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# ASIA-PACIFIC Railway Innovations Forum

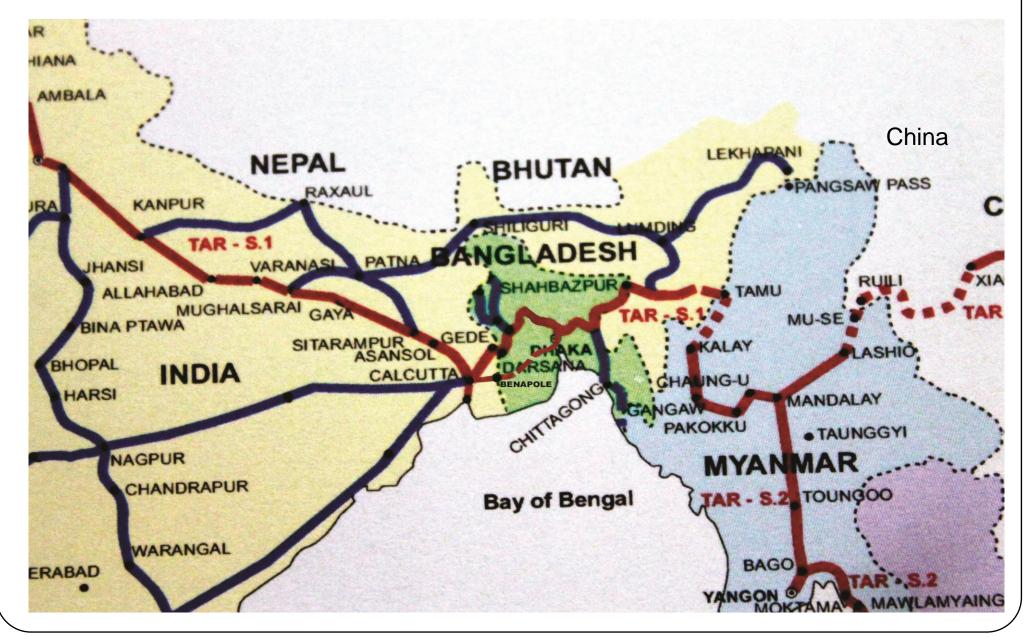


Welcome to Presentation Bangladesh Railway Government of Bangladesh



Presented By Md. Jahangir Hossain Chief Planning Officer Bangladesh Railway

# **SASEC** Rail Connectivity



### **SASEC Rail Corridor: Inside Bangladesh**

# **SASEC RAILWAY Corridor-2:**

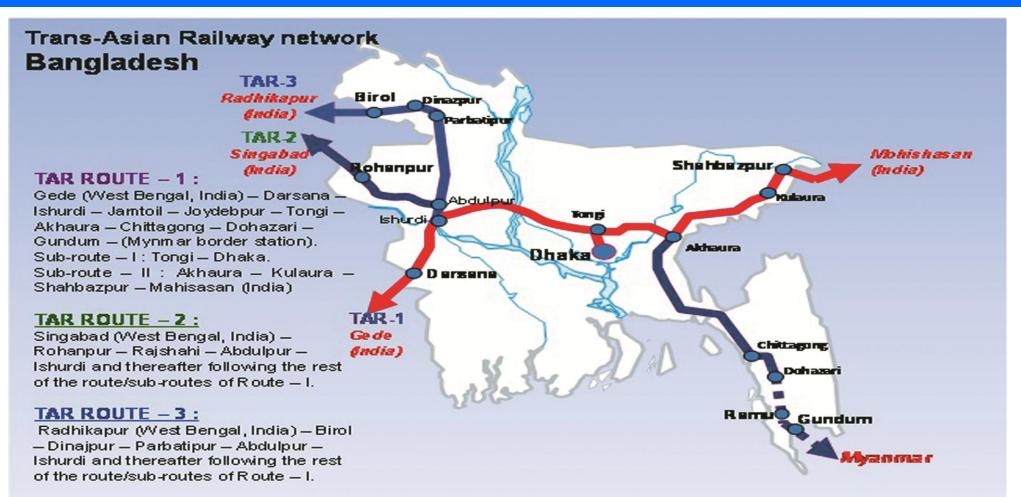
## India-Bangladesh Rail Corridor:

Kolkata-Ranaghat-Gede-Tangail-Dhaka-Comilla-Chattogram-Cox's Bazar (675 Km);

Spur Line 2A: Comilla-Agartala-Akhaura (57Km);

Spur Line 2B:links to Northwest Bangladesh(79km and 156Km) Spur Line 2C: Darsana-Khulna-Mongla(150Km) Spur Line 2D: Connection to Payra Port (236 Km) Total : 1353 Km

