2008-09

PROJECT COMPLETION REPORT: IMED 04/2003 (Revised)

Name of the Project: Urgent Rehabilitation of Pumping Facilities of G.K. Irrigation Project for Sustaining Rural Economic Development.

Administrative Ministry/Division: Ministry of Water Resources.

Executing Agency: Bangladesh Water Development Board.

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 : Urgent Rehabilitation of Pumping Facilities of G.K. Irrigation Project for Sustaining Rural Economic Development.
02. Administrative Ministry/Division : Ministry of Water Resources.
03. Executing Agency : Bangladesh Water Development Board.
04. Location of the Project : Bheramara, Kushtia.
05. Objective of the Project : Main objective of the project is to attain full Capacity of pumps.
06. Estimated Cost :

(In lakh Taka)

	Original	Latest Revised
(a) Total	20175.78	19525.31
(b) Taka	20175.78	19525.31
(c) Foreign Currency	-	-
(d) Project Aid	-	-
(e) RPA	-	-

07. Date of Approval	:	PCP	PP/DPP
(a) Original	:	26.09.2000	17.01.2001
(b) Latest Revised	:	-	21.07.2007

08. Implementation Period :

	Date of Commencement	Date of Completion
(a) Original	2000-01	2003-04 (Extended up to June 2006)
(b) Latest Revised	2000-01	2007-08 (Extended up to June 2009)
(c) Actual	2001-02	30.06.2009

09. Financing Arrangement (Source-wise):
9.1 Status of Loan/Grant.

a) Foreign Financing :

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
19525.31	-	--	-

9.2 Utilization of Project Aid: (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
-	-	-	-	-	-	-

9.3 Re-imbursible Project Aid (RPA) :

(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
2000-01 to 2003-04 (Extended up to June 2006)	2000-01 to 2007-08 (Extended up to June 2009)	2000-01 to 2007-08 (Extended up to June 2009)	266%	

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	20175.78	19525.31	17954.22	-	
TAKA	20175.78	19525.31	17954.22	-	
PA	-	-	-		

03. Project Personnel:

Sanctioned strength as per PP	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) = Nil Staff(s) = Nil Total : Nil	The Project has been implemented by the existing manpower of Bheramara O&M (Pump station) Division under supervision & administrative control of Superintending Engineer, Kushtia O&M Circle.	O & M of the project will be done by the existing manpower of Bheramara O&M (Pump station) Division under supervision & administrative control of Superintending Engineer, Kushtia O&M Circle.				

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

Field of Training /Study tour/workshop/Seminar 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	-	-	-	-	-
b. Local	-	-	-	-	-

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

(In lakh Taka)

Items of work (as per PP)	Unit	Target (as per PP)		Actual Progress		Reasons for deviation (±)
		Financial	Physical (Quantity)	Financial	Physical (Quantity)	
1	2	3	4	5	6	7
Supplies & services:						
Port/Aviation charges etc. for importable goods	Item	33.90	1	-	-	
IT, VAT etc.	Item	600.00	1	-	-	
Telex/Fax charges including courier charges (inland and abroad countries)	Item	0.30	1	0.30	1	
Fuel & Lubricant for road & water transport	Item	5.00	1	5.00	1	
Commission/interest for LC as per contract	Item	56.50	1	56.22	1	
Printing & Publications (advertisement charges, printing & evaluation of Tender documents, contract document & miscellaneous printing/reproduction charges	Item	1.00	1	1.00	1	
Supplies of Office stationeries	Item	2.00	1	2.00	1	
Transportation of Equipment to project sites including insurance & other services incidental to delivery of Equipment	Item	20.00	1	20.00	1	
Honorium for expertise/ specialized services in C/w Pump rehabilitation (BUET Experts & Advisory Committee)	Item	26.00	1	25.04	1	
Testing & inspection of machineries	Item	1.00	1	0.25	1	
Computer accessories	Item	1.00	1	1.00	1	
Hiring charges of transports for Expertise / Specialist/Advisory Committee	Item	2.00	1	2.00	1	
Others expenditure (miscellaneous)	Item	2.00	1	1.97	1	
I) Consultancy service (Supervision, Management & Monitoring)	Item	294.06	1	17.24	1	
ii) Expertise Service provided by the Contractor for design-drawing, installation, testing & commissioning etc. of the facilities	Item	645.90	1	640.06	1	
Repair, maintenance & rehabilitation:	Item					
O&M of existing vehicles (4 Nos)	Item	4.00	1	4.00	1	
RCC lining of Main Canal (from Km:0.00 to Km: 0.230),Subsidiary Main canal km. 0.00 to km. 0.350, total 0.580 km & resectionning of of Main Canal (from Km. 0.00 to Km. 0.230, and Km:0.340 to Km: 1.340) for installation of Flow Measuring Device	Item	781.85	1	579.68	1	
Grants in Aid:						
Salary Support (Overhead cost)	Item	102.75	1	102.75	1	
Machinery & equipment:						
i. Procurement of computers (Brand Pentium IV) with printers (Laser Jet) -2 Nos.	Nos.	2.00	2	2.00	2	
ii. Procurement of Photocopier machine 1 No.	Nos.	1.25	1	1.25	1	
iii. Supplying & installation of Multimedia Monitoring system including CCTV	Item	10.00	1	10.00	1	

