

# Title: Impact of Asian Development Bank (ADB) investment in the Water Sector in Bangladesh.

**Author:** zakir kibria  
Executive Director, BanglaPraxis  
R # 7, H # 22, Rupnagar R/A, Mirpur – 2, Dhaka, Bangladesh  
E-mail: [banglapraxis@yahoo.com](mailto:banglapraxis@yahoo.com)

**1 Introduction:** Water is so central to the lives of rural communities in Bangladesh that anything that affects these resources has livelihood implications. Bangladesh is a country where agricultural production is the mainstay of the rural communities' livelihood system, and therefore livelihood strategies are inextricably linked to the nation's water resources management. Indeed, the river system, most of which emanate from outside the country, have shaped much of the history, economy and culture of the people.

However, with a burgeoning population of 129 million expected to rise to 181 million by 2025 and 224 million by 2050, the county faces many challenges in the water sector ahead. Rapid urbanization is expected with 40% of the people living in the towns and major cities by 2025, and 60% by 2050<sup>1</sup>. Poverty is still endemic with over half the population classified as poor<sup>2</sup>. The recent discovery of arsenic contamination of the shallow aquifer has set back success in bringing safe drinking water supply to the rural communities. The "green revolution" model of agriculture of intensifying production has almost reached its limit<sup>3</sup>. Aquatic bio-diversity and natural environment are under severe threat from changes in flood plain management in the last three decades.

These changes take place within a social and institutional setting that is crucial in defining how the water is managed and allocated, and in particular the form that rights and entitlements of access of resources held by different sections of the community take. These changes of management of water, and the context, within which they take place, are increasingly being influenced and shaped by powerful international and multilateral institutions, donors and international financial institutions (IFIs) like ADB.

The recent review of ADB Water Policy is an interesting opportunity to understand its relevance to National Water Policy and impact of ADB funded projects in the water sector of Bangladesh.

**2 Objective of the Study:** This study will investigate and analyze the relevance of ADB Water Policy to Bangladesh National Water Policy and the impact of ADB funded water sector projects in Bangladesh.

#### Specific objective(s):

- a. Describe the overview of the water sector in Bangladesh.
- b. Describe the genealogy and salient features of Bangladesh National Water Policy
- c. Analyze ADB Water Policy and its relevance to Bangladesh National Water Policy.
- d. Investigate social and environmental impacts of ADB funded water projects in Bangladesh
- e. Investigate peoples participation in ADB funded water projects in Bangladesh.
- f. Provide recommendations for further change.

**3 Scope of the Study:** This study will primarily focus on ADB investment in irrigation and Integrated Water Resource Management (IWRM), which also include river management. In Bangladesh the ADB funding in water sector has been concentrated in flood control and irrigation (FCDI) sector. ADB lending in this sector is increasing with a number of on-going projects, and further projects are in the pipeline. In recent times the ADB has renewed its intervention in public water and sanitary (WatSan)

---

<sup>1</sup> National Water Management Action Plan (Government of Bangladesh, 2001)

<sup>2</sup> There are debates about the "calorie-intake" methodology of poverty estimate, for reasons of space I will not elaborate.

<sup>3</sup> For a detail discussion of "green revolution" agriculture (HYV + chemical fertilizer + irrigated water + pesticide) see Shiva (2001)

utilities. These include structural upgrading of existing facilities<sup>4</sup>, reform of the policy framework, cost recovery and facilitate private sector participation.

#### 4 Methodology:

Methodology used for this study:

- a. Primary and secondary literature review (national policy and programmatic documents on water sector, ADB documents, and academic literature on water resources management in Bangladesh).
- b. Interview with government officials, NGOs, and project affected people.
- c. Community meeting: group discussion with project affected community.
- d. Visiting project area.

**5. Overview of the Water Sector in Bangladesh:** This section will briefly describe the features of water sector. Bangladesh is the site of the world's largest alluvial delta, and the formation of this delta is solely associated to the very distinguished water and sediment carrying features of the mighty Ganges-Brahmaputra-Meghna (GBM) basin<sup>5</sup>. The total drainage area of these river systems is more than 1.55 million sq. km, of which about 0.12 million sq. km (7.5 percent) lies within Bangladesh. The rivers of Bangladesh form one of the largest networks of the world of about 700 rivers including tributaries, which have a total length of about 24, 140-km. The ebb and flow of these rivers sustain the agriculture, rich flora and fauna, and bio-diversity. Most of these rivers emanate from outside the country, of which 54 comes from India. While unilateral water withdrawal by India at Farakka barrage has been the most talked about issue of concern and conflict for years, there are numerous such structures on common international rivers constructed by India. One such structure is Gozaldoba dam on Indian part of Teesta River. India is constructing a cascade of hydroelectric and irrigation diversion projects on upper riparian portion of Teesta river<sup>6</sup>. Over the years Bangladesh witnessed peoples protest, outrage and frustration over international conflicts over common international rivers. There is a strong opposition in Bangladesh to the construction of dams by India on common international rivers; peoples protest over construction of Tipaimukh Multipurpose Hydroelectric Project on Barak River in Manipur is one such instance<sup>7</sup>. Numerous meetings of the Indo-Bangladesh Joint Rivers Commission (JRC)<sup>8</sup> only contribute to the frustration. As many as 44 rivers that come into Bangladesh from India has some kind of structure on them. A complete database of these structures is not available, neither there is water-sharing treaty on these rivers except for Ganges/Padma River. After years of negotiation a water sharing treaty on Ganges/Padma was signed in 1996. The Inter-linking of Rivers Project (ILRP)<sup>9</sup> of India envisages to divert water from Brahmaputra river, which will simply make this country dry as Brahmaputra carries almost 70 percent of water that comes into Bangladesh. A regional water sharing agreement on trans-boundary rivers is a prerequisite for any water management plan in Bangladesh.

