

POINTS OF VIEW

Mahfuz Anam, Editor and Publisher, The Daily Star



For Bangladesh's dream of becoming a middle-income country by 2021 to materialise, infrastructure is a must. If you look at government investment in infrastructure in the ADP outlay starting from FY1977-78 till FY2017-18, you will see that there is clear emphasis on infrastructure-building. Bangladesh spends 2.8

percent of its GDP on infrastructure. Comparing this to neighbouring countries gives us a better picture about where we stand. India and Sri Lanka spend five percent; Vietnam spends ten percent; China spends nine percent. We seem to be spending a modest amount on infrastructure compared to these countries whereas per capita return on investment in infrastructure is higher.

Globally, Bangladesh, according to the World Economic Forum, ranks 114th out of 138 countries in infrastructure competitiveness. We rank towards the bottom. I would like to emphasise again that future growth has to be accompanied by massive investment in infrastructure.

If Bangladesh wants to spend five percent of its GDP, which is a commitment laid out in the Seventh Five Year Plan, on infrastructure development then our per year investment in infrastructure should be a minimum of USD 12 billion. Dhaka Chamber of Commerce estimated that by 2030 a total of USD 320 billion is required—nearly USD 25 billion a year, or 1.5 times the current year's budget, for infrastructure development.

But Bangladesh is not suffering from a fund crisis. The government has increased its spending on development programmes by seven times in the last decade, and donors are showing interest in investing here. A total of USD 27.6 billion is available per year. The government also identified six mega projects soon after January 2014 elections. But so far implementation has been very slow. Questions also remain on quality spending. Per kilometre cost of road construction, for example, is extremely high. These are some of the greatest challenges we are facing when it comes to infrastructure-building. The media can play a great role in bringing forward these issues if we all work together.

Engr Md Kabir Ahmed Bhuiyan, President, Civil Engineering Divisional Committee, IEB



Land acquisition eats up a bulk cost of our infrastructure projects. It also delays implementation. Therefore we should segregate land acquisition works from construction and run it simultaneously. Another major cause of delayed implementation is bureaucratic red tape. In our country, a simple construction project needs to be

approved by the top level and it takes years to get the approval. Therefore we should decentralise the decision-making authority and empower local executing agencies to plan, develop and implement local projects.

Bangladesh National Building Code has not been gazetted due to opposition from diploma engineers. They are demanding supervision authority for large infrastructures that are too complicated to be handed over to them.

Our engineering education is in chaos. Many universities are selling engineering certificates but certificate-holders do not know the basics of construction engineering. Now it has become a challenge to ensure the quality of engineering education in Bangladesh. There should be some regulatory measures to control quality of our engineering education.

Professor Dr Shamim Z Bosunia, Ex-President, Institute of Engineers Bangladesh (IEB)



It is clearly mentioned in SDG 16 that enforcement of law and order is crucial for sustainable development. This is also true for effective infrastructural development. For example, if you can't check overloading of vehicles you will not be able to ensure longevity of highways. We also need to strengthen supervision of construction projects.

There should be parallel and independent review of government projects by experts. IEB should come forward in this regard.

Many of our infrastructure projects remain ineffective due to poor planning and lack of feasibility studies. The government has built several flyovers in the city but these are contributing very little to solve our unbearable traffic situation.

Md Abu Sadeque, Director, Housing & Building Research Institute (HBRI)



Bangladesh loses three percent of its GDP due to poor management of environment and ignoring sustainable solutions. Therefore we should always take into account the environmental costs of construction. We should promote the use of environment-friendly construction materials. We lose a large amount of our top

soil in producing bricks. We can easily replace it with hollow concrete blocks which have high longevity and low maintenance cost.

We also need to reduce dependency on import of construction raw materials by promoting use of indigenous raw materials and adopting alternative building technologies. HBRI has developed alternative technologies that can reduce use of stone by 50 percent. Mass dissemination of this technology will significantly reduce import of stone in Bangladesh. Similarly, there should be research on road construction materials. There is a road research laboratory in the country. Unfortunately, it is not very active in research.

