

PADMA BRIDGE

Economic impact of financing from internal resources

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EARLIER my article had focused on a few socio-economic indicators needing consideration before deciding to finance the multibillion dollar Padma bridge from our own resources. Here I shall outline the negative impacts this investment might have on our economy as well as on the foreign financing proposals.

Raising the revenue income

The then government raised Tk.5.70 billion fund for the Jamuna bridge from levies and charges at a lower rate over a long period of time before onset of the construction work. So the impact and incidence of the levies and charges were not felt in the economy. In case of the Padma bridge the government will have only 3 years to raise funds for the project. So the rate of levies must be high which will put a huge burden on the already over burdened net family income.

The impact and incidence of higher levies may lead to economic disarray and socio-political uprising.

Diverting funds from development projects will slow down or stop implementation of the infrastructure development projects of prime importance in sectors like Roads, Gas, Electricity, Education, etc. This slow down in infrastructure development projects will adversely affect the future national economic growth.

Bank borrowing

Bank borrowing will shrink the industrial and commercial financing ability of the banking system which is already in a poor shape due to the stock market collapse, Hall Mark and Destiny graft cases.

Other sources

The other possible sources are issue of local and international bonds including Wage Earner bonds or raising fund from the stock market. The cost of funds from all these sources will be much higher than workable level for projects like this. Raising funds from the stock market to invest in the long-term bridge project may put the ailing stock market in jeopardy.

Finally, even in the current world economic slowdown, our foreign remittance, good harvests and export earnings are keeping the country's development wheel moving. Investing funds from these earnings may put the country's economy in the "vicious circle."

Despite the finance minister's heroic warning "no graft will be allowed to take place in the execution of the bridge project." Funding the bridge from own sources might open the avenues to give birth to many Hall-Marks in the situation, where tender boxes for few lacs taka are snatched away. There will be the possibilities to increase the bridge cost significantly, in "BTCL style" for procuring the bridge materials. Apart from this, the enactment of the draft PPP Act-2013 into law, with Indemnity to PPP office, might also pave the way to graft and corruption.

The quality aspect

The multibillion dollar bridge should have a minimum effective life 150 years, so the quality of the construction work must be of highest standard with best quality materials. This quality might not be possible if materials are procured through supplier's credit. In the absence of the finance from sources like World Bank, ADB, JICA, IDB, etc. the highly reputed



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international companies might not show interest to do the supervisory works of the bridge. This is also a hindrance to get quality work done. **Foreign investment offers** Countries like, India, Malaysia and China are showing interests in the bridge project. In these financing proposals the issues to be considered are the cost of fund, work speed, technological ability and experience of the country concerned in construction of bridges of such magnitude. The interest rate and other related issues of the proposals must also be viewed with care. For example, if it is a hard term loan with interest of 4.5% the loan amount will be doubled in 16 years. The interest rate of the World Bank would have been about 0.6%

with 35 to 40 years repayment period.

The communication minister has confirmed the local media that the government will sign MoU with Malaysia on February 21 for a total loan of US\$2.19 billion. The Malaysian companies will implement the project. The interest rate and other issues will be negotiated later. Rate of interest, grace and repayment period are the major deciding factors of any loan. If the MoU is signed without discussing these major issues the other party may have the upper hand or the opportunity to dictate terms.

It seems like, putting the cart before the horse. The question also arises, "does Malaysia have enough experience, expertise and speed to build a bridge like the Padma Bridge?"

As has been reported, India has offered US\$1.00 billion loan, diverting most of it from the already committed infrastructure development projects. India's offer of fund does not seem to be enough for the requirement. The fund volume, ability, experience and speed of India also to be evaluated. Both Malaysia and India might not be able to deliver the product within the stipulated time of 3 years.

The Chinese offer

The China Railway Engineering Corporation has proposed the government of Bangladesh with an offer, even better than World Bank on BOT (Build-Own-Transfer) basis without or at much favourable interest on an investment of 2.00 billion US dollar.

They will complete the work within 3 years on the present two tire multipurpose bridge. If this offer is accepted, Bangladesh will need to invest only US\$900 million which the country can comfortably afford within the project period. The Chinese propose to procure all the required materials on their own and will allow appointment of International supervisory company to monitor the project including quality and other aspects of the bridge works.

China has also the ability, experience and speed in the construction of bridges like Padma bridge. They also have the experience to build the world famous 36 km Hangzhou Bay Bridge in China. Among the three, the Chinese offer looks best in all respects.

The election commitment

To fulfill its election commitment the present government, in the changed circumstances, is pushing to start the construction work of the bridge too hastily. The hurry

might lead to selection of a wrong or a less beneficial alternative. As the construction of the approach road on both sides of the bridge and material yard will begin from February 28, 2013, at an estimated cost of Tk.1,337 crore. The investment on the approach road will become a "dead investment," for such period until the bridge becomes functional.

