Moreover, perceived unequal gains among the nations from any initiative often limit cooperation among them.

c) Limited existing value chains

Due to historical and cultural ties among the nations of this subregion, there exist complementarities among these nations. However, until a few years back, all the countries in the subregion were pursuing import-substitution policies. Therefore, the production linkages among these nations have not developed beyond a limit. Therefore, interdependencies are limited and skewed.

d) Conflict

There is a cordial relationship among the BBIN countries, but multiple intra-regional and intra-nation conflicts are common in this subregion. The disputes are based on geographic boundaries or narrow considerations of religion, caste, language or ethnicity. There also exist many unresolved issues between the member countries. For instance, issues regarding sharing of water, illegal migration from the Chittagong Hill Tracts, demarcation of boundaries, trade imbalance, etc., exist between India and Bangladesh. Moreover, a few trade and investment policies and measures adopted by one country are viewed with hatred by others.

¹⁰ UNCTAD (2012): Political Economy of Regional Integration in South Asia. Background Paper No. RVC 5. United Nations Conference on Trade and Development (UNCTAD). Available at: https://unctad.org/system/files/official-document/ecidc2013misc1_bp5.pdf

For example, India's Consolidated FDI Policy 2017 states that a non-resident entity can invest in India through an Automatic Route. Still, a citizen of Bangladesh/Pakistan or an entity incorporated in Bangladesh/Pakistan can invest only under the Government Route (HT 2020).¹¹

Moreover, the national policies of countries in this region also affect their bilateral relations. For example, India's Citizenship (Amendment) Act (CAA) and National Register of Citizens (NRC) have created a negative impression among Bangladeshis. Similarly, Nepal's adoption of a new post-monarchy Constitution in 2015, followed by the Madhesi protest, resulted in an India-Nepal trade blockade.

Apart from bilateral conflicts, intra-national conflicts, which these nations often face, also pose a major challenge to political consensus at regional and national levels.

e) *Asymmetries in rules and regulations*

Asymmetries in trade and transport rules and regulations among BBIN countries act as major hurdles towards better connectivity and effective implementation of different agreements between these countries. For example, the vehicle classifications, axle and gross vehicle weights of a truck vary across the BBIN countries. Similarly, government-laid specifications for inland water vessels vary between India and Bangladesh. Such variations and gaps in rules and regulations create hindrances for stakeholders while claiming insurance. These hindrances, in turn, inhibit the buy-in of stakeholders for any regional initiative.

f) *Vested interest groups*

Inefficient trade practices increase trade costs and reduce consumer welfare by increasing the final prices of the products. Still, certain groups and stakeholders leverage these trade distortions for profit. At times they create these hindrances to serve their vested interests. These groups generally do not favour any trade facilitation policy that clashes with their vested interests. For example, in Meghalaya, if a non-Khasi truck driver transports cargo to or from Dawki-Tamabil LCS, he is harassed and beaten and a few times, such trucks have also been set on fire by the Khasi people. Moreover, tribals in Meghalaya do not allow Assam-based traders to import or export cargo through the two LCS in Meghalaya. In a few states, informal charges are collected from non-local truck drivers (CUTS 2018 A).¹²

Another noteworthy example is Kalitola parking in Bongaon near Petrapole-Benapole at the India-Bangladesh border. Presently, there is a mandate for all the trucks carrying export cargo to Bangladesh through Petrapole-Benapole LCS to park in the Kalitola parking place, even if they are assured of an available parking space at the Central Warehousing Corporation (CWC) provided by the Government of India with a handling

¹¹ HT (2020). "49 years on, India, Bangladesh should deal with unresolved issues" Hindustan Times, December 16, 2020. Available at: <https://www.hindustantimes.com/opinion/49-years-on-india-bangladesh-should-deal-with-unresolved-issues/story-U89UhWKCvatR08Og1YjvPP.html>

¹² CUTS (2018A). *Connecting Corridors beyond Borders – Enabling seamless connectivity in the BBIN subregion*. CUTS International, Jaipur. Available at: https://cuts-citee.org/pdf/Report-Connecting_Corridors_beyond_Borders.pdf

capacity of 1,200-1,400 trucks (CUTS 2018 A).¹³ Reduction in border detention due to any initiative or transit facility will negatively affect their interests. Therefore, it is inevitable that they will protest such initiatives to reduce border detention and ease cargo movement.

Opportunities

Besides intra-regional trade prospects of US\$105bn in 2035 (see Chapter 2), other opportunities which could be leveraged to create political and economic consensus among these countries for building seamless multimodal connectivity include the following:

a) Economic complementarities

One country's topography and climatic conditions in this subregion may be conducive to growing particular vegetation. In contrast, another country may have a predominance of a different kind of vegetation. Similarly, the raw materials for industries may be abundant in one country, whereas all the facilities for setting up the industry will be available in another country. Due to these complementarities, a few natural value chains exist among the BBIN countries. RVC in this subregion currently exists in the Textiles & Clothing sector, Cement industry, etc.

India specialises in upstream activities in the textile and clothing sector, while Bangladesh specialises in various downstream activities. Moreover, cotton waste from textile mills in Bangladesh is used by mattress manufacturing companies in India. Bangladesh is a leading cement manufacturer, whereas its raw materials, gypsum, limestone and fly ash, are mostly sourced from India and Bhutan (CUTS 2019 A).¹⁴

There is also potential to forge regional value chains among BBIN countries in sectors such as processed food and beverages, medicines, bicycle manufacturing, etc. Nepal and Bhutan are home to different medical and aromatic herbs and spices used to prepare ayurvedic medicines, an ingredient in pharmaceutical products, essential oils, etc. On the other hand, India and Bangladesh are the major producers and exporters of pharmaceutical products. Therefore, Nepal and Bhutan can export essential oils and herbs to India and Bangladesh, which can then be used in the production of various medicines (including cosmetics and toiletries) for re-export to Bhutan and Nepal (CUTS 2019 A).¹⁵

b) Environmental interdependencies

Given the geographical proximity and topography of the BBIN region, environmental changes in one country also affect the environment and people in other countries. For example, the monsoons blowing from the Bangladeshi and East Indian waters cause rain in most northern plains and Nepal. Floods in certain parts of India inundate Bangladesh too. The tremors of the earthquake in 2015 in Nepal were also felt not only in the neighbouring Indian states of Bihar, Uttar Pradesh, Assam, West Bengal, Sikkim, Jharkhand,

¹³ *ibid*

¹⁴ CUTS (2019 A). *Role of multimodal connectivity in fostering value chains in the BBIN subregion*. CUTS International, Jaipur. Available at: http://cuts-citee.org/pdf/dp-role-multi_modalconnectivity-in-fostering-value-chains-bbin-sub-region.pdf

¹⁵ *ibid*

Uttarakhand, and Gujarat, but also in the National capital of India, New Delhi, and as far south as Karnataka. Damage from that earthquake was extensive in northern Bihar and minor damages were also reported from parts of Odisha. These countries share natural resources; for example, India and Bangladesh share 54 common rivers.