The approach to water resources system management in Bangladesh has been based on structural interventions in flood control, drainage and irrigation (FCDI), culminated in National Water Policy and National Water Management Plan. Following are the different types of direct water sector interventions implemented in the country:

*Rural FCD* inland and coastal embankments and polders; regulators; small-scale FCD; river training, bank protection and river dredging.

*Urban FCD* town protection schemes, embankments, regulators, pumps etc.

---

<sup>4</sup> The World Bank and bilateral donors have been dominating in this sector and recently Japan Bank for International Cooperation (JBIC) has started to fund heavily.

<sup>5</sup> Recently activists in northeast India has been trying to deconstruct the idea of GBM as single basin. They rightly argued that Brahmaputra is a separate basin from Ganges, and the construction of GBM as single basin owes its origin the development politics in the South Asia. Brahmaputra Barak Rivers watch (BBW), an international alliance with members in Tibet, northeast India and Bangladesh, is vocal in this regard.

<sup>6</sup> See Rudra (2003) for a discussion on the construction of dams and hydroelectric projects on Teesta River. **Teesta Bachao Andolon**, a civil society alliance in Bangladesh (BanglaPraxis is a member, and the author is a campaign, media and research advisor), has been campaigning against unilateral withdrawal of Teesta river water by India.

<sup>7</sup> For more info on Tipaimukh Multipurpose Hydroelectric Project see Kibria and Laifungbam (2003).

<sup>8</sup> Joint Rivers Commission (JRC) was established on 19 March 1972 in Dhaka. There is a counterpart JRC for India and is based in New Delhi, India. JRC is responsible for 57 identified border rivers, 54 with India and 3 with Myanmar. According to the statute, the functions of JRC is to maintain liaison and conduct negotiation and dialogue between the participating countries in order to ensure the most effective joint efforts in maximizing the benefits from common river systems to both the countries

<sup>9</sup> For more information on Inter-linking of Rivers Project (ILRP) see *praxis journal*, v.1, Issue. 1, 2003

*Minor/small-scale irrigation* public sector force mode tube-wells (both deep and shallow), rubber dams; and *khal*<sup>10</sup> re-excavation.

*Major/large-scale irrigation* pumps, irrigation canal network, drainage canal network, barrages, etc.

*Flood proofing* homestead raising and construction of flood refuges.

*Flood warning systems* flood/disaster forecasting and warning, preparedness and management.

*Water supply and sanitation* piped water supply using both surface and groundwater in big cities, sanitation services in big cities etc and hand tube-wells for drinking water in rural areas.

*Dredging* augmentation of river flows and for navigation purposes.

*Cyclone protection* embankments, cyclone shelters etc.

*Hydropower generation* embankments, dams, river training, power house etc.

**5.1 ADB Water Policy:** ADB Water Policy was approved in October 2001. The Bank's policy promotes the concept of water as a "socially vital economic good". ADB's water policy has the following principal elements:

- a. **Promote a national focus on water sector reform.** The Policy seeks to change national water policies, water laws, and sector coordination arrangements; institutional capacities and information management, legal, institutional, and administrative frameworks; and develop a national action agenda for the water sector.
- b. **Foster the integrated management of water resources.** Integrated management is based on conducting comprehensive water resource assessments, and concentrating inter-linked water investments in river basins.
- c. **Delivery of water services.** Focus on water supply and sanitation (both rural and urban), irrigation and drainage, and other sub-sectors. ADB supports autonomous service providers, private sector participation, and public-private partnerships.
- d. **Conservation of water and increase system efficiencies.** This is understood in term's resource management charges to recover costs, and setting up regulation(s).
- e. **Promote regional cooperation and increase the mutually beneficial use of shared water resources within and between countries.** The focus is on the exchange of information and experiences in water sector reform. To create hydrologic and socio-environmental databases on the management of trans-boundary water resources, and implement joint projects between riparian countries.
- f. **Facilitate the exchange of water sector information and experience.** To promote stakeholder consultation and participation, increase access to basic water services, and enhance water investments in the DMCs<sup>11</sup> through public-private-community-NGO partnerships. Rights of the poor marginal communities are not asserted, they are understood as consumers.
- g. **Governance.** Promotes decentralization, building capacity, and strengthening monitoring, evaluation, and research, particularly in public sector institutions.

The Policy is linked to ADB strategy for poverty reduction. The policy also reflects ADB's strategy for private sector development.

**5.2 Bangladesh National Water Policy:** The current policy was prepared in January 1999 under the auspices of The World Bank, it came into effect in 2002. The genealogy Bangladesh National Water Policy started with The Krug Mission Report of 1957.

---

<sup>10</sup> Small creeks and canals.

<sup>11</sup> DMC: Developing Member Country

The Krug Mission Report: The United Nations produced a study on flood control and water management in East Pakistan after the disastrous floods of 1954, 1955 and 1956 that drew world attention. The most significant recommendation of the report was to create a new government corporation with comprehensive responsibilities and authorities to deal with all water and power development problems. Its major outcomes were the initiation of the process of national level water sector planning and the eventual implementation of large-scale Flood Control Drainage (FCD) and Flood Control, Drainage & Irrigation (FCDI) projects including the protection of most coastal zones against tidal flooding. Construction of Kaptai Hydroelectric Power Project, funded by export credit assistance from USAID, was recommended in this report, which displaced more than one hundred thousand indigenous people<sup>12</sup>.

