Welcome to the Presentation Session on Strategies & Polices to Deepen Digitalization in Bangladesh

Presented By



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Outline of the Presentation

1. Introduction
2. Overview of Bangladesh
   - ❖ General, Economic & Social
3. ESCAP & BANGLADESH
4. Bangladesh Railway at a Glance
5. Current Status of Digitalization in Bangladesh Railway
6. International Collaboration Efforts
7. Connecting TAR initiatives by Bangladesh
8. Regional Connectivity Needs for Bangladesh Railways
9. Policy and Institutional Initiatives of Bangladesh Railway Toward Digitalization /Future Policy Recommendations
10. Conclusion



Todays Presentation will cover

- Delve into the digitalization strategies &
- Policies related to the Trans Asian Railway network in Bangladesh.
  - Highlighting its significance, current advancements & future prospects.



INTRODUCTION

OVER VIEW OF BANGLADESH

General Information

- ✓ Bangladesh is situated in South Asia; It has border with India in the west, north and north- east and Myanmar in the south-east side.
- ✓ The Bay of Bengal lies in the south of the country.
- ✓ Bangladesh is mainly a plain land with a number of rivers.
- ✓ Independence day : 26 March 1971 & Victory Day 16 December 1971

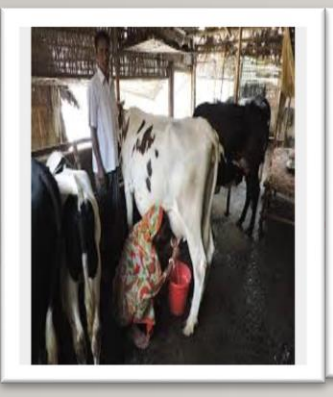
Economic Information

- ✓ Bangladesh has the world's 35th largest economy.[GDP based on IMF Data],
- ✓ Purchasing Power Parity Bangladesh is the 25-26th largest in world, which ranks 2nd in South Asia.
- ✓ Bangladesh is an Agro Based Country.



Currency: Taka; 1 $=122 BDT Area: 147,570 Sq. Km. Capital: Dhaka

IMAGES OF BANGLADESH





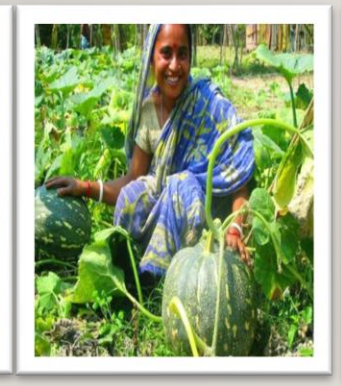
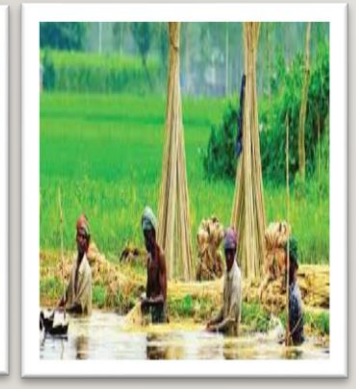
AGRICULTURE SHARE IN GDP 11.5%







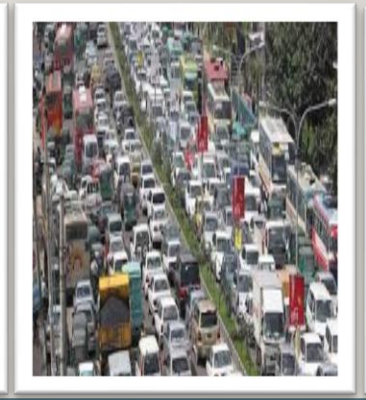

68.34% PEOPLES LIVES IN VILLAGE

RURAL LIFE OF BANGLADESH

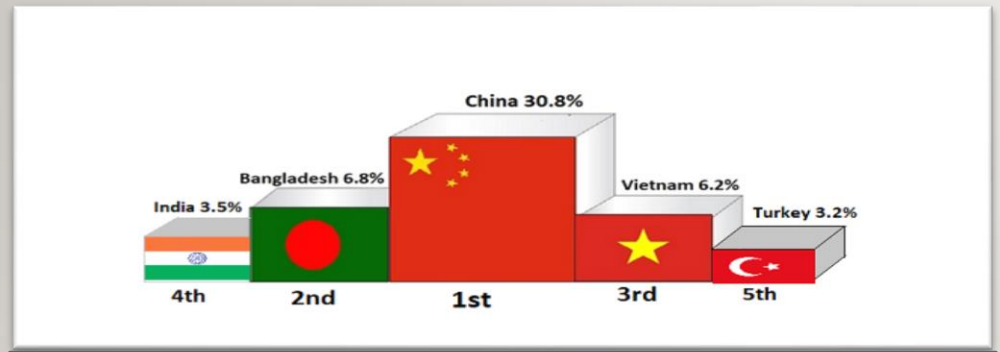
POPULATION DENSITY (PEOPLE PER SQ. KM) : 1,350






ABOUT BANGLADESH

- ✓ On 2023-24 GDP growth was 5.82%.
- ✓ Projected GDP growth for Bangladesh in FY25 (2024-2025) is 5.7%