Manufactoring and Supplying of Equipment:						
a) Pump and other equipment	sets	3019.40	3	3019.40	3	
b) Main Motor	sets	2377.90	3	2377.90	3	
c) Auxiliary equipment	sets	3081.60	3	3081.60	3	
d) Electrical equipment	sets	1439.60	3	1439.60	3	
e) Spare Parts	set	79.10	3	79.10	3	
Construction of works: Dismantle of old Machineries, on-job training, installation of new machineries & Testing commissioning:						
a) Pumps, motors and other machineries	sets	2137.10	3	2137.10	3	
b) Electrical equipment	sets	202.80	3	202.80	3	
c) Strengthening capacity of Pump House	Item	2040.10	2	2040.10	2	
d) Intake channel development	Item	279.30	1	279.30	1	
e) Installation of Discharge Measuring Device of Pumps	Item	1145.90	1	1145.90	1	
CDST, VAT etc.	Item	1130.00	1	679.66	1	
Total :		19525.31		17954.22		

06. Information regarding Project Director (s):

Name & Designation with pay Scale.	Full time	Part time	Responsible for more than one project	Date of Joining	Date of Transfer	Remarks
1	2	3	4	5	6	7
1. Md.Nuran Nabi Chowdhury Superintending Engineer. 15000-600 X8-19800/-	Full time	N.A.	No.	12.01.2003	13.09.2006	
2. Md. Akhtar Husain Superintending Engineer. 15000-600 X8-19800/-	Full time	N.A.	No.	13.09.2006	-	

07. Procurement of Transport (in Nos.):

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	'NONE'					
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:

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
1. Manufactoring and Supplying of Equipment:			05.02.2003	19.04.2005/ 27.08.2005	20.06.2009	20.06.2009
a) Pump and other equipment	3019.40	3019.40				
b) Main Motor	2377.90	2377.90				
c) Auxiliary equipment	3081.60	3081.60				
d) Electrical equipment	1439.60	1439.60				
2. Construction of works: Dismantle of old Machineries, on-job training, installation of new machineries & Testing commissioning:						
a) Pumps, motors and other machineries	2137.10	2137.10				
b) Electrical equipment	202.80	202.80				
c) Strengthening capacity of Pump House	2040.10	2040.10				
d) Intake channel development	279.30	279.30				
e) Installation of Discharge Measuring Device of Pumps	1145.90	1145.90				
3. Expertise Service provided by the Contractor for design-drawing, installation, testing & commissioning etc. of the facilities	645.90	645.90				
4. Consultancy service (Supervision, Management & Monitoring)	294.06	-	-	-	-	
5. RCC lining of Main Canal (from Km:0.00 to Km: 0.230),Subsidiary Main canal (km. 0.00 to km. 0.350), total 0.580 km & resectionning of of Main Canal (from Km. 0.00 to Km. 0.230, and Km:0.340 to Km: 1.340) for installation of Flow Measuring Device	781.85	579.68	15.11.2007	31.12.2007	30.06.2008	30.06.2008

