

Role of Bangladesh Bridge Authority In Physical Infrastructure Development



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Functions of Bangladesh Bridge Authority

- ▶ Planning (including Feasibility Study), implementation, monitoring and evaluation of Construction of bridges 1500m and above, Elevated Expressway, Tunnel (Subway) etc;
- ▶ Operation and maintenance of the multipurpose bridges and other infrastructures;
- ▶ Determine and collect tolls for various classes of vehicles using the multipurpose bridges, tunnels etc.

Major Completed Projects

Construction of Bangabandhu Bridge over the river Jamuna

- ▶ Length: 4.8 km
- ▶ Span: 100 m
- ▶ Width: 18.4 m along with dual gauge railway track
- ▶ Project Cost: 936 million US\$
- ▶ Name of the Contractor: Hyundai Engineering & Construction Company, South Korea.
- ▶ Commencement: October 1994.
- ▶ Completion: June, 1998.

Bangabandhu Bridge over the river Jamuna



Construction of 6th Bangladesh-China Friendship (Mukterpur) Bridge over the river Dhaleshwari

- ▶ Length: 1.521 km
- ▶ Project Cost: 25 million US\$
- ▶ Name of the Contractor: China Road & Bridge Corporation.
- ▶ Commencement Date: July 2005.
- ▶ Completion Date: February, 2008.



Major Ongoing Projects

- ▶ Construction of Padma Multipurpose Bridge
- ▶ Dhaka Elevated Expressway PPP Project
- ▶ Construction of Tunnel under the river Karnaphuli
- ▶ Bus Rapid Transit (elevated part) Project

Construction of Padma Multipurpose Bridge

- ▶ Length: 6.15 km
- ▶ Project Cost: 2.8 billion US\$
- ▶ Name of the Contractor: China Railway Major Bridge Engineering Group Limited.
- ▶ Name of the Construction Supervision Consultant: Korea Expressway Corporation (KEC)
- ▶ Commencement Date: June 2014.
- ▶ Completion Date: 2018.

Construction of Padma Multipurpose Bridge

BENEFITS OF THE BRIDGE



- 1** Direct road link between the capital and the southwest region, Mongla Port
- 2** Travel time between the capital and the southwest region to be reduced by one-fourth; tourism to get a boost
- 3** Being part of the proposed Asian Highway and Trans-Asian Railway Network, the bridge will facilitate regional connectivity
- 4** **29%** growth in construction sector, **9.5%** in agriculture, **8%** in manufacturing and transport
- 5** Poverty to drop by **1%** in the region, **0.8%** nationally
- 6** GDP to grow by **1.7%** in southwest region, **0.56%** countrywide
- 7** New employment and business opportunities for local people
- 8** Daily traffic to increase from **4,300** at present to **12,831** in **5** years, to **45,000** in **2040**
- 9** **19%** economic internal rate of return
- 10** River training to save **9,000** hectares of land worth **\$156** million from erosion and flooding
- 11** Electricity, gas supply lines and optical fibre cables to pass through the bridge, saving **\$271** million
- 12** **\$400** million ferry service cost on Mawa-Janjira route to be saved

Dhaka Elevated Expressway PPP Project

- ▶ Length: 46 km
- ▶ Project Cost: 1 billion US\$
- ▶ Name of the Contractor: Ital-Thai Development Co.
- ▶ Commencement Date: December 2013.
- ▶ Completion Date: December 2020.
- ▶ Concession Period: 25 Yrs.



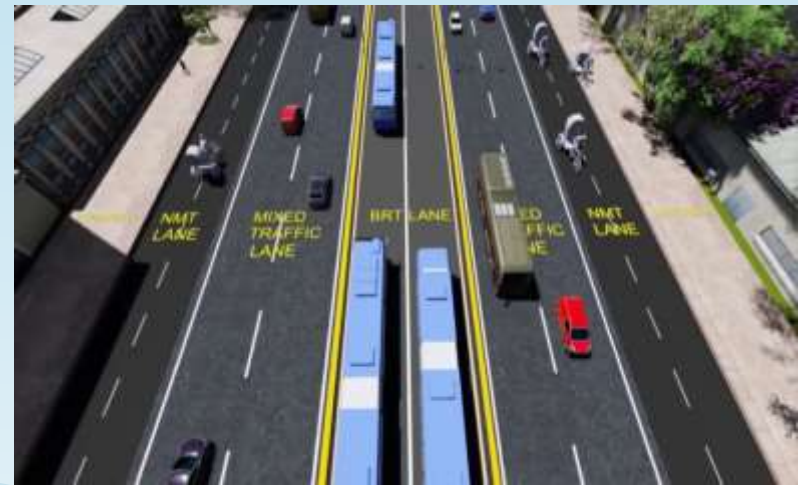
Construction of Tunnel under the River Karnaphuli.

