

827
FAP-21/22-
209

**GOVERNMENT OF PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF WATER RESOURCES
WATER RESOURCES PLANNING ORGANIZATION**

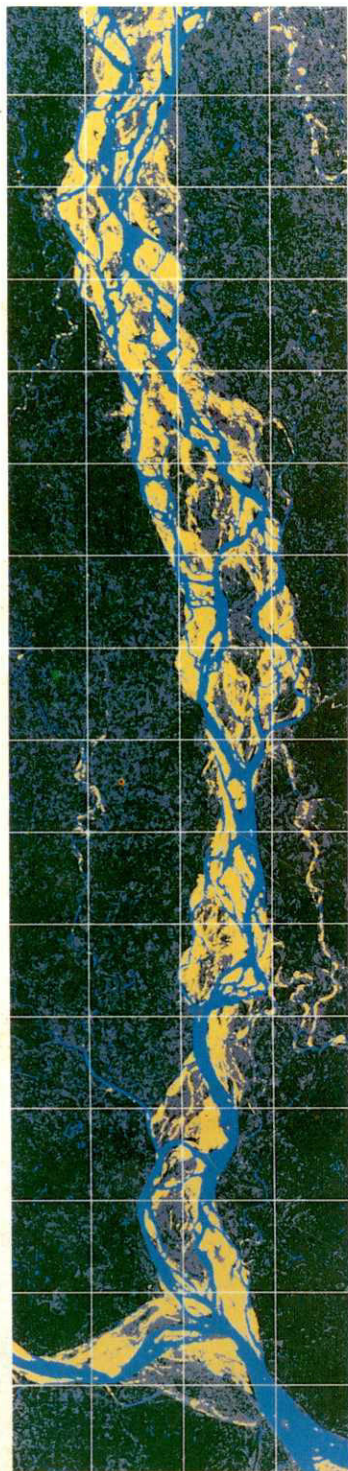
FEDERAL REPUBLIC OF GERMANY

**KREDITANSTALT FÜR
WIEDERAUFBAU (KfW)**

FRENCH REPUBLIC

**CAISSE FRANCAISE DE
DEVELOPPEMENT (CFD)**

43



**BANK PROTECTION AND
RIVER TRAINING (AFPM)
PILOT PROJECT
FAP 21/22**

827
FAP-21/22-
209

**TEST
AND
IMPLEMENTATION
PHASE**



**ADMINISTRATIVE AND
FINANCIAL REPORT
REFERRING TO
PROGRESS REPORT NO.24**

UP TO JUNE '99



**JAMUNA TEST WORKS CONSULTANTS, JOINT VENTURE
CONSULTING CONSORTIUM FAP 21/22**

RHEIN-RUHR ING.-GES.MBH, DORTMUND/GERMANY

**COMPAGNIE NATIONALE DU RHONE, LYON/FRANCE
PROF.DR. LACKNER & PARTNERS, BREMEN/GERMANY
DELFT HYDRAULICS, DELFT/NETHERLANDS**

In association with:

**BANGLADESH ENGINEERING &
TECHNOLOGICAL SERVICES LTD. (BETS)
DESH UPODESH LIMITED (DUL)**

2609 2

**BANK PROTECTION AND RIVER TRAINING
(AFPM) PILOT PROJECT
FAP 21/22**

TEST AND IMPLEMENTATION PHASE

**ADMINISTRATIVE AND FINANCIAL REPORT
REFERRING TO PROGRESS REPORT
NO. 24**

A-82

UP TO JUNE '99

6

**BANK PROTECTION AND RIVER TRAINING (AFPM)
PILOT PROJECT FAP 21/22**

**TEST AND IMPLEMENTATION PHASE
ADMINISTRATIVE AND FINANCIAL REPORT
REFERRING TO PROGRESS REPORT NO. 24**

Up to June '99

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A

INTRODUCTION

A INTRODUCTION

1 BACKGROUND

The Project was awarded by the Flood Plan Coordination Organization (FPCO) represented by the Kreditanstalt für Wiederaufbau (KfW) to the Joint Venture Rhein-Ruhr Ingenieur-Gesellschaft mbH as lead partner, Compagnie Nationale du Rhône, Prof.Dr. Lackner & Partners and Delft Hydraulics in association with Bangladesh Engineering and Technological Services Ltd. (BETS) and Desh Upodesh Ltd. (DUL).

The Consultancy Agreement was signed on October 14, 1991. The date of commencement was fixed on December 01, 1991.

On the occasion of a project appraisal mission from 26.01.1993 to 07.02.1993 by KfW and CFD the results and recommendations of the Planning Study were discussed in tripartite meetings of FPCO, KfW/CFD and the Consultant. The study's overall concept was agreed to by FPCO and KfW/CFD.

As to the sequence of the activities, however, there was a preference to have a general discussion on river training prior to any further investigations and to formally finalize the FAP 22 Planning Study with that meeting. It was therefore agreed to obtain an Experts Opinion on Jamuna River Training/AFPM strategies by holding a discussion with a team of reputed experts in the field of river training and river basis management, and the Consultant was requested to make respective arrangements.

The other result of the discussions was the installation of the Final Stage of Phase I, after finalizing the main services of the Planning Study (Phase I) on 31.10.93 and before starting the Test and Implementation Phase (Phase II) on 01.06.1993. The Final Stage of Phase I served to prepare modified work and staffing schedule for Phase II, to receive and discuss the comments on the Draft Final Report, to prepare the respective answers and to issue the Final Report including the relevant comments. The costs of the Final Stage of Phase I are covered by the balance of the funds for Phase I.

The Letter to Proceed into the Test and Implementation Phase (Phase II) was issued on May 15, 1993 and the Test and Implementation Phase started on June 01, 1993.

The so called EXPERTS DISCUSSION on river training/AFPM of FAP 22 was held in Dhaka on 2nd, 3rd and 4th of November 1993.

A Technical and Financial Proposal for Extended Studies on Recurrent Measures was submitted in July 01, 1995 respectively February 1996. The Consultant started activities for Phase I of the studies in July but interrupted the activities until the Client agreed to the execution of activities of Phase I in March '96. The Study Report Phase I was submitted in August 1996. Client and Donors with their comments to this report requested further information on design and works, but gave the green light to start the physical tests immediately to avoid delays in the execution.