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

Name of the Field	Approved man month		Actual man month utilised	Remarks
	As per PP	As per contract		
1	2	3	4	5
a) Foreign : Consultancy service (Supervision, Management & Monitoring)	64	-	-	No tenderer found qualified and responsive for this work.
b) Local: Consultancy services for supervision of work.	L. S.	12	12	

09. Construction/Erection/Installation Tools & Equipment:

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
----------'Nil'----------						

C. FINANCIAL AND PHYSICAL PROGRAMME:

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

(In lakh Taka)

Financial Year	Financial provision & physical target as per original PP				Financial provision & physical target as per latest revised PP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
Year – 1: Upto June, 2006.	20175.78	20175.78	-	100.00%	4299.96	4299.96	-	22.02%
Year – 2 2006-2007.	-	-	-	-	9524.17	9524.17	-	48.78%
Year – 3 2007-2008.	-	-	-	-	5701.18	5701.18	-	29.20%
Total :	20175.78	20175.78	-	100.00%	19525.31	19525.31	-	100.00%

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
2000-01	1.25	1.25	-	1.00	1.25	0.00	0.00		1.00
2001-02	55.00	55.00	-	4.00	5.00	0.00	0.00	-	2.00
2002-03	5.00	5.00	-	1.00	3.00	3.00	3.00	-	1.00
2003-04	19.00	19.00	-	4.38	17.25	7.50	7.50	-	4.38
2004-05	1802.00	1802.00	-	12.42	1800.00	1612.10	1612.10	-	12.42
2005-06	3105.00	3105.00	-	16.20	2557.50	2557.50	2557.50	-	16.20
2006-07	9000.00	9000.00	-	30.00	8197.50	8047.50	8047.50	-	30.00
2007-08	2900.00	2900.00	-	17.00	2599.93	2543.70	2543.70	-	17.00
2008-09	2405.00	2405.00	-	16.00	2405.00	2400.51	2400.51	-	15.20
Sub-Total :	19292.25	19292.25			17586.40	17171.81	17171.81		
Over head cost centrally deduction :					102.75	102.75	102.75		
CD.ST/VAT :					679.66	679.66	679.66	-	99.20
Grand Total :			-	100.00	18368.80	17954.22	17954.22		

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

SL NO.	Objectives as per PP	Actual achievement	Reasons for shortfall, if any
(a)	To restore full potential irrigation efficiency of G.K. Irrigation Project.	The objective has been achieved.	-
(b)	To accelerate agricultural production in project area covering the districts of kushtia, Chuadanga, Jhenidah & Magura.	The objective has been achieved.	-
(c)	To attain self sufficiency in food grain production by acceleration of agricultural production.	The objective will be achieved in future.	-
(d)	To enhance living standard as well as overall socio-economic uplift of project beneficiaries by way of augmenting per capita income and employment generation.	The objective will be achieved in future.	-

E. BENEFIT ANALYSIS

01. Annual Out-put: **As the project is not direct benefited project, its annual out put cannot be quantifiable at this moment.**

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) -	-	-	-

02. Cost / Benefit:

Item	Estimated	Actual
(1) Benefit cost ratio of the project (i) Financial (ii) Economic (2) Internal Rate of Return (i) Financial (ii) Economic	2.84 : 1.00 3.01 : 1.00 28.32 % 29.40%	The Project is not direct benefited Project. BCR & IRR can be calculated after few years running of the Project.