# **Trans-Asian Railway Network**



TAR-1 [ Gede(Inida)-Darsana-Ishurdi-Jamtoil-Joydebpur-Tongi-Akhaura-Chattogram-Dohajari-Gundum-(Mayanmar Borde) ] is part of SASEC Rail Corridor-2 [Kolkata-Ranaghat-Gede(India)-Tangail-Dhaka-Comilla-Chattogram-Cox's Bazar ]



# THANK YOU

**STATEMENT ON THE PRESENTATION** 

Mr. Ko Sakamoto, Senior transport specialist, ADB and all distinguished participants from different stake holders present in this forum.

Bangladesh, a member of South Asia Sub-regional Economic Cooperation (SASEC), is implementing Railway network linking to the neighboring SASEC member countries like India, Myanmar and Nepal under the financial assistance from Asian Development Bank, among others. There are two SASEC Rail corridors as of today:

SASEC Rail Corridor-1: Nepal-Kolkata Trade Corridor: Birgunj-Raxaul (Nepal)-Muzaffarpur-Patna-Gaya-Asansol-Kolkata-Haldia (912Km);

SASEC Rail Corridor -2: India-Bangladesh Rail Corridor: Kolkata-Ranaghat-Gede-Tangail-Dhaka-Comilla-Chattogram-Cox's Bazar (675 Km);

Spur Line 2A: Comilla- Akhaura - Agartala (57Km);

**Spur Line 2B:** Birol (BR) – Radhikapur (IR) and Rohanpur (BR) – Singhabad (IR); (79km and 156Km): links Northwest Bangladesh

Spur Line 2C: Darsana-Khulna-Mongla (150Km);

Spur Line 2D: Dhaka to Payra Port (236 Km);

#### India-Bangladesh Rail Corridor Total: 1353 Km.

The proposed SASEC rail link of Bangladesh crosses Indian border in five locations, such as: (Darsana (BR) – Gede (IR); Birol (BR) – Radhikapur (IR); Rohanpur (BR) – Singhabad (IR); Chilahati(BR)-Chilahati Border(IR); Akhaura(BR)-Agartala (IR).

The SASEC Rail Corridor -2 at it's Cox's Bazar End, will cross Myanmar border in location Gundum through Ramu (BR)-Gundum (BR) railway line near Mayanmar Border. The interchange point, Rohanpur (BR) – Singhabad (IR) line can be introduced for Nepal Transit Traffic, through Raxaul or Jogbani of India, connecting Biratnagar and Birganj of Nepal. This is part of TAR line. Upon connection of this line, Nepal will be able to use Chattagram, Mongla or Pyra port of Bangladesh. Birol (BR) – Radhikapur (IR) interchange point can also be connected to Nepal through India.

Total length of proposed SASEC Rail line through Bangladesh is about 1353 KM, out of this construction of about 922 KM line is complete and rest is under process for construction (connection to Payra port, Mongla port, Agartala, Chilahati border, etc.).

Bangladesh is one of the highest recipient of ADB loans and grants. From 1975 till today ADB has provided assistance for about USD3.75 billion and probable future assistance is about USD6.00 billion. In this financial year 48 development projects are being implemented by Bangladesh Railway. Among those, 9 projects are funded by ADB with USD2.78 billion. Other development projects are being implemented under financing from Indian LoC, JICA, China G to G, EDCF Korea etc. Among these projects 2 projects are funded by JICA (USD982.38 million), 6 projects by LoC (USD1.3 billion), 2 projects by China (G to G, USD3.15 billion) and 1 project by EDCF Korea (USD168.41 million), others by GOB money.

The SASEC rail projects are being financed by ADB, JICA, Indian LoC, China G to G, EDCF Korea, and Indian Grant etc.

Remarkably, ADB fund has the following positive approaches:

- (1) ADB has some set rules that help achieve value for money.
- (2) It has approach towards transparency.
- (3) It cares for environmental safeguard.
- (4) ADB has comprehensive guidelines for procurement.
- (5) It helps establish rule of law.
- (6) ADB cares for improvement of operating ratio of the organization (BR).
- (7) ADB has total commitments for the betterment of the society of developing country like Bangladesh.

With the ADB financial assistance, BR has already completed one TA project successfully (Technical Assistance for Sub-Regional Rail Transport Project

Preparatory Facility) (RCIP) with seven components for railway infrastructure development (umbrella project). At present BR has another important project preparatory facility (Dhaka-Chittagong-Cox's Bazar Project Preparatory Facility) with assistance from ADB for seven important investment components for future Railway infrastructure development. Now more five components are going to be added with it. Very Soon another project preparatory facility with eleven components is coming up under ADB financing.