The government should immediately finalise and publish gazette of BNBC 2017. Without it we will not be able to solve the current chaotic situation of our construction sector.

Dr Khan Mahmud Amanat, Professor, Civil Engineering Department, BUET



If we can strictly enforce terms and conditions of the contract documents of construction projects, we can avoid delayed implementation and cost escalation. Therefore, we should involve legal experts from the beginning of any infrastructure project.

Bangladesh now produces high quality rod and cement. We should promote use of local construction materials in our infrastructure projects. It will significantly reduce construction cost. In the Karnaphuli tunnel project tunnel blocks are being imported from China which has increased the cost of the project manifold. But these blocks can be easily produced in Bangladesh.

Diploma engineers are demanding undue supervision authority. If the government accepts their demand in BNBC they will ask for similar authority in big infrastructure projects and that will be very dangerous for the country. Therefore, I would urge the government to gazette the BNBC 2017 immediately and without any alteration. Otherwise we might face many other Rana Plaza-like disasters in the future.

Dr Toufiq M. Seraj, Managing Director, Sheltech (Pvt) Ltd



There is no integration among the infrastructure projects in Bangladesh. As we do not have any national urbanisation plan we are doing random construction works. Here, we first build housing facilities and then think about utility connection and communication infrastructures which should actually be the other way

around. Therefore, the government should conduct rigorous studies on the development of various cities of the country, make concrete urbanisation plans, prioritise infrastructure projects and integrate all of them to ensure sustainable infrastructural development in the country.

The government should immediately implement Detailed Area Plan of Dhaka city. It has been rotting in shelves for the last 15 years.

Dr AFM Saiful Amin, Professor, Department of Civil Engineering, BUET



Investment in infrastructures should be based on national-level planning and need assessment. When infrastructure makes transformational impact on the lives of general people they will own it. It will create revenue for future maintenance of the infrastructure as well as construction of new infrastructures. Therefore, when

we build infrastructure we should carefully consider the revenue generation aspect of it. We also need to ensure integrated development of our infrastructure projects.

Architect Md. Nafizur Rahman, Deputy Director, Sustainable & Renewable Energy Development Authority (SREDA), Ministry of Power, Energy & Mineral Resources



With infrastructural development the demand of energy also increases. For example, when the construction of Padma Bridge is completed, many housing and industrial projects will be developed in the adjacent areas which will significantly increase demand for energy. We have to consider this issue seriously to fully realise the

potential of infrastructural development. SREDA is currently working with Urban Development Directorate in Mymensingh, Mirsarai Economic Zone and Payra for renewable energy integration. Our plan is to create self-sustained energy source for the newly developed urban centres through introduction of renewable energy and waste to energy technologies. For this we need huge investment. The government has already formed Bangladesh Infrastructure Finance Fund Ltd in this regard. We should also tag private banks and invest-

ment organisations in this effort. With the support of JICA, SREDA is currently providing soft loans to industries at four percent interest to make their organisations energy efficient.

Dr Sujit Kumar Bala, Professor, Institute of Water & Flood Management (IWFM), BUET



Over the years the Water Development Board has built a lot of infrastructure on water bodies, most of which is now dysfunctional. These projects have failed to achieve their goals and have high maintenance cost. They are now a burden on the government. This happened due to lack of integration in planning. The philosophy behind these projects was

also faulty because the sustainability aspect was not considered during construction of these projects. We should learn from this failure and make our future projects green and integrated with nature. We need to instill the philosophy of living with nature in our infrastructure projects.

Bangladesh is a riverine country. But we have always neglected water in our infrastructural development. Instead of developing our waterways we moved towards surface transportation. Our cities should have been built centred on water bodies. It would have made our communication system fast, efficient and sustainable.