The IBRD Study: The International Bank for Reconstruction and Development (IBRD) mission reviewed the EPWAPDA 1964 Master Plan in 1966 and the report agreed with the general principles regarding the importance of flood control, drainage and irrigation (FCDI). The IBRD review of 1964 Master Plan played an important role in taking decision by many donor agencies to finance large, complex schemes. IBRD Report on Land and Water Resources, Bangladesh, 1972 emphasized, in line with the dominant “green revolution” paradigm of donors, the need for quick results from water development efforts to achieve food grain self-sufficiency. It attached high priority to small and medium sized, simple, low cost, labor intensive projects. Such schemes would involve low embankments and gravity drainage. It also proposed low lift pump irrigation and tube-well irrigation.

The Flood Action Plan (FAP): After the disastrous floods of 1987 and 1988, the attention of the government of Bangladesh, as well as its development “partners”, who found massive investment opportunity, was once again focussed to floods in the country, especially in its urban areas. The Flood Plan Co-ordination Organization (FPCO) was created in 1989, with The World Bank as the lead agency, and it undertook 26 studies under a common umbrella known as the Flood Action Plan (FAP). Noteworthy among the features of FAP were (a) the attention to urban FCD and structural flood proofing, though agriculture remained the main focus of regional plans; and (b) emphasis on social and environmental impact and effect on fisheries. The report titled "The Bangladesh Water and Flood Management Strategy (BWFMS), 1995" was a follow-up to FAP and became the working policy document for the water sector that presented a framework for the development and implementation of specific programmes in water sector. It recommended a 5-year programme involving (a) preparation of National Water Policy; (b) preparation of a national water management plan; (c) strengthening of water sector organizations responsible for planning, construction, operation and maintenance; and (d) implementation of a portfolio of high priority projects.

The broad aims and objectives of the current National Water Policy are:

- a. To address issues related to the harnessing and development of all forms of water and ground water and management of these resources in an efficient and equitable manner.
- b. To ensure the availability of water to all elements of society including the poor and the underprivileged, and to take into account the particular needs of women and children.
- c. To accelerate the development of sustainable public and private water delivery systems with appropriate legal and financial measures and incentives, including delineation of water rights and water pricing.
- d. To bring institutional changes that will help decentralize the management of water resources and enhance the role of women in water management.
- e. To develop a legal and regulatory environment that will help the process of decentralization, and environmental management, and will create investment climate for the private sector in water development and management.

---

<sup>12</sup> For more information on Kaptai Hydroelectric Power project see Kibria (2004)

- f. To develop a state of knowledge and capability that will enable the country to design future water resources management plans by itself with economic efficiency, gender equity, social justice and environmental awareness to facilitate achievement of the water management objectives through broad public participation.

It is acknowledged in the Policy that the existing legislation on water will be supplemented in key areas. It is the intention of the Government that the Policy will be given effect through a National Water Code, which will outline the specific provisions of the water policy required to facilitate implementation. The views of the Government are to enact this Code by revising and consolidating the laws governing ownership, development, appropriation, utilization, conservation and protection of water resources. Subsequently, a National Water Management Plan was developed with funding from The World Bank.

There are some concerns. The Policy states that “*Water will be considered an economic resource and priced to convey its scarcity value*”<sup>13</sup>. Similarly, on pricing of surface and ground water the policy states that “*...rates are to reflect where possible, the cost of delivery*”<sup>14</sup>. The whole issue of pricing of water thus becomes crucial. The idea of “*scarcity value*” is also a complicated and dangerous one. At times “*scarcity value*” of water could greatly exceed the cost of delivery.

**5.3 ADB Funded Project:** ADB entered into the water resource management of Bangladesh, already paved by The World Bank policy interventions and projects as an investment heaven. ADB started investing in components of flood control and irrigation (FCDI) schemes already spelled out in master plans and National Water Management Plans. In recent times ADB funded six projects in the water sector of Bangladesh. There are also nine Project Preparatory Technical Assistance (PPTA)<sup>15</sup>. There are two other projects that also requires attention, a. Padma Multipurpose Bridge Project (formerly Support for Public-Private Partnership in Padma Bridge)<sup>16</sup>, and b. Chittagong Hill Tracts Rural Development<sup>17</sup>. Although they are not explicitly enlisted as water or natural resources sector investment. The Padma bridge project will have significant impact on the Padma river course, as this project will involve river training<sup>18</sup>, and, the second one, Chittagong Hill Tracts Rural Development, enlisted as a rural development project, includes water services delivery as one of its objective.