03. Please give reasons for shortfall, if any, between the estimated and actual benefit: Not applicable.

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:			
(1) Sharif Rafiqul Islam D.G. BWDB.	-	Not found	Instructed to complete the project in time with maintaining proper quality of work.
(2) Md. Amir Khasru ADG (O&M-1), BWDB.	-	"	"
(3) H. S. Mozaddad Faruque D.G. BWDB.	18.04.2007	"	"
(4) Md. Badaruddoza ADG (O&M-2)	18.04.2007	"	"
(5) Md. Moyenuddin Khan ADG(Admin), BWDB.	23.05.2008	"	"
(6) Md. Inamul Haque ADG (Planning)	14.08.2008 & 15.08.2008	"	"
(7) Md. Habibur Rahman ADG(Planning)	19.10.2008	"	"
(8) Liaqot Al Faruque ADG (O&M-2), BWDB	22.11.2008	"	"
(9) Md. Habibur Rahman ADG (O&M-2), BWDB	08.08.2009	"	"
(10) Md. Habibur Rahman Chief, Planning, BWDB	05.05.2007	"	"
(11) Md. Nuran Nabi Chowdhury Chief Engineer, SWZ, BWDB	07.11.2007 & 26.01.2008	"	"
(12) Md. Shahidur Rahman Chief Engineer, SWZ, BWDB	18.10.2008	"	"

(b) IMED:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
(1) Dayananda Debnath Assistant Director, IMED	03.07.2007	No major problem identified	1) In order to implement the project properly, immediate action should be taken for time extension of the project without increasing the expenditure. 2) Implementation of RCC Lining/ Re-sectioning of Main Canal should be quickened. 3) As per actual requirement, the engagement of 32 manmonth foreign Consultant should be verified and if not required, the foreign consultancy services should not be taken in order to avoid duality.
(2) Dayananda Debnath Deputy Director, IMED.	20.08.2009	Not Found	

(c) Others: (Please specify)

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
(1) Md. Shahidul Islam Ex. Honorable M. P., Kushtia-2.	Several Times	Not found	
(2) Md. Habibullah Majumder Chairman, Rural Electrification Board, Ex. Joint Secretary, MOWR	20.05.2008	,,	
(3) Chief of Bangladesh Navy.	14.06.2008	,,	
(4) D. I. G. of Police Khulna Range.	12.07.2008	,,	
(5) D. C. Kushtia	10.10.2008	,,	

0.2. Auditing during and after Implementation:
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
------------------------------------ `Nil' ------------------------------------			

2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4
2002-03	07.03.2004	2.01: GOB fund amounting to Tk.7,40,00,000.00 released by the Administrative Ministry for the year 2001-2002 but no records available in the PD office. 2.02: Un-spent GOB balances amounting to Tk.2,00,000.00 not refunded to Govt.account.	Objections not yet resolved. But very soon all objections are going to be resolved.

2003-04	07.08.2005	01. GOB Grant Tk.19.75 lakh released by the Ministry and drawn by the Director finance but no trace in the project account.
		02. Unspent GOB balance amounting to Tk.9.75 lakh not refunded to account.
		03. Vouchers for Tk.4,85,167.00 not produced to audit.
		04. Excess payment made Tk.50,000.00 as consultancy services over P.P. Provision.
		05. Loss of Tk. 2.50 lakh due to irregular charge of overhead cost in the financial statement.
		06. Loss of Tk. 2,500.00 due to excess payment made to the supplier than the actual.
2004-05	24.09.06	01. Loss of Tk.1,26,48,377.00 was incurred for non deduction of IT and VAT from the Contractors bill.
		02. Vouchers for Tk.29,62,287.30 were not produced to audit.
		03. Unspent GOB balance amounting to Tk. 187.90 lakh was not refunded to Govt.account.
		04. Loss of Tk.200.00lakh due to irregular charge of overhead cost in the financial statement.
2005-06	24.01.2008	01. Income Tax and VAT for Tk. 2,18,15,612.61 not relised from the contractor.
		02. Interest accrued Tk.561466.00 not deposited into govt.a/c.
2006-07		01. Income Tax and VAT for Tk. 1,73,30,411.00 was not deposited into govt. account.
2007-08	09.07.09	01. Income Tax and VAT for Tk. 1,67,81,380.00 was not deposited into govt. account.
		02. Revenue loss of Tk.40,27,524.00 as penal intesest for not depost of Income Tax & VAT into Govt. accounts.
		03. Lossof Govt.revenue of Tk. 3,33,291.00 due to non deposit of accrued bank interest in to Govt.account.
		04. Supportingdocument against expenditure of CD/VAT amounting to Tk.225.00 lakh was not produced to audit.