Most of the big cities of the world were built along coastal areas. We also have similar potential to develop our 710km-long coastal areas and harness the potential of blue economy. We can also address land scarcity by creating new lands in the Bay of Bengal through land and sediment management. These issues demand serious consideration for future infrastructural development of the country.

Finally, we should ensure participation of people in the maintenance of our infrastructure.

Syed Afsor H. Uddin, CEO, PPP Authority



Bangladesh has been in an excellent position to move towards big infrastructural development. The country enjoys steady growth, low debt-to-GDP ratio (26-27 percent), and has enough financial headroom to invest heavily in construction of infrastructure. To ensure adequate funds for infrastructure projects the government is focusing on increasing public invest-

ment, involving the private sector in infrastructure-financing and attracting donors and international financiers. We have developed public-private partnership to include the private sector and banks in infrastructure projects. We are successfully implementing this model in the energy sector.

Bangladesh should develop a national infrastructure plan and prioritise transformational infrastructure projects such as multimodal transit hubs, national expressway network, etc., which have a huge socio-economic impact. We should invest more at the planning stage of an infrastructure project.

M. Firoze, Head of Marketing and Product Development, BSRM



In all the developed countries river routes and railways are used for bulk movement of goods. But we have neglected those options and opted for surface transportation system which is very costly. Here also we have failed to develop an integrated and efficient communication system. We had high hopes about the Dhaka-Chittagong four-lane high-

way. But within a year of construction it has started to crumble. Some spots of the highway have been damaged so badly that it requires capital repairing. We generally refer to overloaded vehicles for this damage. In our country overloading is not a new phenomenon and this highway is meant for transporting heavy loads. I wonder why we do not consider these given factors in our construction process. This clearly indicates a lack in planning, implementation and monitoring of infrastructure projects. We must come out of this haphazard situation.

In Bangladesh land acquisition is a big problem. It eats up the bulk of any investment. The problem exacerbates when we do industrialisation in the wrong location. For example, we have developed our export-oriented garment industry in Gazipur which is very far from the port and the industry has to bear a huge cost, both in terms of money and time, to import raw materials and export finished products through the port. I must admire the government for taking the initiative to establish Economic Zone Authority in different suitable locations to address these problems. Under this initiative the government will provide land and all other utility services to the industries. Our infrastructure projects should be integrated with this plan. We should prioritise construction of infrastructure along the national growth corridor which includes the areas of Dhaka, Chittagong and Mymensingh. We should formulate zoning plans focusing on rivers as the hubs of industrial activities.

In the construction of infrastructure we should follow the life-cycle cost approach which may increase initial cost but result in dramatically reduced operating and maintenance costs. Some rigid pavements have been built along Dhaka-Chittagong highway which has proven to be long-lasting and suitable for enduring heavy loads. This solution can be adopted in our national highways. Bangladesh should also go for elevated expressways

which will ensure the best use of our scarce land.

Professor Dr A M M Safiullah, Vice Chancellor, Ahsanullah University of Science & Technology



We have serious flaws in our thinking of infrastructural development. It is a widely recognised practice not to build flyovers within city areas. But we have done this and, most unfortunately, are continuing to do so. Due to lack of integrated planning a lot of the infrastructure remains dysfunctional. We must come out of it. We need to develop

rapid mass transit system and underground metro to solve our traffic problem. Our neighbour Calcutta is successfully addressing its traffic problem. We should learn from them. We must revive our riverine and rail routes. Finally, we should always keep in mind that you have to obey and understand nature to control it.

