Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (1/42)

No.	Name of Division		Table-1			
			Madaripur O&M Division (4 Projects)			
A	Name of Project		South Kalkini FCDI Sub-Project	North Kalkini FCDI Sub-Project	Ramshil-Kafrulabari FCD Sub-Project	Madaripur town protection project Phase-II
	Reported by		Md. Mainuddin/Md. Nazrul Islam	Md. Mainuddin/Md. Nazrul Islam	Md. Mainuddin/Md. Nazrul Islam	Md. Nazrul Islam
B	Project Component		Flood control, Drainage and Irrigation	Flood control, Drainage and Irrigation	Flood control, Drainage and Irrigation	Flood control, Drainage, Town Protection
B-1	Location	Zone	South-Western Zone	South-Western Zone	South-Western Zone	South-Western Zone
B-2	Location	Upa-zilla / District	Madaripur & Barisal / Kalkini & Muladi	Madaripur / Kalkini	Barisal & Gopalgong / Agailghere & Kotalipara	Madaripur / Madaripur Sadar
B-3	Objectives		Enhancement of crop production with improvement of agricultural management	Enhancement of crop production with improvement of agricultural management	Enhancement of crop production with improvement of agricultural management	Protection of Madaripur town flood project, Arial Khan River
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation					
B-6	Beneficiaries	Number	38,250	32,515	45,560	50,000
B-7	Beneficiaries	Occupation	Majority: Ariculture	Majority: Ariculture	Majority: Ariculture	Different type
C	Project features					
C-1	Total Project area	ha	5,263	3,846	6,958	1,013
C-2	Irrigation area	ha	2,532	1,550	5,696	?
C-3	Flood affected area	ha	4,212	3,077	6,210	?
C-4	Drainage area	ha	3,374	2,465	5,230	?
C-5	Others	ha	500	500	1,262	?
D	Structural Details					
D-1	Embanment	Length km	35.27	31.95	36.18	1.01
D-2		Height	3.0m	3.0m	5m	?
D-3		Crest width	3.05m	3.05m	?	?
D-4		Slope	1:2/1:2	1:2/1:2	1:3/1:2	1:2/1:2
D-5		Free Board	0.6m	0.6m	0.6m	1.0m
D-6		Design Flood	20yr flood	20yr flood	20yr flood	20yr flood
D-7	Sluice gate					
D-8	Others for embankment					
D-9	Drainage canal	Length	34km	40.25km	13.5km	NA
D-10		Depth	?	?	2.3m	NA
D-11		Bottom	1.5-6.0m	2.44-6.0m	3.0-5.0m	NA
D-12		Structure-1				
D-13		Structure-2				
D-14	Irrigation canal	Length	?	?	?	NA
D-15	Intake structure	Type	Reinforced concrete pipe	Reinforced concrete pipe	Reinforced concrete pipe	NA
D-16		Size/Capacit				
D-17	Intake gates	Size	H=1.83 m, W= 1.52 m	H=1.83m, W=1.52 m	H=1.83m, W=1.52m, 5 units and flushing gates 20 units	
D-18		Number	15 units	15 units	5 units / 20units	
D-19	Bank Protection	Type				Concrete block
D-20		Length				
D-21	Size of Concrete block					30cm×30cm×30cm, 40×40×40, 40×40×20
D-22	Dredging	Length				
D-23		Depth				
D-24		Volume				
D-25	Notes, Problems and Further requirement, etc.	1.				
D-26		2.				
D-27		3.				

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (2/42)

No.	Name of Division		Table-1			
			Madaripur O&M Division (4 Projects)			
A	Name of Project		South Kalkini FCDI Sub-Project	North Kalkini FCDI Sub-Project	Rainshil-Kafulabari FCD Sub-Project	Madaripur town protection project Phase-II
	Reported by		Md. Mainuddin/Md. Nazrul Islam	Md. Mainuddin/Md. Nazrul Islam	Md. Mainuddin/Md. Nazrul Islam	Md. Nazrul Islam
E	Implementation & OM					
E-1	Const. Period		1984/85-1992/93(8yr)	1984/85-1992/93(8yr)	1997/98-2003/04(6yr)	1995/96-2001/02(5yr)
E-2	Constuction stages		Completed	Completed	On-going	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	?	?	?	?
E-4	Financial source		GOB & IFAD Fnd	GOB & IFAD Fund	GOB	GOB
E-5	Operation	Year to start	1992/93	1992/93	2004/2005	2001/2002
E-6	Annual operation cost	Cost in Taka	1.5	1.5	2	?
E-7	Annual maintenance	Work items	Resectioning of embankment, lublicating gates, etc.	Resectioning of embankment, lublicating gates, etc.	Resectioning of embankment, lublicating gates, etc.	
E-8		Period	Year round	Year round	Year round	Year round
E-9		Cost in Lac Taka	7.50	7.50	15.00	15.00
E-10	Rate of annual OM	%	1.50%	1.50%	0.70%	1.50%
E-11	Emergency maintenance / Repair	Period	Year round	Year round	Year round	Year round
E-12	Cost	Lac Taka	6.0	6.0	?	10.0
E-13	Financing		GOB	GOB		
E-14	Major Rehabilitation epair conducted / required	Case-1	Embankment L=24.0 km, 1-gate, drainage canal excavation:10km	Yr 2003: L=15.5km, 1-gate, Drainage canal 10km, 480 lac		Yr 2002/03, 14.5 lac
E-15		Case-2				Yr 2003/04, L= 100m, 20 lac
E-16		Case-3				
F	Actions at Flood Time					
F-1	Flood Warning		?	?	?	?
F-2	Operation manual for		?	?	?	?
F-3	Actions at Flood Time		Site visit, Arrangement of materials and equipment	Site visit, Arrangement of materials and equipment	Site visit, Arrangement of materials and equipment	Site visit, Arrangement of materials and equipment
F-4	FFWS Requirement		FFWS is necessary ?	FFWS is necessary ?	FFWS is necessary ?	FFWS is necessary ?
F-5	Problems if no FFWS		Risk for sudden breach of embankment	Risk for sudden breach of embankment	Risk for sudden breach of embankment	Risk for sudden breach of embankment
F-6	Benefit attributable for FFWS	% of total damage	50% of total damage	50% of total damage	50% of total damage	50% of total damage
F-7	Comments by respondent					

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (3/42)

No.	Name of Division		Table-2	Table-3	Table-4	Table-5
			Pabna O&M Division	Feni O&M Division	Chandpur O&M Divisin	Dhaka O&M Division II
A	Name of Project		Pabna Irrigation & Rural Development Project	Muhuri Irrigation Project	Meghna Dhonagoda Irrigation Project	Dhaka Integrated Flood Protection project
	Reported by		Md. Kamrul Rahman Talukder	?	Amanullah	Md. Sojidul Rahman Sarder
B	Project Component		Flood control, irrigation & drainage	Irrigation, flood control and drainage	Flood control, Irrigation & Drainage	Flood control, drainage and environment development
B-1	Location	Zone	North-Western Zone	North-Eastern Zone	North-Eastern Zone	Central Zone
B-2	Location	Upa-zilla / District	Pabna/9 Upa-zilla, Natore/2 & Sirajgong/1	Feni Sadar, Sonagazi, Chagalnaiya and Porshuram, Feni & Mirsarai, Chittagong	19km north of Chandpur Town	Tongi(N),mohammadpur-Mirpur(W), mitford-Sadarghat(S), saidobad-Rampura-Baridhara(E)
B-3	Objectives		To provide flood control, irrigation , Drainage and others	Irrigation, flood control and drainage	Sustainable increase in agricultural production & poverty reduction	Flood control, drainage and environmental development
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB, WASA, DCC
B-5	Existing structure at Implementation					
B-6	Beneficiaries	Number	?	1,500,000	210,000	6,000,000
B-7	Beneficiaries	Occupation	Farmer80%, Buisiness15%, Service5%	Farmer	Agriculture	Serviceman, businessman, Rickshaw puller
C	Project features					
C-1	Total Project area	ha	184,534	40,080	17,584	13,000
C-2	Irrigation area	ha	21,862	23,076	13,602	NA
C-3	Flood affected area	ha	NA	10,000	NA	NA
C-4	Drainage area	ha	138,812	40,080	17,584	13,600
C-5	Others	ha	NA	NA	NA	NA
D	Structural Details					
D-1	Embanment	Length km	157.55	28.50	60.70	15.00
D-2		Height	3m	3m	4.5m	7.5m
D-3		Crest width	7.31m	4.27m	6m	8m
D-4		Slope	1:3/1:3	1:3 / 1:2	1:3/1:2	1:3 / 1:2
D-5		Free Board	1.0m	1.0m	1.5m	1.5m
D-6		Design Flood	20yr flood/40,000cms		20yr flood/16,600cms	100yr flood
D-7	Sluice gate		14 sluice gates			
D-8	Others for embankment					
D-9	Drainage canal	Length	L=540km, Depth=1.8m, Bottom W=8.0m		125.5km	?
D-10		Depth	1. 8m		1.2m	?
D-11		Bottom	8.0m		5.5m	
D-12		Structure-1				6-Vertical lift Gates, 16- flap gates, 1-underpass
D-13		Structure-2				Drainage pump with capacity of 10cms
D-14	Irrigation canal	Length	L=42.28km(Main), 212.48km (2nd / 3rd)	L=280km (main), 114.63km (2nd & 3rd)	L=34.0 km (Main), 184.0km (2nd / 3rd)	?
D-15	Intake structure	Type	Pump for :Irrigation and Drainage	vertical gates 2 units 1m*1m	Pump for irrigation and drainage	?
D-16		Size/Capacit	14.17 cms x5 units		7.22 cms	?
D-17	Intake gates	Size			H=3.83m, W=3.54m	
D-18		Number			10 units	
D-19	Bank Protection	Type	Concrete block & Geo-Textile		Concrete block & Geo-Textile	Concrete block
D-20		Length				
D-21	Size of Concrete block		40cmx40cmx30cm		25cmx35cmx45cm	40cmx40cmx20cm
D-22	Dredging	Length			L=785m	
D-23		Depth			3.0m	
D-24		Volume			91.105m3	
D-25	Notes, Problems and Further requirement, etc.	1.				Number of pump to be increase (at least one unit of 10 cms capacity
D-26		2.				lack of operators
D-27		3.				No regular O&M Budget

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (4/42)