Therefore, from economic prosperity, political consensus (in the subregion) is also required for the environmental conservation of these countries and cooperative management of shared resources. Facilitating multimodal connectivity in the subregion and diversion of traffic from roadways to multimodal routes will also reduce the carbon footprint in the subregion, and thus benefit all the countries in the subregion.

c) Food security

Political and economic consensus will result in the effective implementation of different trade facilitation policies, elimination of non-tariff barriers and improved connectivity, which will, in turn, reduce trade costs intra-regionally and with other parts of the world. Reduced trade costs will decrease the prices of goods, better availability and greater choice. This will help in ensuring food security within the subregion through access to food products at lower prices.

d) Reduction of costs and benefits to the consumers

Better integration and seamless connectivity in the subregion will reduce the time and cost of cargo movement within the subregion, thus reducing the price of consumables in the countries. It will also increase the competitiveness of the export markets in the subregion and will thus generate more employment opportunities and other economic benefits.

Economic integration and a well-connected sub-region would invite global investment, owing to the huge market potential. This will create positive economic externalities and opportunities in the sub-region, along with technological advancement, resulting in efficient use of labour and other resources. This will also benefit the end-consumers in the countries of the subregion.

e) Disaster mitigation

BBIN sub-region is subject to natural calamities and disasters due to terrain and other geographic particularities. Better connectivity and integration of the subregion will help ease disaster mitigation efforts. Connectivity is a form of aid that connects people to the resources critical for survival and enables governments and humanitarian organisations to deliver services swiftly and save lives. It will also act as a road to a speedy recovery and rebuilding of the affected areas. Moreover, exploring and building connectivity through multimodal ways will reduce the risk of losing connectivity of the affected areas with the outside world.

f) Regional security architecture

Building better border infrastructure to facilitate seamless connectivity will also benefit the countries of the subregion by enhancing security and surveillance. It will also help in keeping illegal cross-border activities in check. Besides, a better integrated and economically well-connected subregion is likely to create a forum for peaceful resolution of disputes than any of the isolated efforts.

g) *Tackling financial crisis and poverty reduction*

The COVID-19 pandemic and subsequent global incidents have resulted in an economic slowdown throughout the world, and it has also altered the developed countries' existing investment and trade priorities. Therefore, it is imperative for the BBIN subregion to realign its trade and investment trajectory to overcome the economic slowdown and continue the high economic growth path. In this context, it is vital for the countries in the BBIN subregion to connect more and better integrate with Southeast Asian and other South Asian countries to diversify the supply chains and bring more economic opportunities from the drivers of global growth.

The BBIN subregion houses a large global population unemployed and in the throes of poverty. Significant infrastructure and connectivity development investments will generate employment opportunities directly and indirectly and generate many positive economic externalities that will contribute to poverty reduction.

h) *Increased bargaining power*

A better connected and integrated BBIN subregion will have more bargaining power in international negotiations than isolated negotiations on the part of countries standing alone. Regional cooperation and integration will give small countries a more audible voice and help ensure a place in regional markets. The EU trade blocs offer apt illustrations of collective bargaining power.

i) *Financial and technical assistance from international donor organisations*

To promote regional prosperity by improving cross-border connectivity, boosting trade and strengthening regional economic cooperation among BBIN countries, multilateral organisations are providing financial and technical assistance to these countries.

Since 2001, Asian Development Bank (ADB)¹⁶ has approved almost US\$4.7bn in loans and grants towards which the South Asia Subregional Economic Cooperation (SASEC) governments have contributed more than US\$1.7bn in support of 25 SASEC projects in transport, trade, trade facilitation, energy and information communications technology (VIF 2016).¹⁷ Through their 'One South Asia' Programme, the World Bank is also providing coordinated support to these countries to improve all forms of connectivity in the subregion.

¹⁶ ADB serves as the Secretariat to the SASEC Programmes

¹⁷ VIF (2016). BBIN: Paradigm Change in South Asia. Vivekananda International Foundation (VIF). Available at https://www.vifindia.org/sites/default/files/bbin-paradigm-change-in-south-asia_0.pdf

7

Conclusion and Recommendations

Conclusion

The BBIN subregion holds enormous economic and trade potential for deeper economic engagement, given the strong historical, cultural and ethnic ties among these countries. However, the integration of this subregion is severely affected by sub-optimal connectivity in different modes of transportation. This limits the formation of RVCs among these countries and their participation in GVCs. To participate in GVC and RVC, a country needs to move both inputs and outputs across borders rapidly, at a low cost, and with the least possible risk.

Facilitating multimodal connectivity among the BBIN countries will enhance the transport network among these countries. This will increase intra-regional trade, forge RVC and help these countries, especially land-locked counties, become more competitive to participate in GVC. Strengthening multimodal connectivity will also improve the connectivity of northeast India with the rest of India transiting Bangladesh.

Moreover, it will also help the BBIN subregion to integrate with other regions and subregions. Additionally, diversifying transport networks and modes provide more resilience in shocks. This is proved after the onset of the COVID-19 pandemic. When land borders between Bangladesh and India were closed due to the pandemic, trade in essential commodities was conducted through railways and inland waterways.

Various agreements have been proposed (BBIN railway agreement), and signed (such as PIWTT, BBIN MVA, and India-Bangladesh coastal shipping agreements); varied infrastructure has been built to promote and strengthen multimodal connectivity subregion, but there is still a long way to go. A few prime reasons are poor inter-linkages between modes; rent-seeking activities; poor coordination among agencies; lack of political consensus both inter-country and intra-country; primitive trade practices; absence of required infrastructure; less reliance on automation and mechanisation; and lack of harmonisation of rules, practices, standards and policies among the BBIN countries.

This project is an attempt to understand why despite strong historical, cultural and ethnic ties among the BBIN countries, optimal transport connectivity and economic cooperation continue to remain a distant dream. It aims to facilitate strong multimodal transport connectivity in the subregion by addressing inherent challenges.

This report relies on extensive desk research undertaken under the project, including BIMSTEC Master Plan for Transport Connectivity; scoping visits to other regions and subregions to draw lessons from successful regional arrangements. The report also relies on stakeholders' perspectives and observations from field visits to more than 50 trade and transit locations covering rail heads, river ports and sea ports to understand the current status of infrastructure and gaps therein, policy and regulatory gaps and most importantly, to understand stakeholders' concerns and apprehensions regarding transport connectivity among these countries, including that of BBIN MVA.

The report draws from various outputs under the project. It provides a way to strengthen and integrate the existing modes of transportation and establish new modes for a better-integrated subregion.

Recommendations

To promote multimodal connectivity in the BBIN subregion, a three-pronged strategy must be adopted. *First-* creating greater buy-in among stakeholders for regional initiatives. *Second-* strengthening regional cooperation. *Third-* interventions in policy and physical infrastructure, including investment opportunities, to make connectivity and trade seamless and cost-efficient (see Table 7.1 for Consolidated List of Priority Infrastructure Interventions in BBIN Subregion).