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on:

1.1 Background:

Attainment of food grain self-sufficiency and food security always remain in the objectives of the national food policy and strategies in Bangladesh. This will provide daily nutritious diet of the people, generate rural employment and enhance economic uplift of entire population through alleviation of poverty. Hence the Govt. usually set the target to achieve self-sufficiency in food grain by increasing its productivity in all the successive term plan since 1973.

In conformity with the national objectives and targets, the serendipity of G. K. Irrigation Project came into being in early fifties, which was the 1st major step to provide supplementary irrigation facilities to the traditional variety of crops in the project area. The Project is located in the south-western region of Bangladesh. The Padma and the Gorai River in the north-east, the Mathabhanga River in the west and the Nabaganga River in the south confine the project boundary. The project area spreads over four districts viz. Kushtia, Chuadanga, Jhenaidah and Magura covering parts of 13 upazillas (Kushtia Sadar, Kumarkhail, Khoksha, Daulatpur, Mirpur, Bheramara, Chauadanga Sadar, Alamdanga, Jhenaidah Sadar, Harinakunda, Sailkupa, Magura Sadar & Sreepur)

The Ganges-Kobadak Irrigation Project was originally conceived in early fifties and its execution was completed in seventies. The original project consisted of three units: Kushtia, Jessore and Khulna into a number of phases. Later on the Kushtia unit, Phase-I and Phase-II covering a gross area of 1,94,300 hectares and net irrigable area of 1,42,000 hectares was completed alone in 1969-70 and 1981-82 respectively. However, even after completion of the project, the intended command area could not be served fully due, inter alia, to increase demand for water in modern variety practice, which was not considered in original project plan.

In the meantime, the concept of conventional variety of crops had changed and high yielding variety of paddy had been introduced in the project area with increased demand of water. Water requirement for HYV crops were substantially higher which was not originally considered in project planning. Thus the irrigation network and structures already provided seemed to be inadequate and required full or partial modification. Other auxiliary system of the project after two decade since operation needed rehabilitation. To solve this problem, the project had been rehabilitated in 1982-1993.

The old 3 Main Pumps of the project had been in operation since 35 years, which had been manufactured around 45 years ago. Due to long exploitation effect, its operational capacity and sustainability had been depreciated to a large extent. The pumps had been back dated and discharge capacity were confined in relation to the growing need for more water for irrigation as the conventional variety crops were replaced by modern variety of crops. Besides as old pumps were backdated in type & model, their spare parts/equipment was not readily available. As a result the overvaluing of absolute pumps became very difficult and costly as well as it required repeated overhauling. In this context, it had been empirically observed that the old outdate pumps needed replacement for achieving irrigation efficiency of the project upto full potential.

In these circumstances, the present rehabilitation project in view with replacing the pumping system of G. K. Irrigation Project had been undertaken. The technical experts of Hitachi Company of Japan, the manufacturer of old pumps, inspected the main pumps of G.K. Project in September, 1996 and recommended for early replacement/full overhauling of pumps for effective operation, which had been in operation Since many years. In this context, the Govt. of Bangladesh put up an application for seeking Japanese Debt Relief Grant Aid (DRGA) in order to replace the pumping system of G. K. Irrigation Project. Based on concurrence by the donor the present rehabilitation programme had been formulated for replacement/rehabilitation of pumping facilities of G. K. Irrigation Project for sustaining rural economic development.

1.2 Justification/Adequacy:

The main pumps manufactured by Hitachi Techno Engineering Co. LTD. Japan (1957 model) were installed in the project and had been in operation since 1969. Afterwards some acute problems of the installed pumps appeared in 1979 followed a 10 (ten) years long smooth operational efficiency. In 1985, pump no. 3 became totally ineffective and pump no. 1 & 2 had been in partial operation after a threadbare of repair & overhauling. In January 1986 expert Engineers from concerned manufacturer (Hitachi Techno Engineering Co.) were invited for overhauling pump no. 3 and it's overhauling was accomplished in March 1987 by their direct supervision. Later on, pump no. 1 & 2 were overhauled in 1990 and 1991 respectively by BWDB's own technical capacity.