No.	Name of Division		Table-2	Table-3	Table-4	Table-5
			Pabna O&M Division	Feni O&M Division	Chandpur O&M Divisin	Dhaka O&M Division II
A	Name of Project		Pabna Irrigation & Rural Development Project	Muhuri Irrigation Project	Meghna Dhonagoda Irrigation Project	Dhaka Integrated Flood Protection project
	Reported by		Md. Kamalur Rahman Tahilder	?	Amanullah	Md. Sajidul Rahman Sarder
E	Implementation & OM					
E-1	Const. Period		1970/71-1991/92(22yr)	1977/78-1985/86 (10yr)	1979/80-1987/88(9yr)	1992-June 2003(12yr)
E-2	Construction stages		Completed	Completed	Completed	On-going
E-3	Const. Cost(lac Taka)	Lac Taka	38,404.00	?	17,503.10	85,316.00
E-4	Financial source		GOB-15,742, FC-22,622	BWDB, EEC, IDA, CIDA	GOB & ADB	BWDB portion:539.38 Crore, and remaining by others
E-5	Operation	Year to start	1980/88	1986	1988/89	1996
E-6	Annual operation cost	Cost in Taka	4	10	145	
E-7	Annual maintenance	Work items	Earth work, slope protection, block placing, gate repair, etc.	Excavation of canal, maintenance of gates & hoist of regulator, electrical installation, closure & embankment	Irrigation canal, drainage structures, resectioning of embankment, re-excavatin, etc.	rat hole, rain cut, slope protection, repair of structures
E-8		Period	Nov-Jun	Nov-Jun	Dec.-April	Year round
E-9		Cost in Lac Taka	6.00	216.18	318.00	very negligible
E-10	Rate of annual OM	%	?	1.38%	2.65%	
E-11	Emergency maintenance / Repair	Period	Before and after flood	Regulator, embankment	Year round,bank protection, flood embankment protection	
E-12	Cost	Lac Taka	2.0	?	25.0	?
E-13	Financing		GOB	?		
E-14	Major Rehabilitation epair conducted / required	Case-1		NA	1990/91: L=894m hard point with cost of 1,000 lac	
E-15		Case-2		NA	1996/97-2002/03: L=38.43 km flood embankment, & 1.09km RBP work, 1.8km slope protection with cost of 8,431lac	
E-16		Case-3				
F	Actions at Flood Time					
F-1	Flood Warning		Not received	Received	Received	?
F-2	Operation manual for		None	Ready	Ready	?
F-3	Actions at Flood Time		All gates closed, leakage / seepage stopped, repair of weak section, No lag	Assignment of responsible person, close contact with district adm. Elected members, public representatives. & necessary measures for mobilizing of essential tools, equipment, materials	Detailed work flow-chart for emergency was prepared by the Divisional Office.	1. Flood preparatory work 2. Set-up Flood fighting committee 3. 24 hr operation 4.procure emergency materials
F-4	FFWS Requirement		Not necessary	Necessary	FFWS is necessary	FFWS is necessary
F-5	Problems if no FFWS			Loss / damages will be widened, financial involvement will be high, mass people & project beneficiaries will be greatly hampered	Risks in carastrope of vulnerable points, piping / boiling in embankment, protection of gates	Management problem, resulting slope failure, breaching embankment, thus loss of lives and properties and environmental degradation
F-6	Benefit attributable for FFWS	% of total damage	50% of total damage	70%	80%	60%
F-7	Comments by respondent		FFWS is good for saving human life and domestic animals, properties		Lead time at least 12 hrs ahead of the damage	Smooth operation of management system, to take the people in safer shelter, to provide aids like food, water, medical facilities, etc.

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (5/42)

No.	Name of Division		Table-6				Table-7	
			Dhaka O&M Division I (4 Projects)				Bhola O&M Division-1 (2 Projects)	
A	Name of Project		Construction of embankment / sluice at Shikaripara	Toyebpur-Kashimpur Sub-project	North Rupgonj Water Conservency Project	Sringar-Mawa Bogyakul sub-project	Bhola district Town Protection Project	Extension of Polder No.56/57 at Alimabad
	Reported by		Md. Mokibur Rahman	Mashur Rahman	L.M. Rezaul Lassan	Mr. Ashraf Jamal	Shelim Ahsan	Shelim Ahsan
B	Project Component		Flood control, drainage and irrigation	Flood control (early flood in April / May) & Drainage	Flood control, drainage and irrigation	Flood control, drainage and irrigation	River bank protection	Flood control, Irrigation & Drainage
B-1	Location	Zone	Central Zone	Central Zone	Central Zone	Central Zone	Southern Zone	Southern Zoe
B-2	Location	Upa-zilla / District	Ichamoti river	Manikgonj O & M Sub-Div.	Kaligonj & Rupgonj Distr. Gazipur & Narayangonj	Munshigonj OM Sub-division	UP Dhaka, UZ Bhola Sadar, Bhola	Alimabad, mehendigonj, Barisal
B-3	Objectives			Flood control (early flood in April / May) & Drainage		Flood control, drainage and in	To protect river bank from erosion of Meghna River	To increse irrigation and drainage facilities and minimize flood damage
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	600,000	15,000	?	?	20,000	12,000
B-7	Beneficiaries	Occupation	Agriculture and fishery	Agriculture			Fishing cultivation	Fishing cultivation
C	Project features							
C-1	Total Project area	ha	9,330	1,800	3,700	3,175	?	3,000
C-2	Irrigation area	ha	5,500	NA	2,270	2,800	?	2,200
C-3	Flood affected area	ha	6,500	1,100	NA	NA	?	2,800
C-4	Drainage area	ha	7,465	1,800	NA	2,800	?	2,800
C-5	Others	ha	NA	NA	NA	NA	?	NA
D	Structural Details							
D-1	Embanment	Length km	13.44	10.00	18.00	29.00		10.00
D-2		Height	5.0m	5m	8m	5.3m		3.5m
D-3		Crest width	4.3m	4.3m	1900/01	4.3m		4.3m
D-4		Slope	1:3 / 1:2	1:1.5 / 1:1.5	1:3 / 1:2	1:2 / 1:2		1:4 / 1:2
D-5		Free Board	1.0m	0.9m	?	1.0m		1.0m
D-6		Design Flood	20 yr flood	?	6.92 yr ?	7yr flood		?
D-7	Sluice gate							H=1.8m, W=1.5m, 3 units
D-8	Others for embankment							
D-9	Drainage canal	Length		8.0km	15.5km			
D-10		Depth		1.5m	?			
D-11		Bottom		10m	5m			
D-12		Structure-1		3-Vertical lift gates	?			
D-13		Structure-2			1.58 cms			
D-14	Irrigation canal	Length		?	L=18km (Main), 20 km (2nd / 3rd)	L=0.85km (Main) and 40km (2nd / 3rd)		
D-15	Intake structure	Type		?	?			
D-16		Size/Capacit		?	?			
D-17	Intake gates	Size						
D-18		Number						
D-19	Bank Protection	Type					Concrete block	
D-20		Length						
D-21	Size of Concrete block			40cmx40cmx20cm , 30x30x30			40cmx40cmx40cm	
D-22	Dredging	Length						
D-23		Depth						
D-24		Volume						
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (6/42)

No.	Name of Division		Table-6				Table-7	
			Dhaka O&M Division I (4 Projects)				Bhola O&M Division-1 (2 Projects)	
A	Name of Project		Construction of embankment / sluice at Shikaripara	Toyebpur-Kashimpur Sub-project	North Rupganj Water Conservency Project	Sringar-Mawa-Bgagyakul sub-project	Bhola district Town Protection Project	Extension of Polder No.56/57 at Allimabad
	Reported by		Md. Mokibur Rahman	Mashim Rahman	I.M. Reazul Iaasan	Mr. Ashraf Jamal	Shelim Ahsan	Shelim Ahsan
E	Implementation & OM							
E-1	Const. Period		1999/00-2004/05(6yr)	1983/84 (1yr)	1985/1990 (5yr)	1989-1993(4yr)	1992/93-2003/04(5yr)	2000/01-?
E-2	Construction stages		On-going	Completed	Completed	Completed	On-going	On-going
E-3	Const. Cost(lac Taka)	Lac Taka	998.00	170.00	3,613.10	320.00	3,200.00	523.00
E-4	Financial source		GOB		GOB 2398.3 and AID 1214.5 lac		BWDB	GOB
E-5	Operation	Year to start		1,984		1,993	2004	NA
E-6	Annual operation cost	Cost in Taka		operation by			NA	NA
E-7	Annual maintenance	Work items		Embankment resectioning and repair, and repair of gates		Repair of embankment, breach closing, maintenance of structures	NA	NA
E-8		Period		Jan-May every year		Jan.-June every year	NA	NA
E-9		Cost in Lac Taka		10.00		20.00	NA	NA
E-10	Rate of annual OM	%		8.0%		7.0%	?	?
E-11	Emergency maintenance / Repair	Period	Earth work, Bullah piling, earth filled gunny bag			7km rehabilitation in 1999-2001		
E-12	Cost	Lac Taka	20.0	?	?	?	?	?
E-13	Financing							
E-14	Major Rehabilitation epair conducted / required	Case-1	2002/03:Rehabilitation of embankment L=6.4km with 35 lac Taka	Embankment damaged for 4.6km retarded and 1.2km to be protected needing 500lac Taka				
E-15		Case-2						
E-16		Case-3						
F	Actions at Flood Time							
F-1	Flood Warning		Received	Received	?	Received	Received	Received
F-2	Operation manual for		None	None	?	None	None	None
F-3	Actions at Flood Time		Alart people-install temporary gauge- collect & stack gunny bags - deput full time work	Allert people and administration- Close observation-Report to BWDB and FFW-declaration of emergency by BWDB Action is delayed and damage greater	?	Structural and non-structural measures	No action taken, because of shortage of manpoer, fund, transport, etc.	Sane as left
F-4	FFWS Requirement		?	FFWS is necessary		FFWS is necessary	FFWS is better than nothing	Sane as left
F-5	Problems if no FFWS		Any thing may happen causing severe damages of lives & crops	Emergenct action will bedelayed and damage will be greater		Damage occurrs like breach of embankment, overtopping, inundation of project area	possbility of more losses if no FFWS	Sane as left
F-6	Benefit attributable for FFWS	% of total damage	50%	50%	?	50%	20%	20%
F-7	Comments by respondent			Flood warning information is to be received 72 hours before the occurrence				

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (7/42)