Creating greater buy-in among stakeholders

Following are a few recommendations for greater buy-in among BBIN countries and stakeholders for regional initiatives:

a) In-built mechanism in every project to involve local people

There should be an in-built mechanism in all connectivity-related infrastructure projects to ensure greater local community participation. Without a participatory approach involving the local people in the development initiatives, there will be opposition from them.

A glaring example is the Tetelia-Byrnihat railway connectivity project in the northeastern part of India. Since 2017, the project has been kept on hold after nearly 80 per cent of its completion due to protests from local people.

b) Organise public-private consultation meetings

It is observed that private sector participation in transport connectivity and trade promotion-related meetings organised by the governments of BBIN countries is limited. Lack of public-private consultation inhibits the government from understanding the need and apprehensions of the private sector stakeholders. A good example is the case of Bhairahawa SEZ in Nepal, where the stakeholders from the private sector complained that they are facing infrastructure and policy challenges arising from high lease amount in the SEZ and issues of electricity and water supply even after 20 years of construction, which is keeping them away from operating in the SEZ. Stakeholders also said that the policy to export at least 60 per cent of the

production is still unfavourable, although the government reduced it from 75 per cent to 60 per cent. Such issues arise because of a lack of public-private consultations.

Additionally, due to a lack of consultation, private sector stakeholders are not adequately motivated to participate in infrastructure building and benefit from investing in environment-friendly, sustainable and resilient supply chains.

c) Awareness generation

Most of the stakeholders at the grassroots level are unaware of the development initiatives due to poor access to information and media. This often affects the effective implementation of policies. Therefore, awareness generation amongst stakeholders regarding different policy initiatives (both national and regional), and policy changes should be accorded due importance. This will also help eliminate baseless apprehensions among stakeholders about the outcomes of such initiatives.

Media, civil societies and trade associations could play a crucial role in creating awareness among the concerned stakeholders. Moreover, the BBIN countries can also develop a trade portal, which can act as a repository of trade policies, regulations, trade incentives, best trade practices, and success stories in the subregion. This will help to create awareness among the public about trade initiatives and policies in the subregion.

d) Ensuring losers are compensated

Generally, every initiative creates both winners and losers. It is important to ensure that losers are compensated. For example, implementation of MVA may result in unemployment of the labourers engaged in transshipments at the border. Similarly, with the diversion of traffic from road to multimodal options, some people may likely face unemployment. Smaller and landlocked countries may also have issues related to environmental degradation and sectoral concerns following the implementation of the MVA.

**Project team interacting with grassroot stakeholders
at India-Bangladesh border at Changrabandha**



Therefore, before implementing this policy alternative, employment and livelihood opportunities should be provided to the stakeholders concerned. It is also important to ensure that landowners from whom land has been taken away for development activities are compensated adequately. Capacity building and skill development of the people at the grassroots level in the regions of project implementation will help to ensure that the people who lose their livelihood find alternative sources of employment in the altered situation.

Similarly, the protocol of any agreement may be positioned in such a way that the small countries in the subregion do not feel that the initiative will result in unequal gains for them.

e) Enhance connectivity to both population and economic hubs

To create greater buy-in and disperse the benefits of the development initiatives among the larger public, the BBIN subregion, like the Central Asia Regional Economic Cooperation (CAREC) region, should create strong connectivity to both population hubs and economic centres in the subregion¹.

Drawing lessons from Greater Mekong Subregion (GMS), BBIN countries should ensure that they invest in viable projects. Therefore, impact assessment studies should be conducted before investing in any initiative. This will also create political and economic consensus for any initiative and help stakeholders make informed decisions.

Strengthening regional cooperation

Following are a few recommendations to strengthen regional cooperation to increase intra-regional trade.

a) Establishment of BBIN Research Institute

To enhance the quality of the developmental initiatives and promote evidence-based development projects in the BBIN subregion, a research institute like CAREC Institute should be established. The institute will look into regional cooperation challenges and geographical constraints and suggest solutions.

Moreover, this institute can also prepare Comprehensive Development Plan for the subregion. ASEAN involved key research organisations such as the Economic Research Institute for ASEAN and East Asia (ERIA) to draft comprehensive development plans for the region's transport connectivity based on geographical simulation modelling. A similar approach resulted in the implementation framework of the ASEAN Framework Agreement on Multimodal Transport (AFAMT).²

This initiative will help to enhance connectivity and trade within the subregion. India can take the lead in establishing that research institute for tailoring an evidence-based connectivity framework.

¹ CUTS (2021): Learning from CAREC Corridors and Connectivity: Prospects for BBIN Subregion. Working Note. CUTS International, Jaipur. Available at: <https://cuts-citee.org/pdf/working-note-learning-from-CAREC-corridors-and-connectivity-prospects-for-BBIN-sub-region.pdf>

² CUTS (2020). Multimodal Connectivity in BBIN Sub-region: Lessons from the ASEAN Framework. Working Note. CUTS International, Jaipur. Available at: <https://cuts-citee.org/pdf/working-note-multimodal-framework.pdf>

b) Establishment of BBIN Secretariat for easy coordination

Currently, the BBIN initiative operates through inter-governmental Joint Working Groups (JWG) comprising senior officials of respective governments under the aegis of their respective foreign affairs ministries but drawing in representatives of other ministries concerned/agencies of the government as well. Trade, connectivity and transit and water resources management and power/hydropower trade and grid connectivity are the two JWGs that have been set.³

Establishing a BBIN Secretariat will help coordinate and monitor the implementation of BBIN activities, service the meetings of the Association/JWG and serve as the channel of communication between BBIN and other international organisations. It is expected that it will expedite the proceedings in case of any policy or agreement.

Additionally, BBIN countries can establish an association and appoint a nodal person from each country who could act as the prime face of that country for further negotiations and references. GMS countries follow this exercise and have established GMS Railways Association (GMSRA).⁴ In close coordination with other country representatives, the representative acts as a medium to communicate between the countries and represent their cases.

c) A geospatial digital platform for coordination of multimodal transport

A geospatial digital platform can be made in all the BBIN countries to coordinate with various infrastructure departments and implementation agencies. India is preparing this digital platform under the *Gati Shakti* National Master Plan, where all the infrastructure projects and related details undertaken by various ministries of the central government and state governments can be live-tracked. This will help in integrated planning and coordinated implementation of infrastructure connectivity projects. Along with looking into potential new opportunities for improving logistics and connectivity, it will also help to ensure that the various initiatives and projects of the ministry of roadways, railways and inland waterways complement each other.

