India’s Tipaimukh Dam and Bangladesh’s Policy Response: an Analysis
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ABSTRACT. India has undertaken the Tipaimukh project on the Barak River. This river is very important for the north-eastern region of the country. Once built, this project will have various adverse impacts on Bangladesh. Though India has repeatedly said that she will not do anything that is damaging for Bangladesh, the project has only been deferred temporarily. This paper analyzes all the policy alternatives that Bangladesh has at her disposal and argues that the only feasible option that the country has is to ask India for the closure of the project.

1. INTRODUCTION

Tipaimukh dam is a hydroelectric project, proposed unilaterally by India, to be built on the Barak River – an international river that crosses into Bangladesh, divulges into Surma and Kushiara and creates the third largest river system of the country. The project received environmental clearance approval in 2008 from the Indian authority. This 319 square km project is just 100 km off the Bangladesh border and would require the relocation of 50,000-60,000 indigenous people. The desired benefit from the project is 1500MW of power generation while it will put enormous environmental, economic and social costs on Bangladesh.

The organization of the paper is as follows – this introductory section is followed by a discussion of anthropocentric and non-anthropocentric perspectives, water as a commodity and legal aspects. Then the study analyzes the impacts of the project, if completed, on Bangladesh. Discussion on a regional strategic response is presented next. The paper then specifies the policy options, sets the criteria for policy evaluation and appraises all the options individually and makes the best possible policy suggestion.

2. PHILOSOPHICAL AND LEGAL VIEWS

Anthropocentric and Non-Anthropocentric views: Though anthropocentric (utilitarian) views would usually support projects like dam, the situation is much different here. Because this project would benefit one country at the expense of the other (even it will displace many of the indigenous people in the home country). From a non-anthropocentric viewpoint it’s not an acceptable project as it would change the environment. For instance, humans, an element of the environment, try to be its master by controlling nature. But all members of the ecosystem have rights and hence it’s immoral to exploit and destroy the ecosystem [1]. In a similar line, it has been argued that while dealing with environment the concentration of the ethical system should be on keeping nature unchanged and preserve the natural order and rhythm. Interference would throw the ecosystem off balance [2]. Another view is that humans need nature for their existence and conserving the nature is the way to maintain a sustainable environment. Also, poorer nations¹ receive means to subsist and survive from the nature and destroying them would eliminate the means [3]. When it comes to trans-

¹ Rich nations do get services from the nature too. But for poorer nations its relative importance is higher.
boundary water, the evidence of common normative structures leading to interstate cooperation is rather scanty. Moreover little is the evidence that international legal principles are approaching the right direction [4].

**Viewing water as a commodity:** One approach is to define water as a commodity and its allocation would depend on the demand and human valuation. Utilitarian would allocate the product according to human value. Human rights and environment are not very important here – there are just other sets of demands. Another approach is the economic way that treats water as a commodity whose price is determined by the market clearing condition of supply equals demand. However these approaches don’t resolve the international issues related to water resources. It’s very difficult to develop a satisfactory compensation mechanism when some people in another country are deprived of the resources and its related services. It’s hard to find a mid-point that would address the socio-economic, political, biophysical and ethical concerns of both countries.

**Legal Aspects:** The 1997 UN Convention on International Watercourses requires every state to refrain from undertaking any unilateral project on a trans-boundary river [5]. This has been ratified by only 16 countries and neither Bangladesh nor India has signed it. However the Ganges water treaty (article IX) of 1996 between Bangladesh and India requires both countries to negotiate and share water in all common rivers. This treaty is valid for a period of 30 years and any unilateral decision by one country violates the agreement. According to the report of the World Commission on Dams: “dams have made an important and significant contribution to human development, in too many cases an unacceptable and often unnecessary price has been paid to secure those benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment [6].” The situation becomes more complicated when the benefits are enjoyed by one country whereas it brings sufferings for another.

### 3. IMPACTS IF THE PROJECT IS COMPLETED

**Adverse Environmental impacts on Bangladesh:** Barak supplies 7-8% of Bangladesh’s total water. Two main rivers of the north-eastern region of the country, Surma and Kushiara, and their many tributaries and distributaries depend on the Barak River. These rivers help agriculture, irrigation, navigation, water supply, fisheries, wildlife and various industries (mostly fertilizer, electricity and gas). The dam will cause disruptive & poor water supply, sedimentation, reduced ground water, lower biodiversity, decreased agricultural & fish production, poor water quality, floods, fragmented ecosystems, earthquakes etc. These rivers are connected to Meghna (one of the three most important rivers of the country) and hence will cause similar impacts in the Meghna basin.

The site selected for the project is one of the most geologically active and unstable region in the world. Between 1897 and 1992, there have been 65 earthquakes that measured 6.5 or higher on the Richter scale in this area. Building a 162.8m high dam with a storage capacity of 15,900 mill cubic meters entail a potential risk for a massive disaster.