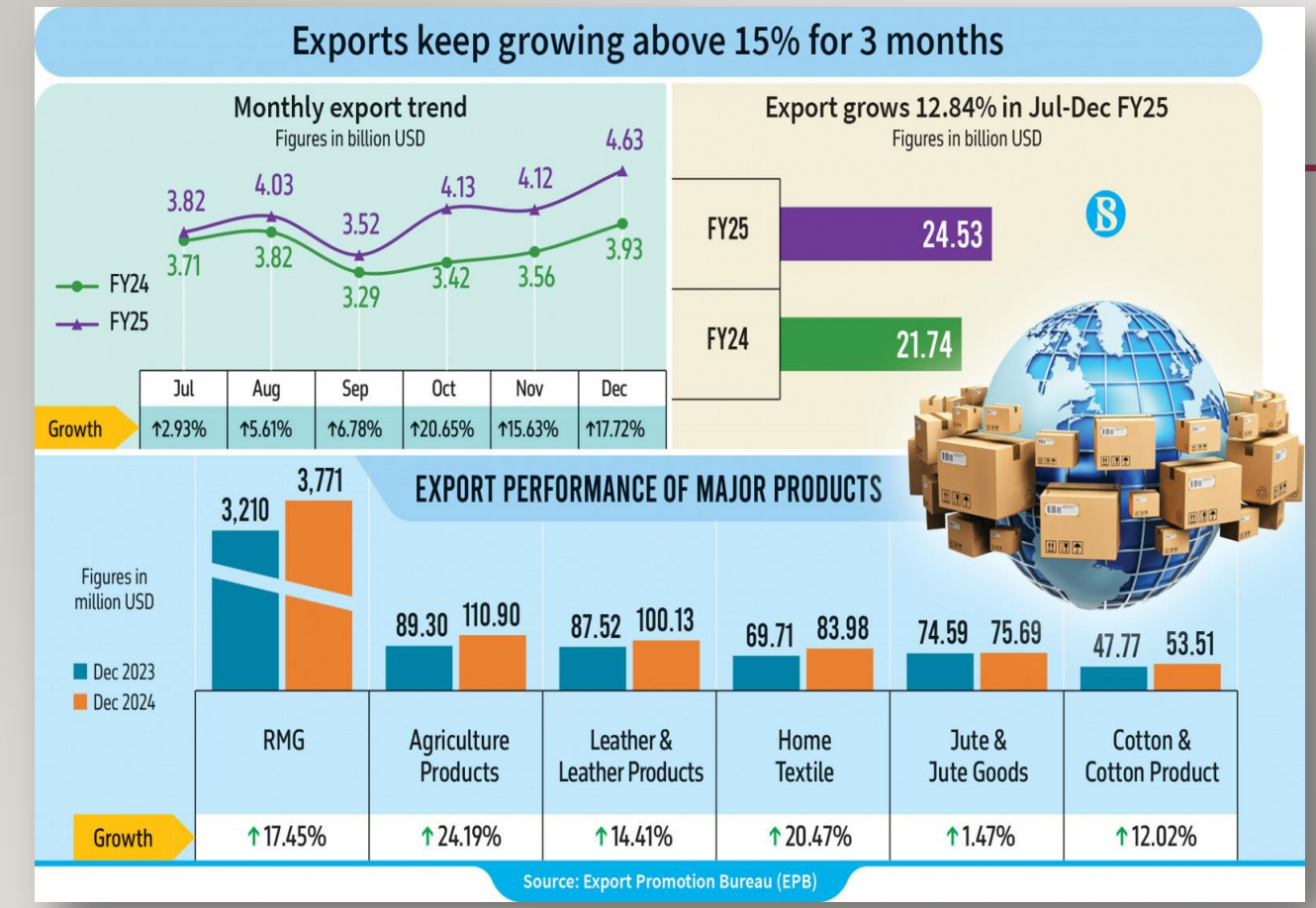
EXPORT POSITION OF READYMADE GARMENTS OF BANGLADESH

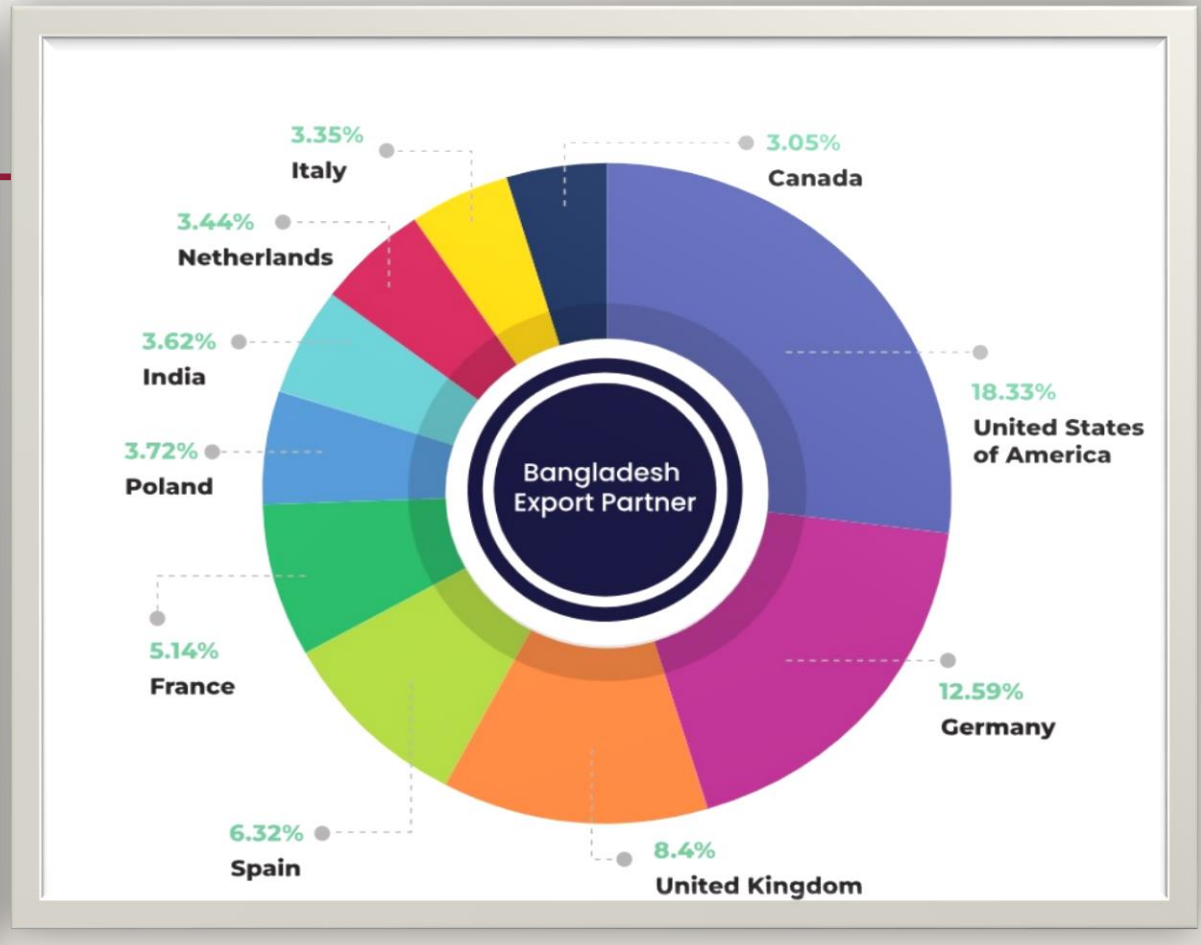


MAJOR BUYERS OF BANGLADESH

- ✓ Economy of Bangladesh is significantly driven by agriculture and the export of readymade garments.
- ✓ The crucial role of remittances, the income earned by Bangladeshi migrant workers abroad, in the country's economy.