In July 1996 the Consultant proposed an extension of the monitoring phase of project up to December 1999 due to the postponement of the works at the second test site at Bahadurabad for one year. The Client approved Scenario B of the proposal on March 1997 up to the financial limits of the TAPP second revision (January 1997).

During the monsoon season 1997 and the following dry season severe erosion occurred further downstream from the Revetment Test Structure at Bahadurabad. Following the demand of the local population for suitable protection of their land and homesteads, WARPO requested the donors KfW and AFD during their review mission in July 1998 to agree to the implementation of a third test site at Ghutail, about 4 km downstream from the Revetment Test Structure. Since the test structures at Kamarjani and Bahadurabad had been implemented within the available budget and taking into account a cost estimate for their monitoring and maintenance until the completion of the Project by the end of December 1999, remaining funds of about DM 8.4 million were estimated. Taking further into account the intention to utilise the contract amount up to 100 %, it was agreed between the donors, WARPO and BWDB in July 1998 to implement a third FAP 21 test site at Ghutail.

Immediately after the decision had been taken in favour of a third test site, the Consultant started necessary investigations and surveys and arrived finally at the conviction that any test structure at any suitable test site on the Jamuna could not be completed before the monsoon season 1999. It was therefore suggested in letter No. CC/F21-22/WARPO-KfW/L/98-332 of November 01, 1998 to start the actual construction of the third test structure after the monsoon season 1999 only.

The Consultant submitted a "Proposal for Modification of Consulting Services for Test Sites" in December 1998. This proposal is based on a project duration up to end of the year 2000.

After incorporating the comments of the donors a revised version (Revision No. 1) was submitted in May 1999. The Donors and Client approved this revision. Hence all tables of this report have been modified accordingly regarding the quantity of man-month and other related quantities.

The present Report of the Test and Implementation Phase (Phase II) covers the period from June 01, 1993 to March, 1998 and includes in:

- Part A: Introduction;
- Part B: Administrative Subjects (FAP 21);
- Part C: Financial Aspects (FAP 21);
- Part C - Part 1: Costs of Consultancy;
- Part C - Part 2: Revision of Rates (FAP 21);
- Part D: Administrative Subjects (FAP 22);
- Part E: Financial Aspects (FAP 22);
- Part E - Part 1: Extended Studies on Recurrent Measures (FAP 22) / Costs of Consultancy;
- Part E - Part 2: Revision of Rates
- Part E - Part 3: Experts Discussion
- Part F: Procurement of Equipment and Materials Subcontracts for the Test Structure (FAP 21);
- Part G: Expenditures for the Works (FAP 21) / First Test Site at Kamarjani;
- Part H: Expenditures for the Works (FAP 21) / Second Test Site at Bahadurabad;
- Part I: Expenditures for the Works (FAP 21) / Adaptation Works at Kamarjani;
- Part J: Expenditures for the Works (FAP 21) / Adaptation Works at Bahadurabad;
- Part K: Expenditures for the Works (FAP 22);
- Part L: Expenditures for the Works (FAP 21) / Third Test Site, and
- Part M: Overall costs of the Project.

2 IMPORTANT DATES AND EVENTS

15.05.1993	Issue of Letter to Proceed into Test and Implementation Phase (Phase II)
01.06.1993	Date of Commencement for the services for Phase II
02.11 to 04.11.1993	Experts Discussion on River Training (FAP 22)
17.01.1994	Issue of Letter of notification of fund commitment
23.02.1994	Issue of Tender Documents for Test Site No. 1 (Kamarjani)
17.04.1994	Tender Opening for Test Site No. 1 (Kamarjani)
08.06 to 20.06.1994	Audit of Technical Assessment of Procurement Arrangements of the Consultant by Dr. Friedrich von Raumer on behalf of FPCO/KfW/CFD
14.06 to 20.06.1994	FAP 21/22 Review Mission of KfW/CFD
29.06.1994	Letter of Intent to the successful bidder for the first test site
23.08.1994	Letter of Acceptance to the successful bidder for the first test site
07.09.1994	Signature of Contract for the works for the first test site
01.10.1994	Start of the construction works for the First Test Site
12.02 to 17.02.1995	Review Mission of KfW / CFD
16.04.1995	Issue of Tender Document for Test Site No. 2
02.05 to 03.05.1995 and 20.05 to 25.05.1995	Financial Audit for Test Site No. I by Deutsche Treuarbeit on behalf of FPCO/KfW/CFD
30.05.1995	Finalization of works of the Test Site No. I
11.06.1995	Tender Opening for Test Site No.2
07.08.1995	Letter of Acceptance to the successful bidder for the second Test Site No. 2
31.08.1995	Notice to Commence the works for Test Site No. 2
20.09 to 26.09.96	Technical Review of KfW/CFD
30.09.1995	Signature of contract for second Test Site No. 2
01.12.1995	Start of construction works at Bahadurabad Test Site
01.02.1996	Suspension of construction works at Bahadurabad Test Site
20.03.1996	Submission of letters of FORCE MAJEURE to WARPO for Kamarjani and Bahadurabad Test Site
26.06 to 03.07.1996	Review Mission of KfW/CFD
07.07.1996	Instruction to restart construction works for Test Site No. 2
18.07.1996	Proposal for Modification of Consulting Services
05.09.1996	Submission of Report on Extended Studies on Recurrent Measures (FAP 22)
30.09.96	Submission of Report on Monitoring and Adaptation 1995 at Test Site I
14.-17.11.1996	Review Mission of KfW / CFD
26.11.1996	Restart of construction works for Test Site No. 2
12.12.1996	Letter of Intent to The Engineers and Corolla Ltd. regarding implementation of bandals at Katlamari (FAP 22)
13.12.1996	Letter to Proceed with construction of bandals to The Engineers and Corolla Ltd. (FAP 22)
18.12.1996	Start of piling works at Katlamari site (FAP 22)
02.03.1997	Letter from the Client authorizing the extension of the Project up to December 1999.
29.09.1997	Works at Katlamari finalized