- ▶ Tunnel Length: 3.4 km Dual Two Lane Tunnel
- ▶ Approach Road: 5.8 Km
- ▶ Project Cost: 1.05 billion US\$
- ▶ Name of the Contractor: China Communication Construction Company Limited.
- ▶ Name of the Construction Supervision Consultant: SMEC (Australia) in Joint venture with COWI (Denmark).
- ▶ Commencement Date: November 2015.
- ▶ Completion Date: June 2020.



Bus Rapid Transit (elevated part) Project

- ▶ Length: 4.5 km
- ▶ Project Cost: 160 million US\$
- ▶ Name of the Consultant: SMEC Intl Pty (Australia)
- ▶ Commencement Date: November 2017.
- ▶ Completion Date: December 2020.



Major Upcoming Projects

- Dhaka-Ashulia Elevated Expressway (Feasibility Study Completed)
- Construction of Dhaka East-West (Middle Ring Road) Elevated Expressway (Feasibility Study Completed)
- Construction of Bridge on Bhulta-Araihaazar-Bancharampur-Nabinagar road over the river Meghna (Feasibility Study On going)

Major Upcoming Projects

- ▶ Construction of bridge on Patuakhali-Amtoli-Barguna-Kakchira road over the river Payra (Feasibility Study On Going)
- ▶ Construction of bridge on Bakergonj –Baufal road over the river Karkhana (Feasibility Study On Going)
- ▶ Construction of Bridge over the river Kalabadar & Tetulia (Feasibility Study On Going)

Major Upcoming Projects

- Construction of Subway in Dhaka (Feasibility in Process)
- Construction of Tunnel under the river Jamuna (Pre-Feasibility in Process)
- Construction of 2nd Padma Multipurpose Bridge at Paturia-Goalundo

Construction of Subway in Dhaka



A True Solution for Traffic Congestion in Dhaka

Construction of Tunnel under the river Jamuna

Objectives:

- ▶ to establish transportation network between north-western part with north-eastern & south-eastern part of Bangladesh.

Length: 12 km

Project cost:

- ▶ USD 6.00 Billion

Construction of Dhaka East-West (Middle Ring Road) Elevated Expressway

Objectives:

- ▶ Reducing traffic congestions in and around Dhaka through connecting three major National Highway of Bangladesh (N1, N5 and N8).
- ▶ Traffic movement from Chittagong, Sylhet & other eastern part and from south western region through proposed Padma Bridge at Mawa-Janjira to the north-western districts will be easier without entering Dhaka city.

Length: 35 km

Estimated Project cost:

- ▶ USD 1.05 Billion

Bridges in the Southern part of Bangladesh

| SI | Name of the Project | Proposed Bridge Length (KM) | Estimated Cost (M USD) |
|----|--|-----------------------------|------------------------|
| 1 | Bridge on Labukhali-Dumki-Boga-Dashmina –Amragachi road over the river Galachipa | 1.58 | 76 |
| 2 | Rahmatpur-Babuganj-Muladi-Hizla road over the river Arialkhan | 1.59 | 73 |
| 3 | Kochua-Betagi-Patuakhali-Lohalia-Kalaya road over the river Payra | 1.69 | 104 |

Bridges in the Southern part of Bangladesh

| Sl. No. | Name of the Project | Estimated Cost (M US\$) |
|---------|--|----------------------------|
| 1 | Construction of Bridge on Bhulta-Araihazar-Bancharampur-Nabinagar road over the river Meghna | 232 |
| 2 | Construction of bridge on Patuakhali-Amtoli-Barguna-Kakchira road over the river Payra | 156 |
| 3 | Construction of bridge on Bakergonj –Baufal road over the river Karkhana | 125 |
| 4 | Construction of Bridge over the river Kalabadar & Tetulia | 300 |

Thank You