No.	Name of Division		Table-8A					
			Dinajpur O&M Division (12 Projects)					
A	Name of Project		Second Small Scal Flood Control & Irrigation Project, Atrai-Kalra SE	River Training & Town Protection, Kaliganj Bazar	River Training & Town Protection, Kaliganj Bazar	Dhepa Nadi Shech Prokalpa	Khansama Thana Bandar Protective Project	Ground Water & Drainage, Low-lift Electrical Irrigation Project
	Reported by		Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali
B	Project Component		Flood control, drainage and irrigation	Flood control	Flood control	Irrigation	Flood control	Irrigation
B-1	Location	Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone
B-2	Location	Upa-zilla / District	24 UP of Upa-Zilla Chirirbandar, Dinajpur	9 UP, Upa-Zilla Chirirbandar, Dinajpur	Fulbari Town, Dinajpur	Dhepa Nadi Shech Prokalpa	Khansama Thana bandar, Atrai River	Panchagar & Dinajpur District
B-3	Objectives		To provide Flood control , drainage improvement, & irrigation facilities	To protect Kaliganj Bazar, high school from erosion of Kakra river	To protect Fulbari Town from bank erosion	To increase irrigation facilities	To protect Khansama Thana Bandar from flood of Atrai River	Irrigation
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	60,000	20,000	?	125000	100,000	400,000
B-7	Beneficiaries	Occupation	Cultivation	Cultivation	?	Cultivation	Business & cultivation	cultivation
C	Project features							
C-1	Total Project area	ha	5,170	2,000	?	1,500	3,000	2,078
C-2	Irrigation area	ha	160	NA	?	1,215	3,000	54
C-3	Flood affected area	ha	4,150	2,000	?	NA	NA	NA
C-4	Drainage area	ha	4,150	NA	?	NA	NA	NA
C-5	Others	ha	NA	NA	?	NA	NA	NA
D	Structural Details							
D-1	Embanment	Length km	42.24					
D-2		Height	2-3.5m					
D-3		Crest width	4.3m					
D-4		Slope	1:2 / 1:2					
D-5		Free Board	9.0m ?					
D-6		Design Flood	?					
D-7	Sluice gate							
D-8	Others for embankment		3-regulator, 2-Surface drainage outlet, & 26-pipe outlets					
D-9	Drainage canal	Length	16.3km					
D-10		Depth	About 3m					
D-11		Bottom	1m-4m					
D-12		Structure-1						
D-13		Structure-2						
D-14	Irrigation canal	Length				?		21.49km
D-15	Intake structure	Type				?		Pump for irrigation
D-16		Size/Capacit						4.0cms
D-17	Intake gates	Size				Radial gates 4units H=6.5m, W=6.0m		Check gates, size variable
D-18		Number						55 units
D-19	Bank Protection	Type	Concrete block	Brick Matressing with boulder 15-45 cm size	Concrete block		Concrete block	Concrete block & bric matressing
D-20		Length		L=400m				
D-21	Size of Concrete block		30cmx40cmx20cm	-	35cmx35cmx35cm 25cm × 25cm × 25cm		40cmx35cmx30cm	35cmx35cmx35cm
D-22	Dredging	Length						
D-23		Depth						
D-24		Volume						
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (8/42)

No.	Name of Division		Table-8A					
			Dinajpur O&M Division (12 Projects)					
A	Name of Project		Second Small Scal Flood Control & Irrigation Project, Atrai-Kalro SP	River Training & Town Protection, Kaliganj Bazar	River Training & Town Protection, Kaliganj Bazar	Dhepa Nadi Shech Prokalpa	Khansama Thana Bandar Protective Project	Ground Water & Drainage, Low-lift Electrical Irrigation Project
	Reported by		Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali	Md. Afsur Ali
E	Implementation & OM							
E-1	Const. Period		1991/92-1995/96(4yr)	1995/96-1996/97(2yr)	2000-	1995/96-2001(6yr)	1995/96-1998/99(3yr)	1962/63-1967/68(5yr)
E-2	Construction stages		Completed	Completed	On-going	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	434.20	46.30	164.87	1,338.72	363.06	140.00
E-4	Financial source		IDA:346.3, & WFP:87.9	GOB	GOB	GOB	GOB	GOB
E-5	Operation	Year to start	1996-97	1997/98	?		1999/2000	1967/68
E-6	Annual operation cost	Cost in Taka	?	?	?	500	?	?
E-7	Annual maintenance	Work items	Repair of earth work, gates, etc.	Repair of brick matressing & boulder dumping	?	?	Earth work, placing & dumping gunny bag, bamboo pilling, brush wood dumping, etc.	Earth work, repair of brick mattressing, painting gate, repair pump equipment, etc.
E-8		Period	January to June	January to June	?	October to	October to	October to December
E-9		Cost in Lac Taka	9.76	1.85	?	13.38	3.63	14.00
E-10	Rate of annual OM	%	2.24%	3.99%		1.0%	1.0%	1.0%
E-11	Emergency maintenance / Repair	Period	Bamboo piling, dumping gunny bags, brush wood, earth work, etc.	Repair of brick matressing & boulder dumping	?	Placing and dumping gunnt bag, bamboo piling, brash wood dumping, earth work	Earth work, placing & dumping gunny bag, bamboo pilling, brush wood	Placing & dumping gunny bag, bamboo piling, brush wood dumping, earth work, etc.
E-12	Cost	Lac Taka	10.0	4.0	?	8.0	36.0	10.0
E-13	Financing		?	?	?	?		
E-14	Major Rehabilitation epair conducted / required	Case-1	Yr 2001/02: 18m bank revetment by concrete block with cost of 5.0 lac		?			Yr 1993/94-2002/2003: bank protection by concrete block & brick mattressing, etc.for 450 m distance with cost of 34.38 lac
E-15		Case-2	Yr 2002/03:39m bank revetment by concrete blocks with cost of 10.0 lac					
E-16		Case-3						
F	Actions at Flood Time							
F-1	Flood Warning		Received	Received	Received	Received	Received	Received
F-2	Operation manual for		None	None	None	Ready	Ready	Ready
F-3	Actions at Flood Time		1. Observation of vulnerable point of embankment, regulator, sluice. 2. transmit / report to the higher authority in Dhaka, beneficiaries, local administration	1. Observation of vulnerable point of embankment, regulator, sluice. 3. transmit / report to the higher authority in Dhaka, beneficiaries, local administration	1. Observation of vulnerable point of embankment, regulator, sluice. 4. transmit / report to the higher authority in Dhaka, beneficiaries, local administration	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 4. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 5. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 6. Receiving instruction of higher authority
F-4	FFWS Requirement		FFWS is necessary	Same as left	Same as left	FFWS is necessary	?	?
F-5	Problems if no FFWS		FFWS is necessary. Immediate action may not be taken without FFWS	Same as left	Same as left	Without FFWS, immediate precaution may not be taken causing river structure damage	same as left	same as left
F-6	Benefit attributable for FFWS	% of total damage	30%	30%	?	25%	25%	25%
F-7	Comments by respondent							

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (9/42)

No.	Name of Division		Table-8B					
			Dinajpur O&M Division (12 Projects)					
A	Name of Project		Dinajpur Town Protection Project	Punarbhaba Eastern FC Embankment Project	Punarbhaba Western FC Embankment Project	Rajuria-Mobashpur Sub-Project	Jagatdara-Sunkhal Drainage & Irrigation Project	Cholegopal-Gangaprasad FCDI Project
	Reported by		Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain
B	Project Component		Flood control	Flood control	Flood control	Flood control, irrigation & drainage	Flood control	Flood control, drainage and irrigation
B-1	Location	Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone	Northern Zone
B-2	Location	Upa-zilla / District	Dinajpur town, Dinajpur	upazila-Bisol, Dinajpur	upazila-Bisol, Dinajpur	Upazila-Bisol & Kaharol, Dinajpur	Upazila-Bisol, Dinajpur	Upazila Sadar, Dinajpur
B-3	Objectives		To protect dinajpur Town from flood of the Punarbha & Gorveshawri rivers	To protect project area from flood	To protect project area from flood	To increase irrigation facilities, to prevent flood and to mitigate drainage problem	To increase drainage capacity in th project area	Flood control, inprovement of drainage system, rigation & communication
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	150000	3200	75,000	3500	5500	20000
B-7	Beneficiaries	Occupation	Business	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
C	Project features							
C-1	Total Project area	ha	5,000	150,000	12,000	150,000	225,000	7,000
C-2	Irrigation area	ha	NA	NA	NA	150,000	NA	500
C-3	Flood affected area	ha	5,000	150,000	11,706	150,000	NA	7,000
C-4	Drainage area	ha	NA	NA	NA	150,000	180,000	2,000
C-5	Others	ha	NA	NA	NA	NA	NA	NA
D	Structural Details							
D-1	Embanment	Length km	28.00	4.40	16.26	4.10	?	14.00
D-2		Height	4.0m	4.0m	3.5m	3.5m	?	3.0m
D-3		Crest width	4.3m	6.4m	4.3m	2.4m	?	4.3m
D-4		Slope	1:3/1:2	1:3/1:2	1:2/1:2	1:2 / 1:2	?	1:2 / 1:2
D-5		Free Board	0.92m	0.92m	0.9m	0.9m	?	0.92m
D-6		Design Flood	1989 flood, 567cms	1989 flood, 567cms	?	?	?	1998 flood, 860cms
D-7	Sluice gate							
D-8	Others for embankment							
D-9	Drainage canal	Length				2.05km	19.03km	
D-10		Depth				1.0m	2.5m	
D-11		Bottom				2.0-5.0m	2.3-6.0m	
D-12		Structure-1	Drainage outlet: 8 sites Drainage regulator: 7 sites	Drainage regulator: 5units 1.52mx1.82m	Drainage outlet: 10 units Drainage regulator: 1 unit	Drainage outlet: 5 units Drainage regulator: 1 unit	Drainage outlet: 4 units	
D-13		Structure-2						
D-14	Irrigation canal	Length						
D-15	Intake structure	Type						
D-16		Size/Capacit						
D-17	Intake gates	Size						
D-18		Number						
D-19	Bank Protection	Type	Concrete block	Concrete block	brick mattressing for 400m			Concrete block
D-20		Length						
D-21	Size of Concrete block		40, 35, 30, 25 cm cube 40cmx40cmx20cm	40, 30cm cube & 40cmx40cmx20cm	NA			30, 41 cm cube, 40cmx40cmx20cm
D-22	Dredging	Length						
D-23		Depth						
D-24		Volume						
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (10/42)