Dr Ahsan H Mansur, Executive Director, Policy Research Institute



Our current investment in infrastructure is three percent of GDP. But this ratio should be 10 percent which means we need to invest USD 20-30 billion in the infrastructure sector. But financing is not that big an issue here. Our major problem is ensuring value for money which means we are failing to prioritise high-yielding projects. For example, we

are investing USD 13.5 billion for the construction of Rooppur Nuclear Power Plant which will yield 2400 MW power. We can produce the same amount of power by spending only USD 2.5 billion through other power generation technologies. We are enjoying a big financial space and it does not mean we can squander money because ultimately we have to pay the debt. If big investments do not bring adequate return we will face a similar situation as Sri Lanka which is now struggling to repay debts.

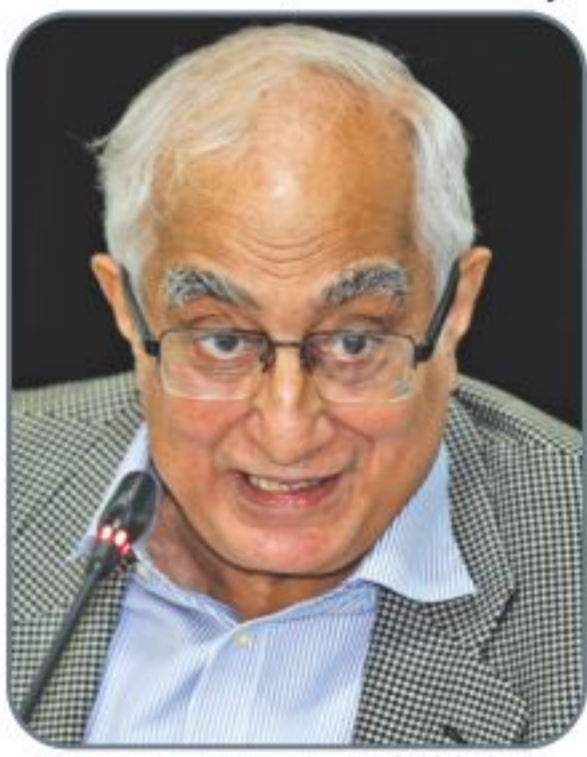
Unless and until we bring dramatic changes to our railway administration we will not be able to improve the railway sector. Our railway system needs to be business-oriented. A big investment plan worth USD 25 billion is waiting in the pipeline but our inefficient rail service system is not capable of bringing return from this huge investment. The situation of our river-transport administration is similarly awful. If we want to make our infrastructural investment meaningful we must improve our public service delivery system.

Dr Salehuddin Ahmed, Faculty, BRAC University and IUB & Moderator of the Session



Along with development of hard infrastructure we should develop soft infrastructure which includes education, health, and so on. Without developing soft infrastructure we will not be able to improve planning and management of our hard infrastructure.

Professor Dr Jamilur Reza Choudhury, Vice Chancellor, University of Asia Pacific



During the Partition East Bengal only had 600km of metal roads of which 80 percent was in Sylhet region alone. Over the years, Bangladesh has made tremendous development in infrastructure. But it could have been faster and in a better way.

We need to improve our negotiation skills in operating government-to-government (G2G) projects. These projects should be verified and vetted by independent experts.

We should create skilled manpower for project management. Most of our project directors do not have adequate expertise on the projects because they have to move from one project to another and they do not have adequate technical education to run complicated infrastructure projects.

Therefore we should create a separate cadre in the BCS exam to recruit manpower so that they are groomed to be specialists in project management. We also need to ensure corruption-free management of big projects.

In some cases the government takes loans to finance infrastructure projects at a high interest rate which may cause problems in debt-servicing in the future. Therefore all the infrastructure projects should have a revenue generation plan. There used to be a separate chapter on balance of payment in the project document which I do not see now.

We have systematically neglected our riverine and rail routes which are more efficient than surface transportation system. We should revive these modes of transportation.

Currently, the government is working on the construction of First Dhaka Elevator Express. There are some criticisms of the project. We have thoroughly studied the project. I think it will be effective as a temporary solution.

Finally, the government should prevent undue political interference in implementation of infrastructure projects which often hampers operational efficiency of a project.