Since the pumps were very much backdated in model/type, manufacture of most of its mechanical and electrical spares/ equipment had already been closed. As a result, it became difficult to procure necessary spares/ equipment for overhauling of such obsolete devised pumps. Hence for delivery of such unconventional spares/ equipment by virtue of new manufacturing, the excessive higher value had to be paid. Besides, these backdated devices of pumps necessitated frequent repair/ overhauling that had ultimately come to unprofitable stage from economic point of view. In that circumstances, the phased replacement of obsolete pumps by new technology devised as well as more capable pumps had been found realistic and rationale from both financial and performance view points.

1.3 Objectives:

The broad objectives of the present rehabilitation programme of the original project are:

1. To restore full potential irrigation efficiency of G.K.Irrigation project that means to enhance annual incremental paddy production of 286650.00 mt. (valued Tk. 1843.73 lakh at current market price) by ensuring effective irrigation area coverage from present 1, 00,000 ha. To 1, 42,100 ha.;
2. To accelerate agricultural production in project area covering the districts of Kushtia, Chuadanga, Jhenaidah and Magura through command area development;
3. To attain self sufficiency in food by acceleration of agricultural production ; and
4. To enhance living standard as well as overall socio-economic uplift of project beneficiaries by way of augmenting per capita income and employment generation.

1.4 Project revision with reasons: Based on the study report prepared by Agricultural Development Consultants Association (ADCA) of Japan in 1997, the original PP costing Tk. 20175.78 lac was formulated and accordingly it was approved by competent authority. But according to financial offer of the Contractor, Ebara Corporation of Japan, the cost of major physical components has been changed in the Contract Agreement. Again, the project was scheduled for commencement in FY: 2000-2001 and completion in FY: 2003-2004 as per approved PCP/PP. However, no physical project works were achieved since approval of the original project document and meanwhile project completion period were extended up to June, 2006. Later on, contract agreement was signed on 19.04.2005 between BWDB and Ebara Corporation, Japan amounting to JPY 2646.990 million for implementation of project works and the contract was effective from 29.09.2005.

In this backdrop, the project needed revision due to changes in cost of major physical components based on contract amount and actual field requirement. The revised project plan included some of new project components as well as variation in cost of some of project items included in original approved PP. Such variation of items and inclusion of new components seemed inevitable for accomplishment of the project to fulfill its targets and outputs. However the revised total project cost had been estimated by inter component cost adjustments on actual basis as well as inclusion of new components. Thus the total approved revised project cost became Tk. 19525.31 lac, which is less by Tk. 650.47 lac from the original approved PP cost. Among the total approved revised project cost of Tk. 19525.31 lac, Tk.12054.67 lac, has been allotted from DRGA fund and rest 7470.64 lac allotted from GOB Fund. The rationale of the project is very much appropriate in respect of concept, Design, Location and Timing.

2. Rationale of the project in respect of Concept, Design, Location and Timing: The rationale of the project is very much appropriate in respect of Concept, Design, Location and Timing.

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

- Project Identification: The old 3 Main Pumps had been in operation since 30 years, which had been manufactured around 40 years ago. Due to long exploitation effect, its operational capacity and sustainability had been depreciated to a large extent. Meanwhile the increased demand for water had been substantially higher than the originally planned corps as the farmers already switched over from local to HYV of crops. Besides the existing pumps were backdated in type and model and its spare parts/equipment are not readily available. As a result the overhauling of obsolete pumps became very difficult and costly as well as it required repeated overhauling.