**It may cause political instability in the country:** In recent years, this issue has been dominating the political and media’s discourse in Bangladesh. There have been massive protests, rallies etc. demanding a complete annulment of the project. Given the public support toward these programs, if the current government can resolve the issue, it would be recognized as a big success.

**The rights of the indigenous people:** Also there are indigenous people (in both countries) who live and depend on the waters. They have been agitating since the initial stage of the project. According to the UN Declaration on the rights of Indigenous peoples (2008) and recommendations of the

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2 This analysis doesn’t focus on the adverse impacts on the Indian territory.
3 Two earthquakes of more than 8.5 magnitudes in the last 50 years.
4 More than 100 earthquakes have been triggered by reservoirs around the world.
sessions of UN Permanent Forum on Indigenous Issues at UN HQs (May 2009), indigenous people have the right of self determination over their land and resources and have defined rights to set their development priorities on how to manage and use their resources [7,8].

**It can be a source of future conflicts:** Concerns and tensions over the use and management of trans-boundary rivers are much more common today as water has become an increasingly important resource in this over populated and conflict-prone region. Being an upstream country, India has the potential to exploit water resources. Once the dam is built, India will have more control over the water management and can use it as a strategic device. This dam can be a source of future conflict as it would affect Bangladesh in every sphere – political, economic, financial and social.

The Awami League is ruling Bangladesh since 2007. Traditionally the Awami league and the Congress, both recognized as one of the two major parties in Bangladesh and India respectively, have a friendly relationship. In recent years Indian People’s Party (BJP) has emerged as the largest political party of India and it is currently in power. BJP has not changed India’s policy regarding Bangladesh. But both BJP and the Bangladesh Nationalist Party (Bangladesh’s other major political player) are right wing nationalist parties. If BNP comes to power, Indian government is likely to change its policies toward its neighbor. So, even if the present Indian government says that they will not do anything that harms Bangladesh that is not a credible promise. As the following table shows, only in two of the four possible cases, cooperation between the two countries is a potential outcome, given the present behavior of the parties. However, all these outcomes are not and should not be treated as equally likely.

| Bangladesh | India | Awami League | Cooperation | Non-cooperation |
|------------|-------|--------------|-------------|-----------------|
| Congress   | Cooperation | Bangladesh Nationalist Party | Non-cooperation |

### 4. BANGLADESH-INDIA-CHINA: THE BEST RESPONSE FROM A REGIONAL STRATEGIC PERSPECTIVE:

Bangladesh has expressed concerns over the Tipaimukh Multipurpose Hydroelectric Project over Barak River whereas India has expressed concerns over Chinese Government’s plan to dam and divert waters of Brahmaputra River in Tibetan Plateau. China is planning to build dams and generate 40,000 Megawatt power from the Brahmaputra and to divert 200 billion cubic meters of waters to the Yellow River for easing water shortages in Norther China. Brahmaputra flows over China (1,625 km), India (918 km) and Bangladesh (363 km). China’s project will cause disaster in the Tibetan plateau and the lower riparian countries, India’s North East and Bangladesh. For India it’s also a security question since China controls the major watersheds of the region. However, India has already constructed a number of dams on its portion of the same river for a potential electricity generation of 19,600 MW. But it was not able to divert much water because downstream Indian regions depend on it. In case of the Tipaimukh, the dam is being constructed just 150 km from the Bangladesh border and India can divert water whenever it wants. Once built, it will be a strategic tool for India to dominate Bangladesh. Bangladesh should be more proactive to these dams because, if Bangladesh allows India to build this, Bangladesh loses its moral ground to oppose China’s proposed dam.

**Past experience:** In terms of water sharing Bangladesh has a bitter experience with India. India constructed the Farakka Barrage on the Ganges – the main river over Bangladesh. This was a strategic instrument to dominate the then Pakistan. But when Bangladesh became independent, India assured that it will not do anything that harms the newly independent country. In 1974, India said that it will do a ‘trial run’ of the Barrage – which has not ended in the last 41 years. There have
been a couple of water sharing treaties between the two countries – but Bangladesh never got the stipulated share of the water. Also that project caused drying up of large parts of the country, affecting navigation and adversely influencing the environment, agriculture and fisheries. India’s dam on the Teesta River has affected the performance of Bangladesh's irrigation barrage, hurting agriculture and environment in the country's north.

5. ALTERNATIVE POLICIES AND THEIR MERITS: POLICY EVALUATION

Criteria for Policy Evaluation: Based on this exposition, we can set some general criteria to evaluate our alternatives. First, the policy should not reduce the existing level of benefits that we are receiving from these rivers and there should be no significant harm done. Any significant adverse impact or significant reductions in benefit will make the policy untenable. Second, it should be consistent with the sustainable approach to development. The policy should give proper attention to the environment, human rights (esp. right of the indigenous people and also right of future generations to some extent). Third, it should be a right move politically. India is a big factor in the domestic politics of Bangladesh. The right wing parties are generally anti-Indian and many people support them consciously knowing that. Most Bangladeshis, regardless of their party-leaning, are concerned about the ‘Tipaimukh dam’ issue and so it should be carefully dealt with. Fourth, since the major rivers of the country are transboundary in nature (originated in either India or China), Bangladesh’s response must be strategically correct. Hence, a successful policy solution will have the following characteristics -

1. It should cause no harm to the country and should not reduce the level of current benefits from the river
2. It should not be in clash with a sustainable development policy.
3. Politically right for the government
4. Should be a strategically sound policy (from the regional perspective) for the country.