20.06 to 29.06.1997	Audit of Technical Assessment of Procurement Arrangements of the Consultant by Dr. Friedrich von Raumer on behalf of WARPO/KfW/CFD
07.07 to 21.07.1997	Financial Audit for all test sites by Deutsche Treuarbeit on behalf of WARPO/KfW/CFD
14.07 to 21.07.1997	Review Mission of KfW/CFD
22.12.1997	Submission of Modified Proposal of Technical and Financial Offer for Consultancy Service and Construction of Low Cost and Recurrent Measures (FAP 22) to KfW
14.07 to 23.07.1998	Review of Mission of KfW/AFD
23.12.1998	Submission of Proposal for Modification of Consulting Services for Test Site-3
01. to 07.03.1999	Technical Review Mission of KfW/AFD
31.05.1999	Submission of Proposal for Modification of Consulting Services for Test Site-3 (Revision 1)
23.06.1999	Order to commence with prefabrication of cc-blocks for Third Test Site

B

**ADMINISTRATIVE SUBJECTS
(FAP 21)**

B ADMINISTRATIVE SUBJECTS

1 STAFFING

1.1 Professional Staff Fielded

As per the Consulting Agreement the fees for the professional staff will be paid in accordance to the time actually spent on the project. The cost for local support staff is included in the office running costs.

The assignment periods of the expatriate staff for the reporting period are given in Part 1, Table 1 and for the local professional staff in Table 2.

1.2 Staff Schedule

Table 3 of Part 1 shows the staffing schedule as per Revision No. 2.

Revision No. 2 is the agreed Schedule and represents the prolongation of the project up to 12/1999 as agreed upon by the Client in March 1997. Table 4 of Part 1 shows the related Work Plan.

Modification of staff arrangement:

Expatriate Staff (according to Staffing Schedule Revision No. 2)

No.	Function	Person	Schedule Revision No. 3 (Project Duration :Total 91 Month)						Fielded up to 30.06.99	Modified MM	Remarks
			Total			up to 30.06.99 (P. Dur.: 73 month)					
			Bd	Eu	Total	Bd	Eu	Total			
1.1	Project Director	Dr. Neuhaus/ Dr. Kramer	3.00	9.00	12.00	1.71	9.38	11.09	11.09	0.00	theoretical value
1.3.1	Project Manager	C. Netzeband	76.50	2.50	79.00	63.00	3.00	66.00	63.30	-2.70	less work in Bd+Eu.
1.4	Chief Hydraulic Design Engineer	Dr. Kramer	24.00	6.00	30.00	16.21	5.23	21.44	21.40	-0.04	
2.1.1	Hydraulic Design E.	M. Schwarz	23.00	3.00	26.00	19.31	2.69	22.00	22.59	0.59	
2.2	Structural Engineer	K. Schnackenberg	2.13		2.13	2.00	0.00	2.00	2.13	0.13	
2.3.1	Mechanical Engineer	Dos Santos	1.00	0.00	1.00	2.00	1.00	3.00	1.00	-2.00	
2.4.1	Procurement Expert	Dos Santos	0.00	3.00	3.13	1.00	3.00	4.00	3.00	-1.00	
2.5.1	Subsoil Engineer	H. Wessling	1.20	2.06	3.26	2.00	2.00	4.00	3.26	-0.74	
3.1	Chief Supervising Engineer	Delille/Bouard/ Gruener							15.74		
									7.53		
			29.27	0.00	29.27	25.00	0.00	25.00	23.27	-1.73	
3.2.1	Supervising Engineer	Rouyer/Hourseau	18.96	0.00	18.96	20.00	0.00	20.00	18.96	-1.04	
3.4.1	Surveyor	J. Heise	4.44		4.44	5.50	0.00	5.50	4.44	-1.06	
3.5	Administrator	B. Thomas	30.00	0.00	30.00	28.00	0.00	28.00	28.78	0.78	for audit in 7/97
3.6.1	Monitoring Expert	T. Doescher L&P							11.37		
		T. Doescher RRI							0.77		
		T. Doescher CNR							5.04		
			23.00	0.00	0.00	16.00	0.00	16.00	17.18	1.18	
4.1.1	Morphologist	Dr. Mosselman	9.00	2.00	11.00	9.00	1.00	10.00	8.53	-1.47	
4.2.1	Modelling Expert	M.v.d. Wal/ J.Lambeek							18.61		follow up model tests of falling apron and filter tests, model tests adaptation site I
		Divet/Carrion							3.84		
			23.50	2.00	25.50	15.33	1.67	17.00	22.45	5.46	
4.3.1	Environmental Expert	C. Bertrand	2.00	0.00	2.00	1.00	0.00	1.00	0.97	-0.03	
4.5.1	Economist	NN	1.00	0.00	1.00	0.00		0.00	0.00	0.00	
4.6.1	Unallocated Site Supervision		7.00	1.44	8.44						
		J.C. Thiesson						2.10	2.10	0.00	interim site II
Total										-3.67	

Local Staff (according to Staffing Schedule Revision No.2)

No.	Function	Person	Schedule		Fielded up to 30.06.99	Modified MM	Remarks
			Total Bd	Up to 30.06.99 Bd			
1.3.2	DeputyProject Manager	S.Mansur	89.00	73.00	70.80	- 2.20	
2.1.2	Hydraulic Design Engineer 2	A.Q.M. Ali	35.00	31.51	31.51	-	
2.3.2	Mechanical Engineer 2	Masih ur Rahman	12.21	12.21	12.21	-	
2.4.2	Procurement Expert 2	Masih ur Rahman	1.00	1.00	1.00	-	
2.5.2	Subsoil Engineer 2	Mazharul Haque	3.11	3.11	3.11	-	
3.2.2	Supervising Engineer 2	F. Rahman/G. Quader	71.00	55.00	55.31	0.31	
3.3	Quantity Surveyor	Faizur R. Khan	26.80	26.80	26.80	-	
	Monitoring Expert 2	Anwar Haider	68.20	56.00	54.27	- 1.73	
3.4.2	Surveyor 2	A.H.M.Kamal	44.00	43.96	43.96	-	
3.6.2	Monitoring Expert 3+4	P.K. Maitra/Y.Khayer	98.00	66.00	66.17	0.17	
4.1.2	Morphologist 2	Salahuddin/Sarker	5.08	5.08	5.08	-	
4.2.2	Modelling Expert 2+3	Q. Saifuddin/SRKhan	20.00	19.97	19.97	-	additional model tests
		J.Islam/Kader					
4.3.2	Environmental Expert 2	Dr. N. Islam	2.50	1.30	1.30	-	
4.4	Socio Economist	T Nabi	33.00	27.50	30.05	2.55	3rd test site
4.5.2	Economist 2	NN	1.00	-	-	-	
					Total	- 0.90	

