

Project Name Bangladesh-Gorai River Restoration...  
Project (GRRP)

Region South Asia

Sector Rural Development-Irrigation, Drainage and  
Flood Control

Project ID BDPE55290

Borrower Government of Bangladesh (GOB)

Implementing Agencies Bangladesh Water Development Board (BWDB)

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1. Country and Sector Background: In Bangladesh, the main focus of water management in the dry season is ensuring adequate supply for domestic, industrial, agricultural and environmental purposes. The main focus of water management in the wet season is provision of adequate flood control and drainage services. In the Southwest region, restoration/improvement of the natural river system to maintain fresh water flows to the region during the dry season is the main issue. Major policy and institutional issues to be addressed are establishment and implementation of a satisfactory institutional and policy framework for water resources management, improvement of efficiency of water sector institutions, and satisfactory operation and maintenance of water infrastructure.

2. Project Objectives: The objective of the project is to prevent environmental degradation in the Southwest region (SWR) of Bangladesh, specifically around the city of Khulna, Mongla port, coastal belt, and in mangrove forest of the "Sunderbans". This would be achieved by: (i) increasing fresh water flows during the dry season and ensuring such flows during the wet season by restoring the Gorai river; (ii) building capacity to utilize the fresh water flows effectively; and (iii) building institutional capacity to operate and maintain the restored river system on a sustainable basis. This objective would contribute significantly to sector-related goals of mitigating adverse environmental effects and ensuring environmental protection, improving local navigation, floodplain fisheries, and increasing agricultural production. Key Performance Indicators which would be used to measure achievement of the objectives are: (i) increase in fresh water flows to the SWR during dry season (January-May) through the Gorai River; (ii)

reduction in salinity levels in the SWR region, specifically, around city of Khulna, coastal belt and in the "Sunderbans"; (iii) reduction in pollution, improvement in public health and domestic and industrial water supply to Khulna town its vicinity; (iv) improvement in local navigation in the region; (v) improvements in fisheries and aquatic life in the region, and Gorai crocodile population which is an endangered specie; and (vi) growth in "Sundri" trees and other environmental habitat including the Bangla Tiger, and bio-diversity in the "Sunderbans".

3. Project Description: The components of the project are: (i) Restoration of Gorai River (Civil Works and Construction Supervision), including (a) Training Works at Gorai Mouth, and Ganges Approach to Gorai Offtake; (b) River training Works in Gorai River; and (c) Restoration of Distribution System of Gorai River; (ii) Community Development and Participation (in project water distribution and use) community development and participation program would be launched for developing understanding of the project among general public and water users, formation of groups for participating in the project, specifically, in construction of small river training works and slope stabilization through vegetation etc., in the O&M of the project works and effective utilization of the available water; (iii) Institutional Capacity Building for maintaining the restored river system on a sustainable basis. This would include, technical assistance, training, capacity for carrying out hydraulic and morphological surveys, mathematical and physical model studies, and purchase of equipment; (iv) Project Management, including monitoring and evaluation; and (v) Studies including preparation of future water sector projects, and project preparation studies.

4. Project Financing: The project cost is tentatively estimated at about US\$220 million equivalent. The tentative financing plan is: IDA US\$180 million equivalent, and Government of Bangladesh US\$40 million equivalent.

5. Project Implementation: Overall project implementation/coordination would be the responsibility of Ministry of Water Resources (MOWR) of Government of Bangladesh (GOB). A Project Steering Committee chaired by the Secretary, MOWR would have responsibility for overall coordination and monitoring, as well as for policy guidance. The committee would include members from all relevant GOB Ministries (MOWR, Fisheries, Agriculture, Environment, Local Government, Inland Navigation, Planning, Finance, Economic Relations, Joint Rivers Commission), all implementing agencies (BWDB, LGED), NGOs and private sector representatives. BWDB's Member Implementation would have responsibility for project management and civil works, while the Member O&M would have responsibility for O&M. A Project Director, Management and Monitoring Cell, Gorai River Restoration Project has been appointed for day-to-day project management. Keeping in view the complexities of the project GOB has agreed to the appointment of a panel of experts (POEs) to oversee the project preparation and design efforts as well as its implementation. Suitably qualified internationally recruited consultants would play a major role in assisting BWDB in implementation, supervision of the construction and contract management. The consultants would be designated as the Engineer for construction supervision. LGED may implement small sized works for channel restoration and use of fresh water among the local communities. For implementation of the Resettlement Action Plan an implementation arrangement like the River Bank Protection Project would be adopted. These implementation arrangement have worked very well. A unit headed by Deputy Director Resettlement would be established in the Project Director's office. In