ECONOMICAL ACTIVITIES OF BANGLADESH





ECONOMICAL ACTIVITIES OF BANGLADESH







Bangladesh has made considerable strides in improving

- Healthcare access
- Expanding educational opportunities
- Empowering women
- Eliminate gender disparity in primary and secondary education

Quality of life	Bangladesh's people reportedly enjoy levels of life satisfaction and happiness that are higher than other more 'Developed' countries though its ranked 123rd among 167 countries.
Wealth & Economic Growth	Bangladesh's GDP is the 35th largest in the world in nominal terms and the 25th largest by purchasing power parity (PPP).
Education & Human Capital Development	Human Development Index (HDI), Bangladesh is ranked 129th out of 191 countries, placing it in the "Medium Human Development" category.
Job Creation & Employment	Around 16.8% of the youth population are unemployed.
Health & Wellness	In the latest WHO rankings on global healthcare quality, Bangladesh ranks 88th among 195 countries.
Clean Environment & Green Industry	A global leader in sustainable manufacturing particularly readymade garment (RMG) sector

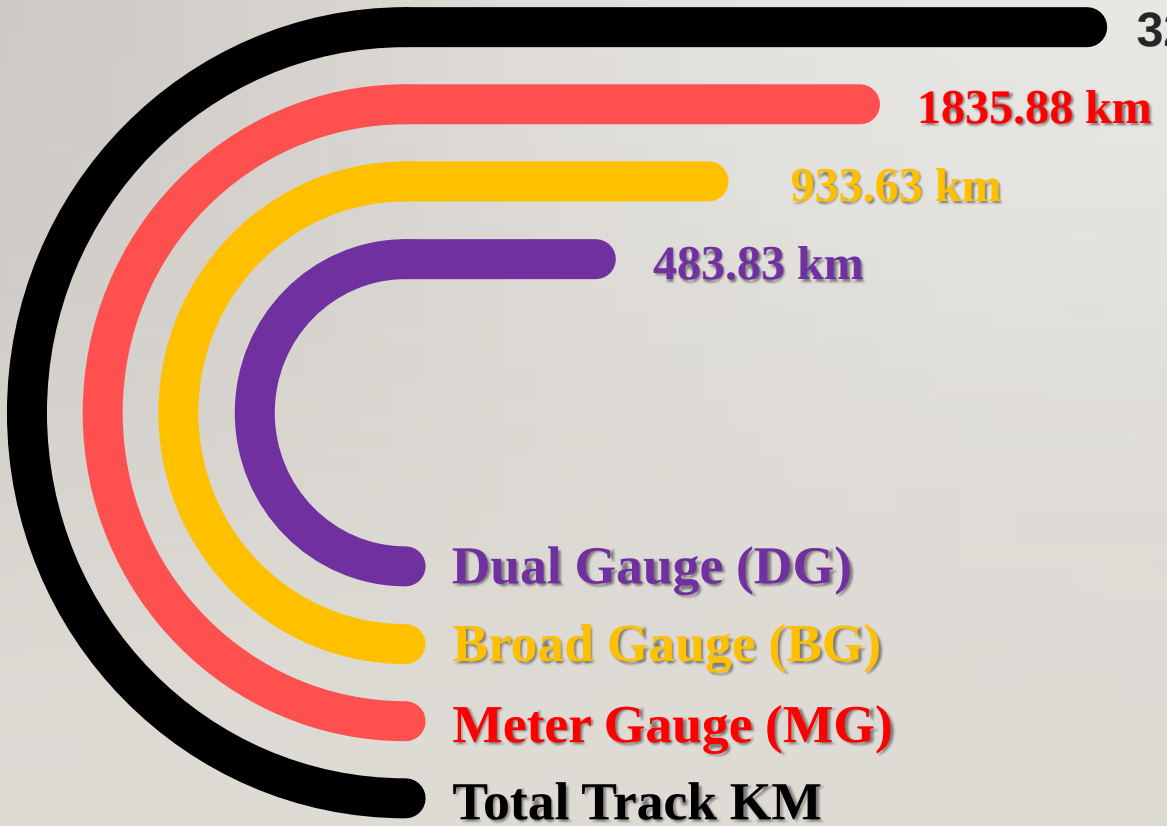
Socio Economical Development of Bangladesh

Rail line Est. in BD	:	15 November 1862 (it was 53.11 km at that time)
Total Route	:	3018.88 km
Rail line	:	Both Meter Gauge & Broad Gauge
Total locomotive	:	263
Carriages	:	1764(Passenger Carriages & Other Coaching Vehicles)
Freight	:	956 (Covered Wagons & Special type Wagons)
Total Rail Station	:	483
Railway workshop	:	03 (CLW, Chattogram, Syedpur)
Training Academy	:	01
Diesel Shop	:	04 (Dhaka, Chattogram, Ishwardi, Parbotipur)
Rail coverage	:	43 Districts out of 64 District

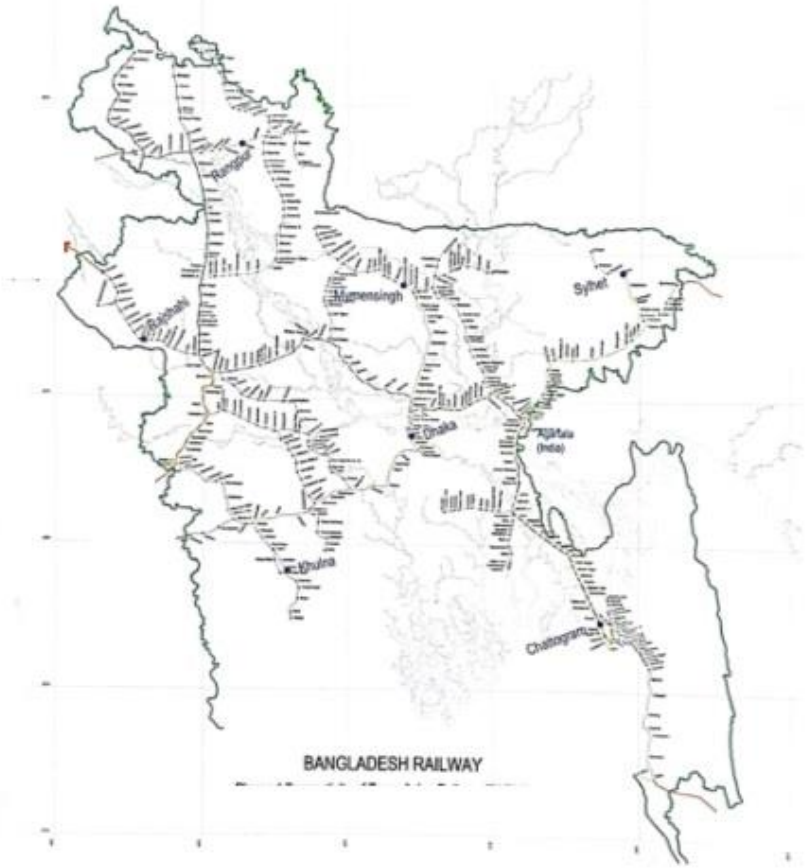


BANGLADESH RAILWAY AT A GLANCE

TOTAL ROUTE KILOMETER : 4846.68 KM



Route KM:	3254.34 KM
BG (1676 mm):	933.63KM
MG (1000 mm) :	1835.88 KM
DG (3 Rail) :	483.83 KM



