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16 2010-11

ADP No- 27

PROJECT COMPLETION REPORT(PCR) :
IMED 04/2003 (Revised)

Feasibility Study/Survey For Integrated Water Management Project of Gungiajuri Hoar Area.

Directorate of Planning-1
BWDB, 6th Floor,
WAPDA BHABAN.
Motijheel C/A, Dhaka.

Government of the People's Republic of Bangladesh
Ministry of Planning
Implementation Monitoring and Evaluation Division

PROJECT COMPLETION REPORT : IMED 04/2003 (Revised)

A. PROJECT DESCRIPTION :

01. **Name of the Project** : **Feasibility Study/Survey For Integrated Water Management Project of Gungiajuri Hoar Area**

02. **Administrative Ministry/Division** : **Ministry of Water Resources**

03. **Executing Agency** : **Bangladesh Water Development Board**

04. **Location of the Project** :

Upazilla	District
Bahubal, Baniachang, Nabigonj & Habigonj.	Habigonj

05. **Objective of the Project** : **To carryout Feasibility Study of the project for investment in the water sector to meet up the national demand of food and agriculture,fisheries, round the year navigation and sustainable environment etc .**

06. **Estimated Cost** :

(In lakh Taka)

	Original	Latest Revised
(a) Total	186.423	186.423
(b) Taka	186.423	186.423
(c) Foreign Currency	-	-
(d) Project Aid	-	-
(e) RPA	-	-

07.

Date of Approval	:	PCP/PSP	PP
(a) Original	:	11-08-2009 Vide memo no: পাসম/পরি-২(৪৭)/২০০৭/১৮০	
(b) Latest Revised	:	30-05-2010 Vide memo no: পাসম ৪২.০৪৩..০১৪.০১..০২.২০০৭.১৯৮	

08. **Implementation Period** :

	Date of Commencement	Date of Completion
(a) Original	August,2009	May,2010
(b) Latest Revised	August,2009	June,2011
(c) Actual	August,2009	June,2011

09. Financing Arrangement (Source-wise) :

9.1 Status of Loan/Grant

a) Foreign Financing : Not Applicable

Source (s)	Currency as per Agreement	Amount in US $,(Million)	Nature (Loan/Grant/ supplier's/ credit)	Date of Agreement	Date of Effective -ness	Date of Closing	
						Original	Revised
1	2	3	4	5	6	7	8

b) GOB :

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
186.423	-	186.423	-

9.2 Utilization of Project Aid/Grant : (Source wise)

(In million)

Source (s)	Total Amount		Actual Expenditure		Unutilized Amount	
	In US $	In Local Currency	In US $	In Local Currency	In US $	In Local Currency
1	2	3	4	5	6	7
GoB	-	Tk 17.195	-		-	Tk 17.195

9.3 Re-imbursible Project Aid (RPA) : Not Applicable

(In lakh Taka)

R P A Amount		Amount Spent	Amount Claimed	Amount Re-imbursed	Remarks
As per PP	As per Agreement				
1	2	3	4	5	6

B. IMPLEMENTATION POSITION

01. Implementation Period :

Implementation Period as per PP		Actual Implementation period	Time Over-run (% of original implementation period)	Remarks
Original	Latest Revised			
1	2	3	4	5
August,2009 - May,2010	August,2009 - June,2011	August,2009 - June,2011	-	-

02. Cost of the Project :

(In lakh Taka)

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest revised			
1	2	3	4	5	6
TOTAL	186.423	186.423	Tk 171.95	-	-
TAKA	186.423	186.423	Tk 171.95	-	-
PA	-	-	-	-	-

03. Project Personnel : (Including BWDB Counterpart)

Sanctioned strength as per PP/PSP	Manpower employed during execution	Status of the existing manpower			Manpower Employed	
		Manpower requirement for O&M as per pp	Existing manpower for O & M	Others		
1	2	3	4	5	Male	Female
Officer (s)	32	-	-	-	165 m.m	-
Staff(s)	04	-	-	-		-
Total :	36	-	-	-	165 m.m	-