Such a geospatial digital platform in all the countries in the subregion will help in the effective coordination and speedy implementation of the connectivity infrastructure development projects. By looking into the various aspects of multimodal connectivity, these digital platforms in the four countries can pave the way to a well-coordinated and efficient logistics connectivity infrastructure in the subregion.

d) Effective implementation of existing bilateral, multilateral and regional agreements

There are various agreements signed bilaterally, multilaterally and regionally among the BBIN countries to allow trade and transit among these countries. Certain agreements, although signed long back are yet to be fully implemented, such as the BBIN MVA. Even as all the BBIN

³ VIF (2016). BBIN: Paradigm Change in South Asia. Vivekananda International Foundation (VIF). Available at https://www.vifindia.org/sites/default/files/bbin-paradigm-change-in-south-asia_0.pdf

⁴ CUTS (2020). Multi-Modal Transport Connectivity in Greater Mekong Sub-Region through Railways Network Lessons for BBIN. Working Note. CUTS International, Jaipur. Available at: <https://cuts-citee.org/pdf/working-note-multi-modal-transport-connectivity-in-greater-mekong-sub-region-through-railways-network.pdf>

countries are signatories of SAFTA, stakeholders mentioned that these countries sometimes do not accept SAFTA documents. Therefore, effective implementation of existing agreements and reduction of cross-border non-tariff barriers, which is integral to SAFTA, will enhance trade and strengthen cooperation among these countries.

e) Transport integration among BBIN countries

The respective BBIN countries have prepared various plans, frameworks and policies to integrate multimodal transport within their territories. However, no initiative has been taken to integrate multimodal transport among the BBIN countries at the subregional level. Preparing a framework for BBIN multimodal transport will be pragmatic in this regard.

f) BBIN dispute settlement mechanism

Dispute settlement mechanisms are a critical component of every regional cooperation system. A comprehensive dispute settlement mechanism reduces uncertainties regarding regulatory policies and government procedures and enhances the system's reliability.

Dispute settlement mechanisms can either follow a negotiation-based approach or a rule-based approach. Establishing such a dispute settlement mechanism for the BBIN subregion will help address issues in this subregion and create greater buy-in among stakeholders for regional initiatives.

Interventions in soft and physical infrastructure, including investment opportunities to make connectivity and trade seamless and cost-efficient

A. Interventions in soft infrastructure

a) Improvement in coordination among inter-country and intra-country stakeholders

Lack of coordination among inter-country and intra-country stakeholders hinders both trade and connectivity initiatives.

For example, the state government of Jharkhand, India, does not allow IWAI barges to ply on the national waterways for short distances even when the transporter has a No Objection Certificate (NOC) issued by the IWAI authority. This indirectly hampered trade through inland waterways between India and Bangladesh. In Bangladesh, BIWTA and the Roads and Highway Department have a dilemma over responsibility regarding monitoring and maintaining the Gomti-Daudkandi river port. As the Gomti river port belongs to BIWTA and the surrounding area belongs to the Roads and Highways Department, the dilemma continues and maintenance, development and usage of the port suffer.

Hence the countries in the subregion should develop a portal through which inter-linked agencies and departments can discuss and resolve issues. Additionally, an inter-agency committee should be created to resolve issues that hinder cross-border trade.

b) To improve coordination and resolve issues among trade-related agencies from different BBIN countries, a federation comprising freight forwarders, multimodal transport operators and other relevant stakeholders of the entire BBIN subregion can be established to interact

with the public sector regulators involving stakeholders, like Customs, Food Safety Authorities.

c) Need for capacity building, sensitisation and skill development of stakeholders

Multiple stakeholders and agencies are involved in cross-border trade. To make cross-border trade seamless and avoid unnecessary delays, it is very important that each stakeholder is well-capacitated and executes his/her role efficiently.

For example, most of the workers in Ashuganj port lack training in handling complex machines, resulting in delays and increased trade costs. Therefore, with the establishment of mechanised facilities in various ports, it is equally important that the staff is trained to handle them.

It is also observed that government officials are often unaware of new developments or lack the capacity to work as per revised guidelines. During consultations, multiple stakeholders informed that they carry hard copies of all documents to avoid unnecessary hurdles while transporting the cargo. At times, officials are found to be unaware of rules and changes in terms of paperless trade.

Moreover, as trade in the BBIN region is primarily through a single mode (mostly roadways), the stakeholders are not aware of the procedures of trading through multimodal routes, which creates apprehensions among them.

Therefore, to successfully implement different initiatives (such as faceless assessment programme; paperless trade systems), there is a need to equip the officials and workers with digital skills and technical know-how about using trade and transport-related software and tools.

d) Harmonisation of Rules and Regulations among BBIN countries

Lack of harmonisation and/or mutual recognition of standards, regulations and conformity assessment procedures among BBIN countries acts as a major hurdle towards better connectivity and effective implementation of different agreements. As clearances become slower and cumbersome due to differences in protocols, standards and regulations, it is important to harmonise the rules and regulations related to trade and transport in the BBIN subregion. For example, the vehicle classifications, axle and gross vehicle weights of a truck vary across the BBIN countries. Similarly, the government-laid specifications for inland water vessels vary in India and Bangladesh. Such variations and gaps in rules and regulations create hindrances for stakeholders while claiming insurance.

Similarly, each BBIN country uses different customs processing systems. Bangladesh and Nepal use ASYCUDA; India uses ICEGATE, Bhutan uses BACS and these systems are incompatible. Apart from this, not all the BBIN countries use the ECTS system, which can simplify the procedures and save time and cost.

Therefore, the governments of the BBIN countries should take the initiative to harmonise rules, processes, regulations and systems to increase intra-regional connectivity. An agreement

between the BBIN countries on the allowed emission levels, axle and gross vehicle weights and specifications for various vehicle modes should be made. Acceding to international conventions, for example, the Convention on Road Traffic, 1968, Convention on Road Signals and Signs, 1968, Customs Convention on International Transport of Goods Under Cover of TIR Carnets (TIR Convention) and aligning domestic standards with international norms by all the BBIN countries will help to solve several incompatibility issues.

Enhancing the ambit of the South Asia Regional Standards Organisation (SARSO) with a particular thrust on Mutual Recognition Arrangements (MRAs) will also help in this regard.

e) Facilitating a paperless trade system among the BBIN countries and for intra-regional trade

As many agencies are involved in multimodal transport, the trade process becomes cumbersome as clearances are required at multiple locations. Paperless trade simplifies the trade process, increases transparency and reduces delays at the check posts by ensuring quick clearances. A paperless trade system is already being implemented in the four countries at various stages, but hard copies of major documents continue to be used at most offices. This results in delays, procedural complications, and corruption in the form of illegal money collection from service users.

Therefore, the countries in the subregion should expedite efforts to implement a complete paperless trade and transit system. The creation of an enabling environment and infrastructure for effective implementation is important. For example, the Dawki LCS in the state of Meghalaya in India and Sutarkandi LCS in the state of Assam in India (both are being upgraded to ICPs) lack internet and electricity facility and this compels them to use the manual form of trade processing. The case is similar in many border areas in the entire subregion. Providing internet and 24*7 electricity facility, and sufficient computers and other required equipment, such as scanners, will facilitate a paperless trade regime in the subregion.

The countries in the subregion should ratify UNESCAP's Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific. This will help the subregion countries get the required capacity-building and technical assistance from international development organisations. So far, Bangladesh is the only country in the subregion to ratify this agreement.

f) Increase reliance on technology

All the BBIN countries should increase reliance on technology for cross-border trade. This will make trade seamless and time and cost-efficient by increasing transparency, reducing red-tapism, removing rent-seeking opportunities for officials, providing crisis resilience and eliminating unnecessary delays. A few technologies that can make trade more efficient include the Single Window System, Automated Customs Processing System, Risk Management System (RMS), and Electronic Cargo Tracking System (ECTS).