Khulna Jessore Drainage Rehabilitation Project (KJDRP)<sup>19</sup>: The ADB designed and funded the project with stated objective of reducing poverty by alleviating river drainage congestion. The project was spread over eight thana<sup>20</sup> of Khulna and Jessore district in the Southwest coastal area covering 100,600 hectares. The project area was part of Coastal Embankment Project, which the USAID funded in mid 1960s. ADB earlier funded a similar project in the area, Khulna Coastal Embankment Rehabilitation Project<sup>21</sup>, implemented between 1986 and 1993. The KJDRP aimed to achieve its objectives by rehabilitating the river drainage infrastructure, by constructing a series of sluice gates and regulators on rivers to protect the *beels* (wetland) area under project from tidal and seasonal flood and supporting agricultural extension. Local communities have been saying all along that the idea of controlling the tidal flow of the rivers will not provide solution to any problem. Rather the heavy siltation, a natural characteristic of the rivers in the region, will make the sluices and regulators redundant. The local communities opposed the project from the very beginning and suggested alternative plan, Tidal River Management, known by its acronym TRM. The ADB ignored people’s demand and went ahead with its project based on engineering solution. In the end, local communities were proved right and the project didn’t bring promised result and created massive environmental problems. The project was officially completed in 2002.

<sup>13</sup> The Bangladesh National Water Policy, p. 16

<sup>14</sup> The Bangladesh National Water Policy, p. 16

<sup>15</sup> For detail information on recent ADB loan and PPTA in the water of Bangladesh see annex # 1 and annex # 2

<sup>16</sup> PPTA: BAN35049-01

<sup>17</sup> PPTA: BAN32467-01

<sup>18</sup> The feasibility study of the Padma bridge project was funded by JICA, and JBIC is expected to fund the project. Recent information suggests that the JBIC is interested to have The World Bank, ADB, and probably other bilateral donors as co-financiers as expenditure is expected to reach more than one billion US\$.

<sup>19</sup> KJDRP: Loan 1289-BAN [SF]

<sup>20</sup> Local government Unit

<sup>21</sup> ADB, 1986. Loan 819–BAN [SF]. Total loan amount was \$16.9 million.

**6. Findings:** This section will briefly discuss the relationship between ADB Water Policy and National Water Policy, environmental impact of ADB funded projects, and peoples participation (or lack of it) in ADB funded projects.

### **6.1 The Relationship between ADB Water Policy and National Water Policy**

ADB has no specific theme or sector for water in Bangladesh, lending are classified under the theme/sector of natural resources/agriculture and rural development (IWRM and FCDI) and social infrastructure (urban water supply and sanitation for secondary towns)<sup>22</sup>. Lending in water is channeled through National Water Policy and National Water Management Plan<sup>23</sup>. Coordination with other donors is mainly through the Local Consultative Group (LCG), popularly known as the donor club<sup>24</sup>. Currently, the LCG has 22 active sector/sub-sector working groups, which meet regularly to share with each other their operational strategies and programmes, and to exchange views on development and policy issues.

The National Water Policy and ADB Water Policy has many similarity. Both policies intend to introduce cost recovery and facilitate private sector participation. The scope of the Bangladesh National Water Policy to further supplement with laws, legislation and institutional change clearly allows ADB to intervene in reforming it. A number of recent ADB lending has stated objectives to further reform policy framework clearly illustrates that<sup>25</sup>. Almost all the current lending and PPTA spells out intention to further reform the policy framework of water resource management in Bangladesh.

### **6.2 Impacts of ADB Funded Water Project: Social and Environmental**

To illustrate the environmental impact of ADB funded projects in the water sector of Bangladesh I will take the example of Khulna Jessore Drainage Rehabilitation project (KJDRP). Let me start with a quote from KJDRP project completion report (PCR), commenting on similar projects implemented in the past, the PRC said, "*These earlier interventions saved about 400,000 ha of agricultural land from salt water intrusion caused by daily tide flows and drainage congestion during monsoon. However, these projects caused catastrophic drainage congestion due to silt in the river channels, outside polders and along the sluice gates*"<sup>26</sup>. Now, if ADB experiences had shown them that blocking the natural tidal flow causes congestion and siltation along sluice gates then why they again fund a similar project to relieve river drainage congestion? A recent visit by Bank Information Center (BIC)<sup>27</sup> revealed that the project area has become an ecologically damaged zone. A number of rivers have died out because of deposit of sedimentation. Local fisher-folks dependent on open water capture fishery now have no work. Most of the regulators and sluices are not working properly because of sedimentation along the sluices. The manifestation of problems already envisioned by local communities.

Following are some of examples of problems created as result of KJDRP:

Beel Khuksia: In local language *beel* means wetlands. The Khuksia beel/wetland is situated on the bank of Hari River. An 8-vent sluice gate was constructed under the KJDRP project to drain the Khuksia beel. The catchment area of this beel is 16000 hectares spread over 51 villages. After the construction of the sluice gate, the tidal flow of Hari River couldn't come into the Khuksia beel. As a result silt deposited on the riverbed and the river has been silted up. Once local people, defying law, breached the nearby Bharatbhaina beel and let the tidal flow open so that it can release the sediment and silt in the beel, the Hari River became 30 feet deep. But now the river is totally silted up. In times of heavy rain the water can not flush out through the river and water inundates the villages.

Beel Kedaria: Caving into local peoples demand KJDRP implemented the Tidal River Management (TRM) in 600 hectares of land in Beel Kedaria. The purpose was to raise the level of the land allowing the Hari River to release its silt inside the Kedaria wetland. A 21-vent sluice gate was constructed to facilitate the process. Local communities asserted that solution is not construction of the sluice gate.

<sup>22</sup> ADB Country Strategy and Programme Update for Bangladesh, July 2003

<sup>23</sup> ADB Country Strategy and Programme Update for Bangladesh, July 2003

<sup>24</sup> For more information see: <http://www.lcgbangladesh.org/>

<sup>25</sup> A look into the annex # 1 and # 2 will clearly illustrate that.