2 SUBCONTRACTS

2.1 General

The Consulting Agreement (Letter to Proceed) provides for four subcontracts to be executed under the Project, namely

1. Topographic, cadastral and bankline surveys (item 5.1)
2. Construction and test running of a Filter Test Rig (item 5.2)
3. Physical modelling of sites (item 5.3)
4. Subsoil investigations (item 5.4)

In addition special physical model investigations on falling aprons have been provided (item 4.1).

These model tests on falling aprons have been executed through the Laboratory division of the joint venture partner CNR in a small bypass channel of the river Rhône in France.

2.2 Subcontracts Concluded

Out of the above mentioned subcontracts, No. 3 has been concluded. Subcontract 1 is scheduled over several periods, four survey campaign has been concluded so far. The construction of the Filter Test Rig under Subcontract 2 has been finalized, the test have been executed between May 30, 1994 and September 22, 1994.

The main data regarding the subcontracts are as follows:

Item	Subject	Subcontractor	Amount paid up to 30.06.99		Remarks
			TK equivalent to DM		
5.1	Survey:				
5.1.3	1st campaign Kamarjani	Hydroland	336,500	14,374	Finalized
5.1.3	2nd campaign Kamarjani	Hydroland	135,000	4,979	Finalized
5.1.3	1st campaign Bahdurabad	Hydroland	323,220	13,754	Finalized
5.1.3	3rd campaign Kamarjani	Hydroland	75,000	2,940	Finalized
5.1.3	4th campaign (Katlamari + Kundarapara)	Hydroland	589,200	22,650	suspended
5.1.3	Both sites	Globe	968,440	43,247	on going
			2,427,360	101,944	
5.2	Filter Test Rig:				
5.2.1	Constr. & Installation	AIR	1,275,183	52,031	Finalized
5.2.2	Guarding	AIR	210,117	7,782	Finalized
5.2.2	Testing	AIR	256,598	10,200	Finalized
5.2.3	Filter Material	AIR	263,761	10,811	Finalized
			2,005,659	80,824	
5.3	Physical Modelling:				
5.3.1	Model bed rent Jan.93 to June 93	RRI-Faridpur	144,000	6,207	
5.3.2	Model Tests	RRI-Faridpur	1,387,000	55,480	
5.3.2a	Model Tests Adaptation: Site I: 1st part 1995/96 Site I: 2nd part 1997/98	RRI-Faridpur	926,000	33,127	
		RRI-Faridpur	2,287,181	89,734	
			4,744,181	184,548	
5.4	Subsoil Investigations:	Soiltech	293,460	12,600	
			293,460	12,600	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -
EXPATRIATE PROFESSIONAL STAFF
up to 30.06.99