04. Training of Project Personnel (Foreign/Local) :

Field of Training /Study tour/workshop/ Seminer etc.	Provision as per PP		Actual		Remarks
	Number of person	Man - months	Number of person	Man - months	
1	2	3	4	5	6

a. Foreign : Not Applicable

b. Local : Not Applicable

05. Component-wise Progress (As per latest approved PP/PSP) :

(In lakh Taka)

Items of work (as per PP/PSP)		Unit	Target (as per PP/PSP)		Actual Progress		Reasons for deviation (±)
			Financial	Physical (Quantity)	Financial	Physical (Quantity)	
Sl	1	2	3	4	5	6	7
1.	Consultancy (4874) :						
a)	Main Consultant	Tk.	99.354	100 %	85.837	100 %	Consultant signed contract at Lower price.
b)	Mathematical Modeling Study	Tk.	59.976	100 %	59.706	100 %	
c)	EIA/SIA Study	Tk.	26.053	100 %	25.950	100 %	
	Sub Total of Consultancy		185.383		171.493		
2.	Other Allowance (4795)		0.24		0.160		
3.	Stationary (4828)		0.30		0.298		
4.	TA/DA of BWDB personnel (4801)		0.50		-		
	Toatal (1-4)		186.423		171.951		

06. Information regarding Project Director (s) :

Name & Designation with pay Scale.	Full time	Part time	Responsible for more than one project	Date of		Remarks
				Joining	Transfer	
1	2	3	4	5	6	7
Md.Azharul Islam Director 25750-1000X8-33750	-	Yes	Yes	29-01-2008	24-01-2011	The Project Director is the Team Leader stationed at Head quarter office in Dhaka.
Md Abdul Mannan Director 25750-1000X8-33750	-	Yes	Yes	25-01-2011	21-03-2011	
Md. Sarafat Hossain Khan Director 25750-1000X8-33750	-	Yes	Yes	22-03-2011	Till Now	

07. Procurement of Transport (in Nos.) : Not Applicable

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemned/ damaged with date	Remarks
1	2	3	4	5	6	7
Car						
Jeep						
Microbus						
Minibus						
Bus						
Pick-up						
Truck						
Motor Cycle						
By-cycle						
Speed Boat						
Launch						
Others with name						

08. Procurement of Goods, Works and Consultancy Services:

08.1 Goods & Works of the Project costing above Tk. 200.00 lakh and Consultancy above Tk. 100.00 lakh : **Not Applicable**

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per PP	Contracted value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7

8.2 Use of Project Consultant (s) (Foreign/Local):

a) Foreign : Not Applicable

b) Local :

Sl.	Name of the Field	Approved man month		Actual man month utilised	Remarks
		As per PP	As per contract		
	1	2	3	4	5
1.	Team Leader	10	10	10	
2.	Deputy Team leader	13	13	13	
3.	Sr.Design Engineer	5	5	5	
4.	Hydraulic Engineer/Modeller	6	6	6	
5.	Morphological Modeller	2	2	2	
6.	Economist	1	1	1	
7.	Environmentalist	1	1	1	
8.	Socio Economist	1	1	1	
9.	Agronomist	0.5	0.5	0.5	
10.	Fesieries Specialist	1	1	1	
11.	Jr. GIS Specialist	1.5	1.5	1.5	
	Jr. Auto CAD Specialist	2	2	2	
12.	Jr. Engineer	12	12	12	
13.	Jr. Data Analyst	3	3	3	
14.	Field Researcher	6	6	6	

08. Construction/Erection/Installation Tools & Equipment : Not Applicable

Description of items	Quantity (as per PP)	Quantity procured with date	Transferred to O & M with date	Disposed off as per rule with date	Balance	Remarks
1	2	3	4	5	6	7

C. FINANCIAL AND PHYSICAL PROGRAMME :

01. (a) Original and revised schedule as per PP/PSP :

(In lakh Taka)