The single window system provides a one-stop solution for traders and greater transparency. Currently, the single window system in the BBIN countries is at various stages of development, which has to be expedited. The ECTS offers the facility of sealing containers using high-

security electronic seals with embedded tracking functionality, making the processes simpler, less time-consuming, and cost-consuming. It also enhances the safety and security of the cargo and provides traceability through improved shipment visibility. For example, using the ECTS system by Nepal for transit traffic from the Visakhapatnam and Kolkata ports of India has helped improve cargo and transport efficiency by saving time and cost.

However, the reliance on these technologies and their efficiency varies across the BBIN countries. For instance, the ASYCUDA system used by Bangladesh has no transit module for realising duty for transit cargo from northeast India to the rest of India through Mongla and Chittagong ports. Bhutan still lacks a one-stop solution for trade-related transactions. The usage of the ECTS sealing system is also limited in all the BBIN countries for intra-country trade. Bangladesh and Nepal use the ECTS seal only for transit cargo exported/imported from Bangladesh/Nepal to global destinations through Indian gateways.

Therefore, the BBIN countries should establish the required infrastructure at appropriate nodes and make necessary policy amendments to facilitate such technology usage. A single window system should be established in Bhutan. It should link banks, licensing agencies and trade clearance agencies into a single platform and should allow a digital exchange of information in real-time to speed up the approvals.

B. Interventions in physical infrastructure

a) Optimum utilisation of available infrastructure

The BBIN countries have to utilise the existing infrastructure to the fullest. Recently, there has been an increase in the number of new multimodal connectivity infrastructure development initiatives in the subregion. For instance, the BIMSTEC Master Plan for Transport Connectivity, in which all the BBIN countries are members, have 267 projects covering different modes of transportation, including roadways, railways, waterways and airways. Many of these projects are related to trade facilitation in the four (BBIN) countries. However, along with building the new infrastructure, the countries must ensure the optimum utilisation of the existing and available infrastructure.

For example, in the Karimganj district of Assam, there is a strategic railway station in Mahishashan at the international border between India and Bangladesh, which has been unutilised for years. The railway station has connectivity with Shahbajpur in the Sylhet district of Bangladesh. Suppose this railway line is converted into a broad gauge for a distance of 50-100 metres. In that case, it can act as an important railway connectivity point in the entire BBIN subregion and facilitate trade. This rail line can connect rest of India, northeast India, Bhutan and Nepal with Myanmar through Gede (Rest of India)-Darshana (Bangladesh)-Shahbajpur (Bangladesh)-Mahishashan (northeast India)-Moreh (northeast India)-Tamu (Myanmar) route, while it can also connect northeast India with rest of India through rail connectivity between Mahishashan (northeast India)-Shahbajpur (Bangladesh) and Gede (West Bengal).

Again, the full capacity of the inland waterway routes in the subregion is not utilised yet. Large volumes of cargo, which can potentially be transported through waterways, continue to

move through roads in the subregion. Policy reforms complemented by the building of enabling infrastructure such as wider roads to the river ports, dredging to facilitate sufficient depth of rivers, and government incentives can lead to the shift of cargo from road to waterways.

b) Upgrading the existing infrastructure

The available infrastructure for multimodal connectivity in the BBIN subregion needs upgrading. The existing infrastructure is insufficient in many places to meet the growing trade and transport requirements. For example, most of the ICPs/LCSs in the subregion face capacity constraints such as insufficient warehouses, cold storage facilities, AQ & PQ facilities, and parking spaces. A number of them even lack the basic requirements such as washrooms, drinking water facilities and restrooms.

The roads leading to the international borders and the major trade points that were constructed earlier must be widened in many places. For example, the road from the Dawki LCS to Tamabil LCS is narrow and congested, causing delays in truck movement across the borders. The same is the case with the approach road to the Kolkata port.

c) Need to expedite infrastructure development initiatives

A delay in infrastructure development is stifling the multimodal connectivity aspirations of the subregion. For example, the Mongla-Khulna rail link project, which was approved in 2010 and expected to be completed within three years, is still in the process of implementation. The work of this 65 km railway line, which will link Bangladesh's second-largest seaport Mongla with neighbouring countries of India, Bhutan and Nepal, started only after six years of approval. This has led to the doubling of the project cost.⁵

Similarly, the project for upgrading the Birgunj-Pathlaiya road, which handles most of Nepal's exports and imports, is delayed by more than two years.

Timely completion of infrastructure projects and fast-tracking the connectivity development initiatives is important to facilitate the growing logistics requirement of the subregion in the background of flourishing trade. The outbreak of the COVID-19 pandemic has aggravated such delays. Governments in the subregion must prioritise the connectivity development projects and try to complete them within the scheduled time.

d) Ensuring gender-friendly infrastructure in the subregion

Interactions with stakeholders revealed a gross mismatch in the participation of men and women in cross-border trade and transportation activities in the subregion. One important reason is the absence of a gender-friendly infrastructure such as separate washrooms for women. Other requirements such as safe sanitation facilities, safety-enhancing facilities like surveillance cameras and accommodation facilities for lady staff working in related offices

⁵ Dhaka Tribune (February 19, 2021). Khulna-Mongla rail link: Costs double as project drags on for 10 years. Retrieved from <https://www.dhakatribune.com/bangladesh/nation/2021/02/19/khulna-mongla-rail-link-costs-double-as-project-drags-on>

must be ensured. Inclusive infrastructure planning with the objective of gender mainstreaming is important for the subregion to achieve its full economic potential.

e) Ensuring digitisation of infrastructure

While the quality of connectivity and trade-related infrastructure has improved in each of the countries, several stakeholders believe that poor internet connectivity and provisions at trade points such as LCS, ICP and ICD are limiting the digitisation process of the logistics sector in the subregion. This has also resulted in a lack of awareness among stakeholders about various policy initiatives and interventions.

The availability of the internet and 24*7 power connectivity is a prerequisite for paperless cross-border trade, increasing transparency and reducing border clearance delays. Internet connectivity will also be required to check ECTS seal on a container and track those consignments. Along with internet connectivity and unhindered power supply, there should be sufficient computers, scanners and other equipment for digitisation.

C. Looking into new infrastructure investment opportunities in the subregional infrastructure

The governments in the subregion should invest in establishing new infrastructure that can enhance multimodal connectivity in the subregion. In this context, the M-Connect project has identified some of the potential infrastructural opportunities in the subregion that can advance multimodal connectivity:

- *Building Hili (West Bengal)-Mahendraganj (Meghalaya) corridor through Bangladesh*

Building a corridor between Hili in West Bengal (India) and Mahendraganj in Meghalaya (India) through a portion of territory that falls in Bangladesh can connect northeast India with the rest of India. Currently, the only road corridor for the northeast region of India to connect with the rest of India is the narrow and crowded 22 km Siliguri corridor. The Siliguri corridor is a congested and time-consuming route and is vulnerable to landslides.