Alternatives Policies: The country has the following six policy options

1. Maintaining the status quo
2. The dam is built
   a. India gets all the benefits
   b. Costs and benefits are shared by two countries
   c. Bangladesh is compensated for the damages done
   d. Bangladesh buys the benefits (electricity) from India
3. Permanent closure of the project

Alternative 1: The status quo is maintained. Adopting this policy means no change from the current situation hence no progress on the construction of the project. In that case there will be no damages or no reduction in current benefits. However, as long as the project is active in paper, doing nothing will not be a move that is right from a domestic or regional strategic viewpoint.

Alternative 2a: India builds the dam and reaps all the benefits. As elucidated earlier, it will adversely affect Bangladesh, especially the north-eastern region of the country. This policy is not consistent with sustainable development as it degrades environment and violates the rights of the indigenous people. Also it doesn’t satisfy any of the strategic criteria.

Alternative 2b: The dam is built and the costs and benefits are shared by two countries. It doesn’t satisfy the first criterion since the dam would cause a wide range of adverse impacts. It’s not sustainable as it disregards environmental concerns. Because of the conceivable adverse impacts, the general public will not support it. Strategically it would be a wrong move since it would encourage India (& China) to undertake similar projects on other trans-boundary rivers. Additionally there is a host of problems regarding how to define, evaluate and distribute the cost and benefits.
Table 2: The Summary Table of Evaluating Alternative Policies

| Policy goals                  | Views | Criterion                      |               |               |               |               |
|------------------------------|-------|--------------------------------|---------------|---------------|---------------|---------------|
|                              | Anthropocentric | Non-anthropocentric | No damage, existing benefits | Sustainable development | Politically right | Strategically right |
| 1. Status quo                | √     |                               |               |               | X             |               |
| 2a. Building dam             | X     | √                              | X             | X             | X             | X             |
| 2b. Sharing costs and benefits | X     | X                              | X             | X             | X             | X             |
| 2c. Compensation for damage  | X     | X                              | X             | X             | X             | X             |
| 2d. Sharing (buying) benefits | X     | X                              | X             | X             | X             | X             |
| 3. Stopping the project      | X     | X                              | √             | √             | √             | √             |

Supports √, Doesn’t Support X, Partially supports/doesn’t support X √.

**Alternative 2c: The dam is built and Bangladesh is compensated for damages (or lost benefits).** It doesn’t satisfy the first criteria unless the received compensation equals total loss due to the project. This argument is based on the ‘polluters pay principle’. We have to apply the collectivist position of the principle since it is between two countries. However why should India pay? This approach requires a background theory of justice and an account of entitlements. Also what do we do for India’s noncompliance? The required institutional mechanism is still nonexistent. At the international level, this approach had never been a feasible solution. For the arguments presented before, it doesn’t satisfy the criteria.

**Alternative 2d: The dam is built and Bangladesh buys the benefits (electricity) from India.** India doesn’t have any power sharing treaty with Bangladesh. India itself suffers from electricity shortage and the situation is likely to aggravate in near future because of increasing gap between expected growths of electricity demand and supply [9]. So, it is unlikely that India will have surplus electricity to sell to Bangladesh. So, it’s not a potentially feasible option. Also it doesn’t meet those criteria outlined before.

**Alternative 3: Stopping the project.** If the project is permanently stopped – no harm is done and Bangladesh receives the existing level of services from the water resource. No impact on the environment or on the indigenous people. As regards, domestic politics and regional strategy, this option is the best one.

6. CONCLUSION

The foreign ministry has the key role to play here and it is necessary to set the course of action of the ministry. The ministry should deal this issue with one of the world’s emerging superpowers carefully. In recent months the relationship between the two countries has improved significantly. Bangladesh has given transit and other facilities that were long demanded by India. India also assured that it will not do anything in the Tipaimukh that hurts Bangladesh. However the project has not been dropped permanently. Bangladesh should take resort of bi-lateral diplomacy to make India stop the project permanently. India has never shared the documents on the Tipaimukh hydro-electric project with Bangladesh. The first step should be asking India to make the document available. Due to massive deforestation and unplanned development the frequency and intensity of floods have increased in the region. Massive afforestation program is necessary and it is important to keep the ecosystem unharmed. Since most of the major rivers in the region are trans-boundary, integrated watershed management is required. We have a Joint River Commission (JRC) with India.
Attempts should be made to make it more effective emphasizing an integrated management of the trans-boundary rivers. If bi-lateral diplomacy fails, we can explore other avenues like UN intervention.

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