Bangladesh Government has signed TAR agreement in 2007 and BR will be a part of the TAR network after completing projects related to SASEC rail corridor-2. It is expected that construction work of proposed SASEC rail connectivity within Bangladesh will be completed by the year 2025.

Bangladesh Railway is constructing some main railway lines such as: Akhaura-Laksam dual gauge double line (ADB funding), Dohazari-Cox's bazar rail link (ADB funding), Bhanga- Payra (under design), Padma bridge rail link (Dhaka-Jessore, China G2G funding), Bongobondhu Sheikh Mujib railway bridge over the river Jamuna (JICA funding), Bogra- Sirajganj chord line, , high speed rail line from Dhaka to Chattagram to Cox's Bazar) (under process), Khulna-Darsana line doubling, Akhaura-Agartala, Chilahati-Chilahati border, Khulna-Mongla rail link, etc. On the other hand, many branch lines are also being constructed. Overall Bangladesh Railway network is rapidly expanding. We have adopted a Master Plan of 30 years (2016-2045) for railway network expansion, associated infrastructure development, rolling stock procurement and workshop development, with an estimated total cost US\$ 66 billion for 230 projects. It is a challenge for Government of Bangladesh to implement this masterplan.

The economical development of the country is getting faster, at present GDP is above 7.50 % and end of financial year 2018-2019 it will exceed 8 hopefully. The economical growth of the country will be further accelerated through railway infrastructure development. At present small scale business is going on with India using the existing railway connectivity. The SASEC rail corridor as well as Trans Asian railway network will play as vital life line for the export –import business of Bangladesh with India, China and other neighboring countries. At present SASEC countries have a very different level of infrastructure development. Modern innovative construction technologies have been developed much and that could be very effective for construction of Rail network, associated infrastructure development and rolling stock procurement.

For construction of railway embankment, bridges, track and maintenance of the infrastructure, some evolutionary technology and equipment are being used by the highly industrialized developed countries. In Bangladesh the use of these technology and equipment is very limited. The reason is, it is a general idea in Bangladesh that, these technologies, equipment and their maintenance are costly, even though these equipment can provide high quality and good quantity of works. For the sake of the quality and volume of the works, specially for the international railway network, the use of these technology and equipment is essential. Here ADB and other stakeholders can play important role to make these equipment available to the concern authority with a competitive price and maintenance base.

For safety, speedy and large number of train operations, a good signaling system with automated train management and controlling system can play very vital role. But in the perspective of Bangladesh the level of signaling system development is very different. On the other hand there is no automated train controlling and train management system (CTC system) in BR. The level of signaling system development and train controlling system are also not in a very good condition. Here ADB can play a very vital role. ADB can help formulate rules for all the railways' linked with the corridors. In this regard ADB can support formulating standards among organizations for this part of the world, which ultimately will help achieve international standards and specifications for track, rolling stock, signaling system, CTC system, traction, ticketing system, etc.

The difference in gauze is a vital obstacle for unification of the international railway in our region. As a midterm solution, suitable infrastructure can be developed in the border of two countries having difference in track gauge, for transshipment of freight and passengers. But for the long term solution, kind of consensus will have to be developed by the standardization organization through mutual consensus and agreement by the member countries.

Following process will be helpful for development and operation of the international railway network.

- 1. Ease of availability of all sorts of logistics for whole of the rail network.
- 2. Passengers and freight of the member countries should be allowed to travel without any hindrance throughout the member countries.
- 3. Ease of Customs & Immigrations for the passengers and freight throughout the whole network.
- 4. Technology Transfer and common training for technical person for whole of the network of the member countries.
- 5. Introduction of common apps or card for buying & selling train tickets.
- 6. Ensuring safety of the passengers and freight of the whole network.
- 7. There should be an agreement among the signatories to eliminate the restrictions of movement of trains in the territory of member countries.
- 8. New bilateral or multilateral corridors should be explored for mutual benefit of the member countries, for win-win situation.
- 9. Member countries and Development Partners should come forward to finance for the projects for mutual benefit.

ADB and UIC may play very significant role in achieving the above.

I believe Railway Innovation Forum- 2019 will be a milestone event to establish a effective railway transportation system among the nations of this part of the world.

On behave of BANGLADESH RAILWAY, here would like to thank ADB and UIC for organizing this Innovation Forum.

#### Thank You All.

-Md. Jahangir Hossain, Chief Planning Officer, Bangladesh Railway.