No.	Name of Division		Table-8B					
			Dinajpur O&M Division (12 Projects)					
A	Name of Project		Dinajpur Town Protection Project	Punarbhaba Eastern FC Embankment Project	Punarbhaba Western FC Embankment Project	Rajuria-Mahesbpur Sub-Project	Jagatdara-Sualkhal Drainage & Irrigation Project	Chokgopal-Gangaprasad FCDI Project
	Reported by		Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain	Md. Amjad Hossain
E	Implementation & OM							
E-1	Const. Period		1992/93-1999/00(5yr)	1934	1975/76-1999/00(26yr)	1992/93-1995/96(4yr)	1999/00	2000/01
E-2	Construction stages		Completed	?	Completed	Completed	?	On-going
E-3	Const. Cost(lac Taka)	Lac Taka	2,095.10	175.00	162.00	18.94	70.55	545.79
E-4	Financial source		GOB:501.56 lac ADB: 1,593.54 lac	WFP & IDA	WFP: 1,060 MTwheat IDA: 82.5 lac	GOB:2.84 lac IDA: 16.1 lac		
E-5	Operation	Year to start	2000/01	1959	1976/77	1996/97	?	
E-6	Annual operation cost	Cost in Taka	?		?	?	?	
E-7	Annual maintenance	Work items	Earth work, repair & painting of structure, repair of protection work	Repair of embankment, painting structure and gates, repair of protection work	earth work, repair of embankment, repair of structure & gates	Repair / resectioning of embankment, repair & maintenance of drainage regulator, etc.	Re-excavation of canal, repair of structures	
E-8		Period	January to June	January to April	January to April	January to April		
E-9		Cost in Lac Taka	16.00	0.50	10.00	2.00	0.00	
E-10	Rate of annual OM	%	0.76%	0.75%	0.60%	1.00%		
E-11	Emergency maintenance / Repair	Period	Placing & dumping gunny bag, bamboo piling, brush wood dumping, earth work, etc.	Placing & dumping gunny bag, bamboo piling, brush wood dumping, earth work, etc.	Earth work, placing & dumping gunny bags, bamboo pilling, brusf wood dumping, etc.	Earth work, placing & dumping of gunny bag, bamboo pilling, brush wood dumping, etc.	No O&M fund after project completion	
E-12	Cost	Lac Taka	10.0	2.5	15.0	?	NA	
E-13	Financing							
E-14	Major Rehabilitation epair conducted / required	Case-1	1999/2001: 5.6km distance bank revetment work with cost of 450 lac	1999/2001: 200m bank revetment with cost of 135.0 lac	199/2000: 400m brick mattressing 6 construction of 5 drainage pipe outlets with cost of 82.5 lac	2000/01: 3.0km embankment	?	
E-15		Case-2						
E-16		Case-3						
F	Actions at Flood Time							
F-1	Flood Warning		Received	Received sometime	Received sometime	Received sometime	Received sometime	Received sometime
F-2	Operation manual for		None	None	None	None	None	None
F-3	Actions at Flood Time		1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 7. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 8. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 9. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 10. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 11. Receiving instruction of higher authority	1. Necessary arrangement 2. To inform situation to beneficiaries & local administration, 3. To inform the situation to the higher authority of BWDB 12. Receiving instruction of higher authority
F-4	FFWS Requirement		FFWS is necessary	FFWS is necessary	FFWS is necessary	FFWS is necessary	FFWS is necessary	FFWS is necessary
F-5	Problems if no FFWS		same as left	same as left	same as left	same as left	same as left	same as left
F-6	Benefit attributable for FFWS	% of total damage	25%	25%	25%	25%	25%	25%
F-7	Comments by respondent							

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (11/42)

No.	Name of Division		Table-9A					
			Khulna-I O&M Division (11 Projects)					
A	Name of Project		Barnal Salimpur Kola Bainthali Project	Bhufar Beel Drainage Project	Coastal Embankment Project (Polder No.9,10/12,16,18/19,23)	Coastal Embankment Project (Polder No.22)	Coastal Embankment Project (Polder No.21)	Coastal Embankment Project (Polder No.20 &20/1)
	Reported by		Proddyut Kurma Saba	Proddyut Kurma Saba	Md. Lutfor Rahman	Md. Rafiqul Islam	A.K.M. Mainul Islam	A.K.M. Mainul Islam
B	Project Component		Flood control, Irrigation and Drainage	Flood control and drainage	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage
B-1	Location	Zone	South-Western Region	South-Wester Region	South-Wester Region	South-Wester Region	South-Wester Region	South-Wester Region
B-2	Location	Upa-zilla / District	Khulna & Navail	Khulna & Navail	south-west of Bangladesh	30km towards South-west from Khulna City	50 km South west from Khulna City	50 km South west from Khulna City
B-3	Objectives		Poverty reduction through increase of agricultural production by preventing flood and tidal water intrusion,	Poverty reduction through increase of agricultural production by preventing flood and tidal water intrusion,	Poverty reduction by increasing agricultural product, protection from tidal and seasonal flooding	To save mass prople, cattles, home and substructures and cultivate rice by controling flood	Flood Control and Drainage	Flood Control and Drainage
B-4	Implementing agency		BWDB	BWDB	BWDB	USAID	BWDB	BWDB
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	NA	NA	180000	40000	30000	50000
B-7	Beneficiaries	Occupation	Agricuture, fishculture, labors	Agricuture, fishculture, labors	Fisheries, agriculture, small trading	Cultivation	Cultivation	Cultivation and Fisheries
C	Project features							
C-1	Total Project area	ha		13,300	39,400	1,417	1,417	2,225
C-2	Irrigation area	ha	?	NA	?	NA	NA	NA
C-3	Flood affected area	ha	?	10,000	?	NA	NA	NA
C-4	Drainage area	ha	?	8,000	?	1,417	1,050	1,500
C-5	Others	ha	?	NA	?	NA	NA	NA
D	Structural Details							
D-1	Embanment	Length km	77.03	76.00	?	19.45	17.00	24.00
D-2		Height	3.96-5.4m	5m	3m	2.9m	2.5m	2.5m
D-3		Crest width	4.27m	4.27m	4.27m	4.27m	4.27m	4.2m
D-4		Slope	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2
D-5		Free Board	1.0m	1.0m	0.9m	0.9m	1.0m	1.0m
D-6		Design Flood	?	?	?	?	?	?
D-7	Sluice gate							
D-8	Others for embankment							
D-9	Drainage canal	Length	178km	84km	150km	21/4km	27.1km	27.0km
D-10		Depth			2.5m	1.9m	2.5m	2.5m
D-11		Bottom			3.0m	5.0m	5.0m	5.0m
D-12		Structure-1		Gate: lift and flap , 18 Regulators, 7 sluice, 6 culvert, 9 closure	Gate: 175 units H=1.83m, W=1.52m	2units flap gate H=1.8m W=1.5m	Flap gate: 3 units H=1.8m W=1.5m	Flap gate: 15 units H=1.8m W=1.5m
D-13		Structure-2						
D-14	Irrigation canal	Length						
D-15	Intake structure	Type	Regulator: 17 units					
D-16		Size/Capacit						
D-17	Intake gates	Size	Lift / flap gates					
D-18		Number						
D-19	Bank Protection	Type			Concrete block			
D-20		Length						
D-21	Size of Concrete block				40cmx40cmx20cm			
D-22	Dredging	Length						
D-23		Depth						
D-24		Volume						
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (12/42)

No.	Name of Division		Table-9A					
			Khulna-I O&M Division (11 Projects)					
A	Name of Project		Barnal Salimpur Kola Basukhali Project	Bhuflar Beel Drainage Project	Coastal Embankment Project (Polder No.9,10/12,16,18/19,23)	Coastal Embankment Project (Polder No.22)	Coastal Embankment Project (Polder No.21)	Coastal Embankment Project (Polder No.20 &20/1)
	Reported by		Proddyut Kurna Saba	Proddyut Kurna Saba	Md. Lutfor Rahman	Md. Rafiqul Islam	A.K.M. Mainul Islam	A.K.M. Mainul Islam
E	Implementation & OM							
E-1	Const. Period		1977/78-1981/82(5yr)	1986/87-1991/92(5 yr)	1964-1972 (8yr)	1972-1973 (2yr)	1961/62-1977/78 (16yr)	1961/62-1977/78(16yr)
E-2	Construction stages		Completed	Completed	Completed	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	953.00	1,018.00	365.00		90.00	110.00
E-4	Financial source			Dutch Aid	USAID	USAID	USAID	USAID
E-5	Operation	Year to start	1982/83	1992/93	?	1973	1961-1978	1961-1978
E-6	Annual operation cost	Cost in Taka			5	15	?	?
E-7	Annual maintenance	Work items	Repair of sluice, repair of gates, embankment, reexcavation of Khals	Repair of sluice, replacement and repair of gates, embankment, re-excavation of Khals	Resectioning of embankment, re-excavation of khal and repair of gate & sluice	Construction of retired emb., R/S of emb., breach closing, ghag repair, sluice repair, building repaire, etc.	Re-sectioning of emb., breach closing, etc.	Re-sectioning of emb., breach closing, etc.
E-8		Period	Dec.-June	Dec.-June	Dec-June	Dec-June	Dec-Jun	Dec-Jun
E-9		Cost in Lac Taka	20.00	20.00	35.00	20.00	8.00	8.00
E-10	Rate of annual OM	%	2%	2%	1.50%	8.00%	8.88%	7.27%
E-11	Emergency maintenance / Repair	Period	Temporary protective works, repair of embankment, construction of rev. and	Temporary protective works, repair of embankment, construction of rev. and	repair of ghoge / rat hole, construction of retired embankment, temporary protective	Construction of repair emb., breach closing, ghog repair, slope protection, sluice repair,	Breach closing	Breach closing
E-12	Cost	Lac Taka	Depend on requirement	Depend on requirement	2.0	10.0	4.0	?
E-13	Financing						?	?
E-14	Major Rehabilitation epair conducted / required	Case-1	NA	NA	NA		NA	NA
E-15		Case-2	NA					
E-16		Case-3						
F	Actions at Flood Time							
F-1	Flood Warning		Received Sometimes	Received Sometimes	Received Sometimes	Received	Received	Received
F-2	Operation manual for		None	None	None	None	?	?
F-3	Actions at Flood Time		?	?	To aleart all concerned people, to monitor existing embankment, infrastructure and to report to the concerned authority, to monitor water level, rainfall and to report th concerned authority	Gates are sealed and emb. is maintained by close monitoring	Preventive works of water control structures and embankment so that flood water cannot enter inside the polder area	Preventive works of water control structures and embankment so that flood water cannot enter inside the polder area
F-4	FFWS Requirement		FFWS is necessary	FFWS is necessary	?	Necessary	Necessary	Necessary
F-5	Problems if no FFWS				No precautionary measures will be taken and loss of properties and life will be increased	Preventive measures may be failed	No preparation for prevention can be taken	No preparation for prevention can be taken
F-6	Benefit attributable for FFWS	% of total damage	50%	50%	?	20%	12%	12%
F-7	Comments by respondent					Subject to participation of the beneficiaries in emergency maitenance work		

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (13/42)