The proposed corridor, if implemented, will reduce the travel distance and cost of connectivity between Northeast India and the rest of India. Siliguri corridors can also get decongested and facilitate a smoother flow of passengers and goods. Reduction in distance between the northeast and the rest of India will also increase commerce within the BBIN subregion by reducing transportation time and cost.

- *Inter-modal gateway in Karimganj*

Karimganj of Assam has a strategic location with connectivity to roads, rail and waterways. It lies in the Trans-Asian Railway route, thus offering railway connectivity to Southeast and Central Asia. The location has proximity to the Asian Highway network, through the Asian Highway 2, which connects Indonesia with Central Asia overland via South Asia. Karimganj is connected with Asian Highway 2 at Shillong through National Highway 44. Karimganj is blessed with waterway connectivity through the Kushiyara river⁶, which flows into the Meghna river in Bangladesh.

⁶ This river requires dredging at some stretches of it in the Bangladesh side.

Due to its strategic location at the India-Bangladesh border, Karimganj can connect northeast India and parts of Bhutan to the rest of India through Bangladesh. Sutarkandi ICP, on the Indian side connecting with Shaola in the Sylhet division of Bangladesh, is close to Karimganj.

- *Upgrading railway line to Hasimara and extending to Pasakha*

The railway line that connects Hasimara railway station, situated close to the India-Bhutan border town of Jaigaon, has to be electrified and double-laned. The distance to Hasimara railway station from Jaigaon is approximately 17 km. But there is no established railway connectivity on this route. Cargo coming through rail is unloaded at Hasimara and transported by road to Jaigaon.

This railway station, located in the Alipurduar district of West Bengal, can potentially connect Bhutan with Bangladesh, India and Nepal through railways. The Pasakha Industrial Estate in Bhutan is close to this railway station, providing potential railway connectivity to the industrial estate. A railway line between Hasimara and Pasakha has been proposed.

- *Burimari-Changrabandha rail connectivity*

A two kilometre railway track between Burimari in Bangladesh and Changrabandha in India will help the two countries to establish ready rail connectivity between two major points in the subregion. Burimari has a land port and Changrabandha has a Land Customs Station, which facilitates export-import activities in the subregion. Apart from Bangladesh and India as two direct beneficiaries of this rail link, Bhutan and Nepal will also benefit from this rail connectivity as they can use it for transit.

If railway connectivity is established between the two countries through this route, the carrying cost of goods will be reduced and loading and unloading at multiple points can be avoided. It will boost the high volume-low value goods traded in the subregion by facilitating cheaper transport options. Currently, goods move through this route by road on trucks, which increases the cost and time of transportation and adds to environmental pollution.

Dedicated rail freight corridor connectivity among the BBIN countries

The dedicated rail freight corridors constructed by the Government of India should be complemented by additional connectivity to the important industrial centres in other countries of the BBIN subregion. The eastern dedicated rail freight corridor, which was recently completed, connects Ludhiana (Punjab) in the north with Dankuni (West Bengal) in the eastern end. This dedicated freight corridor allows the movement of trains three times faster, pulling heavier weights than what it carries now. Thus, it will increase logistics efficiency and reduce cost and carbon footprint.

Dankuni has connectivity to Bangladesh, Bhutan and Nepal over various modes of transport, including road and rail, which need to be upgraded and strengthened. The distance between Dankuni and Phuentsholing (Bhutan) is around 680 km by road, but this has to traverse the congested Siliguri corridor. There is rail connectivity from Dankuni to Hasimara in north Bengal, around 35 km from Phuentsholing. If this rail line is upgraded and extended to the

Pasakha Industrial area in Bhutan, it will be a game changer in the logistics sector of the BBIN subregion.

Dankuni is connected to the Kolkata-Dhaka corridor via the Petrapole-Benapole border. The existing road and rail connectivity is to be upgraded. A dedicated freight corridor from Dankuni through Gede in West Bengal will enable seamless freight movement from India to Bangladesh and southeast Asia.

Another dedicated freight corridor is coming up between Vijayawada in Andhra Pradesh and Kharagpur in West Bengal. This eastern coastal freight corridor can connect Bhutan and Nepal with the Visakhapatnam port. Therefore, complementary transport connectivity infrastructure development from these dedicated freight corridors to the borders of Bangladesh, Bhutan and Nepal, along with connecting the dedicated corridors with major seaports in the subregion, will facilitate seamless cargo movement within the BBIN subregion and outside the subregion.

- *A multimodal terminal at Ashuganj*

Ashuganj in Bangladesh has a strategic location which connects northeast India with the rest of India through Bangladesh. From Kolkata, freight will move to Ashuganj through waterways on the India-Bangladesh Protocol routes and then to Agartala over land via Akhaura. Ashuganj-Akhaura road is being upgraded to a four-lane highway. Rail connectivity is being implemented between Agartala and Akhaura, with further expansion potential till Ashuganj.

Ashuganj is connected to another border of India, Karimganj district in Assam, over river routes via Zakiganj in Sylhet. Ashuganj currently has a river port in the Meghna River and a warehouse. It is well connected to the Chittagong and Mongla ports. Ashuganj has well-established railway connectivity with various parts of the subregion through Dhaka's capital city.

- *Freight Village at Tribeni*

A freight village serves as a cargo aggregation and distribution point. Delivery and coordination of various freight-related activities under one roof ensure ease of doing business.

Tribeni is an ideal location for setting up a freight village since it is strategically located and could function as an efficient cargo aggregation and distribution point with access to roadways, railheads, and inland waterways. Located on the banks of the Ganga River in the Hooghly district of West Bengal, Tribeni has been declared an extended port of call under the existing treaty between Bangladesh and India on the use of inland waterways for transit and trade. The IWA has set up two Reinforced Cement Concrete (RCC) jetties in Tribeni to facilitate trade in fly ash with Bangladesh.

Tribeni is close to Burdwan and Nadia's major paddy and vegetable-producing districts and is close to the industrial towns of Asansol and Durgapur. Major urban agglomerates and consumption points like Kolkata and Howrah are also within 200 km of Tribeni. A logistics hub at Dankuni lies within 46 km of Tribeni. This hub has good railroad connectivity but lacks connectivity with inland waterways, and Tribeni is well suited to bridge the gap by providing an additional connectivity mode.

Also, Bandel, 7 km from Tribeni, is a major railhead connecting southern West Bengal with northern West Bengal and Siliguri, one of the major commercial hubs and the gateway to northeast India. Tribeni also has road connections with the National Highway-19 *vis-à-vis* other destinations in India and Bangladesh. Moreover, the closer proximity of this location with the Inland Container Depot (ICD) at Durgapur in West Bengal (approximately 130 km from Kolkata) adds up to its viability as a freight village.

- *Multimodal logistics park at Farakka*

Farakka, in the Murshidabad district of West Bengal, is strategically located. The bridge over the Ganges at Farakka connects the southern part of West Bengal with the northern part via rail and road.