addition to the central office in Kushtia the unit would establish field offices in the region to provide convenient service to the project affected people. For resettlement activities, the unit would be assisted by the project implementation consultants and one or two NGOs.

6. Project Sustainability: The main factor in determining the project sustainability would be extent of annual maintenance dredging that would be required to keep the channels open in the project area. This would be quantified as part of the project preparation studies and would also be the main factor in determining technical and economic viability of the project. GOB support would be necessary in providing funds for O&M of the main project works.

[Note: Flag the factors critical for the sustainability of project benefits.]

7. Lessons Learned From Past Operations in the Country/Sector: The major lessons from previous and on-going projects in Bangladesh and other countries, and which are/would be reflected in the proposed project design are: (i) upfront actions should be taken by the government for institutional reforms. In this case GOB should take actions for improving leadership of BWDB and WARPO before starting the project; (ii) review and evaluation of alternatives and selection of best solution. The detailed designs and bidding documents would be completed before approving the project; (iii) construction through internationally selected contractors and supervision with the support of qualified consultants are essential; (iv) social assessment and plan for participation of communities in the project and subsequently in its O&M is very important; (v) identification of project affected person and upfront agreement on preparation and agreement on the implementation of a Resettlement Action Plan in accordance with the World Bank Guidelines are required.

8. Poverty Category: The project not be would be a 'Program of Targeted Interventions'. The primary beneficiaries of the project would be the poorest sections of society. Over 90% of Bangladesh's poor live in rural areas. The rural poor are first victims of natural resource degradation, salinity intrusion, pollution, and reduction of fresh water and potable water supply.

9. Environmental Aspects: The project is designed to prevent environmental degradation. However, potential environmental issues to be studied during project preparation are: (i) impact, if any, of reduced flow in Ganges river below Gorai offtake; (ii) impact of civil works during construction; (iii) quantification (with more reliability) of environmental benefits, and measures needed to realize these benefits; and (iv) participation of environmental interest groups in project planning, keeping in view past experience in flood-action program in Bangladesh.

10. The project has been rated as Environmental Category 'A' taking into account the need to study potential environmental impacts listed earlier. Extensive work done under the Flood Action Plan studies, specifically the FAP 16 (Environmental Study) and subsequently the Environmental Impact Assessment Guidelines (for water sector projects) adopted by GOB, and the environmental assessment done during the pre-feasibility studies would form the basis for preparing an environmental impact assessment (EIA) for the project. As part of preparation, a plan would be prepared to minimize and mitigate the negative environmental effects. Arrangements would be made for proper implementation of environmental action plan during project implementation. The baseline surveys, and other analysis for estimating the project benefits would also

feed into the environmental impact assessment. EIA would be prepared in conformity with the Bank's guidelines (OP/BP/GP 4.01) including public consultation and transparency.

11. Some resettlement for construction of the project physical works is expected. The extent of resettlement would be determined during the project preparation. A Resettlement Action Plan for the project, which would outline principles, policies and procedures which would be applicable for land acquisition and resettlement for the project, including impacts on squatters, encroachers or settlers, would be prepared during project preparation. The RAP would be substantially based on the implementation experience of the Resettlement Action Plan (RAP) for the on-going IDA-funded River Bank Protection Project (Cr. 2791-BD) and Coastal Embankment Rehabilitation Project (Cr. 2783-BD).

Program Objective Categories: Environmentally Sustainable Development  
(EN)

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Note: This is information on an evolving project. Certain activities and/or components may not be included in the final project.

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