

**GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH**  
**Ministry of Planning**  
**Implementation Monitoring and Evaluation Division**  
**Sher-e-Bangla Nagar, Dhaka-1207.**



**FINAL REPORT**  
**MAY 2010**

***In-depth Monitoring of Removal of Drainage Congestion from the Beels adjacent to Bhabodaha Area under Jessore District (Phase-1, BWDB)***

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## EXECUTIVE SUMMARY

01. The presence of polders constructed in earl's 60 by BWDB restricts the natural tidal flows and prevents sedimentation on the low lying areas. This caused sedimentation in the peripheral rivers of polders and reduced drainage capacity. As a result, polder areas were suffering from water logging and drainage congestion for quite long periods and that in turn caused large scale environmental, social and economical degradation in the Upazila of Jessore Sadar, Manirampur, Abhaynagar, Keshobpur of Jessore district and Dumuria, Fultala, Batiaghata and Daulatpur of Khulna District. To solve this long-standing water-logging problem in the above area, the well-known Khulna-Jessore Drainage Rehabilitation Project (KJDRP) was implemented during 1994-2002. The benefit of the project sustained in the Khulna region of the KJDRP, but the northwest part of KJDRP (Jessore region) still suffers from recurrent acute water-logging arising due to non-functioning of the non-structural measures (TRM) adopted in the KJDRP in removing drainage congestion.

The problem of drainage congestion of the Beels of Bhabadah area, a project was formulated for drainage improvement from the beels adjacent to Bhabadah area raised on the recommendations of the report of the SMEC & Associates Limited. The original DPP costing to Tk. 6958.08 lakh was considered in ECNEC meeting held on 03-03-2007. Thus the project entitled "The Removal of Drainage Congestion from the Beels adjacent to Bhabodaha Area under Jessore District (Phase-1), BWDB Project" was started in the early 2007. The Revised DPP of the project costing to TK. 7360.50 lakh has also been approved by the Ministry on 9<sup>th</sup> February, 2010

02. Engineering data was collected by the Consultant during field visits in the project area. Field Data Collection covering socio-economic/demographic, agriculture, fisheries, environment and other was carried out at the selected four (4) upazilas in Abhoynagar, Keshobpur, Monirumpur and Jessore Sadr Sadar In Jessore district and additional one upazila Dumuria in Khulna district through the deployment of enumerators. The collected data were processed, compiled and analyzed.
03. The Final Report covering the scope of works as defined in the TOR includes general information on study background, study objectives, scope of works and expected outputs; description of the project, collection of relevant reports, field visits, data collection and analysis; outputs of data analysis; TRM approaches in the beels and its effectiveness; drainage congestion in Bhabadaha area with future plan; project management; problems and bottleneck; findings, recommendations and conclusion etc.
04. Implementation status of the project and quality of works at sites and accordingly outputs of data analysis has been summarized in tabular form:

Sl. No.	Item of Works	Outputs of Data Analysis
1.	Analysis of physical & financial progress as per target mentioned in DPP of the project (upazila wise) mentioning the different components (target-wise)	Actual physical and financial progresses till to date are achieved only for re-excavation of rivers in all the upazilas except Jessore. Physical progress for hydraulic structures is achieved only in Abhoynagar by about 67% while the same in Monirumpur is about 2%. The highest physical progress for re-excavation of rivers is at Monirumpur by about 100% while the lowest physical progress for the same at Abhoynagr is about 40%. Physical progress of TRM operation only in Keshobpur is about 40%. The highest financial progress for re-excavation of rivers in Keshobpur is about 49% while the lowest in Abhoynagr is about 33%. The financial progresses for hydraulic structure in Abhoynagar is about 56% while the same in Monirumpur is about 2%.
2.	Examine whether year-wise ADP allocation was inconsistent with the approved DPP provisions	Year wise ADP allocations through the FY 2006-07 to FY 2009-10 are inconsistent with the year wise investment cost mentioned in the DPP
3.	Examine whether the approved specification and design has been correctly followed in accomplishing the different works at sites	Approved specification and design has been followed in accomplishing the different works at sites of the selected upazilas



## 05. TRM approaches in the Beels and its effectiveness:

In KJDRP, 08 Beels adjacent to Bhabodaha area were selected for TRM operation where TRM was implemented only in 2 Beels namely Beel Bhaina and Beel Kedaria. TRM in East Beel Khukshia is presently under operation by BWDB. TRM in each beel is operated over a period of about 3 to 4 years depending on the deposition of silts. It was learnt from the local people that due to TRM operation in Beel Bhaina about 1500 ha of land was raised on and average by about 1m. Land development has occurred in TRM area (600 ha) of East Beel Khukshia by about 40% (240 ha) till now and accordingly land level has been raised on and average by about 2.0m in TRM area. TRM approaches in the Beels and its effectiveness have already been discussed in details in Chapter 5.