The Farakka Barrage regulates and diverts an adequate quantity of Ganga water to the Bhagirathi-Hoogly River system through a 38 km feeder canal and ensures water supply to the entire area. Agriculture, fisheries, industrial activities and other human health and well-being in West Bengal and Bangladesh depend on Farakka Barrage.

Regarding trade and connectivity, Farakka lies on the proposed 675 km expressway connecting Kolkata and Siliguri. Also, Farakka is at a distance of 30 km from the Mahadipur Land Customs Station in Malda, has rail connectivity and it is 20 km from Dhulian, which is on the Dhulian – Rajshahi route (IBP route no. 5 and 6).

The IBP routes 5, 6 aim at connecting NW1 with NW2. Connecting NW1 and NW2 via Dhulian-Rajshahi would not only provide an alternative to the transportation of goods through the congested roadway network of Siliguri (North Bengal) but will also reduce the time and cost of transporting cargo from eastern India to northeast India through inland waterways network.

Regarding air connectivity, the Government of India plans to build airports at Malda, Balurghat and Cooch Behar, all of which are close to Farakka.

Therefore, having a multimodal logistics hub at Farakka would play an important role in improving trade and connectivity among countries in the BBIN region.

- *Upgradation of Kakarbhitta ICD*

The ICD at Kakarbhitta on the eastern border of Nepal is along a major trade route with India, Bangladesh and Bhutan. It is important for Nepal's third country trade through the seaports in the BBIN subregion. The Kakarbhitta-Panitanki-Fulbari route is the shortest way from Nepal to Bangladesh through India. The 44-km route connects the Banglabandha border and is the main channel for commerce passing from Nepal to Bangladesh.

The existing infrastructure at Kakarbhitta ICD is insufficient to meet the growing trade requirements. It requires upgrading in terms of parking space, warehousing facilities, refrigerated container handling facility, and handling equipment such as forklifts, considering the significant growth of international trade through this eastern border of Nepal. The growth

of multimodal connectivity initiatives in the BBIN subregion necessitates the facilitation of container handling in major transport and connectivity points such as dry ports.

Strengthening inland waterways in Nepal

Nepal currently depends on roadways for most cargo transportation, and it has an alternative route of transport connectivity through the Himalayan rivers, such as Kosi and Gandak. India has recently agreed to allow Nepal to use three inland waterways for trade: Kolkata-Kalughat-Raxaul, Kolkata-Sahibganj-Biratnagar and Kolkata-Varanasi-Raxaul routes. However, Nepal lacks riverine ports to facilitate trade through the envisioned waterways. Therefore, investment in infrastructure that facilitates inland waterway transportation in Nepal is required.

The rivers in Nepal are known for flooding and changing courses due to the blocking of channels and constant deposits of sediments. This points to the need for proper channelisation of the rivers. The rivers in Nepal lack sufficient draft at times to facilitate cargo movement all around the season. This shows the need for dredging and river engineering to facilitate cargo movement through the rivers in Nepal.

- *Kakarbhitta-New Jalpaiguri rail link*

Kakarbhitta is the border point in the eastern end of Nepal, where it shares the boundary with India. The East-West railway connectivity project in Nepal extends from Kanchanpur in the western end of Nepal to Kakarbhitta in the eastern end. Therefore, rail connectivity from Kakarbhitta in Nepal to New Jalpaiguri in India will help Nepal to integrate with the railway line in India.

The new rail line will facilitate cargo movement through railways from Nepal to the Haldia, Kolkata and Visakhapatnam ports in India for the third-country trade of Nepal. Nepal can also connect with Bangladesh rail lines through India to access the Mongla and Chattogram ports if the rail line between Kakarbhitta and New Jalpaiguri is established.

- *Connecting Gelephu with Jogighopa via railway*

Gelephu is a border town on the India-Bhutan border and is one of the road entry points into Bhutan from India. Gelephu is geographically closer to Jogighopa, where India is building its first multimodal logistics park. The road distance from Gelephu to Jogighoppa is approximately 90 km. A rail line connecting Gelephu with the multimodal park under construction in Jogighopa will help the economic movement of low-value, high-volume goods from Bhutan. It will help in Bhutan's trade with India and other third countries as Bhutan will be able to use the multimodal park in Jogighopa to transport its goods using different modes of transport such as waterways, airways and through the land.

Connectivity to Jogighopa multimodal park through road and rail connectivity will enhance Bhutan's third-country trade through India in the context of Bhutan, being given access to the Mongla and Chittagong ports in Bangladesh.

Rail connectivity to Gelephu will also help Bhutan connect to the larger Trans-Asian railway network. Bhutan is not a member of the Trans-Asian Railway Network in the absence of rail transport in Bhutan.

Addressing the challenges presented in this report and investing in multimodal infrastructure will not only make this BBIN subregion achieve the projected US\$105bn intra-regional trade, it will also pave the way for economic and trade integration of the whole of South Asia. A consolidated list of proposed interventions is provided in Table 7.1.

Table 7.1: Consolidated List of Priority Interventions in the BBIN Subregion

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ⁷
<i>Interventions for Creating Greater Buy-in From Stakeholders</i>				
1	BBIN-01	In-built mechanism in every infrastructure project to facilitate the participation of locals	This will help timely completion of infrastructure projects in all the BBIN countries	P-2
2	BBIN-02	Organise public-private consultation meetings	This will help better understanding of projects and lead to buy-in from private stakeholders	P-1
3	BBIN-03	Awareness generation on development initiatives	This will facilitate the participation of stakeholders in development projects	P-1
4	BBIN-04	Ensuring losers are compensated	This will eliminate the fear of smaller countries and help them participate in regional connectivity initiatives	P-1
<i>Interventions for Strengthening Regional Cooperation</i>				
5	BBIN-05	Establishment of BBIN Research Institute	It will help BBIN countries to have a holistic view of development issues and overcome development challenges	P-3
6	BBIN-06	A geospatial digital platform for the coordination of multimodal transport	It will help BBIN countries in trade integration	P-1
7	BBIN-07	Effective implementations of existing bilateral, multilateral and regional agreements	It will help BBIN countries in trade integration	P-2
8	BBIN-08	BBIN dispute settlement mechanism	It will help BBIN countries in the timely resolution of the dispute and facilitate trade and cooperation	P-1

⁷ P-1: Immediate Intervention; P-2: Medium Term Intervention; P-3: Long Term Intervention