No.	Name of Division		Table-9B				
			Khulna-I O&M Division (11 Projects)				
A	Name of Project		Coastal Embankment Project (Polder No.30)	Coastal Embankment Project (Polder No.31)	Khulna Town Protection Project	Khulna Jessor Drainage Rehavilitation Project	Eusufpur Kr. Saha
	Reported by		Md.Sayedur Rahman	Md.Sayedur Rahman	Md. Rafiqul Islam	Md. Lotfor Rahman	Eusufpur Kr. Saha
B	Project Component		Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage	Flood control and drainage	Coastal Embankment Project
B-1	Location	Zone	South-Wester Region	South-Wester Region	South-Wester Region	South-Wester Region	South-Wester Region
B-2	Location	Upa-zilla / District	8 km South from Khulna City	20km Southwest from Khulna City	Khulna City and and adjacent Uparilla	Khulna and Jessor	Khulna
B-3	Objectives		Flood Control and Drainage	Flood Control and Drainage	To save mass people, office and residentialbuilding, industries, cattles, etc.	Poverty reduction through increase of agricultural production by rehabilitation of drainage infrastructure to reduce drainage congestion	Growing agricultural crops by preventing intrusion of saline water
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation						
B-6	Beneficiaries	Number	75000	50000	1500000	1200000	?
B-7	Beneficiaries	Occupation	Cultivation	Cultivation	service and business	Agricuture, fishculture, small traders	Agricuture, fishculture, labors
C	Project features						
C-1	Total Project area	ha	4,048	3,100	2,600	100600 (14,900 for sub-division)	19,829
C-2	Irrigation area	ha	NA	NA	NA	NA	NA
C-3	Flood affected area	ha	NA	NA	NA	100,600	NA
C-4	Drainage area	ha	4,048	3,100	2,600	100,600	19,829
C-5	Others	ha	NA	NA	NA	NA	NA
D	Structural Details						
D-1	Embanment	Length km	40.00	28.00	6.50	110.00	150.00
D-2		Height	2.85m	2.85m	2.5m	3.0m	4.27m
D-3		Crest width	4.27m	4.27m	4.27m	4.3m	4.27m
D-4		Slope	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2	1:3 / 1:2
D-5		Free Board	1.0m	1.0m	0.9m	0.9m	0.3m
D-6		Design Flood	?	?	?	?	?
D-7	Sluice gate						
D-8	Others for embankment					Bank protection by Sod facing	
D-9	Drainage canal	Length	30.0km	52km	8.5km	2.1km	140km
D-10		Depth	2.5m	2.5m	1.95m	2.0m	2.0m
D-11		Bottom	5.0m	5m	9.0m	6.0m	6.0m
D-12		Structure-1	Flap gate: 15 units, H=1.5m W=1.5m	Flap gate: 10 units, H=1.5m W=1.5m	Flap gate: 21 units H=1.83m W=1.52m		
D-13		Structure-2					
D-14	Irrigation canal	Length					
D-15	Intake structure	Type					
D-16		Size/Capacit					
D-17	Intake gates	Size					
D-18		Number					
D-19	Bank Protection	Type					
D-20		Length					
D-21	Size of Concrete block						
D-22	Dredging	Length				L=15km, D=2.5m	
D-23		Depth				2.5m	
D-24		Volume					
D-25	Notes, Problems and Further requirement, etc.	1.					
D-26		2.					
D-27		3.					

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (14/42)

No.	Name of Division		Table-9B				
			Khulna-I O&M Division (11 Projects)				
A	Name of Project		Coastal Embankment Project (Polder No.30)	Coastal Embankment Project (Polder No.31)	Khulna Town Protection Project	Khulna Jessor Drainage Rehavilitation Project	Enerdyut Kr. Saha
	Reported by		Md.Sayedur Rahman	Md.Sayedur Rahman	Md. Rafiqul Islam	Md. Lutfor Rahman	Enerdyut Kr. Saha
E	Implementation & OM						
E-1	Const. Period		1961-1972 (12yr)	1961-1972 (12yr)	1962-2000 (38yr)	1995-2002 (7yr)	1966/71-1968/78(8yr)
E-2	Construction stages		Completed	Completed	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	900.00	600.00		25,100.00	493.00
E-4	Financial source		USAID	USAID	US Aid & ADB	ADB assisted	USAID & IDA
E-5	Operation	Year to start	1961-1972	1961-1972	1963	2002/03	1968/78
E-6	Annual operation cost	Cost in Taka	10	10	20	3	10
E-7	Annual maintenance	Work items	Re-sectioning of emb., breach closing, re-excavation, sluice repair	Re-sectioning of emb., breach closing, re-excavation, sluice repair	Repair and replacement of Concrete block, repaire of slopes, desilting	Repair of sluice gate, resectioning of embankment, reexcavation of Khal	Repair of sluice gate, replacement & repair gates, resectioning of embankment
E-8		Period	Dec-Jun	Dec-Jun	Dec-Jun	Dec.-June	Dec.-June
E-9		Cost in Lac Taka	20.00	15.00	30.00	7.00	?
E-10	Rate of annual OM	%	3.00%	4.00%	0.57%		
E-11	Emergency maintenance / Repair	Period	Breach closing and slope protection, etc.	Breach closing and slope protection, etc.	Repair and replacement of Concrete block, repaire of slopes, desilting	Temporary protective work, repaire of embankment, repair of rat hole / ghoges and replacement of gates	Temporary protective work, repair of embankment, construction of new embankment
E-12	Cost	Lac Taka	2.0	2.0	20.0	Depend on requirement	Depend on requirement
E-13	Financing		?	?			
E-14	Major Rehabilitation epair conducted / required	Case-1	NA	NA	NA		
E-15		Case-2					
E-16		Case-3					
F	Actions at Flood Time						
F-1	Flood Warning		Received	Received	Received	Received Sometimes	Received Sometimes
F-2	Operation manual for		None	None	None	None	None
F-3	Actions at Flood Time		Preventive works of water control structures and embankment so that flood water cannot enter inside the polder area	Preventive works of water control structures and embankment so that flood water cannot enter inside the polder area	Gates of water control structures are sealed and embankment is amintainedby close monitoring	To alert all concern local authority / people, to continuous / regular monitor the water level, embankment position and other infrastructure, report to higher authority, monitor rainfall, rate of flood water increase, report to concern authority	?
F-4	FFWS Requirement		Necessary	Necessary	?	?	Necessary
F-5	Problems if no FFWS		No preparation for prevention can be taken	No preparation for prevention can be taken	Preventive measures may be failed	Without FFWS, no precautionery work in time, loss of properties and life more	
F-6	Benefit attributable for FFWS	% of total damage	15%	15%	20%	50%	50%
F-7	Comments by respondent				Subject to participation of the beneficiaries in emergency maitenance work		

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (15/42)

No.	Name of Division		Table-10			
			Jessor O&M Division			
A	Name of Project		Re-excavation of teka Mukteswari Project	Coastal Embankment Project (Polder-24)	Harihar River Re-excavation Project	Coastal Embankment Project (Polder-24)
	Reported by		Md. Abu Bakr Khan, Md. Mohsin Shaik	Md. Abu Bakr Khan, A.S.M.Ali Akber, Md. Bazhur Rahman	Md. Abu Bakr Khan, Md. Mohsin Shaik	?
B	Project Component		Drainage Project	Drainage & flood control	Drainage	Early flood protection, Monsoon drainage
B-1	Location	Zone	South-Western Zone	South-Western Zone	South-Western Zone	South-Western Zone
B-2	Location	Upa-zilla / District	?	Keshabpur, Monirampur and Dumuria, Jessore & Khulna	?	Abhoynagor, Monirampur and Keshabpur, Jessore & Dumuria, Khulna
B-3	Objectives		Drainage Project	Drainage & flood control	Drainage	Flood control & drainage
B-4	Implementing agency		BWDB	BWDB	BWDB	BEDB
B-5	Existing structure at Implementation					
B-6	Beneficiaries	Number	125,000	120,000	145,000	1,000,000
B-7	Beneficiaries	Occupation	Cultivation & fisheries	Cultivation & fisheries	Cultivation & fisheries	Cultivation & fisheries
C	Project features					
C-1	Total Project area	ha	38,400	24,078	16,516	28,340
C-2	Irrigation area	ha	NA	NA	NA	NA
C-3	Flood affected area	ha	NA	7,100	NA	11,822
C-4	Drainage area	ha	38,400	24,078	16,516	16,518
C-5	Others	ha	NA	NA	NA	NA
D	Structural Details					
D-1	Embanment	Length km		26.00		26.00
D-2		Height		3m		4m
D-3		Crest width		4.2m		4.27m
D-4		Slope		1:3 / 1:2		1:3 / 1:2
D-5		Free Board		1.0m		1m
D-6		Design Flood		2.88 yr		1962 flood
D-7	Sluice gate					
D-8	Others for embankment					
D-9	Drainage canal	Length	32km	51km	20.15	51km
D-10		Depth	0.3m-1.8m	2.0m	0.91-4.3m	2.0m
D-11		Bottom	2.2-9.75m	5-6m	1-6.6m	10m Variable
D-12		Structure-1	Sluice: 25 units 1.52m*1.83m	Slice: 36units 1.52m*1.83m	Sluice: 10 units 1.52m*1.83m	Stop log, 1.83m*1.52m
D-13		Structure-2				
D-14	Irrigation canal	Length				
D-15	Intake structure	Type				
D-16		Size/Capacit				
D-17	Intake gates	Size				
D-18		Number				
D-19	Bank Protection	Type				
D-20		Length				
D-21	Size of Concrete block					
D-22	Dredging	Length				
D-23		Depth				
D-24		Volume				
D-25	Notes, Problems and Further requirement, etc.	1.				
D-26		2.				
D-27		3.				

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (16/42)

No.	Name of Division		Table-10			
			Jessor O&M Division			
A	Name of Project		Re-excavation of teka Mukteswari Project	Coastal Embankment Project (Polder-24)	Harihar River Re-excavation Project	Coastal Embankment Project (Polder-25)
	Reported by		Md. Abu Bakr Khan, Md. Mohsin Shaik	Md. Abu Bakr Khan, A.S.M.Ali Akber, Md. Bazlur Rahman	Md. Abu Bakr Khan, Md. Mohsin Shaik	?
E	Implementation & OM					
E-1	Const. Period		1979/80-1984/85 (5yr)	1972/73-1977/78 (5yr)	1979/80-1982/83 (5yr)	1962/63-1967/68 (5yr)
E-2	Construction stages		Completed	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	360.00	96.13	74.73	?
E-4	Financial source		GOB	IDA	IDA	GOB
E-5	Operation	Year to start	1979/80	1972/73	1979/80	1978/79
E-6	Annual operation cost	Cost in Taka	73.51	10	14.94	60
E-7	Annual maintenance	Work items	Re-excavation of river & repaire of sluice such as block replacement, supply of flap gate, lift gate, handle, nut-bolts, greasing.	Re-sectioning of emb., silt clearnce, repair of sluices, flap gate, slide gate, handle, etc.	Re-excavation of river & repaire of sluice such as block replacement, supply of flap gate, lift gate, handle, nut-bolts, greasing.	Re-sectioning of emb., re-excavation of canal, painting gates
E-8		Period	Dec-Apr	Dec-Apr	Dec-Apr	Jan-Jun
E-9		Cost in Lac Taka	73.51	10.00	14.94	60.00
E-10	Rate of annual OM	%	20%	10%	20%	?
E-11	Emergency maintenance / Repair	Period	NA	Repair work, closing of breach, closing pf ghogs, public cut, re-sectioning of damage slope	NA	Ghoge repair, silt clearance, retaired emb.
E-12	Cost	Lac Taka		?	?	5.0
E-13	Financing					
E-14	Major Rehabilitation epair conducted / required	Case-1	NA	NA	NA	Rehavilitation of flood damage with Taka 20 crores in 1994/95-2001/02
E-15		Case-2				NA
E-16		Case-3				
F	Actions at Flood Time					
F-1	Flood Warning		?	?	?	Received
F-2	Operation manual for		?	?	?	Ready
F-3	Actions at Flood Time		To take measures for removal of obstructione such as cross dam fish pata etc, from the river, & for opening closing gates of sluices	?	To take measures for removal of obstructione such as cross dam fish pata etc, from the river, & for opening closing gates of sluices	Close monitor of flood warning and very carefully watch flood embankment in 24 hr
F-4	FFWS Requirement		?	?	Necessary	Necessary
F-5	Problems if no FFWS		?	?	?	Severe flood damage may occure
F-6	Benefit attributable for FFWS	% of total damage	20%	?	20%	50%
F-7	Comments by respondent					We do alart people and safe valuable lives and crops