Financial Year	Financial provision & physical target as per original PP/PSP				Financial provision & physical target as per latest revised PP/PSP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2009-2010	5.00	5.00	-	12%	5.00	5.00	-	12%
2010-2011	168.00	168.00	-	88%	168.00	168.00	-	88%

01. (b) Revised ADP allocation and progress :

(In lakh Taka)

Financial Year	Revised Allocation & target				Taka release	Expenditure & physical progress			
	Total	Taka	P.A.	Physical %		Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9	10
2009 - 2010	5.00	5.00	-	12%	5.00	5.00	5.00	-	12%
2010 - 2011	168.00	168.00	-	88%	168.00	166.95	166.95	-	88%

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT /STUDY:

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
(a)To review existing flooding and drainage system of inside and outside the Project area. (b)To examine the easibility of providing full flood control in the Project area. (c) To review the existing irrigation System. (d) To study and suggest possible interventions for surface water availability in the Project area. (e) To study the current agriculture situation and suggest measures for possible improvement . (f) To identify the areas to be suitable for fish culture. (g) To suggest measures for round the year navigation, etc. (h) To study the impact of proposed interventions on the surrounding areas.		

E. BENEFIT ANALYSIS

01. Annual Out-put: Not applicable

Items of out-put	Unit	Estimated quantity expected at full capacity	actual quantity of out-put during the 1st year of operation at full capacity (or during, real production for newly completed project).
(a) (b) (c) (d)			

02. Cost / Benefit : Not applicable

Item	Estimated	Actual
(1) Benefit cost ratio of the project (i) Financial (ii) Economic (2) Internal Rate of Return (i) Financial (ii) Economic		

03. Please give reasons for shortfall, if any, between the estimated and actual benefit:

F. MONITORING AND AUDITING

0.1 Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4

(a) Ministry / Agency:

(b) IMED :

(c) Others: (Please specify)

0.2. Auditing during and after Implementation: Not applicable

2.1. Internal Audit:

Period of Audit	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4

2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on :

1.1 Background (As per Approved PSP)

The Integrated Water Management Project of Gungiajuri Haor Area is located in Bahubal, Baniachang, Nabiganj and Habiganj thana of Habigonj district. It is bounded by the Bijna, Gungiajuri river and Hobigonj- Nabigonj road in the north, Bijna River in the East, Khowai river in the West and Dhaka-Sylhet Road in the South. Its gross area is about 17,235 ha and net area is about 13,788 ha. (Index Map Enclosed). Like other haor area, most of the project areas consist of low lying bowl type lands. The interior land elevation is lower than that of the peripheral and is insufficient to resist inflow of pre-monsoon flood water into the haor area. The Gungaijuri haor area is prone to flash flood and damages of the standing crops every year. As a result the condition of the people of the project area is deteorating day by day.

A comprehensive feasibility study was conducted of Sadar, Bahubal and Baniachang thana during 1986-1987 for solving the problems through the financial assistance of the IDA. As per recommendations of the study, BWDB took steps for implemenatation of the Gungaijuri FCD sub-project. The main objectives of the project were to protect 14000 ha area of Sadar, Bahubal and part of Baniachang thana from early flood and to remove the drainage congestion as the farmers can take steps in time for rabi crops.

Meanwhile the project area has been silted up and as such the people now want to cultivate Aman crops, which cannot be protected by submersible embankment. Moreover, they are demanding surface water for irrigation during boro season.

The area remains flooded throughout the monsoon season. The drainage of the project area is controlled by water levels in the Gungiajuri River, which drains through the Khowai (also called the Barak) river into the Kalni (also called the Dhaleshwari) river (a branch of the upper meghna). Reportedly high water levels in the Bank due to siltation at its outfall, delay drainage from the area. Hence, re-excavation of the internal drainage channels may not be fully effective.

The Karangi Peri Khal is seasonal. Unless the provision is made to divert and impounded water in the Karangi, irrigation water may not be available. The completed drainage Regulators are equipped with river side sluice gates to prevent entry of river water, but there are no country side gates to retain water for lift irrigation. Farmers use low lift pumps and manual methods to lift water from Karangi River and the khals. Also deep tube wells and shallow tube wells operate throughout the dry season in the area, indicating that ground water potential is good.