In view of the situation, the following points demand consideration of the government:

1. The government may put a "pause" on the speed of the declared "time frame" to start construction work of the bridge and give enough time to the concerned departments and experts to carefully review the socio-economic indicators, financing alternatives mentioned, and select the most favourable one.

2. The government may also seat down with the opposition leaders to discuss related issues to come to a consensus on the favourable financing alternative. This will leave no room for future political disagreements and criticisms.

The above steps will bring the "political will" and technical and financial compatibility to an equilibrium giving birth to an efficient, safe and beneficial Padma Bridge of our national pride, ensuring harnessed economic growth of the country's south-western region of and the country as a whole to materialise the dream of making our beloved motherland a nation of "mid-level income group" country within a shortest possible time.

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Is the concept of nuclear safety clear to us?

ABDUL MATIN

SINCE signing the US\$500 million loan agreement with Russia in financing the construction of the first nuclear power plant at Rooppur, the issue of the nuclear plant's safety has surfaced again. People have particularly become skeptical on this issue after two major nuclear accidents took place: one at Chernobyl, now in Ukraine, in 1986 and another at Fukushima in Japan in 2011.

At a discussion organised by the Forum for Energy Reporters at the auditorium of Bangladesh Atomic Energy Commission, the State Minister for Science and Technology tried to assure the public about the safety of the proposed nuclear plant at Rooppur. "The IAEA [International Atomic Energy Agency] will oversee the safety measures at each level of installation. And Russia has assured us of ensuring safety of the project," he said.

The minister must be trying hard to make the nuclear plant safe but the fact of the matter is that neither the IAEA nor Russia will be responsible for the safety of nuclear power plants in Bangladesh. It is probable that the minister was wrongly advised on the concept of nuclear safety. We should make clarify the concept before we proceed with our plans in building any nuclear power plant. The responsible authority to ensure nuclear safety will be the Bangladesh Nuclear Energy Regulatory Authority (BNERA).

The function of the IAEA regarding nuclear safety is strictly advisory. The IAEA has developed safety standards which "provide a system of fundamental safety principles, safety requirements and safety guides for ensuring safety." The IAEA has no statutory power to enforce safety regulations and hence cannot be held responsible for any nuclear accidents in a member state.

It is true that the VVER-1000 reactors which Bangladesh intends to buy from Russia are safer than those of the pressure tube-type boiling water reactor (RBMK) of Chernobyl with no

containment building or the pressure vessel-type boiling water reactors of Fukushima with an older version of containment buildings.

VVER-1000 reactors are built with multiple barriers to prevent release of radioactivity into the atmosphere. The generation-III reactors incorporate passive safety systems that come into operation without the requirement of any action by the operator. These features make the reactors safer than the generation-II reactors.

Enhanced safety features, however, provide no guarantee that nuclear accidents will not occur. They only minimise the probability of accidents. The responsibility of the vendor ceases after the hand-over of the nuclear plant to the owner/operator. The vendor thus cannot be held responsible for any nuclear accidents during the operation of the plant.

The safety of a nuclear reactor depends not only on design features but also on its mode of operation, application and enforcement of safety regulations and some natural calamities. We shall make a fundamental mistake if we become complacent about reactor safety on the basis of the advisory services by the IAEA or the assurances of the reactor vendor.

Neither the reactor vendor nor IAEA will come to our rescue if, God forbids, any accident occurs at the Rooppur nuclear plant. We are legally bound to take full responsibility for any nuclear accident occurring within our territory. It is, therefore, imperative that we prepare ourselves to take this responsibility if we want to ensure the safety of our nuclear plants.

The Bangladesh Nuclear Energy Regulatory Authority (BNERA) was established very recently. This is the only legal authority to enforce nuclear safety in our country. The function of a regulatory authority is to protect public health and the environment from uses of nuclear facilities and materials. It is, therefore, essential that we build a competent, proficient, strong and independent BNERA. The regulatory authority sets standards, makes rules, issues licenses and permits. It

inspects, evaluates and investigates operating performances of nuclear facilities and uses of nuclear materials. It initiates actions against violations of safety regulations.

To ensure nuclear safety, BNERA will evaluate the site before issue of the site permit, examine the design features of nuclear plants before approval of the preliminary and the final safety analysis reports, inspect the plant during construction to ensure conformity of design parameters with actual construction, issue licenses to the plant operators after rigorous tests and inspect the plant during operation to enforce adherence to prescribed operating practices. It will also ensure safety during transportation, handling and storage of all nuclear materials.

BNERA may require 30-40 professionals to start with its regulatory functions. It will take several years to recruit and train the required engineers and scientists in very specialised fields. It may be mentioned here that the US Nuclear Regulatory Commission (NRC) has an annual budget of \$1 billion and employs 4,000 people. The Canadian Nuclear Safety Commission (CNSC) employs 800, Korea Institute of Nuclear Safety (KINS) 420 and Indian Nuclear Regulatory Body (AERB) 250 people.