RAILWAY: ROUTE KILOMETRES

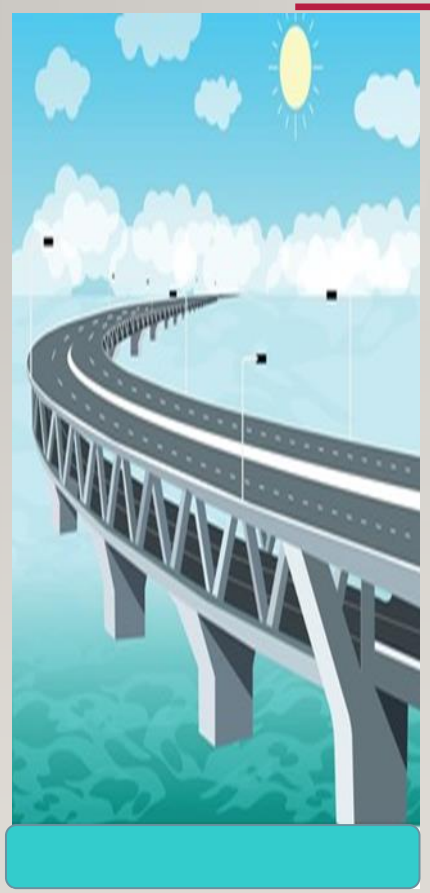
ESCAP

ESCAP & Bangladesh

- Bangladesh has been an active member since its independence in 1971.
- Bangladesh engages with ESCAP
    - sustainable development,
    - infrastructure, connectivity,
    - disaster risk reduction,
    - trade, technology and
    - social development.

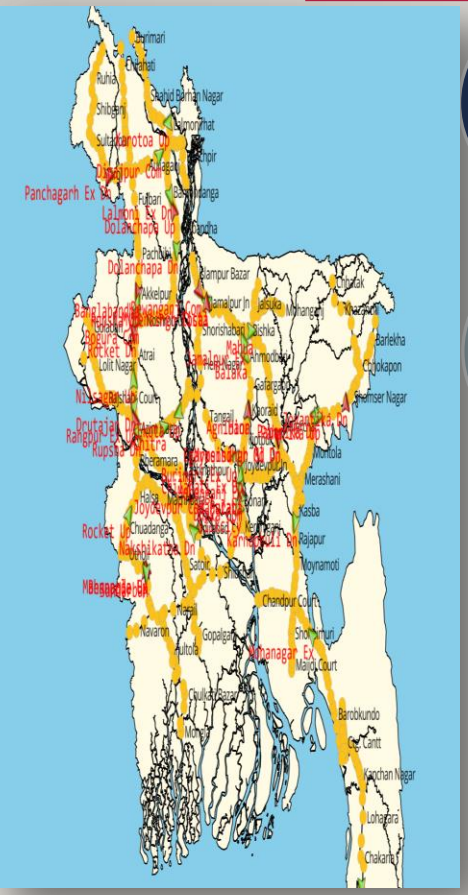
Transportation & Communication Area

- Trans-Asian Railway and Asian Highway
- Digital Innovation.



1	Computer Based Interlocking Signaling System (CBI)	Out of 389 station 148 stations are established CBI
2	Level Crossing Gate	Around 2453 LC Gate 82 are interlocked
3	Train Tracking and Monitoring System(TTMS)	Through BR Explorer App identify the train location, next stoppage Train Starting time etc.

CURRENT STATUS OF DIGITALIZATION IN BANGLADESH RAILWAY



4	Train information Display system (TIDS)	Situated at some important rail stations. Train arrival and departure time displayed for the passengers
5	CCTV	Important places of the rail stations
6	Public Address (PA)	115 PA system established different important stations

CURRENT STATUS OF DIGITALIZATION IN BANGLADESH RAILWAY



7	Bangladesh Railway Automated Support System (BRASS)	Trough this software inventory, procurement and supply management done by this software.
8	E-ticketing	Real time based Trains seat booking, purchasing and payment system
9	Railway Estate Management System	Piloting at Lalmonirhat Division of BR
10	E-GP, Ibas++, GEMS & D-filing	Bangladesh Government including Bangladesh Railway using these Apps/Website

CURRENT STATUS OF DIGITALIZATION IN BANGLADESH RAILWAY

- Bangladesh has engaged in partnerships with countries such as India, China. Exim Bank, World Bank, ADB, Jica and Economic Development Cooperation Fund for technical assistance and funding for rail projects.
- Participation in regional initiatives like the Trans Asian Railway network has opened avenues for knowledge exchange and technology transfer.
- Collaboration with international organizations has also facilitated workshops and conferences to discuss best practices in rail digitalization.

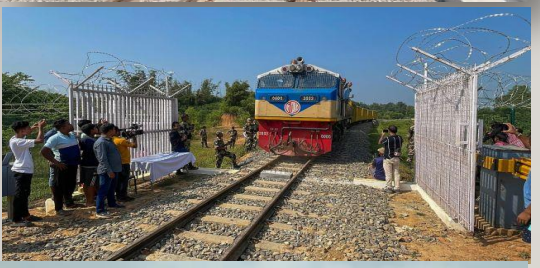
INTERNATIONAL COLLABORATION EFFORTS



Connecting TAR: Initiatives by Bangladesh Railway











MAJOR INFRASTRUCTURE PROJECTS

Padma Bridge Rail Link Project

172 km rail line connecting Dhaka to Jashore via the Padma Bridge.

Khulna–Mongla Port Rail Line

65 km rail link connecting Khulna to Mongla Port, enhancing port access.

Jamuna Brdige Rail Link Project

4.8 km, making it the longest dedicated railway bridge in Bangladesh.: Dual-gauge, double-track bridge situated 300 meters upstream of the existing Jamuna Multipurpose Bridge.