<sup>26</sup> ADB 2004. PCR: BAN 21087.

<sup>27</sup> Richard Mahapatra, South Asia Coordinator, Bank Information Center (BIC) recently visited the KJDRP area.

They demeaned that the embankment should be breached in a location suggested by local community. The local community also suggested that sediment/silt will be deposited along the sluice gate. Their suggestions were not taken into account and the 21-vent sluice gate was constructed, and 6 km downstream from the point suggested by the local community. Now, the sluice gate is blocked and congested with deposited sediment/silt and water inside the Kedaria beel/wetland can not go out with the low tide. Gradually, sediment deposited on the bed of the Hari River. Now, in times of heavy rain or flood, Hari River can't flush out the water and villages along it have become perennially waterlogged. Local communities have submitted memorandum government to authority, and demanding excavation of the Hari River.

Beel Panjira, Pathra and Burulia: These three beel/wetlands are situated adjacent to each other. They are on the upper Bhadra River basin. Under the KJDRP, two sluice gates were constructed to drain these beels (sluice gate number 2409 and 2410, having three and four vents respectively). The catchment area is about 1400 hectares, covering 21 villages. According to the local people, the downstream portion of the upper Bhadra River has silted up as its flow is regulated by the sluice gates and can not release its silt inside the *beels*.

These are a few examples of the problems created by the KJDRP project. Local communities continue to suffer from the ill effects of the KJDRP project.

### **6.3 Peoples Participation:**

To illustrate levels of community participation I will again draw examples form Khulna Jessore Drainage Rehabilitation Project (KJDRP).

The local community had earlier experiences of Coastal Embankment Project (CEP) of the sixties and the ADB's Khulna Coastal Embankment Rehabilitation. They knew from their experience and indigenous wisdom that KJDRP would create massive sedimentation along the regulators and obstruct the silt and sedimentation entering the polders resulting in loss of soil nutrient inside the polders and rise of riverbeds due to sedimentation. Local people started to mobilize and submitted petition to local government authorities. In this context, a petition was submitted to the ADB jointly by Uttaran<sup>28</sup>, CEN, ADAB, Pani Committee and a number of other NGOs<sup>29</sup>. The local community and NGOs suggested that natural tidal river flow should be allowed to enter the wetland to keep the natural sedimentation process<sup>30</sup>. They also demanded an independent environmental and social impact assessment of the project. An ADB visiting team discussed the issues with government water authorities and local NGOs and assigned an EIA<sup>31</sup>. Initially, the EIA was not being done in a participatory manner, and authorities tried to impose the already spelled out objectives of the project, but peoples campaign forced the team to investigate further, the EIA conducted by CEGIS incorporated and endorsed tidal river management (TRM) as a viable option. The report recommended 6 options and tidal river management was 6<sup>th</sup> option. While options based on constructing engineering structures would cost \$ 62 million, the TRM option would cost only \$ 0.7 million. The report also termed TRM as socially acceptable. In response to increasing community mobilization the project authorities incorporated the idea of TRM in the project. But it was not implemented in a proper way. Site selection was not done according to people's suggestions and demand, and instead of cutting the embankments, as demanded by local communities, water was ventilated through sluice gates. Making successful implementation of TRM redundant<sup>32</sup>.

**7 Recommendations:** I think that there is a need for NGOs and civil society organizations (CSOs) to mount a sustained campaign on ADB investment in the water resource management projects, engagement with ADB on Water Policy should be part of that process. I also think that we should not

<sup>28</sup> During this campaign against KJDRP, **Uttaran**, a NGO based in southwest coastal area and **Pani Committee**, a community based forum, was in a leading role. The director of **Uttaran** and several other activists of **Pani Committee** was harassed and detained by police under special powers act.

<sup>29</sup> Islam 2000.

<sup>30</sup> The concept is popularly known as Tidal River management (TRM) and has since entered the lexicon of water experts.

<sup>31</sup> CEGIS 1998.

<sup>32</sup> The Project Completion Report (PCR) of KJDRP says absolutely nothing about the people's protest and mobilization, and how ADB came to incorporate, inadequately though, a concept developed local community. ADB is structurally incapable of listening to and registering people's voices.

limit our focus only on water privatization and dams, and we should talk beyond *implementation* of ADB Water Policy and discuss overall water policy. Following are some of my demands and recommendation for further change:

- Any exercise in reviewing the *implementation* of the water will be futile, nothing short of full review of the water policy is acceptable.
- There should be an independent review of ADB funded water resources management projects much in line with World Commission on Dams (WCD) methodology with broader civil society participation.
- The on-going water policy implementation review is an attempt to weaken safeguard standard to allow ADB to finance large infrastructure projects and a public relations exercise to legitimize it.
- The case studies prepared by ADB to understand the implementation of the ADB Water Policy only looks into the projects in sanitation, not on other water projects funded by ADB.
- While funding integrated water resources management (IWRM) projects ADB should take into consideration of regional sharing of water issues and refrain from funding projects in one country that may adverse impact on co-riparian and downstream country. Although ADB Water Policy spells out the issues regional sharing but ADB funded projects on international river basin do not have in-built mechanisms to comply to regional and international policy framework in relation to international river basins.
- All ADB funded projects in the integrated water resources management (IWRM) and flood control and irrigation (FCDI) that encompass international river basins should make explicit provisions to comply to international conventions and norms in this regard and existing bilateral treaties and other arrangements.
- ADB water policy should be committed to WCD recommendations and other international conventions like UN Convention on the Law of Non-Navigational Uses of International Watercourse, Conventions and Biological Diversity (CBD) and other international conventions and norms.
- AND water policy should commit to incorporating indigenous knowledge on water management. Communities have thousand years of proven knowledge and skills to manage water, and ADB should refrain from bringing in international consultants who are not familiar with local tradition, and practice.
- ADB water policy should declare water as fundamental human rights.
- ADB water policy should not follow GATS as it enforces privatization water management facilities.
- ADB should not include agricultural out in its rate of return for the integrated water resources management (IWRM) and flood control and irrigation (FCDI) project. It increases advantage margin and economic viability of flood control projects artificially. Any AADB funded project in flood control should be justifiable in terms of its in bringing in benefits by control of flood.
- Full or partial cost recovery in irrigation project is not acceptable in irrigation projects. It is privatization of water and goes against principle of water as basic human rights. Irrigation should remain in public sector.

