

### ROUNDTABLE ON

# Padma Bridge -- New Lifeline of Development



Recently BSRM and The Daily Star organised a roundtable on "Padma Bridge -- New Lifeline of Development". Here we publish a summary of the discussions. - Editor

**Mahfuz Anam, Editor & Publisher, The Daily Star**  
We are very glad to see the recent progress of the Padma Bridge project. I want to give my sincere thanks to the PM for her relentless effort to make it happen. Now we expect timely completion of the project so that the country can reap the best out of it.

**AFM Saiful Amin, Professor, Civil Engineering Department, BUET (Keynote speaker)**  
Padma Bridge is the most challenging construction project in the history of Bangladesh. With 150 m span and 6150 m total length it is going to be the largest bridge in the Ganges-Brahmaputra-Meghna river basins of country in terms of both span and the total length. It has considerable geo-morphological challenges due to high mica content present in the subsoil. Scour depth of the river system is another big issue. The number of piles has been optimised considering the scour depth at the bridge location and also to make the bridge earthquake resistant. The base-isolation technique has been established using special types of bearings and joints. Special care is required on this critical aspect. The river training work will be a difficult task. At the bridge site, weather condition varies rapidly and unpredictably. The river continues to shift its course. So, we need to carefully monitor the ever changing geo-morphology of the river during construction and after construction as well.

In the southern region we do not have enough rail networks. The Padma Bridge will provide the missing but essential rail infrastructure to effectively connect this region on rails. There will be connecting railways on both sides of the bridge. The existing Dhaka-Mawa two-lane road needs to be expanded further at the later stage of the project. The Bridge has toll plazas and service area on both sides. The transportation mode in the bridge has been conceived in a broad context. There will be rail lines, roads, high pressure gas transmission line and fibre optic communication link in the bridge that will make it a multimodal combination.

We are largely dependent on foreign countries for primary raw materials of the construction project. This is a big constraint for us, and it increases the cost of the project. Timely completion is another important issue. Undue delay means higher cost.

We also need to consider sustainability of the project. There is a considerable fatigue issue related to already foreseen repetitive heavy loads on the bridge. As soon as the bridge goes into operation we need to start close monitoring at the critical locations of superstructure. The plan needs to be chalked out at least during construction. Corrosion is another important aspect to be considered seriously because the area has comparably high corrosive rate. We need to deploy necessary devices and sensors for intensively monitoring the scour depth at each pier locations and river training works. Overall, we are trying to enforce an international standard for the operation and maintenance of the bridge, some of which need to be started right at the construction phase. If we can complete the project successfully it would be a big boost for our regional and sub-regional connectivity. And the country will enter a new era of development.

**Professor Jamilur Reza Choudhury, Chairman of the panel of experts on Padma Bridge and Moderator of the Session**

The benefit-cost ratio of Padma Bridge is very high. We will be greatly benefited from reduced travel time. And the increased connectivity will help link the backward

## PARTICIPANTS



**Obaidul Quader**



**Jamilur Reza Choudhury**



**AFM Saiful Amin**



**Nahim Razzak**



**Shagufta Yesmin Emily**



**BM Muzammel Haque**



**Khan Mahmud Amanat**



**A.K.M. Saiful Islam**



**Mahfuz Anam**

region with rest of the country. It will be a great boost for the development of our agriculture and industry in the area. It will also connect our second most important port at Mongla and industrial zone in Khulna. Padma Bridge will provide connectivity to Asian Highway and trans-Asian railway.

**Nahim Razzak MP, Shariatpur-3**

The government has taken massive development programmes targeting the Padma Bridge. We are planning to establish a high-tech park in Shariatpur. In Bagerhat we have already started construction of an airport. The Bridge will also connect the Payra port. It will also help decentralize the government administration. Our PM has a plan of making Faridpur a separate

division. According to economists, the Bridge will add 1.66 % growth to our GDP. We will be able to bring a dramatic change in the life of the poor people of the region within next ten years.

On a different note, siltation is a massive problem in our region. Construction of the Bridge will exacerbate the problem. I would request the authority concerned to look into it seriously.

**Shagufta Yesmin Emily MP, Munshiganj - 2**  
I want to thank our communication Minister Obaidul Quader for his sincere effort to expedite the construction process. As far I know he has visited the project site 137 times which is remarkable for a minister who has been entrusted with the responsibility of overseeing all the road and bridges around the country. It shows his commitment to the project, and this level of dedication from the highest level is crucial for successful execution of a big infrastructure plan.

It is our achievement that we have successfully relocated and rehabilitated the people living in and around the project site. They have received handsome amount of money for the acquired land. We paid them more than the existing market price of land in the area. The government has also established rehabilitation zones for these people providing all modern amenities.

**Jamilur Reza Choudhury**  
The government has successfully rehabilitated 70,000 people from the project area. I personally asked many of them whether they were satisfied with the price. Almost all of them replied positively. A non-government organisation conducted the price survey. Landowners got real price of the land with 50% premium. There is also a training programme under the rehabilitation project which will provide various livelihood trainings to these people.

**BM Muzammel Haque MP, Shariatpur 1**  
The Padma Bridge is simply a blessing for the people of south-western region. They are already feeling the momentum. Previously one bigha land in my area fetched only Tk1 lac which has now soared to Tk 25 lac. Many industrialists are eager to invest in the area. After completion of the Bridge, it will take only one and half hours to reach Dhaka. So our farmers will be able to directly send their perishable products to the capital without suffering any wastage. It will also create an opportunity for developing tourism business in that area. On the whole, the Bridge will bring dramatic change in every sphere of our life.

**Jamilur Reza Choudhury**  
Padma Bridge is one of the most challenging projects in the world. We are constructing the Bridge on the second largest river flow in the world. Every second, approximately 140,000 cubic metre water flows through the project area. Twenty second flowing of that amount will be sufficient to meet one day drinking water demand of Dhaka city. Another challenge is scour depth. We have also considered earthquake related dangers. That's why we are using the second most powerful pile hammer in the world for this project.

River training is another challenge. It requires huge amount of money. Last year there was serious river erosion in the Mawa area, and as a consequence we had to change our design to cope with such types of calamities. It might take more than three years to complete the river training works.