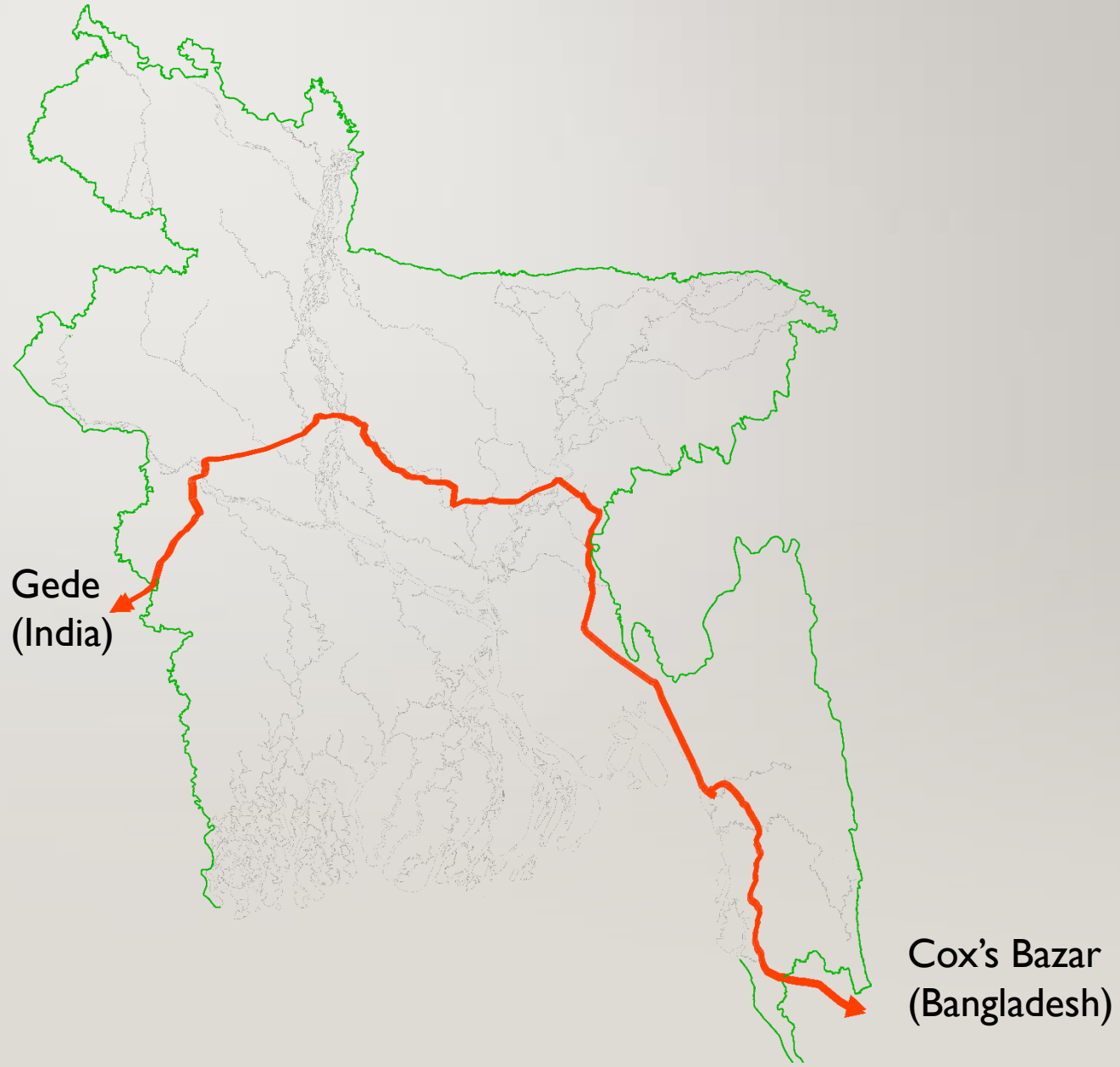
Dohazari–Cox's Bazar–Gundum Line:

Connect southeastern Bangladesh to Myanmar, aligning with TAR's Southern Corridor.

Connecting TAR: Connecting TAR: Initiatives by Bangladesh Railway

Existing Regional Connectivity

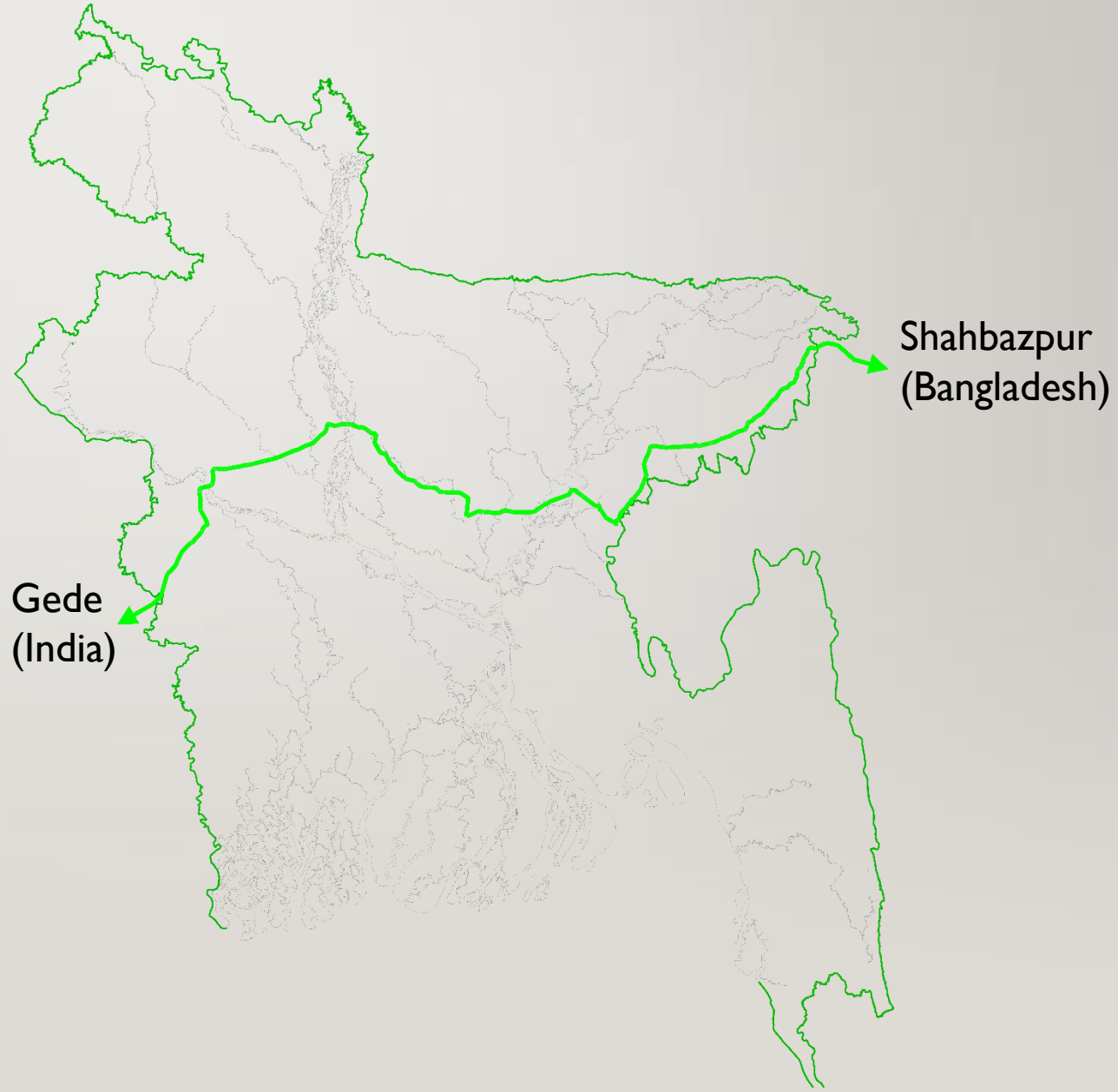
TAR-1 Gede-Cox's Bazar (702 km)