No.	Function	Name	Time Spent cumulated long + short term assignments	Assignment Breakdown			Total Man Month **							
				Full Months	Working Days	Travel Days	Fees ***		Allowance ***		Hotel		House	
							Fees	Total	Allow.	Total	Item 2.5	Total	Item 2.4	Total
1.1	Project Director	Dr D Neuhaus / Dr H Kramer	01.06.93 - 31.12.98 1-5) 01.01.99 - 30.06.99	-	-	-	10.04 1.05	- 11.09	1.71 -	- 1.71	1.23 -	- 1.23	- -	- -
1.2	Home Office Support	RRI, CNR, L&P, DELFT	01.06.93 - 31.12.97 1-4) 01.01.98 - 30.09.98	-	-	-	8.20 -	- 8.20	- -	- -	- -	- -	- -	- -
1.3.1	Project Manager	C Netzeband	01.06.93 - 31.12.93 1) 01.01.94 - 31.12.94 1) 01.01.95 - 31.12.95 2) 01.01.96 - 31.12.96 3) 01.01.97 - 31.12.97 4) 01.01.98 - 31.12.98 5) 01.01.99 - 30.06.99 01.01.99 - 30.06.99 *#	- - - - - - 4 0	- - - - - - 22 11	- - - - - - 4 0	5.77 10.60 10.33 10.83 10.77 9.77 4.87 0.37	- - - - - - - 63.30	5.77 10.43 10.33 10.60 10.51 9.20 4.87 -	- - - - - - - 61.71	- - - - - - - -	- - - - - - - -	7.00 12.00 12.00 12.00 12.00 12.00 6.00 73.00	- - - - - - - -
1.4	Chief Hydraulic Design Engine	Dr H Kramer	07.06.93 - 31.12.93 1) 01.01.94 - 31.12.94 1) 10.02.95 - 29.12.95 2) 01.01.96 - 31.12.96 3) 01.01.97 - 31.03.97 4) 01.01.98 - 31.12.98 5) 01.01.99 - 31.03.99 01.01.99 - 31.03.99 *#	- - - - - - - -	- - - - - - 27 17	- - - - - - 3 -	2.30 3.64 4.33 2.97 3.09 3.50 1.00 0.57	- - - - - - - 21.40	2.03 2.97 3.27 2.27 2.26 2.37 1.00 -	- - - - - - - 16.17	1.90 2.70 2.87 2.06 2.00 2.07 0.90 -	- - - - - - - 14.50	- - - - - - - -	- - - - - - - -
2.1.1	Hydraulic Design Engineer	M Schwarz	03.09.93 - 22.12.93 1) 01.01.94 - 31.12.94 1) 01.01.95 - 29.12.95 2) 02.01.96 - 31.12.96 3) 27.05.97 + 03.06.97 4) 01.01.98 - 31.12.98 5) 01.01.99 - 31.03.99 01.01.99 - 31.03.99 *#	- - - - - - 0 0	- - - - - - 13 8	- - - - - - 2 0	3.80 5.55 7.70 3.37 0.07 1.33 0.50 0.27	- - - - - - - 22.59	3.80 4.90 7.03 3.07 - 0.60 0.50 -	- - - - - - - 19.90	3.67 4.63 6.40 2.74 - 0.47 0.43 -	- - - - - - - 18.34	- - - - - - - -	- - - - - - - -
2.2	Structural Engineer	K Schnackenberg	09.09.93 - 08.11.93 1)	-	-	-	2.13	-	2.13	-	2.00	-	-	-
2.3	Mechanical Engineer	Dos Santos	03.10.93 - 29.10.93 1)	-	-	-	1.00	-	1.00	-	0.87	-	-	-
2.4	Procurement Expert	Dos Santos	01.11.93 - 31.12.93 1) 01.01.94 - 31.01.94 1)	- -	- -	- -	2.00 1.00	- 3.00	- -	- -	- -	- -	- -	- -
2.5	Subsoil Engineer	H Wessling	15.11.93 - 16.12.93 1) 01.02.94 - 24.02.94 1) 01.03.95 - 16.11.95 2)	- - -	- - -	- - -	1.20 0.80 1.26	- - 3.26	1.20 - 1.20	- - -	1.07 - 1.07	- - -	- - -	- - -
3.1	Chief Supervision Engineer	C Delille J Y Bouard	04.09.94 - 22.12.94 1) 02.01.95 - 02.07.95 2) 16.09.95 - 31.12.95 2) 01.01.96 - 31.03.96 3)	- - - -	- - - -	- - - -	3.77 5.77 3.20 3.00	- - - 15.74	3.77 5.77 3.20 3.00	- - - 15.74	3.63 5.36 3.00 2.93	- - - 14.92	- - - -	- - - -
		HJ Gruener	20.10.96 - 31.12.96 3) 01.01.97 - 04.06.97	- -	- -	- -	2.40 5.13	- 7.53	2.40 5.13	- 7.53	2.33 5.07	- 7.40	- -	- -
3.2.1	Supervision Engineer	Rouyer / Hourseau G Hourseau	03.10.94 - 31.12.94 1) 01.01.95 - 31.12.95 2) 01.01.96 - 02.07.96 3)	- - -	- - -	- - -	3.00 10.36 5.60	- 18.96	3.00 10.36 5.60	- 18.96	2.83 9.93 5.33	- 18.09	- -	- -
		J.C. Thiesson	20.04.96 - 22.06.96 3)	-	-	-	2.10	-	2.10	-	1.97	-	-	-
3.4.1	Surveyor	J Heise H. Andrejewski J. Heise	15.10.93 - 31.12.93 1) 18.03.94 - 24.07.94 1) 20.02.95 - 11.07.95 2) 17.04.95 - 11.05.95 2) 13.08.96 - 26.08.96 3) 28.04.97 - 25.05.97 4)	- - - - - -	- - - - - -	- - - - - -	0.53 0.76 0.92 0.83 0.47 0.93	- - - - - 4.44	0.53 0.76 0.92 0.83 0.47 0.93	- - - - - 4.44	0.46 0.46 0.92 0.70 0.47 0.80	- - - - - 3.81	- - - - - -	- - - - - -
3.5	Administrator	B Thomas	19.06.94 - 22.12.94 1) 02.01.95 - 31.12.95 2) 01.01.96 - 22.12.96 3) 28.06.97 - 02.08.97	- - - -	- - - -	- - - -	6.27 10.90 10.44 1.17	- 28.78	6.27 10.90 10.44 1.17	- 28.78	6.13 2.90 - 1.03	- 10.06	9.00 12.00 -	- 21.00
3.6.1	Monitoring Expert	T Döschner	01.06.95 - 01.10.95 2) 01.06.96 - 30.09.96 3) 02.06.97 - 22.09.97 4) 01.04.97 - 23.04.97 4) 24.02.98 - 08.09.98 5) 23.02.99 - 30.06.99	- - - - 0	- - - - 29	- - - - 3	4.07 4.00 3.30 0.77 1.07	- 11.37 0.77 5.04	4.07 4.00 3.30 0.77 1.07	- 11.37 0.77 5.04	3.90 3.87 3.23 0.70 0.97	- 11.00 0.70 4.77	- -	- -
4.1.1	Morphologist	Dr E Mosselman	09.09.93 - 08.11.93 1) 09.06.94 - 14.06.94 1) 06.02.95 - 15.09.95 2) 18.02.96 - 15.09.96 3) 13.08.97 + 15.12.97 4) 01.01.98 - 31.12.98 5) 01.01.99 - 31.03.99 01.01.99 - 30.06.99 #	- - - - - - - -	- - - - - - 7 3	- - - - - - 3	2.20 1.66 1.00 1.67 0.70 0.87 0.33 0.10	- 8.53	2.20 1.43 1.00 1.30 0.70 0.57 0.33 -	- 7.53	2.07 1.16 0.87 1.14 0.60 0.47 0.23 -	- 6.54	- -	- -
4.2.1	Modelling Expert	M vd Wal J Lambeek	06.06.93 - 12.12.93 1) 06.03.94 - 31.12.94 1) 01.01.95 - 31.12.95 2) 01.01.96 - 31.10.96 3) 23.05.97 - 15.12.97 4) 01.01.98 - 31.12.98 5) 01.01.99 - 31.03.99 01.01.99 - 30.06.99 # 28.11.95 - 23.12.95 2) 18.02.96 - 05.03.96 3)	- - - - - - - - - -	- - - - - - 32 11	- - - - - - 3 -	4.63 3.71 2.31 1.83 1.60 1.43 1.17 0.37 1.00 0.57	- 18.61	4.63 3.41 2.21 1.83 1.10 1.13 1.17 - 0.90 0.57	- 16.95	0.23 3.34 2.15 1.77 1.00 1.03 1.07 - 0.77 0.43	- 11.79	5.00 -	- -
	Modelling Expert	E Divet/D Carrion D Carrion	27.05.97 - 06.12.97 4) 10.01.98 - 07.02.98 5)	- -	- -	- -	2.87 0.97	- 3.84	2.80 0.97	- 3.77	2.73 0.90	- 3.63	- 5.00	- -
4.3.1	Environmental Expert	C Bertrand	28.10.95 - 25.11.95 2)	-	-	-	0.97	-	0.97	-	0.83	-	-	-
4.5.1	Economist	-	-	-	-	-	-	-	-	-	-	-	-	-
							262.65		227.76		133.52		99.00	