**References:**

- Adnan, Shapan and Sufiyan, Abu M., *State of the FAP: Contradictions between Policy Objectives and Plan Implementation*, Dhaka, Research and Advisory Services (RAS), (1993)
- Adnan, Shapan , "Wetlands vs. Drylands: The Retreat from Flood Control in the Ganges-Brahmaputra-Meghna Delta of Bangladesh". Forthcoming Research Paper. (2005)
- Asian Development Bank, Project Completion Report on the Khulna-Jessore Drainage Rehabilitation Project in Bangladesh (Loan 1289-BAN [SF]), Manila, (2004).
- Asian Development Bank, Bangladesh Country Strategy and Programme Update: 2004-2006, (2003)
- Biswas, Asit K. and Juha I. Uitto, *Sustainable development of the Ganges-Brahmaputra Meghna Basins*. United Nations University Press and Oxford University Press, (2001)
- Chadwick, Mathew and Datta, Anjan, "Water Resources Management in Bangladesh", Policy Review Paper 1, DFID.
- CEGIS, Environmental and Social Impact Assessment of Khulna-Jessore Drainage Rehabilitation Project, (1998)
- CIRDAP, (1993)
- Government of The Peoples Republic of Bangladesh, National Water Policy, (1999)
- Government of The Peoples Republic of Bangladesh, National Water Management Action Plan, (2001)
- Hughes, Ross, Shapan Adnan and Barry Dalal-Clayton, *Floodplains or Flood Plans? A Review of Approaches to Water Management in Bangladesh*. IIED and RAS. London, (1994)
- Islam, Shahidul, "People took initiatives for changing policy: a case on people's movement for coastal wetland conservation", Uttaran and Pani Committee, (2000)
- ISPAN and ICDDR, B., The Demographic, Health and Nutritional Impacts of the Meghna-Dhonogoda Embankment. Bangladesh Flood Action Plan (FAP), FAP 16 Environmental Study, Special Studies Programme, (1992)
- Kabir, Mahbub, "The Saga of a Forgotten Disaster", in praxis journal, vol. 2, issue. 1. Dhaka, (2004)
- kibria, zakir and Laifungbam, Roy, *Tipaimukh Multipurpose Hydroelectric Project: Dam or Damage?*, BanglaPraxis and CORE. Dhaka, (2003).
- kibria, zakir, "The Dam at Kaptaimukh in Bangladesh: Past Violation and Issues of Non-compliance in the Proposed Extension Plan", *Workshop Proceedings: Addressing Existing Dams*, June 14-16, 2004, Nairobi, Kenya. (UNEP), (2004).
- kibria, zakir, "Development Interventions on the Rivers of Bangladesh", A backgrounder brief, Policy Literacy Circle (PLC), 2005
- praxis journal*, v.1, Issue. 1, 2003
- Rudra, Kalyan, "Taming the Teesta", in The Ecologist Asia, Vol. 11, No. 1, January-March 2003.
- Shiva, Vandana, *The Violence of the Green Revolution: Agriculture, Ecology and Politic in the South*, Other India Press in association with RFSTE, (2001)
- WARPO, Draft Final National Water Management Plan, Volume No. 1, (2001)
- World Bank and GoB, *Proceedings of the Second Flood Action Plan Conference*, March 1-5, 1992, Dhaka, 1992
- Willcocks, Sir William, *Lectures on the Ancient System of Irrigation in Bengal and Its Application to Modern Problems*, University of Calcutta, (1930)
- WARPO, *National Water Management Plan Project, Draft Development Strategy, Vol. 1: Summary of Options*, Dhaka, (2000)
- Water Resources Planning Organization, Ministry of Water Resources, Government of Bangladesh.