Regional and Cross-Border Connectivity/Provisional

Existing Regional Connectivity

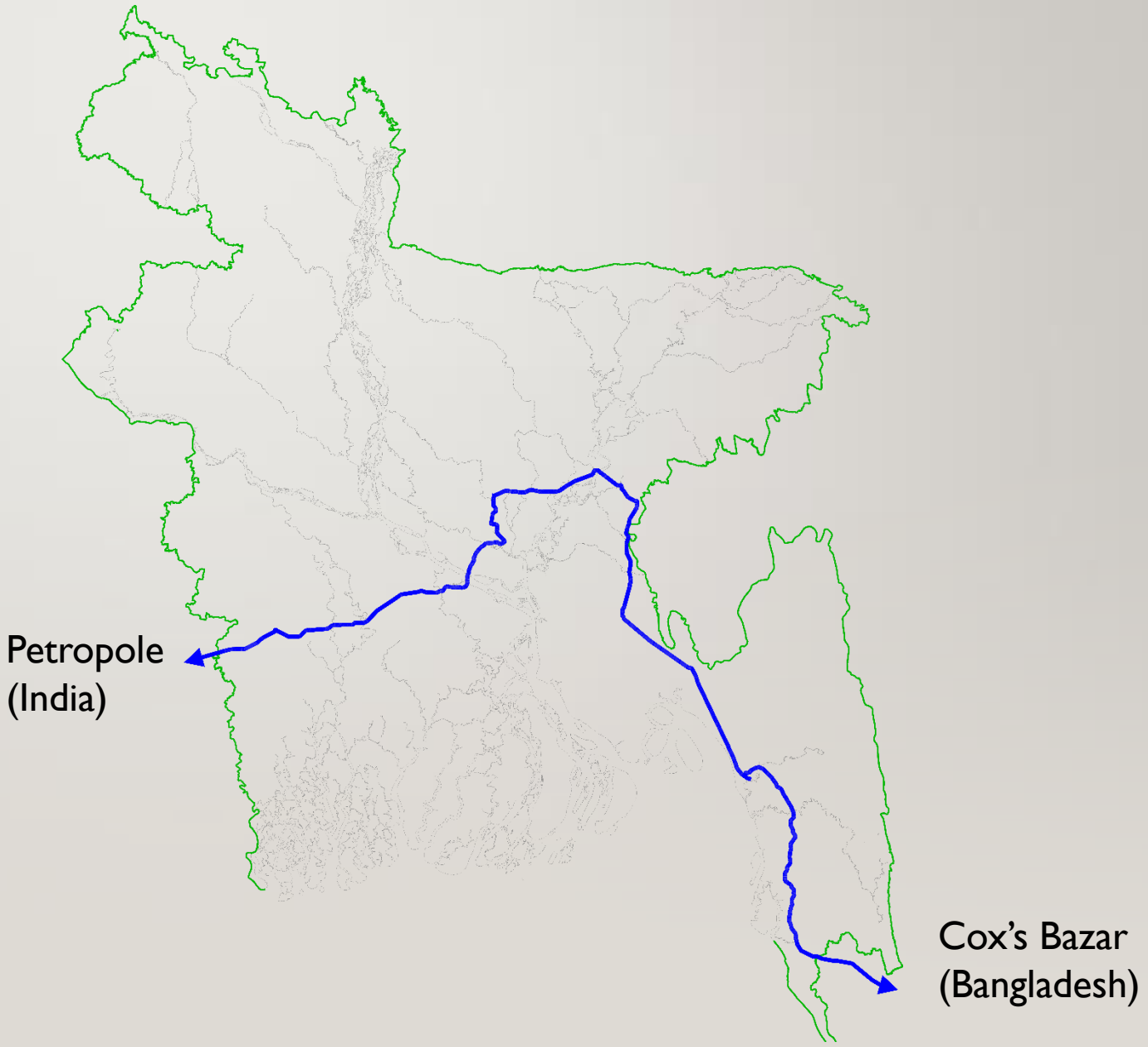
TAR-2 Gede-Shahbazpur (536 km)