Previously the Gungiajuri FCD project was developed as the concept of partial flood protection. But now the people are demanding for full flood protection with Irrigation and Drainage. So, the executed Gungiajuri FCD project is insufficient to meet up the present demand of the people of the project as well as adjoining areas.
In the Gungiajuri FCD Project Implemented in 1986-87 to 1992-93 two polders were created in both banks of the Karangi River. The local people and reporters are demanding another polder by constructing a new embankment on the left bank of Bijna River from Khagaura Bazar to Snanghat. They are also demanding rubber dams on the Bijna and Karangi River to meet the irrigation water demand during the dry season for Boro crop production.

To solve the problems of the area, feasibility study of the area is to be taken to examine the viability for full flood protection with irrigation and drainage as per demand of the people as well as the requirement of the area.

1.2 Justification/Adequacy

Bangladesh is predominately agrarian in character. To attain the self sufficiency and increasing demand in food, it is necessary to be undertaken FCD and FCDI projects to boost up agricultural production. So, development of agriculture, flood control and water resources sector, continues to enjoy high priority in national economy.

Water resource development plays a vital role in accelerating the process of technological transformation on agriculture, planned utilization and efficient management of water resources remain to be one of the most crucial elements for achieving desired changes in agricultural production and productivity in oncoming future terms plan. Therefore, the central strategy for water resources development would be expansion of irrigation coverage and water control measures to increase the area under effective cultivation of HYV`s for the improvements in agricultural productivity and employment situation. Sectoral programme will also eliminate flood damages to crops, properties and physical infrastructure. In this broad context of national urgencies, BWDB need to have a regular and independent out fit of Planning of countinuously carry on feasibility studies of projects.

The Three Years Rolling Programme has the following major objectives:

a. Alleviation of poverty through accelerated economic growth (on an average, 7% per annum) during the plan period to bring about a noticeable improvement in the standard of living of citizens by raising their level of income and ensuring adequate supply of basic needs. Alleviation of poverty will be considered as synonymous with development.

b. Generation of substantial employment opportunities, and increase in productivity through an optimal choice of the traditional labour intensive and new capital intensive technologies;

c. Attainment of food production beyond the self-sufficiency level in the shortest possible time and higher production of diversified high valued export goods;

d. Promotion and diversification of high value-added production for exports;

e. Human resources development with emphasis on compulsory primary education, and vocational training;

f. Development of necessary infrastructure, utilities and other services needed to promote growth, particularly in the private sector;

g. Achievement of a lower population growth rate (1.20%) by the terminal year of the plan, coupled with provision of necessary health care and improved nutrition of mother and child;

h. Protection and preservation of environment, by putting in place adequate regulatory regimes and effective institutions, keeping in view optimum exploitation of natural resources for sustainable development;

i. Closing the gender gap, giving priority to woman's education, training and income rising employment generation with special support for educating the girl child;

j. Establishment of better social justice through a more equitable distribution of income, resources and opportunities, and creation of effective safety nets for the socially and economically disadvantaged section of the population.

The sectoral objectives of water resources development during the Three Years Rolling Programme are:

i To alleviate poverty and generate employment opportunities;

ii To ensure ecological balance;

iii To promote water conservation for irrigation and other uses;

iv To enhance conveyance capacity of water courses through desiltation;

v To protect towns, commercial centres, agricultural lands etc. from the erosion of inland and border rivers;

vi To control flush flood during pre-monsoon;

vii To reduce intensity of flush flood, damages of crops, properties and human sufferings etc;

viii To augment agricultural productivity and accelerate other economic works;

ix To reduce the drainage congestion during post monsoon;

x To create navigational facilities in the river & khals;

xi To explore the possibility of providing irrigation facilities;

xii To promote culture fisheries in the completed projects, establishment of fish sanctuary and culture pink pearl in the haors and rivers.