* Home Office Work ** Decimal fractions of months are based on 30 days/month

*** Including travel days # Work for project purpose in Europe + Work for project purpose in Asia

1) For details refer to report no. 6 2) For details refer to report no. 10 3) For details refer to report no. 14

4) For details refer to report no. 18 5) For details refer to report no. 22

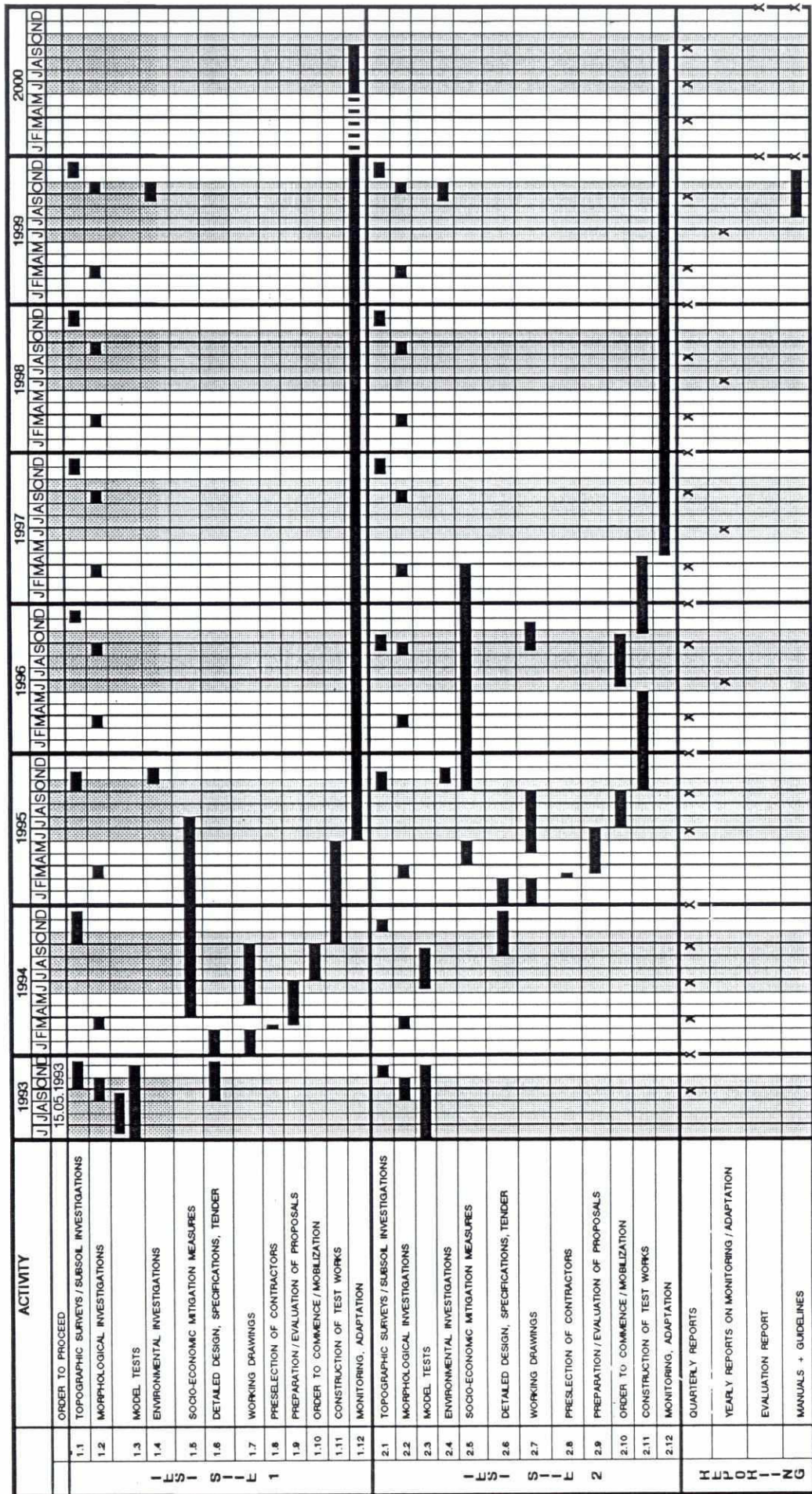
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CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -
LOCAL PROFESSIONAL STAFF
up to 30.06.99