Let us not undermine the role of the BNERA in ensuring nuclear safety. Complacency and dependence on others will not help. As the owner of the plant, we should insist that all safety features of the plant conform to US or European safety standards. BNERA should ensure this conformity. Let us constitute the regulatory authority and the operation teams of the plant with the best talents available in the country and train them properly in the trades. Let the assurance of safety come from the plant operators and the BNERA, not from anyone else.

Let me repeat that any attempt to compromise with nuclear safety can have dangerous consequences.

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M. EMAMUL HAQUE

SURPRISINGLY, four years have swiftly passed since the death of your band of brothers. In these 48 months your silences ringed out loud and clear in our lives. I know that in line with the laws of existence, we will hear you speak no more. We may try but won't be able to comprehend what went through your minds that fateful day and night. Did you notice the sun shining, the birds chirping either in alarm or silent and frightened away by the gunfire and explosions of the handful of cowards methodically exterminating the brave sentinels of my beloved motherland?

It pains me to think what other thoughts raced through your worried mind. Did you long to talk to your wife and children and siblings? I wonder what you would have done had you known that one of your child was covering in sheer raw fear of dear life within walking distance from you. Would you have been able to maintain the Soldiers poise if you had known that your wife and daughter are separated; one imprisoned and the other at school?

I am sure some such thoughts must have raced through your mind. Your thoughts were obviously overshadowed by the sense of duty to help bring the situation under command.

But one thing is clear: Out of sheer raw bravery as a Soldier, you displayed purpose and commitment when you ventured out -- unarmed amidst a nest of fully-armed-to-the-teeth dastardly traitors -- at the command of your General, towards your destiny, the destiny which every true soldier dreams of -- to become a veteran or a martyr -- a Shaheed.

Today, in a far away land, displayed on my desk are your photographs -- pictures showing you in service uniform, as an ace Golfer and one capturing a moment of you as command of a sector in Georgia.

In your early years, you were a good debater, showing a glimpse of your talent as a natural speaker. There was something electric about the way you spoke, giving off a burst of energy for the audience to absorb. That vigor yet keeps me going when my spirits are low because, as the poet said "I have prom-

ises to keep and miles to go and miles to go before I sleep."

Dada, your departure was unexpected and sudden, you could have offered so much more to those you loved and to the motherland. Alas, dear Dada, it hurts to realise that we will not communicate any more the way we used to in the not so distant past.

Although you were, are my eldest brother, you never took offence but instead remained elder brotherly calm and steadfast to your philosophical views. You displayed confidence and without any ambiguity, you forcefully reiterated that when it came to integrity, there is no option but to lead decent and honourable lives.

I last saw my dear brother, Colonel Mojib's face, peaceful, devoid of life, at the mortuary of CMH. And I also remember his firm and alert face salut-



ing the dais at the 2009 Annual BDR Parade, just a few days earlier. So much had changed within these few days and so much did not happen that ought to have, it is indeed a conundrum. That lifeless face was the face of a humble and calm self. His graying mustache camouflaged his last facial expressions when the cowards and hyenas gunned him down on February 25, 2009.

Dear Dada, sadly, many amongst us, find enough reasons to be skeptical about the future. In your motherland people are still suffering meaningless, untimely and violent deaths. Only recently, an innocent apprentice tailor by the name of Biswajit was extremely brutally slaughtered in broad day-light in plain view of a large general citizen, over 100 innocent ready-made-garment workers lives turned into ashes, their charred bodies dumped in body-bags,

written in anonymous graves, awaiting DNA identification.

This, unfortunately, has become the way of the world in our unique brand of democracy. However, in spite of such hopelessness, I see a flicker of light at the end of tunnel, in the form of our youth. I trust, hope and pray that they shall turn their back on such heinous and putrefied political culture.

The youth are blessed by the legacy of the band of martyred officers, the lesson of patriotism. Unbeknown to the traitorous perpetrators, the youth is aware of the truth and is looking forward to its revelation and justice. Our youth have witnessed your bravery and they feel proud that this nation produced sons like you all. They appreciate the strength of your convictions.

I feel confident that they will not get caught up in the present social petti-

ness. They have a promise to fulfill, and they know the debt they own you all and the promise they have made to you and to the nation. We have weaved a history through such sacrifices and our youth are donned in red and green, the colours of the motherland's standard.

I reassure you, if you can feel this that they observe everything and they shall not disappoint you.

You must have seen them, their vigor and spirit in recent time at Shahbagh. This time around, they will neither quit nor will they remain quiet anymore.

Today, on Shaheed Shena Dibosh, we remember all of you with tears in our eyes and gratitude in our hearts and hope in our minds.

May you all rest in peace, Ameen.

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