xiii To promote optimum use of available flows of the common rivers in domestic, agricultural, fisheries, navigation and industrial sectors;

xiv To fulfill the need of irrigation for achieving food grain self-sufficiency by ensuring year-round sustainable irrigation through conjunctive use of surface and ground-water thus avoiding over-extraction of sub-surface water;

xv To control floods to protect crops, lives and properties and promote both HYV rice and fish through controlled flooding;

xvi To prevent saline intrusion;

xvii To ensure active people's participation in planning implementation and maintenance of water sector projects; and

xviii To carry out studies on future water resources development projects.

xix To strengthening of training capacity of Training Institute of BWDB at different places in Bangladesh.

xx To dissemination of knowledge, experience and insights obtained from projects undertaken in Bangladesh in the past and present, like the FAP, SP, EIP, LRP, DDP, CERP and alike.

1.3 Objectives

The specific objectives of the study are as follows:

- To review existing flooding and drainage system of inside and outside the project area.
- To examine the feasibility of providing full flood control in the project area.
- To review the existing irrigation system.
- To study and suggest possible interventions for surface water availability in the project area.
- To study the current agricultural situation and suggest measures for possible improvement.
- To identify the areas to be suitable for fish culture.
- To suggest measures for round the year navigation, etc.
- To study the impact of proposed interventions on the surrounding areas.

1.4 Project revision with reasons

Original PSP: July, 2009 (Aug,2009-May,2010)	
Revised PSP : April,2010 (Aug,2009-June,2011)	**Time Extension without cost Increase**

2. Rationale of the project in respect of Concept, Design, Location and Timing. : Not Applicable

3. Brief description on planning and financing of the project and its applicability.

- **Project Identification**
- **Project Preparation**
- **Appraisal**
- **Credit Negotiation**
- **Credit Agreement**
- **Credit Effectiveness**
- **Loan Disbursement**
- **Loan Conditionalities**
- **Project Approval.**
- **Others (if any).**

Not Applicable

4. Analysis of the Post-Implementation situation and result of the project : Not Applicable

4.1 Whether the beneficiaries of the project have clear knowledge about the Target/ Objectives of the project.

4.2 Programme for use of created-facilities of the project

4.3 O & M programme of the project.

4.4 Impact of the project -

4.4.1 Direct

4.4.2 Indirect

4.5 Transfer of Technology and Institutional Building through the project

4.6 Employment generation through the project.

4.7 Possibility of Self employment

4.8 Possibility of women-employment opportunity

4.9 Women's participation in development

4.10 Probable Impact on Socio-Economic activity.

4.11 Impact on environment

4.12 Sustainability of the project

4.13 Contribution to poverty alleviation/reduction

4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.

4.15 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities.

5. Problems encountered during Implementation (with duration & steps taken to remove those)

5.1	Project Management	5.12	Project aid disbursement and reimbursment
5.2	Project Director		
5.3	Land Acquisition	5.13	Mission of the development partners.
5.4	Procurement	5.14	Time & Cost Over-run
5.5	Consultancy	5.15	Project Supervision/Inspection
5.6	Contractor	5.16	Delay in Decision
5.7	Manpower	5.17	Transport
5.8	law & Order	5.18	Training
5.9	Natural clamity	5.19	Approval
5.10	Project financing, allocation and release.	5.20	Others.
5.11	Design formulation/approval		
Time over runed without cost increase hence the time has extended for 13 month.			

6. **Remarks & Recommendations of the Project Director :**

"Feasibility Study/Survey For Integrated Water Management Project of Gungiajuri Hoar Area" has been completed on 30-06-2011. It is recommended that the project should beimplementedearly to achieve the desired objectives.

04.9.11

Date : .....

Signature and seal of the Project Director/Manager

(Md. Sarafat Hossain Khan)
Director
Planning-1, BWDB, Dhaka.

7. **Remarks/Comments of Agency Head**

Date : .....

Signature and Seal
(Md. Habibur Rahman)
Director General
Bangladesh Water Dev. Board
Dhaka.

8. **Remarks/Comments of the officer in- charge of the Ministry/Division**

Date :

Signature and Seal