No.	Function	Person	Assignment		Man-Month	
			From	To	Fees	Total
1.2	Home Office Support	Dr S K Chowdhury	01.06.93	31.12.93	0.70	6.40
			01.01.94	31.12.94	1.20	
			01.01.95	31.12.95	1.20	
			01.01.96	31.12.96	1.20	
			01.01.97	31.12.97	1.20	
			01.01.98	31.12.98	0.60	
			01.01.99	30.06.99	0.30	
1.3.2	Deputy Project Manager	S M Mansur	01.06.93	31.12.94	7.00	70.80
			01.01.94	31.12.94	11.84	
			01.01.95	31.12.95	11.74	
			01.01.96	31.12.96	10.88	
			01.01.97	31.12.97	11.68	
			01.01.98	31.12.98	11.93	
			01.01.99	30.06.99	5.73	
2.1.2	Hydraulic Design Engineer - 2	A Q M Ali	08.09.93	26.12.93	3.60	31.51
			01.01.94	31.12.94	11.28	
			31.01.95	31.12.95	11.34	
			01.01.96	31.12.96	4.29	
			01.01.97	31.01.97	1.00	
2.3.2	Mechanical Engineer - 2	Masih-ur-Rahman	04.10.93	03.11.93	1.00	12.21
			29.01.94	31.12.94	1.81	
			01.01.95	31.12.95	5.85	
			01.01.96	31.12.96	3.55	
2.4.2	Procurement - 2	Masih-ur-Rahman	04.11.93	15.12.93	0.70	1.00
			01.11.94	09.11.94	0.30	
2.5.2	Subsoil Expert - 2	Muzharul Haque	12.09.93	31.12.93	1.67	3.11
			01.01.94	10.02.94	1.44	
3.2.2	Supervising Engineer - 2	Fazlur Rahman	30.10.94	31.12.94	2.07	55.31
			01.01.95	31.12.95	11.70	
			01.01.96	31.12.96	11.70	
			01.01.97	31.12.97	11.84	
			01.01.98	31.07.98	7.00	
		Golam Quader	01.08.98	31.12.98	5.00	
			01.01.99	30.06.99	6.00	
3.3	Quantity Surveyor - 2	Faizur Rahman Khan	20.10.94	31.12.94	2.40	26.80
			01.01.95	31.12.95	11.90	
			01.01.96	31.12.96	12.00	
			01.03.97	31.03.97	0.50	
	Monitoring Expert - 2 / Quantity Surveyor - 3	A B M Anwar Haider	01.10.94	31.12.94	2.77	54.27
			01.01.95	31.12.95	11.83	
			01.01.96	31.12.96	11.67	
3.4.2	Surveyor - 2	A H M Kamal	27.09.93	31.12.93	3.10	43.96
			01.01.94	31.12.94	10.97	
			01.01.95	31.12.95	11.97	
			01.01.96	31.03.96	11.80	
			01.01.97	11.07.97	6.12	
3.6.2	Monitoring Expert - 3	Pankaj Kumar Maitra	04.05.95	31.12.95	7.93	37.93
			01.01.96	30.11.96	11.00	
			01.01.97	31.12.97	4.00	
			01.01.98	31.12.98	9.00	
			01.01.99	30.06.99	6.00	
	Monitoring Expert - 4 (Data Processor)	Yasmin Khayer	05.09.96	20.10.96	1.53	28.24
			28.10.96	14.11.96	0.57	
			20.01.97	31.12.97	11.14	
			01.01.98	31.12.98	9.00	
			01.01.99	30.06.99	6.00	
4.1.2	Morphologist - 2	M Salahuddin Khan M.H. Sarker	20.06.93	09.11.93	4.61	5.08
			01.10.96	14.10.96	0.47	
4.2.2	Modelling Expert - 2 + 3	Q Saifuddin / S R Khan	20.06.93	15.12.93	5.87	19.97
			21.07.93	09.09.93	1.63	
		Jahangir Islam	25.05.94	30.09.94	4.23	
			01.10.95	31.12.95	3.00	
		M. Kader	01.01.96	10.01.96	0.35	
			15.09.97	11.12.97	2.89	
		M.H. Sarker	11.01.98	19.02.98	1.33	
4.3.2	Environmental Expert - 2	Dr. Nazrul Islam	01.11.95	09.12.95	1.30	1.30
			01.11.95	09.12.95	1.30	
4.4	Socio-Economist - 2	Tauhidun Nabi	09.05.94	31.12.94	7.33	30.05
			01.01.95	31.12.95	7.57	
			01.01.96	31.12.96	11.45	
			01.01.97	31.01.97	1.00	
			01.04.99	30.06.99	2.70	
4.5.2	Economist - 2	nn	-	-	-	-
4.6.2	Unallocated - 2	nn	-	-	-	-
					Total	427.94

Observation : Decimal fractions of months are based on 30 days/month

BANK PROTECTION TEST STRUCTURES FAP 21
WORK PLAN
REVISION NO. 2 / REVISION NO. 3



BANK PROTECTION TEST STRUCTURES - FAP 21

TEST SITE - III

WORK PLAN

VERSION 05.1999

	ACTIVITY	1999												2000											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
3.1	MORPHOLOGICAL INVESTIGATIONS	■	■	■	■	■	■	■	■	■	■	■													
3.2	PROCUREMENT OF MATERIAL		■	■	■	■	■	■	■	■	■	■													
3.3	SITE SELECTION										■														
3.4	TOPOGRAPHIC SURVEY										■	■													
3.5	ENVIRONMENTAL INVESTIGATIONS										■	■													
3.6	SOCIO-ECONOMIC MITIGATION MEASURES										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3.7	DETAILED DESIGN, SPECIFICATIONS, TENDER										■	■													
3.8	WORKING DRAWINGS										■	■													
3.9	SELECTION OF SUB-CONTRACTOR										■														
3.10	ORDER TO COMMENCE/MOBILIZATION											■													
3.11	CONSTRUCTION OF TEST WORKS											■	■	■	■	■	■	■	■	■	■	■	■	■	■
3.12	MONITORING																		■	■	■	■	■	■	■
3.13	WORKSHOPS												■						■	■	■	■	■	■	■

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C

**FINANCIAL ASPECTS
(FAP 21)**

C - PART 1
COSTS OF CONSULTANCY

C-PART 1: COSTS OF CONSULTANCY

1 GENERAL

The Consulting Agreement provides for payment of the costs incurred by 4 quarterly installments for each consultancy budget year.

For each budget year an interim balance for the services rendered during the year shall be submitted. At the end of the project a final balance based on the interim balances shall be submitted.

To enable the Client and Funding Agencies a financial follow up and control of the Project during its execution the Administrative and Financial Report shall provide both an informative review of approximate costs accrued so far and a forecast on possible substantial changes of final costs, so far as anticipated at the date of reporting.

For easy reference the status of expenditures will be given in accordance to the tables of Attachment 3 of the Letter to Proceed and exactly along the same items, showing the quantities and amounts of the Agreement and additionally the quantities and amounts accrued until the respective date(s). These tables are given in Section C, Part 1, 2 and 3.

2 STAFFING COSTS

In Chapter B the staffing schedule is shown on Part 1, Table 1 and Table 2.