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ⁷
<i>Interventions in Soft Infrastructure</i>				
9	BBIN-09	Improvement in coordination among inter-country and intra-country stakeholders	It will bring efficiency in logistics and trade procedures and regulations	P-1
10	BBIN-10	Need for capacity building, sensitisation and skill development of stakeholders	It will help stakeholders participate in trade and related activities	P-1
11	BBIN-11	Harmonisation of rules and regulations among BBIN countries	It will bring efficiency in logistics and trade procedures and regulations	P-1
12	BBIN-12	Facilitating paperless trade, and increased reliance on technology such as ECTS in the BBIN countries	It will bring efficiency in logistics and trade procedures and regulations	P-1
<i>Interventions in Physical Infrastructure</i>				
13	BBIN-13	Refrigerated container handling facility for cargo movements within the subregion	This will help in the safe transportation of perishable products traded in the subregion	P-1
14	BBIN-14	Improved internet connectivity at trade points such as LCS, ICP, ICD	It will make trade efficient and environment friendly	P-1
15	BAN-01	Speeding up Mongla to Khulna Railway link	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
16	BAN-02	Construction of express highways and bypass roads for decongestion at Dhaka	This will ease the congestion and ensure Dhaka's seamless connectivity through the land to the Chattogram and Mongla seaports	P-2
17	BAN-03	Upgradation of existing infrastructure and modernisation of Narayanganj river port	This will help in speedy and efficient cargo handling	P-1
18	BAN-04	Construction of express highways and bypass roads for decongestion at Benapole	This will ease the congestion and ensure seamless connectivity from the land to the ports	P-2
19	BAN-05	Dredging and maintenance of IBP route in Bangladesh	This will help the movement of cargo vessels	P-1
20	BHU-01	Proper storage facilities for perishable goods at Phuentsholing	This will help the preservation of perishable products traded by Bhutan	P-2
21	IND-01	Customs office closer to the Dhubri river port	It will smoothen up the cargo movement between India and Bangladesh	P-2

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ⁷
22	IND-02	Upgradation of existing infrastructure, such as Lock Gates in NSD and KPD	This will help in speedy and efficient cargo handling	P-1
23	IND-03	Dredging and maintenance of waterways such as NW-1 and NW-2	This will smoothen up the movement of cargo vessels	P-1
24	IND-04	Shillong-Dawki road widening & wider bridge at Dawki	It will help the speedy movement of heavy load cargo	P-1
25	IND-05	Upgradation of the approach road to Dawki LCS	It will ensure seamless connectivity to land port	P-1
26	IND-06	Rail link to the ICP in Agartala	It will establish multimodal connectivity to ICPs and enhance trade facilitation	P-3
27	IND-07	Expediting construction of ICP in Jaigaon	It will solve the existing issues, such as insufficient parking facilities, testing and quarantine facilities, etc.	P-3
28	IND-08	Speeding up the development of the Motihari-Raxual Highway	Improved connectivity with Nepal	P-1
29	IND-09	Dedicated rail corridor inside the Visakhapatnam port	It will help cargo movement inside the port.	P-2
30	IND-10	Speed-up construction of a bridge between Sahibganj and Manihari	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
31	IND-11	Construction of express highways and bypass roads for decongestion at Petrapole	This will ease the congestion and ensure seamless connectivity through the land to the ports	P-2
32	IND-12	Expediting construction of ICPs Changrabandha and Fulbari	It will solve the existing issues at Bangladesh-India border points, such as insufficient parking facilities, testing and quarantine facilities, etc.	P-3
33	IND-13	Expediting construction of ICP Panitanki	It will solve the existing issues at India-Nepal border points, such as insufficient parking facilities, testing and quarantine facilities, etc.	P-3
34	IND & NEP-01	Expediting Jogbani-Biratnagar rail link construction	It has the potential to increase intra-regional trade of the countries in the subregion	P-2
35	NEP-01	Upgradation of Birgunj-Pathlaiya Road	This will ensure seamless connectivity from the land to the ports	P-2

S. No.	Intervention Code	Type of Interventions	BBIN Development Logic	Priority ⁷
<i>Opportunities for Investment in Infrastructure</i>				
36	BBIN-15	Dedicated rail freight corridor connectivity among the BBIN countries	It will strengthen multimodal connectivity in the subregion	P-3
37	BAN-07	Capacity enhancement at Chattogram Port	The port is running at its maximum capacity, the port faces continuous congestion and delays in clearance	P-2
38	BAN-08	A multimodal terminal at Ashuganj	It will strengthen multimodal connectivity in the subregion	P-3
39	BAN & IND-01	Building Hili (West Bengal) - Mahendraganj (Meghalaya) corridor through Bangladesh	Improved connectivity between northeast India and the rest of India through Bangladesh	P-3
40	BAN & IND-02	Reopening of the closed Shahabazpur-Karimganj rail link through Mahisasan	Improved connectivity between Bangladesh and India	P-3
41	BHU-02	Customs transit/liaison office at Gelephu	It will facilitate trade between India and Bhutan	P-2
42	BHU & IND-01	Upgrading the railway line to Hasimara and extending to Pasakha	Improved connectivity between India and Bhutan	P-3
43	BHU & IND-02	Connecting Gelephu with Jogighopa via railway	It will help the economic movement of low-value, high-volume goods from Bhutan	P-3
44	IND-14	Freight Village at Tribeni	It will facilitate multimodal connectivity and seamless movement of goods across the BBIN countries	P-3
45	IND-15	Multimodal logistics park at Farakka	It will strengthen multimodal connectivity	P-3
46	IND & NEP-02	Kakarbhatta – New Jalpaiguri rail link	It will facilitate cargo movement through railways from Nepal to the Haldia, Kolkata and Visakhapatnam ports in India	P-3
47	NEP-02	Upgradation of Kakarbhatta ICD	This will improve efficiency and facilitate trade	P-1
48	BAN & IND-03	Burimari-Changrabandha rail connectivity	This will make goods movement through this route cheaper, faster and more environment-friendly	P-2

About the Project

Countries in the BBIN (Bangladesh-Bhutan-India-Nepal) Subregion are now increasingly realising the need and importance of economic and trade integration. In the recent past, the BBIN countries have taken several initiatives, including initiatives for strengthening transport connectivity, towards this. Many of these initiatives, however, have not been able to achieve intended objectives. BBIN Motor Vehicles Agreement (MVA), signed in June 2015 to facilitate seamless movement of vehicles of one country into the territories of others, is one of them. Several factors are responsible for this.

It is, therefore, important to understand the political-economy and other ground level challenges in terms of infrastructure, policy and regulatory gaps that hinder implementation of subregional agreements. This project 'Enabling a Political Economy Discourse for Multimodal Connectivity in the BBIN Subregion' is an important step in that direction. Supported by Foreign, Commonwealth & Development Office, Government of the United Kingdom, the project is being implemented in partnership with Unnayan Shamannay, Bangladesh; Bodhi Media and Communications Institute, Bhutan; and Nepal Economic Forum, Nepal.

For details, please visit:

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

CUTS International

Established in 1983, CUTS International (Consumer Unity & Trust Society) is a non-governmental organisation, engaged in consumer sovereignty in the framework of social justice and economic equality and environmental balance, within and across borders. More information about the organisation and its centres can be accessed here: <http://www.cuts-international.org>.



CUTS[®]
International

D-217, Bhaskar Marg, Bani Park, Jaipur 302 016, India

Ph: 91.141.228 2821, Fax: 91.141.228 2485

Email: cuts1@cuts.org, Website: www.cuts-international.org

Also at Delhi, Kolkata and Chittorgarh (India); Lusaka (Zambia); Nairobi (Kenya); Accra (Ghana); Hanoi (Vietnam); Geneva (Switzerland) and Washington DC (USA).