## 06. Drainage Congestion in Bhabodaha Area with Future Plan to Solve the Problem:

**Drainage Congestion in Bhabodaha Area:** Due to the construction of a series of polders in the coastal area in early's 60 by BWDB; After operation of Farakka barrage in 1972 constructed over the Ganges and as a result, polder areas including the beels adjacent to Bhabadaha area were suffering from water logging and drainage congestion for quite long periods in the Upazilas of Jessore Sadar, Manirampur, Abhaynagar and Keshobpur of Jessore district; Due to non-functioning of the TRM adopted in the KJDRP in removing drainage congestion; Failure of TRM operation in Beel Kedaria due to the non-cooperation and opposition from a section of people and accordingly, delay to start TRM implementation and operation in East Beel Khukshia

**Future Plan to solve the Problem:** Timely implementation of the physical works under the On-going Phase-1 and Proposed Phase-2 of Bhabadaha Project; Non-structural Measures by TRM Operation at the selected Beels. Ganges Barrage Project might be effective to the removal of long-standing water logging problem in Bhabadaha area.

## 07. The overall findings and accordingly recommendations made by the Consultants are summarized in tabular form:

Sl. No.	Findings	Recommendations
1.	Implementation Status and Shortfall in Project Implementation:	
1.1	The overall progress of the project is still behind the target as per DPP. The physical progress as of 31 <sup>st</sup> March, 2010 is around 47.00% and the financial progress is around 36.79%.	Though the overall progress of the project is still behind the target as per DPP and there is no scope at this moment to cover the DPP's target, Revised Implementation Schedule as per Revised DPP should be strictly followed by BWDB and the Feasibility Study and Detail Design Consultants to complete all the remaining works within the schedule time frame.
1.2	At this moment, there is no scope to cover the target mentioned in original DPP and accordingly, the target as per Revised DPP is to be achieved in future.	
1.3	The delay in the starting of project by about 9 months results in project completion by additional 12 months i.e., up to June 2012 as per proposed Revised DPP (BWDB submitted the Revised DPP to the Ministry in month of September' 09 which had already been approved on 9 <sup>th</sup> February' 10).	
1.4	The delay in recruiting the Feasibility Study and Detail Design Consultants by about two years five months also delayed in project implementation as per target mentioned in DPP.	
1.5	Lack of Contractor's resources.	Contractors should be well furnished in respect of resources & logistics during execution of works.
1.6	Price escalation of the construction materials. Accordingly, implementation cost increases substantially.	Whenever the project is prepared, a block allocation under price escalation should be considered. So that, time over run and cost over run could be avoided during project period.



1.7	Actual volume of works required as per DPP has been increased in Revised DPP.	Estimates of interventions/ infrastructure should be done properly during project formulation stage.
1.8	Delay in finalization the land acquisition and resettlement issues.	Concerned agencies should be more effective to settle land acquisition and resettlement issues
2.	Quality of Works at Sites:	
2.1	Design of BWDB works at the project area has been done following BWDB's and International Standard Design Practices. Works under the project are being carried out as per approved designs, and specifications.	Field level BWDB officials should be more active to ensure quality of works as well as quick progress of the project. BWDB field personnel should have copies of all contract documents. Work Program with targets and achievements should be available at working sites.
3.	Procurement of Works, Goods and Services:	
3.1	PPR-2008 is being followed in procurement of works, goods and services in the present project.	It seems in the extreme to eliminate low bidders who are fully responsive under PPR 2008. Technical Evaluation Committee should verify low bids carefully and low bids should be realistic to ensure the quality of works. The issues should be addressed in the amendment of PPR 2008.
3.2	Examine whether the approved specification and design has been correctly followed in accomplishing the different works at sites.	Approved specification and design has been followed in accomplishing the different works at sites of the selected upazilas.
4.	Shortfall in TRM operation:	
4.1	Delay in the payment against crops compensation due to TRM operation.	Crops compensation should be rationalized and distributed to the land owners as early as possible to get social acceptability of TRM operation.
4.2	There is no scope of compensation for the share coopers and vulnerable groups in TRM operation.	During TRM period, the area should be opened for capturing fishes to the share coopers and vulnerable groups.
4.3	Present TRM operation in East Beel Khukshia is not being done in planned way. Land development is also under disturbing by the fisheries activities like fisheries ghers.	TRM operation should be maintained in planned way as per model study and approved design and fisheries ghers should not be allowed in TRM area. Uniform land development by TRM operation should be maintained
4.4	River bank erosion of Hari river at Village Agorhati is still in action due to the TRM operation in East Beel Khukshia, which is not protected by protective works till now.	Adverse effect like river bank erosion by TRM operation should be checked carefully and accordingly protective measures against adverse effect should be taken
5.	Other vulnerable issues related to environment:	
5.1	Conservation of water bodies	Conservation of water bodies and rivers from the illegal encroachments by the homesteads, buildings etc. Stopping construction of fish ghers and adverse fishing activities in the rivers and khal.

8. It can be expected that the implementation of the project would be helpful in the achievement of its objectives i.e., to devise a long term solution of drainage problem of Bhabodah area in the context of sustainable land and water management, considering all relevant technical, social, economic and institutional aspects.