**Annex # 1: Recent ADB loan in water sector**

Name of the Project	Stated Objectives and components	Investment (million US \$)	Timeframe	Loan Number
Southwest Area Integrated Water Resources Planning and Management	(i) preparing participatory integrated water management plans (IWMPs) (\$0.9 million); (ii) establishing productive and sustainable water management systems through IWMP implementation comprising (a) WMA formation and strengthening with participatory preparation of program implementation plans (\$1.5 million), (b) water management infrastructure (\$25.3 million), (c) support services for developing agriculture, fishery, and livelihood enhancement of the poor (\$3.7 million), and (d) support for establishing sustainable O&M mechanisms (\$3.3 million); and (iii) strengthening institutions (including policy and institutional framework and organizational capacities) for effective provision of services to achieve this ends and project management (\$7.9 million).	28.10	<b>Initial Listing</b> 24 July 2002 <b>Most Recent Update</b> 21 September 2005	LOAN: BAN 34418-01
Jamuna-Meghna River Erosion Mitigation Project	The Project scope comprises three parts, i.e., Part A: adaptive riverbank protection works; Part B: non-structural mitigation and social development to erosion-displaced poor; and Part C: capacity development. The Project will protect 7.0 km and 4.4 km of riverbank revetment using geo-textile sand bags in Pabna Irrigation and Rural Development Project (PIRDP) and Meghna-Dhonagoda Irrigation Project (MDIP), respectively.	42.20	<b>Initial Listing</b> 12 March 2001 <b>Most Recent Update</b> 14 February 2005	LOAN: BAN 34038-01
Small Scale Water Resources Development Sector II	The objectives will be (i) constructing sustainable water management infrastructure and establishing sustainable management institutions; (ii) strengthening operation and maintenance through institutionalizing beneficiary participation; and (iii) strengthening Government institutions that facilitate the establishment of sustainable water management.	34.00	<b>Initial Listing</b> 22 April 1999 <b>Most Recent Update</b> 4 September 2001	LOAN: BAN 30209-01
Secondary Towns Integrated Flood Protection (Phase 2)	To promote economic growth and alleviate poverty in the nine selected towns in Bangladesh by providing a flood-free and secure living environment within the framework of integrated flood protection. The integrated approach, combining river protection works with drainage and basic municipal services in low-lying areas with poor drainage systems.	80.00	<b>Initial Listing</b> 27 June 2002 <b>Most Recent Update</b> 22 June 2005	LOAN: BAN 26427-01
Emergency Flood	The objective of the Project is to sustain economic development by supporting the	180.00	<b>Initial Listing</b>	LOAN: BAN

Damage Rehabilitation Project	Government's efforts to rehabilitate high-priority and essential infrastructure damaged by the 2004 floods in Bangladesh. The Project also includes capacity building and training to strengthen the Government's disaster preparedness through adoption of flood-resistant infrastructure design standards, and preparatory work to enhance early warning systems.		17 November 2004 <b>Most Recent Update</b> 17 April 2005	38625-01
Flood Damage Rehabilitation Project	The Project consists of restoration and rehabilitation of flood damaged facilities in six key sectors: (i) roads; (ii) rural infrastructure; (iii) water resources; (iv) railways; (v) urban infrastructure; and (vi) education; and includes civil works, equipment and materials, and consulting services for project design, evaluation, and implementation.	104.00	<b>Initial Listing</b> 26 October 1998 <b>Most Recent Update</b> 13 August 1999	LOAN: BAN 32501-01

**Annex # 2: Recent ADB technical assistance grants in water sector**

Name of the project	Stated objective and components	Investment (million \$)	Timeframe	Number
Command Area Development Project II	The TA will assist the Government to design an investment project that is suitable for external financing in establishing participatory water management system in very large flood control, drainage, and irrigation (FCDI) schemes. The project goal is to enhance agricultural growth and poverty reduction in the concerned FCDI schemes through sustainable water management system that can operate and maintain water management infrastructure in a sustainable manner with necessary local resources mobilization.	0.6	<b>Initial Listing</b> 23 November 2004 <b>Most Recent Update</b> 13 September 2005	PPTA: BAN352 46-01
Southwest Areas Integrated Water Resources Management	The TA was implemented in two phases. Phase I strengthen regional strategy and priorities building on the regional framework of the National Water Management Plan, and prepare elaborate IWRM plans in the selected sub-regions. Phase II will prepare a comprehensive investment package through design of institutional strengthening measures for improved IWRM and service delivery, and feasibility studies of the identified priority schemes (such as rehabilitation of flood control, drainage, irrigation schemes and pilot testing of arsenic mitigation interventions).	0.9	<b>Initial Listing</b> 24 July 2002 <b>Most Recent Update</b> 25 February 2005	PPTA: BAN344 18-01
Secondary Towns Integrated Flood Protection II	The scope of the TA include: (i) to review and reconfirm the suitability of selected towns for investment under the ensuing Project; (ii) to prepare a basic plan for integrated flood protection supported by a clearly defined immediate Improvement Action Program; (iii) to determine the specific Project components to meet the priority needs; (iv) to assess the feasibility of the Project (technical, economic, financial, social and environmental); and (v) to recommend institutional arrangements for Project implementation, operation and management based on the experience of the earlier project for Secondary Towns Integrated Flood Protection Project.	0.9	<b>Initial Listing</b> 27 June 2002 <b>Most Recent Update</b> 27 November 2002	PPTA: BAN264 27-01
Jamuna and Meghna River Erosion Mitigation Project	The objectives of the TA are (i) to assist the Government to identify and design feasible measures to mitigate river bank erosion at MDIP and PIRDP that are sustainable and cost effective for agricultural lands; and (ii) to prepare the framework for sustainable river bank management and planning systems for both sites. These systems are to incorporate local participation within the institutional framework, monitoring, O&M, annual planning processes, and cost recovery mechanisms.	1.0	<b>Initial Listing</b> 12 March 2001 <b>Most Recent Update</b> 5 February 2002	PPTA: BAN340 38-01
Small Scale Water Resource	The TA comprise the following major activities: (i) review relevant water sector policy documents and water sector activities; (ii) undertake an institutional capacity analyses of the organizations and	0.4	<b>Initial Listing</b> 22 April 1999	PPTA: BAN302 09-01