Regional and Cross-Border Connectivity/Provisional

Existing Regional Connectivity

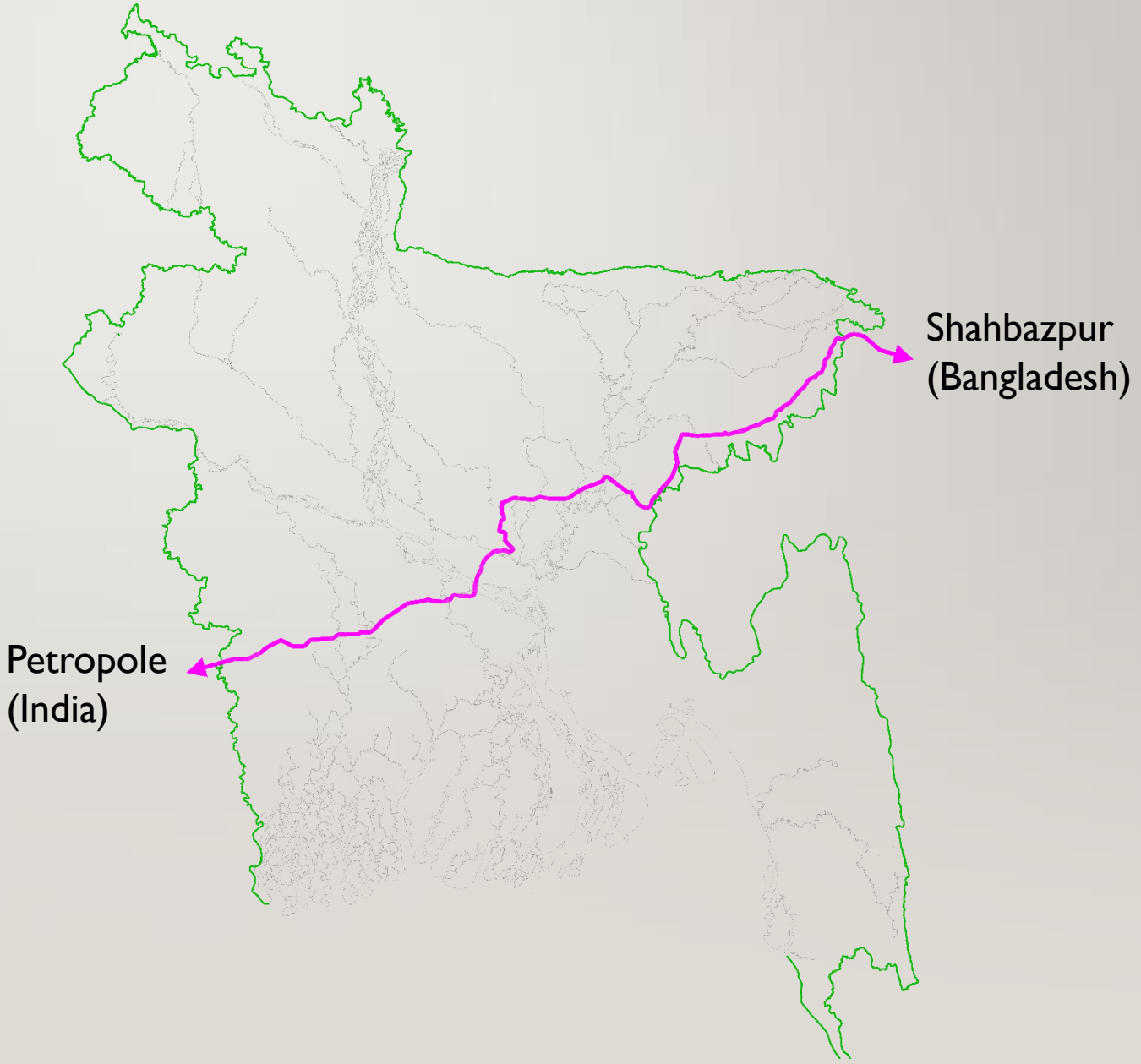
TAR-3 Petrpole-Cox's Bazar (663 km)



 Regional and Cross-Border Connectivity/Provisional

Existing Regional Connectivity

TAR-4 Petropole-Shahbazpur (496 km)



Regional and Cross-Border Connectivity/Provisional

Existing Regional Connectivity

TAR-5 Singabad-Cox's Bazar (735 km)



Regional and Cross-Border Connectivity/Provisional

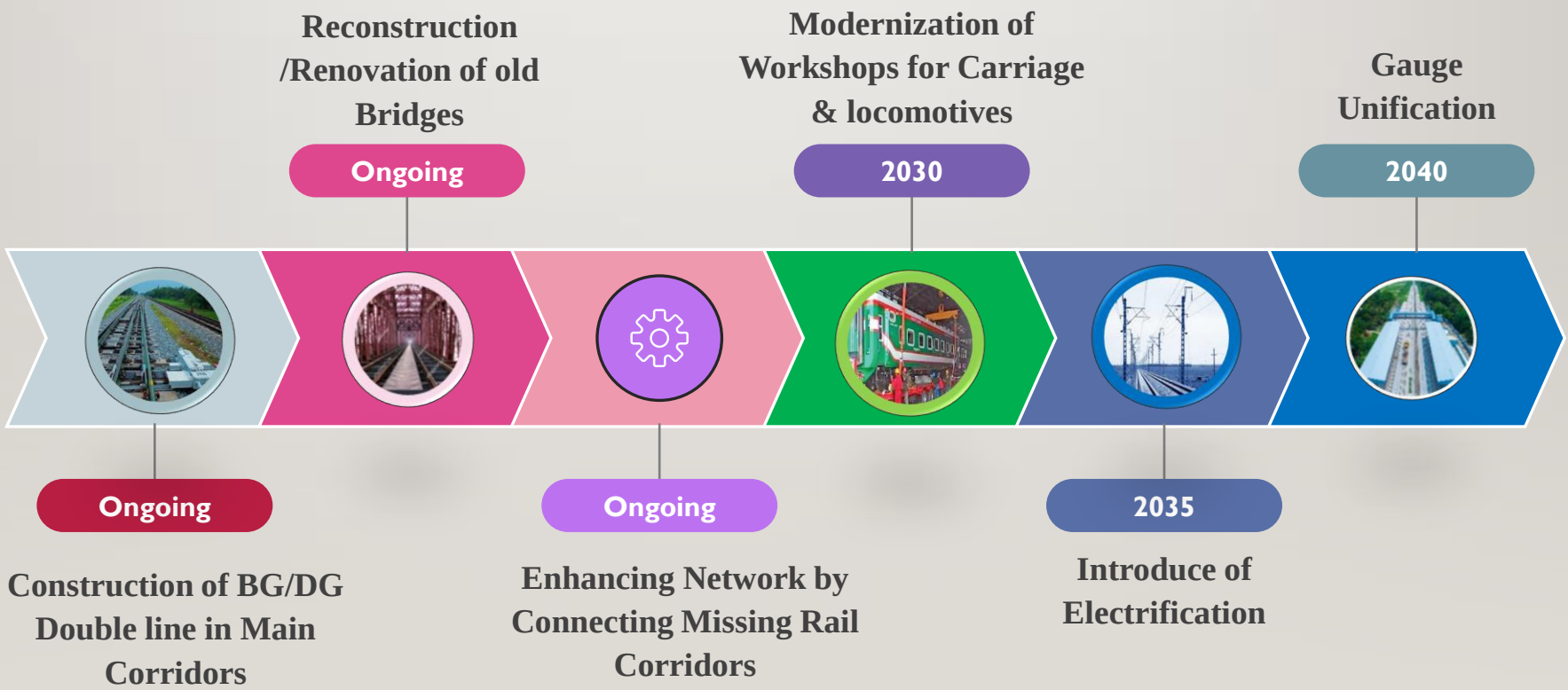
Existing Regional Connectivity

TAR-6 Singabad-Shahbazpur (568 km)