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On- going Projects (Based on the information responding to the Quetionnaire Survey) (17/42)

No.	Name of Division		Table-11A				
			Naogaon O&M Division (10 Projects)				
A	Name of Project		Naogaon polder-1 Sub-project	Tulshiganga left embankment sub-project	Chilimpur Saligrame Sub-project	Patnitola Sub-project	Badalgachi PC sub-project
	Reported by		Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain
B	Project Component		Flood control, drainage and irrigation	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage
B-1	Location	Zone	North-Western Zone	North-Western Zone	North-Western Zone	North-Western Zone	North-Western Zone
B-2	Location	Upa-zilla / District	Naogaon Sadar, Raninagar, Atrai, Manda & mohadevpur	Naogaon and joypurhat & Akkelpur	Dharmirhat, Naogaon	Mahadepur and Patnitola, Naogaon	Mahadepur and Patnitola, Naogaon
B-3	Objectives		to provide flood control, drainage facilities and to create irrigation facilities	To provide flod control of the project along with drainage improvement	To provide flood control and drainage improvement	To reduce damages to crops, properties and human suffering by providing flood control and drainage facilities	To provide flood control and drainage improvement
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation						
B-6	Beneficiaries	Number	?	?	?	?	?
B-7	Beneficiaries	Occupation	Cultivation	Cultivation	Cultivation	Cultivation	Cultivation
C	Project features						
C-1	Total Project area	ha	46,100	12,000	3,557	1,955	14,000
C-2	Irrigation area	ha	NA	NA	NA	NA	NA
C-3	Flood affected area	ha	46,100	12,000	3,557	1,955	14,000
C-4	Drainage area	ha	37,000	9,600	2,899	1,159	11,000
C-5	Others	ha	NA	NA	NA	NA	NA
D	Structural Details						
D-1	Embanment	Length km	66.07	25.06	10.27	26.09	32.75
D-2		Height	5m	3.5m	4.0m	4.0m	3.0m
D-3		Crest width	4.3m	3.6m	4.3m	4.3m	3.6m
D-4		Slope	1:3 / 1:2	1:2 /1:2	1:2.5 / 1:2	1:2.5 / 1:2	1:2 /1:2
D-5		Free Board	0.9m	0.9m	?	0.9m	0.9m
D-6		Design Flood	? (973 cms)	?	?	20yr (973.02 cms)	?
D-7	Sluice gate						
D-8	Others for embankment						
D-9	Drainage canal	Length	79.5km				
D-10		Depth	2.8m				
D-11		Bottom	2.28-17.35m				
D-12		Structure-1	Gate: VLG 2.44*3.05m 12units		Gate: VLG 1.50m*1.8m 1unit		Gates: VLG 1.82m*1.52m ?units
D-13		Structure-2					
D-14	Irrigation canal	Length					
D-15	Intake structure	Type					
D-16		Size/Capacit					
D-17	Intake gates	Size					
D-18		Number					
D-19	Bank Protection	Type	Concrete Blocks	Concrete Blocks	Concrete Blocks	Concrete Blocks	Concrete Blocks
D-20		Length					
D-21	Size of Concrete block		40cmx40cmx20cm、30×30×30、25×25×25	40cmx40cmx20cm、35×35×35	40cmx40cmx20cm、35×35×35	40cmx40cmx20cm、35×35×35、30×30×30	40cmx40cmx20cm、35×35×35
D-22	Dredging	Length					
D-23		Depth					
D-24		Volume					
D-25	Notes, Problems and Further requirement, etc.	1.					
D-26		2.					
D-27		3.					

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (18/42)

No.	Name of Division		Table-11A				
			Naogaon O&M Division (10 Projects)				
A	Name of Project		Naogaon polder-1 Sub-project	Tulsiganga left embankment sub-project	Chilimpur Saligrama Sub-project	Patnitola Sub-project	Badalgachi F.C sub-project
	Reported by		Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain
E	Implementation & OM						
E-1	Const. Period		1985-94 (9yr)	1990/91-1994/95(5yr)	1990/91-1994/95 (5yr)	1991/92-1994/95(4yr9	1988/89-1993/94(5yr)
E-2	Construction stages		Completed	Completed	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	10,400.00	802.84	86.00	127.02	841.57
E-4	Financial source		IDA, UNDP & GOB	Dutch-Sweedish & GOB	GOB	IDA & WFP	Dutch-Swidish & GOB
E-5	Operation	Year to start	1995/96	1996/97	?	1995/96	?
E-6	Annual operation cost	Cost in Taka	263.19	?	?	4.2	?
E-7	Annual maintenance	Work items	Repair of embanment and strucure	Maintenance of embankment and regulator gates	Depend on available fund	Repair of embankment, gates & hoist	Maintenance of embankment and regulatore gates
E-8		Period	Jan-May	Jan-May	Jan.-May	Jan-May	Jan-May
E-9		Cost in Lac Taka	18.41	1.56	1.73	5.78	3.26
E-10	Rate of annual OM	%	0.12%	0.19%	2.01%	4.50%	0.47%
E-11	Emergency maintenance / Repair	Period	Repair of embanment	Embankment	Embankment	Repair of embankment and protective work	Embankment
E-12	Cost	Lac Taka	3.9	0.1	1.4	?	1.4
E-13	Financing		For 2003/04		For 2002/03	?	For 2002/03
E-14	Major Rehabilitation epair conducted / required	Case-1		Repaire of 7km embankment with cost of 40 lac Taka in 1999-2001	?	NA	8.14km embankment rehabilitation with cost of 41.0 lac in 1999-2001
E-15		Case-2					
E-16		Case-3					
F	Actions at Flood Time						
F-1	Flood Warning		Receoved Sometimes	Received Sometimes	Received Sometimes	Received Sometimes	Received Sometimes
F-2	Operation manual for		None	None	None	None	None
F-3	Actions at Flood Time		Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area
F-4	FFWS Requirement		Necessary	FFWS is necessary	?	FFWS is necessary	FFWS is necessary
F-5	Problems if no FFWS		Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase
F-6	Benefit attributable for FFWS	% of total damage	?	20%	22%	?	20%
F-7	Comments by respondent						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (19/42)

No.	Name of Division		Table-11E				
			Naogaon O&M Division (10 Projects)				
A	Name of Project		Tulshiganga sub-project	Raktadaha-Lohachara Beel Drainage Scheme	Upper Nagor Valley sub-project	Nagor Vally sub-project	Construction of Embankment on Right bank of the River Atrai
	Reported by		Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain
B	Project Component		Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage	Flood Control and Drainage
B-1	Location	Zone	North-Western Zone	North-Western Zone	North-Western Zone	North-Western Zone	North-Western Zone
B-2	Location	Upa-zilla / District	Naogaon Sadar, Badalgachi, Dharmairhat in Naogaon Dist. & Joypurhat Sadar, Akkelpur in Joypurhat Dist.	Naogaon Sadar, Raninagar, Atrai in Naogaon Dist. & Adamdighi in Bogra Dist.	Adamdighi, Dupchachia in Bogra Dist.	Atrai, Raninagar in Naogaon Dist. & Adamdighi in Bogra Dist.	Dharmoirhat, Patnitola, Mohadebpur, Manda in Naogaon
B-3	Objectives		To provide flood control and drainage improvement	To provide flood control and drainage facilities	To provide flood control and drainage facilities	To provide flood control and drainage facillities	To reduce damages to crops, properties and human suffering by providing flood control and drainage
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation						
B-6	Beneficiaries	Number	?	?	?	?	?
B-7	Beneficiaries	Occupation	Cultivation	Cultivation	Cultivation	Cultivation	Cultivation
C	Project features						
C-1	Total Project area	ha	25,100	11,400	4,100	15,700	20,700
C-2	Irrigation area	ha	NA	NA	NA	NA	NA
C-3	Flood affected area	ha	25,100	11,400	4,100	15,700	NA
C-4	Drainage area	ha	20,000	9,482	3,350	11,000	15,000
C-5	Others	ha	NA	NA	NA	NA	NA
D	Structural Details						
D-1	Embanment	Length km	62.00	35.00	25.55	58.00	60.30
D-2		Height	3.0m	3.5m	2.50m	3.0m	4.5m
D-3		Crest width	4.27m	4.3-6.0m	3.60m	3.6m	5.0m
D-4		Slope	1:2 / 1:2	1:2 / 1:3	1:2 /1:2	1:2 /1:2	1:3/ 1:3
D-5		Free Board	0.9m	?	?	?	0.9m
D-6		Design Flood	?	?	?	?	50yr (973.02cms)
D-7	Sluice gate						
D-8	Others for embankment						
D-9	Drainage canal	Length	23.6km	29km	NA		NA
D-10		Depth	2.0m	2.0m	NA		
D-11		Bottom	8.0m	15.0m	NA		
D-12		Structure-1	Gates: VLG 1.8m*1.5m ?units	Gates: VLG 1.8m*1.5m~1.8m ?units	Gates: VLG 1.8m*1.5m ?units	Gates: VLG 1.8m*1.5m ?units	
D-13		Structure-2					
D-14	Irrigation canal	Length					
D-15	Intake structure	Type					
D-16		Size/Capacit					
D-17	Intake gates	Size					
D-18		Number					
D-19	Bank Protection	Type		Concrete Blocks			NA
D-20		Length					
D-21	Size of Concrete block			40cmx40cmx20cm			
D-22	Dredging	Length					
D-23		Depth					
D-24		Volume					
D-25	Notes, Problems and Further requirement, etc.	1.					
D-26		2.					
D-27		3.					