s Develop ment Sector II	institutions presently involved in or with a mandate for small scale water sector development, (iii) review and update the completed appraisal studies on sample subprojects, (iv) recommend ways to operationalize the integrated water management concept through an appropriate institutional framework; (iv) define activities to be undertaken within the context of the sector project; and (v) develop a sector investment package for sustainable small-scale water management interventions.		<b>Most Recent Update</b> 14 January 2000	
Kalni-Kushiyara River Improvement	The proposed TA assist the Government in preparing an investment project based on the feasibility study undertaken by Canadian International Development Agency (CIDA) for the Kalni-Kushiyara River Management Project. The scope of the Project consists of four integrated components: (i) Review of Project Design and Verification of Impact; (ii) Development of Financing Mechanisms for River Management; (iii) Establishing a Sustainable Institutional Mechanism for River Management; and (iv) Identification of a Policy Dialogue Agenda.	0.5	<b>Initial Listing</b> 14 July 1999 <b>Most Recent Update</b> 1 October 1999	PPTA: BAN294 44-01
Padma Multipurpose Bridge Project (formerly Support for Public-Private Partnership in Padma Bridge)	The proposed PPTA will to prepare the proposed Padma Bridge Project for consideration for ADB financing. It will build upon the feasibility study carried out by consultants to confirm the technical, economic, and financial viability of the project, as well as prepare all the required studies and documentation to ensure that The PPTA will also formulate, analyze and recommend different options for attracting private financing for the project, including public-private partnerships.	0.8	<b>Initial Listing</b> 15 February 2005 <b>Most Recent Update</b> 27 July 2005	PPTA: BAN350 49-01
Dhaka Water Supply and Sanitation	The Project will be designed to provide a sustainable and safe water supply facilities in Dhaka to (i) improve health conditions and introduce public health and hygiene concepts, (ii) enhance the standard of living and quality of life of households, and (iii) accelerate industrial and commercial development. The improvements in physical facilities will be complemented with institutional development, focused on improving operational efficiencies, reducing wastage, strengthening cost recovery and financial management, and institutionalizing the community participation approach to water supply facilities to ensure the long-term sustainability of the benefits. The TA will critically review the performance of the earlier projects implemented by Dhaka WASA and incorporate the lessons learned in the ensuing project. The TA will include: (i) Updating of the master plan of the water supply system for Dhaka. This will include review of existing and projected water demand, study and performance of existing	1.0	<b>Initial Listing</b> 19 July 2005 <b>Most Recent Update</b> 1 September 2005	PPTA: BAN394 05-01

	resources, and development of potential surface water sources and new groundwater fields, rehabilitation of existing tube wells, and, rehabilitation and expansion of water supply distribution network for improvements in coverage and service levels. The TA will undertake investigation, review of earlier studies, detailed designs of selected components, and review of private sector participation in the development/management of various components of the project; and (ii) Improvements in operational efficiency through institutional development and improved management of Dhaka WASA.			
Secondary Towns Water Supply and Sanitation	The TA will prepare a project that is suitable for ADB financing. The Project will be designed to provide sustainable and safe water supply and sanitation facilities in selected district towns to (i) improve health conditions and introduce public health and hygiene concepts, (ii) enhance the standard of living and quality of life of households, and (iii) accelerate industrial and commercial development. The improvements in physical facilities will be complemented with institutional development, focused on improving operational efficiencies, reducing wastage, strengthening cost recovery and financial management, and institutionalizing the community participation approach to water supply facilities to ensure the long-term sustainability of the benefits. The TA will critically review the performance of the earlier phase of the Project and incorporate the lessons learned in the ensuing Project. Following that integrated approach, the project will improve water supply services in two phases: (i) rehabilitate the existing water supply facilities, and (ii) expand the service coverage to meet the future water demand. This will ensure that the investments are cost effective. The control of wastage will be an important feature of the design, and include bulk metering to monitor the production and distribution process. Environmental sanitation services, such as solid waste management, public latrines, and wastewater management under the responsibility of pourashavas/municipalities, will be complemented by a Household Environmental Sanitation Program covering latrines, hygiene education, and wastewater and solid waste management. The Project (tentatively) will have three parts: Part A: Water Supply Services; Part B: Environmental Sanitation Services; and Part C: Project Management and Institutional Development.	0.8	<b>Initial Listing</b> 20 January 2004 <b>Most Recent Update</b> 28 December 2004	PPTA: BAN362 97-01
Social Development for Erosion-Affected Poor in the	Its specific objective is to pilot and establish a community-based self-help mechanism of social development for the informal settlers living on and around the flood embankments and other landless people within the Meghna-Dhonagoda Irrigation Project (MDIP) and Pabna Irrigation and Rural Development Project supported under Loan No.	0.79	<b>Initial Listing</b> 3 March 2005 <b>Most Recent Update</b>	Grant: BAN340 38-02

Jamuna-Meghna Floodplains	1941-BAN: Jamuna-Meghna River Erosion Mitigation Project.		15 September 2005	
Chittagong Hill Tracts Rural Development	The TA designed to assess the potential for rural development and infrastructure investment in CHT. The Project components include small-scale water retention structures to improve crop cultivation, and improve drinking and irrigation water supplies by enhancing land-use and watershed management.	0.5	<b>Initial Listing</b> 1 February 1999 <b>Most Recent Update</b> 1 July 1999	PPTA: BAN324 67-01