  In view of above circumstances, the technical expert team of Hitachi company of Japan, the manufacturer of old pumps, inspected the G. K. Main pumps in September, 1996. They recommended in the their report that the existing old pumps needed early extended overhauling for continuing its efficiency, with onward replacement of pumps. Thus the issue of urgent rehabilitation of pumping facilities of G. K. Irrigation Project had been emphasized at the apex level. ADCA (Agricultural Development Consultants Association) of Japan dispatched a Mission to Bangladesh to investigate the problems of G.K. Irrigation Project with particular emphasis on pumping facilities. The Mission prepared a report based on field investigation. The Mission opined that the irrigation system of G.K. Project was quite developed and managed with considerable efficiency. But the main pumps which supply about 72% of the total irrigation water became quite old and passed their working lives long before, which were kept into operation by several repairs and rehabilitation works. The cost of further repairs of old pumps seemed very high with no guarantee of length of operation. Based on this fact they recommended strongly for replacement/rehabilitation of old pumping system by new ones. In this backdrop, the project entitled as "Urgent Rehabilitation of Pumping Facilities of G. K. Irrigation Project for Sustaining Rural Economic Development" was formulated.

- Project Preparation: As per recommendation of Hitachi Company of Japan, the manufacturer of old pumps, this project had been prepared. The total estimated cost for this rehabilitation project was based on study report prepared by Agricultural Development Consultants Association (ADCA) of Japan in 1997. An application form seeking Japanese assistance under Debt Relief Grant Aid (DRGA) in order to finance this rehabilitation project was processed as per existing rules and accordingly concurrence had been given by respective donor for financing the project under DRGA of Japan.

- Appraisal: The total estimated cost for this rehabilitation project was based on study report prepared by Agricultural Development Consultants Association (ADCA) of Japan in 1997. The PCP of the original project costing total Tk. 20224.60 lac was approved in ECNEC meeting held on 26.09.2000. Subsequently original PP of the project, prepared in the light of approved PCP, was considered in DPEC meeting held on 17.01.2001 in the Ministry of Water Resources and in compliance with the decisions of said DPEC meeting recast PP costing total Tk. 20175.78 lac was approved by competent authority. Finally the Revised DPP amounting to Tk. 19525.31 lac, among which Tk. 12054.67 lac from DRGA Fund and Tk. 7470.64 lac from GOB Fund, has been approved on 21.07.2007.

- Credit Negotiation
- Credit Agreement
- Credit Effectiveness: After formulation of this project an application form seeking Japanese assistance under Debt Relief Grant Aid (DRGA) in order to finance the proposed rehabilitation project was processed as per existing rules and accordingly concurrence had been given by respective donor for financing the project under DRGA of Japan. However, the Govt. of Bangladesh had to fulfill certain terms and conditions for effectiveness of Japanese DRGA fund as per procedure as laid down in ERD's letter No. ERD/Jap-3/DRG-16/2000/134, dated: 13.06.2000.

Afterwards it was decided that out of total estimated cost of Tk. 20224.60 lac, an amount of Tk. 16390.20 lac would be financed under DRGA of Japanese grant for the total replacement of pumps and other accessories as well as the consultancy service package cost. The rest of the amount to the tune of Tk. 3834.40 lac would be borne by the Govt. of Bangladesh as local resource for recurring CDST, VAT and other establishment (overhead) cost.

As per grant utilization procedure of DRGA, the equivalent local currency of grant amount in Japanese Yen has to be primarily arranged in GOB's ADP allocation and counterpart matching fund in favour of the project had to be maintained by opening of special account in Bangladesh Bank under ADP of the Govt. of Bangladesh. Hence the entire estimated cost of the project had to be initially financed on local resource with ADP allocation.

However as per approved revised DPP, the final Project Cost became Tk. 19525.31 lac. Out of total Tk. 19525.31 lac, an amount of Tk. 12054.67 lac has been financed under DRGA Fund and rest Tk. 7470.64 lac from GOB Fund.

- Loan Disbursement
- Loan Conditionalities
- Project Approval.
- Others (if any).

Not applicable.

4. Analysis of the Post-Implementation situation and result of the project/programme:

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

4.2 Programme for use of created-facilities of the project: The facilities, rehabilitated under this project, will be used for supply of irrigation water to the area of G. K. Irrigation Project.

4.3 O & M programme of the project: O&M programme has been taken by Bheramara O&M (Pump Station) Division under the supervision of Superintending Engineer, Kushtia O&M Circle, BWDB, Kushtia.