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On- going Projects (Based on the information responding to the Quctionnaire Survey) (20/42)

No.	Name of Division		Table-11B				
			Naogaon O&M Division (10 Projects)				
A	Name of Project		Tulsbiganga sub-project	Raktadaha-Lohachara Beel Drainage Scheme	Upper Nagor Valley sub-project	Nagor Vally sub-project	Construction of Embankment on Right bank of the River Atrai
	Reported by		Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain	Md. Afzal Hossain
E	Implementation & OM						
E-1	Const. Period		1974-1986 (12yr)	1970-1980 (10yr)	1988-1991 (4yr)	1984-1988 (4yr)	2000/01-2003/04 (4yr)
E-2	Construction stages		Completed	Completed	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	299.42	193.40	708.16	1,570.00	3,501.75
E-4	Financial source		Dutch-Swidish & GOB	?	Dutch-Swidish & GOB	Dutch-Swidish & GOB	GOB
E-5	Operation	Year to start	1987/88	1981/82	1992/93	1989/90	NA
E-6	Annual operation cost	Cost in Taka	?				134
E-7	Annual maintenance	Work items	Repair of embankment and structures	Repair of embankment and structures	Repair of embankment and structures	Repair of embankment and structures	NA
E-8		Period	Jan-May	Jan-May	Jan-May	Jan-May	NA
E-9		Cost in Lac Taka	4.20	4.99	1.36	2.31	NA
E-10	Rate of annual OM	%	1.33%	2.58%	0.19%	0.15%	
E-11	Emergency maintenance / Repair	Period	Embankment	Embankment	Embankment	Embankment	NA
E-12	Cost	Lac Taka	1.2	0.05	?	0.9	NA
E-13	Financing		For 2002/03	For 2002/03		For 2002/03	
E-14	Major Rehabilitation epair conducted / required	Case-1	1998 Flood damage repair with cost of 201.68 lac in 2000/02	1998 Flood damage repair with cost of 145.36 lac in 2000/02 (400m protective work, 2.16km embankment, 4nos of WCS		1998 Flood damage repair with cost of 145.48 lac in 2000/02 (26.5km resectioning of embankment protection work	
E-15		Case-2					
E-16		Case-3					
F	Actions at Flood Time						
F-1	Flood Warning		Received Sometimes	?	?	?	Received Sometimes
F-2	Operation manual for		None	?	?	?	None
F-3	Actions at Flood Time		Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area	Strengthening spervision of embankment and structures, to keep ready gunny bags to meet emergency, to make arrangement to inform the people in the project area
F-4	FFWS Requirement		FFWS is necessary	FFWS is necessary	FFWS is necessary	FFWS is necessary	FFWS is necessary
F-5	Problems if no FFWS		Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase	Timely action could not be taken, project damage will increase
F-6	Benefit attributable for FFWS	% of total damage	?	?	?	?	
F-7	Comments by respondent						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (21/42)

No.	Name of Division		Table-12		Table-13
			Bogra O&M Division (2 Projects)		Cox's Bazar O&M Division
A	Name of Project		Upper Nagor River Embankment Sub-project	Brahmaputra Right Flood Embankment	Harbang Chara Irrigation Project
	Reported by		Md. Mukhlesur Rahman	Md. Mukhlesur Rahman	Shambhu Nath Biswas
B	Project Component		Flood Control and Drainage	Flood Control	Irrigation and Flood Control
B-1	Location	Zone	North-Western Zone	North-Western Zone	South-Eastern Zone
B-2	Location	Upa-zilla / District	Upazilla-Kaholoo, Nandigram & Singra, Bogra & Natore	Upazilla-Sonatola & Sariakandi, Bogra	Western side of Ctg-Cox's Bazar Highway, Cox's Bazar
B-3	Objectives		To protect land against monsoon flood in Nagor River, to provide drainage	Flood Control	Irrigation and Flood Control
B-4	Implementing agency		BWDB	BWDB	BWDB
B-5	Existing structure at Implementation				
B-6	Beneficiaries	Number	90000	?	3000
B-7	Beneficiaries	Occupation	Cultivation	Cultivation	Agriculture and business
C	Project features				
C-1	Total Project area	ha	13,863	216,200	300
C-2	Irrigation area	ha	13,863	NA	270
C-3	Flood affected area	ha	11,090	216,200	350
C-4	Drainage area	ha	11,090	NA	350
C-5	Others	ha	NA	NA	Catchment area of 3,900ha
D	Structural Details				
D-1	Embanment	Length km	39.24	220.00	4.97
D-2		Height	3.5m	6.0m	4.0m
D-3		Crest width	3.66m	5.0m	3.0m
D-4		Slope	1:2/1:2	1:3 / 1:3	1:2 / 1:2
D-5		Free Board	0.9m	1.5m	1.0m
D-6		Design Flood	?	?	20yr (145 cms)
D-7	Sluice gate				
D-8	Others for embankment				
D-9	Drainage canal	Length	61.5km		12km
D-10		Depth	2.5m		3.0m
D-11		Bottom	5.0m		20.0m
D-12		Structure-1	Gate: VLG 1.52m*1.52m 22units, 12 nos. Regulators	gate: VLG 1.52m*1.52m 1 unit	Concrete barrage with gates Roller gate H=1.83m, W=1.52m, 5units
D-13		Structure-2			
D-14	Irrigation canal	Length			2.7km (main) 3km (2nd & 3rd)
D-15	Intake structure	Type			
D-16		Size/Capacit			
D-17	Intake gates	Size			Concrete pipe structure, with stoplog H-0.75m W=0.5m 1 unit
D-18		Number			
D-19	Bank Protection	Type			Concrete Blocks
D-20		Length			
D-21	Size of Concrete block				45cmx45cmx30cm, 40×40×40
D-22	Dredging	Length			
D-23		Depth			
D-24		Volume			
D-25	Notes, Problems and Further requirement, etc.	1.			
D-26		2.			
D-27		3.			

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (22/42)

No.	Name of Division		Table-12		Table-13
			Bogra O&M Division (2 Projects)		Cox's Bazar O&M Division
A	Name of Project		Upper Nagor River Embankment Sub-project	Brahmaputra Right Flood Embankment	Harbang Chara Irrigation Project
	Reported by		Md. Mukhlesur Rahman	Md. Mukhlesur Rahman	Shambhu Nath Biswas
E	Implementation & OM				
E-1	Const. Period		1987/88-1991/92(4yr)	1963/64-1968/69 (6yr)	1990-1991 (1yr)
E-2	Construction stages		Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	770.00	675.00	124.00
E-4	Financial source		Netherland & Swiden	IDA	IDA: 94 GOB: 30
E-5	Operation	Year to start	1992/93	1969/70	1992
E-6	Annual operation cost	Cost in Taka	8.19	30	5
E-7	Annual maintenance	Work items	Re-sectioning of emb. Re-excavation of Drainage channel & Repairing & Maintenance of Regulator	Re-sectioning of embankment, retired embankment	Irrigation canal re-sectioning, gate repair, painting & seal change
E-8		Period	Jan-May	Jan-May	
E-9		Cost in Lac Taka	8.19	30.00	0.80
E-10	Rate of annual OM	%	1.06%	4.44%	4.68%
E-11	Emergency maintenance / Repair	Period	Before flood	Before flood Repaiding of rain cut Ghogs and slope protection	Gate repair, guide bundh repair / re-sectioning and loose appron repair
E-12	Cost	Lac Taka	?	10.0	5.0
E-13	Financing				
E-14	Major Rehabilitation epair conducted / required	Case-1	Flood damage repair with cost of 90 lac in 2000/01 (11.389km re-sectioning	Floord damage repair with cost of 35 lac in 2000/01 (2.8km re-sectioning)	Flood damage repair with cost of 7.S lac in 2000 (0.46km guide bundh, etc.)
E-15		Case-2	Flood damage repair with cost of 10.25 lac in 2001/02 (1.271km re-sectioning)	Floord damage repair with cost of 2.4 lac in 2001/02 (0.3 km re-sectioning)	Siltation of irrigation canal with 34 lac in 1999 (3.0km canal re-excavation)
E-16		Case-3	Flood damage repair with cost of 52.6 lac in 2002/03 (4.458km re-sectioning)	Floord damage repair with cost of 13.0 lac in 2002/03 (0.994 km re-sectioning)	
F	Actions at Flood Time				
F-1	Flood Warning		Not received	Received	Not received
F-2	Operation manual for		None	None	None
F-3	Actions at Flood Time		NA	To watch total BRE where rat hole, rain cut, holes are found immediate measures are taken to protect side slope	All the gates will be fully opened, repair the guide bundh on emergency basis
F-4	FFWS Requirement		?	?	Better than nothing
F-5	Problems if no FFWS		Embankment may be breached, & regulator cannot be operated	NA	The sudden flood with debris and wooden logs hit the structures and gates, and damage the upstream guide bundh and loose appron
F-6	Benefit attributable for FFWS	% of total damage	50%	50%	25%
F-7	Comments by respondent				

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (23/42)

No.	Name of Division		Table-14A					
			Moulvibazar O&M Division (11 Projects)					
A	Name of Project		Moulvibazar Town Protection Project	Shakha Borak sub-project	Dhalai River Project	Manu Left Flood Control Embankment Protection Project	Manu River Irrigation Project	Hail Haor Project
	Reported by		Kazi Abu Bakar Siddique Siddiqur Rahman	Kazi Abu Bakar Siddique Siddiqur Rahman	Kazi Abu Bakar Siddique Siddiqur Rahman	Kazi Abu Bakar Siddique Siddiqur Rahman	Kazi Abu Bakar Siddique Siddiqur Rahman	Kazi Abu Bakar Siddique Siddiqur Rahman
B	Project Component		Flood Protection	Flood control, irrigation &drainage	Flood control	Flood control and drainage	Flood control, Irrigation & Drainage	Irrigation, flood control & Drainage
B-1	Location	Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone
B-2	Location	Upa-zilla / District	Left bank of Manu River	At the left bank of Kushiyara & Shakha Borok river under Moulvibazar Sadar Upazilla	Right bank of Dhalai River, Major part of Komolgonj thana and part of Rajnagar & Kulaura Thana	Lefy bankof Manu River, Maulvibazar Sadar Upazilla	Maulvibazar Sadar & Rajnagar Upazilla under the district of Moulvibazar	Maulvibazar Sadar & Sreemongal Upazilla under the district of Moulvibazar
B-3	Objectives		Flood Protection	Flood control, irrigation &drainage	Flood control	Flood control and drainage	Flood control, Irrigation & Drainage	Irrigation, flood control & Drainage
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB and Kuwaiti Aid	IDA & WFP
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	500000	100000	250000	400000	500000	100000
B-7	Beneficiaries	Occupation	Service & business	Agriculture	Agriculture	Business & agriculre	Irrigation	Agriculture
C	Project features							
C-1	Total Project area	ha	1,500	4,520	23,000	11,480	24,076	24,372
C-2	Irrigation area	ha	NA	2,000	3,000	NA	12,146	3,900
C-3	Flood affected area	ha	1,500	3,800	17,500	11,480	22,672	18,178
C-4	Drainage area	ha	NA	3,000	3,000	NA	6,885	7,000
C-5	Others	ha	NA	NA	3,000	NA	NA	NA
D	Structural Details							
D-1	Embanment	Length km	9.00	7.81	57.00	16.86	98.00	39.23
D-2		Height	4.0m	3.0m	5m	3.5m	4.0m	3-4/3.5/3m
D-3		Crest width	4.27m	4.8m	4.27	2.45-3.66m	4.27m	4.27/3.05/4.27m
D-4		Slope	1:2 / 1:2	1:2.5 / 1:2.5	1:2 / 1:2	1:2 / 1:2-1:3	1:2 / 1:2, 1:2.5, 1:3	1:2-1:2/1:3-1:2/1:2-1:2
D-5		Free Board	0.9m	0.9m	1.0m	0.9m	0.9m	0.9/0.9/1.0m
D-6		Design Flood	20yr (1400 cms)	20yr (2,888cms	20yr (400cms)	20yr (1400 cms)	25yr (1400cms)	20yr
								Internal/Subm./Main
D-7	Sluice gate							
D-8	Others for embankment					Bank revetment 3.36km		
D-9	Drainage canal	Length		16km		0.5km		85km
D-10		Depth		3.0m		1.5-2.5m		3-4m
D-11		Bottom		10.5m		5.0m		4-10m
D-12		Structure-1		1 flushing gates & 3 regulators, lift gate of 1.5m * 1.8m		2 regulators / drainage sluice 0.5m * 0.5m		Bridge/culvert/ 35nos. Gopla river L=20km, H=5.5-6.5m, Bottom=30-60m, Slope 1:5
D-13		Structure-2						
D-14	Irrigation canal	Length					Main:36.54km, 2nd & 3rd: 71.95km	
D-15	Intake structure	Type						
D-16		Size/Capacit						
D-17	Intake gates	Size					Radial gate 2units 6.64*9.14, & 6 units 5.33m*9.14m Pump capacity 4.25 cms	
D-18		Number						
D-19	Bank Protection	Type	boulder stone	Stone boulders	Concrete block in slope, boulder in appron	Stone boulders	Stone boulders	
D-20		Length						
D-21	Size of Concrete block		40cmx40cmx20cm	40cmx40cmx20cm	40cmx40cmx20cm	40cmx40cmx20cm	40cmx40cmx20cm	
D-22	Dredging	Length						
D-23		Depth						
D-24		Volume						
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (24/42)