Regional and Cross-Border Connectivity/Provisional

Policy and Institutional Commitments



TECHNICAL ENHANCEMENTS
SERVICES OFFERED BY BANGLADESH RAILWAY

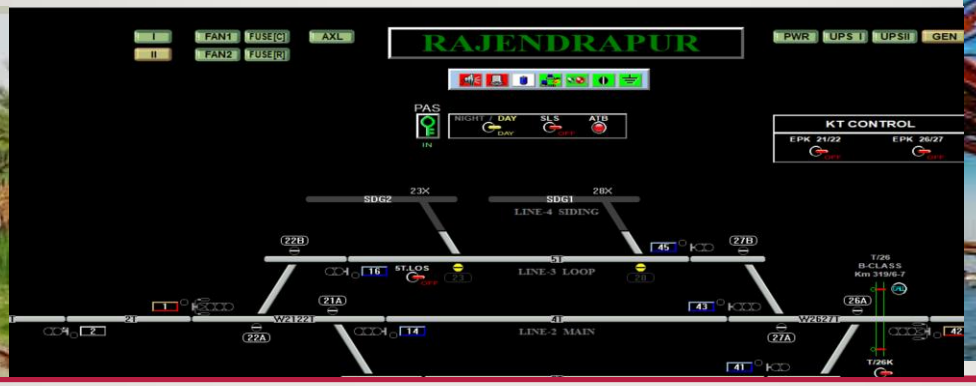
Comprehensive Service

- Operation of Intercity, Mail/Express, Commuter & Local trains.
- Transporting containers, fuel, food grains, parcels, mail etc.
- Operation of International Intercity Passenger Trains and Freight Trains.
- Operation of special trains e.g. Military Special, Eid Special, Pilgrim Special, Mango Special, Cattle Special & Oxygen Trains.
- Providing various passenger services at stations and on trains.

Existing E-Services/Digital System

- ✓ E-ticketing System (www.eticket.railway.gov.bd)
- ✓ GIS Based Railway Track (Approximate 100 KM) and Bridge Management Information System .
- ✓ Bangladesh Railway Automated Support System (BRASS)
- ✓ Railway Estate Management System.
- ✓ Train Tracking and Monitoring System.









Introduction of modern Signaling System on the entire BR network

33.33% stations having modern Signaling System



Introducing of Automatic Train Protection System

A Feasibility Study is going on by METI, Japan



Ensuring Protection at Level Crossings

Approx. 3,000 L/C on 3100 KM Rail Route. Underpass & Overpass is planned to make in important L/Cs



Enhance facilities for Container Freight Transport

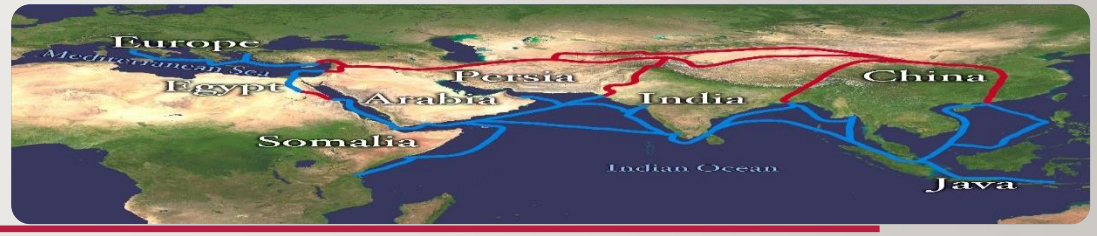
A Feasibility study is going to enhance facilities for Container Freight Transport

Policy and Institutional Initiatives of Bangladesh Railway Toward Digitalization

Regional Connectivity Needs for Bangladesh Railway

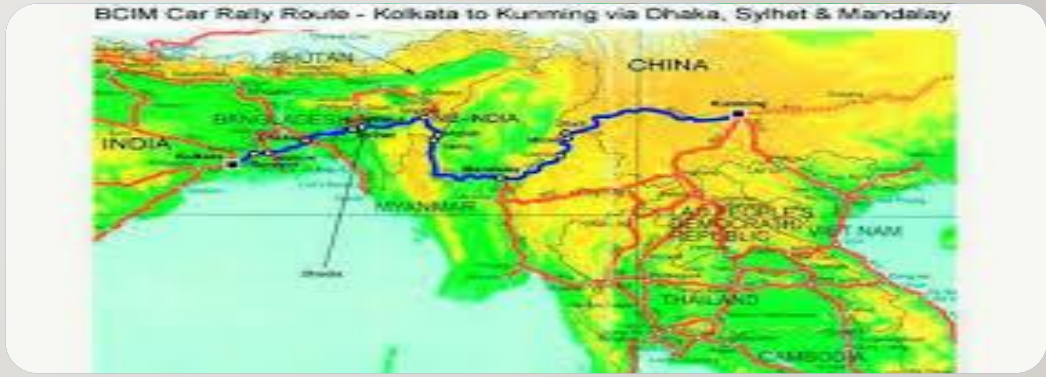
Silk Route

The Silk Road or Silk Route is a historical network of interlinking trade routes across the Afro-Eurasian landmass that connected East and South and Western Asia



BCIM Route

Bangladesh, China, India and Myanmar - in a convoy of twenty cars, undertook the first leg of a historic journey that took them all the way from Kolkata to Kunming via Dhaka and Myanmar. The stated purpose of this journey was to highlight road connectivity in the four countries of the region (BCIM)



BIMSTEC



Bangladesh, India, Myanmar, Srilanka, Thailand, Bhutan and Nepal will be linked together

TAR

Bangladesh singed the “Intergovernmental Agreement on the Trans-Asian Railway Network”

☐ **Freight Transport**

- **Road:** ~75–80%
- **Rail:** ~4–5%
- **Inland Waterways:** ~10–15%

☐ **Passenger Transport**

- **Road:** ~85–90%
- **Rail:** ~8–10%
- **Inland Waterways:** ~2–5%

Observations on modal Share

- ✓ Road Transport -Flexibility and Extensive Network
- ✓ Railway: Underinvestment & limited connectivity.
- ✓ Waterways: Specially in southern and riverine regions-infrastructure limitations

☐ Government Strategy:

- ✓ Infrastructure Upgradation -Double-tracking, electrification Connecting Trans-Asian Railway corridors,
- ✓ Port and waterway dredging and modernization &
- ✓ Intermodal logistics hubs.
- ✓ Introduction of Real-Time Container and Freight Management

TRANSPORT NETWORK IN BANGLADESH

CONCLUSIONS

- Digitalization of Bangladesh's rail system is essential to modernize its operations and improve service delivery.
- Significant challenges
  - ✓ Proactive strategies &
  - ✓ Collaboration with international partners can foster progress.
- Focused approach in policy recommendations will enable Bangladesh to leverage the benefits of rail digitalization effectively.





Thank you!

DO YOU HAVE ANY QUESTIONS?