4.4 Impact of the project -

4.4.1 Direct: The supply of irrigation water has been already increased. As a result more area will come under cultivation and the production of crops will definitely be increased to a good extent.

4.4.2 Indirect: Socio-economic condition of the project area had already been increased to a good extent.

4.5 Transfer of Technology and Institutional Building through the project: The facilities, rehabilitated under this project, have most updated modern and sophisticated technology, which is completely new to BWDB personnel. However in due course, the BWDB personnel will be get accustomed with the new technology.

4.6 Employment generation through the project: Not applicable.

4.7 Possibility of Self employment: Not applicable.

4.8 Possibility of women-employment opportunity: Not applicable.

4.9 Women's participation in development: Not applicable.

4.10 Probable Impact on Socio-Economic activity: Positive impact.

4.11 Impact on environment: Positive impact.

4.12 Sustainability of the project: Sustainable.

4.13 Contribution to poverty alleviation/reduction: Positive.

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

4.15 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities: Not applicable.

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

5.1 Project Management: Not arisen
5.2 Project Director : Not arisen
5.3 Land Acquisition : Not applicable
5.4 Procurement : Not arisen
5.5 Consultancy: As per provision in the PP, Foreign Consultants could not be engaged, as no tender found qualified and responsive for this work. However a BUET Expert Team comprising of senior Professors of Mechanical, Electrical, Civil and Water Resources Engineering Departments, had been engaged for proper supervision of the project works.
5.6 Contractor: Not arisen
5.7 Manpower Not arisen
5.8 law & Order: Not arisen
5.9 Natural calamity : Not arisen
5.10 Project financing, allocation and Release: Not arisen
5.11 Design formulation/approval : Not arisen
5.12 Project aid disbursement and re-imbursement: Not arisen
5.13 Mission of the development partners: Not arisen
5.14 Time & Cost Over-run: Extension of time has been approved by the competent authority.
5.15 Project Supervision/Inspection: Not arisen
5.16 Delay in Decision: Not arisen
5.17 Transport: Not arisen
5.18 Training: There was no scope for training of BWDB personnel in the PP/DPP.
5.19 Approval: Not arisen
5.20 Others: Not arisen

6. Remarks & Recommendations of the Project Director:

Remarks: G. K. Irrigation Project is the most ancient and prestigious irrigation project in Bangladesh. It is also a successful irrigation project. Through the rehabilitation of Main Pumps under this project the irrigation efficiency enhanced to a good extent. It will definitely accelerate agricultural production in project area. The Pump, Motors and other auxiliary equipments, rehabilitated/replaced under this project, have the most up-dated modern and sophisticated technology including discharge Flow Measuring Device, which is essential for water management in irrigation system and Programmable Logic Controller (PLC) system with computerized Data Logger, which are completely new for pump operation in Bangladesh. This experience can be utilized in modernizing the other Pump Station in Bangladesh.

Recommendation: There is shortage of manpower for operation & maintenance of new pumps in Bheramara O&M (pump station) Division. So deployment/posting of efficient manpower in that division is urgently needed. As the facilities, rehabilitated under this project, have the most updated and new sophisticated technology, so as soon as the BWDB personnel will be posted, they will be get accustomed with the new technology quickly.

The irrigation canals, structures, regulators of G. K. Irrigation Project need urgent rehabilitation. A DPP named G. K. Irrigation Rehabilitation Project has been already submitted to concerned authority for necessary approval. If this project can be undertaken, more 42,000 hectares of land will come under irrigation scheme and the water, discharging from newly rehabilitated pumps, can be utilized properly-which will definitely increase the food grain production in Bangladesh to a great extent. So it is strongly recommended to undertake the aforesaid G. K. Irrigation Rehabilitation Project immediately with giving utmost priority.

Date: 03.09.2009.

03/09/09

Signature and seal of the Project Director/Manager

Md. Akhtar Hussain
Project Director
G K I Project
BWDB, Kushtia
03.09

7. Remarks/Comments of Agency Head

Date: ....

Signature and Seal

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

Date:. . . . .

Signature and Seal