No.	Name of Division		Table-14A					
			Moulvibazar O&M Division (11 Projects)					
A	Name of Project		Moulvibazar Town Protection Project	Shakha Borak sub-project	Dhalai River Project	Manu Left Flood Control Embankment Protection Project	Manu River Irrigation Project	Hail Haor Project
	Reported by		Kazi Abu Bakar Siddique Siddique Rahman	Kazi Abu Bakar Siddique Siddique Rahman	Kazi Abu Bakar Siddique Siddique Rahman	Kazi Abu Bakar Siddique Siddique Rahman	Kazi Abu Bakar Siddique Siddique Rahman	Kazi Abu Bakar Siddique Siddique Rahman
E	Implementation & OM							
E-1	Const. Period		1971-1999/00 (29yr)	?	1996/97-	1983-1986 (3yr)	1975/76-1982/83 (8yr)	1981-1988/89 (8yr)
E-2	Construction stages		Completed	?	On-going	Completed	Completed	Completed
E-3	Const. Cost(lac Taka)	Lac Taka	832.00		500.00	437.00	7,260.00	658.00
E-4	Financial source		?					IDA 65S& WFP 1500t
E-5	Operation	Year to start	1971	1989		1986	1984	1981
E-6	Annual operation cost	Cost in Taka	?	?		?	?	?
E-7	Annual maintenance	Work items	Earth work revetment, Concrete workfiltering	Earth work, revetment, slope protection, repair of structures		Bank rebetment, re-sectioning of embankment, repair of revetment, construction of core wall	earth work, bank revetment	Earth work
E-8		Period	Nov-March	Nov-March		Nov-Mar	Nov-Mar	Nov-Mar
E-9		Cost in Lac Taka	20.00	22.00		10.00	45.00	30.00
E-10	Rate of annual OM	%	2.50%	19.32%		2.29%	6.19%	4.56%
E-11	Emergency maintenance / Repair	Period	Seepage & piping control, diltering, sliding & boiling control	Seepage & piping control, sliding of embankment, erosion of river bank		seepage & piping control, erosion, sliding control, boiling & filtering	Sliding & boiling control, piping & erosion control, filtering	NA
E-12	Cost	Lac Taka	3.0	3.0		5.0	20.0	
E-13	Financing							
E-14	Major Rehabilitation epair conducted / required	Case-1	Embankment breach in 1984, details not clear				NA	NA
E-15		Case-2	Bank protection 4.307km, flood wall 0.963km and core wall 0.96km, & re-sectioning of embankment 5.353kmin 1990-1999 with cost of $6.77lac					
E-16		Case-3						
F	Actions at Flood Time							
F-1	Flood Warning		Received Sometimes	Received Sometimes	?	Received Sometimes	?	?
F-2	Operation manual for		None	None	?	None	?	?
F-3	Actions at Flood Time		Opening of flood control room for monitoring, awareness of flood to local people, local adm., media, & public representatives. Monitoring weak point of project area & pre-cautionary measures are taken	Communicate with flood fighting committee in addition to the left	Monitoring different weak point of embakment, warning the nearby inhabitant & local adm. And public representatives	Monitoring the weak point of embankment, opening of flood control room to awair local people, adm. & public representatives, pre-cautionary measures are taken where seepage, piping, sliding, boiling & erosion occurred	Opening of control room to awair the local people, adm. & representatives. Communicate with the flood fighting committee. Precautionary measures are taken against erosion. Breaching, piping, sliding & boiling	No precautionary measures are taken because no gauge station
F-4	FFWS Requirement		Necessary	Necessary	?	?	?	?
F-5	Problems if no FFWS		Severe damage of inhavitant & infrastructures may occure	Severe damage of home-steads, crops & cattles & other infrastructures such as road, bridges & culverts	water level of Dhalai river rises suddenly and damage / breched flood embankment at different locations of right bank and damages the crops, infrastructures	Serious damage may occure by breacging of embankment at different locations	?	Home-steads & cattles are seriously affected
F-6	Benefit attributable for FFWS	% of total damage	30%	25%	30%	20%	20%	NA
F-7	Comments by respondent			25% above is for flushy regions, less in other region. The above annual cost for OM is required budget, but no budget allocation	Flood warning is urgently necessary since the Dhalai is flushy river			Why not applicable for benefit attributable for FFWS

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire

Table-2. Brief Features of the Completed and On-going Projects (Based on the information responding to the Quetionnaire Survey) (25/42)

No.	Name of Division		Table-14B					Table-15
			Moulvibazar O&M Division (11 Projects)					Sirajganj O&M Division
A	Name of Project		Tatapasha-Premnagar Flood Control Project	Manu River FCD Sub-project	hanhamichara FCD Sub-project	Sharifpur FCD Project	Manu River FCD Sub-project	River Bank Protection Project
	Reported by		Kazi Abu Bakar Siddique, Md Shafiul Huda Khan	Kazi Abu Bakar Siddique, Md Shafiul Huda Khan	Kazi Abu Bakar Siddique, Md Rafique Ullah	Kazi Abu Bakar Siddique, Md Rafique Ullah	Kazi Abu Bakar Siddique, Md Rafique Ullah	Md. Abdul Hamid /Md.Nizamul Haque Bhuiyan, Tapan Kumar Saha
B	Project Component		Flood control	Flood Control	Flood control & Drainage	Flood Control	Flood Control & Drainage	Flood Control
B-1	Location	Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Eastern Zone	North-Western Zone
B-2	Location	Upa-zilla / District	Union Kamarchak, Thana-rajnagar	Dist. Moulvibazar, Upazilla-Rajnagar & Kulaura	Distrct MoulvibazarUpazilla Sadar	District Moulvibazar, Upazilla Kulaura	District Moulvibazar, Upazilla Kulaura	District Sirajganj & Bogra, Upazilla Sirajganj Sadar and Sariakandi
B-3	Objectives		To save the people &crops infrastructure from flushy flood	To save the people and crops, infrastructure from flushy flood and to improve drainage system	To provide flood protection and drainage improvement	To protect agricultural land, homestead and infrastruture from flush flood providing improved damage	To protect agricultural land, homestead and infrastruture from flush flood providing improved damage	To prevent the merger of the Brahmaputra and Bangali Rivers and preventing regional flooding, &to protect
B-4	Implementing agency		BWDB	BWDB	BWDB	BWDB	BWDB	BWDB
B-5	Existing structure at Implementation							
B-6	Beneficiaries	Number	60000	50000	24600	5000	40000	2300000
B-7	Beneficiaries	Occupation	Farmer	Farmer (70%)	Agriculture	Agriculture	Agriculture	Cultivators & rural people
C	Project features							
C-1	Total Project area	ha	8,000	5,215	2,544	1,822	3,075	300,000
C-2	Irrigation area	ha	NA	NA	NA	1,175	NA	NA
C-3	Flood affected area	ha	8,000	1,500	1,294	1,214	1,500	300,000
C-4	Drainage area	ha	NA	1,500	457	1,214	1,500	NA
C-5	Others	ha	NA	NA	NA	NA	NA	7,800
D	Structural Details							
D-1	Embanment	Length km	12.85	27.61	10.00	10.34	36.00	?
D-2		Height	3.9m	4.0m	3.0m	4.0m	4.0m	?
D-3		Crest width	5.0m	4.3m	3.0m	4.27m	4.26m	?
D-4		Slope	1:3 / 1:3	1:3 / 1:3	1:2 / 1:2	1:2 / 1:3	1:2 / 1:3	?
D-5		Free Board	4.9m ?	0.9m	0.9m	0.9m	0.9m	?
D-6		Design Flood	20yr (1000cms)	20yr (1200cms)	20yr (30cms ?)	20yr (1010cms)	20yr (1010cms)	?
D-7	Sluice gate							
D-8	Others for embankment							
D-9	Drainage canal	Length		19km	1.8km	5.42km	18.0km	
D-10		Depth		2m	2.0m	2.0m	2.0m	
D-11		Bottom		4.5m	6.0m	5.0m	5.0m	
D-12		Structure-1						
D-13		Structure-2						
D-14	Irrigation canal	Length						
D-15	Intake structure	Type						
D-16		Size/Capacit						
D-17	Intake gates	Size						
D-18		Number						
D-19	Bank Protection	Type	?	?				
D-20		Length						
D-21	Size of Concrete block		40cmx40cmx20cm	40cmx40cmx20cm	30cmx30cmx30cm			65cm*59cm*45cm
D-22	Dredging	Length						2.55km
D-23		Depth						15.0m
D-24		Volume						3,550,000 m3
D-25	Notes, Problems and Further requirement, etc.	1.						
D-26		2.						
D-27		3.						

Notes: NA- Not Available or Not Applicable ?- No answer to the Questionnaire