CONSULTANCY SERVICE FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

Item	Summary	Per Agreement			Revision No. 3		up to 30.06.99	
		DM			DM		DM	%
1	MANPOWER COSTS *	7,807,650			10,551,824		8,648,960	81.97
2	LUMPSUMS PER UNIT #	3,090,915			4,290,440		3,496,865	81.50
3	REIMBURSABLES #	866,400			747,810		564,993	75.55
4	LUMPSUMS #	480,000			539,000		509,000	94.43
5	SUBCONTRACTS #	416,000			409,972		379,916	92.67
6	CLIENT'S TRAINING, INFORMATION TOURS, CONFERENCES #	81,500			67,977		67,977	100.00
	SUBTOTAL (Sum item 2 to 6)	12,742,465			16,607,023		13,667,711 5,018,751	82.30
	PHYSICAL CONTINGENCIES	1,200,000						
	FINANCIAL CONTINGENCIES	2,057,535						
	PRICE ESCALATION REPLACING FINANCIAL CONTINGENCIES (ESTIMATE)				2,340,880		1,793,384	
	OBSERVATION : * Price basis of the unit rates as Consulting Agreement of October 14, 1991 # Price basis of the unit as per Letter to Proceed of May 15, 1993							
	Total	16,000,000			18,947,903		15,461,095	96.63

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

		Revision No. 3	up to 30.06.99	
Item	Description	DM	Total DM	%
1	MANPOWER COSTS * (Payment for actual assignment in the project)			
1.1	Expatriate Staff (see Table 1.1)			
1.1.1	Fees	7,769,533	6,348,324	81.71
1.1.2	Living Allowances	976,850	797,172	81.61
	Subtotal	8,746,383	7,145,496	
1.2	Local Staff (see Table 1.2)	1,805,441	1,503,465	83.27
	* OBSERVATION : - Vacation and sickness leave is included in the overhead costs of the man month rates - In item 1.1, 2 x 2 days are allowed for travel time for each roundtrip EUR - DHAKA			
TOTAL ITEM 1		10,551,824	8,648,960	81.97

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -
EXPATRIATE PROFESSIONAL STAFF

Note: The fees and allowances refer to the basic unit rates as per Consulting Agreement of October 14, 1991

**CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
TEST AND IMPLEMENTATION PHASE
LOCAL PROFESSIONAL STAFF**

Sl.	Function	Person	REVISION No. 3				up to 30.06.99	
			Fees (DM)		Fees (DM)		Incl. Allowances	
			MM	MM-Rate	Amount	MM	Amount	Amount
1.2	Home Office Support	Dr. S K Chowdhury	7.00	4,650	32,550	6.40	29,760	
1.3.2	Deputy Project Manager	S M Mansur	89.00	4,800	427,200	70.80	339,840	
2.1.2	Hydraulic Design Engineer - 2	A Q M Ali	35.00	3,800	133,000	31.51	119,738	
2.3.2	Mechanical Engineer - 2	Masih-ur-Rahman	12.21	4,000	48,840	12.21	48,840	
2.4.2	Procurement - 2	Masih-ur-Rahman	1.00	4,100	4,100	1.00	4,100	
2.5.2	Subsoil Expert - 2	Muzharul Haque	3.11	4,150	12,907	3.11	12,907	
3.2.2	Supervising Engineer - 2	Fazlur Rahman/G. Quader	71.00	2,700	191,700	55.31	149,337	
3.3	Quantity Surveyor - 2	Faizur Rahman Khan	(26.8)	2,650	251,750	26.80	71,020	
	Monitoring Expert - 2	Anwar Haider	95.00 (68.2)					
3.4.2	Surveyor - 2	A H M Kamal	44.00	3,700	162,800	43.96	162,652	
3.6.2	Monitoring Expert - 3 + 4	Pankaj K Maitra/Y. Khayer	98.00	2,650	259,700	66.17	175,351	
4.1.2	Morphologist - 2	M Salahuddin	5.08	4,300	21,844	5.08	21,844	
4.2.2	Modelling Expert - 2	Saifuddin /Khan/Islam/Sarker/Kader	20.00	4,800	96,000	19.97	95,856	
4.3.2	Environmental Expert - 2	Dr. Nazrul Islam	2.50	4,000	10,000	1.30	5,200	
4.4	Socio-Economist - 2	T. Nabi	33.00	4,100	135,300	30.05	123,205	
4.5.2	Economist - 2	nn	1.00	3,800	3,800	-	-	
4.6.2	Unallocated - 2	nn	3.10	4,500	13,950	-	-	
		Sub-Total Item 1.2	520.00		1,805,441	427.94	1,503,465	

Note: The fees and allowances refer to the basic unit rates as per Consulting Agreement of October 14, 1991

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

			Revision No. 3				up to 30.06.99			
Item	Description	Unit	Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	Remarks	
2	LUMPSUMS PER UNIT (Payment per unit performed)									
2.1	Main office running costs incl. rental, electricity, water, communications, stationary and full support staff	month	90.00	15,545	1,399,050	73.00	1,134,785	81.11		
2.2	Main office long term stand-by costs incl. reduced electricity, water, communication no stationary, no support staff	month	-	4,500	-	-	-	0.00		
2.3	Site office running costs incl. electricity, water guards	month	124.00	1,100	136,400	103.00	113,300	83.06	Kamarjani 58	
2.4	House running costs for long term exp. staff	month	116.00	3,000	348,000	99.00	297,000	85.34	Bahadurabad 45	
2.5	Hotel / guesthouse for short term exp. staff	month	160.00	3,500	560,000	133.52	467,320	83.45		
2.6	Jeep running costs incl. microbus	veh. - month	540.00	2,200	1,188,000	446.00	981,200	82.59	(7 jeeps)	
2.7	Sedan running costs	veh. - month	137.00	1,650	226,050	118.00	194,700	86.13	from 1,7 98 only 6 (2 sedan)	
2.8	Car rental costs	veh. - month	12.00	3,300	39,600	12.00	39,600	100.00	from 1 4 98 only 1	
2.9	Reporting (In case of additional orders the unit rates for items 2.9.2 and 2.9.3 will be reduced to 90 % of the original rate for the first ten additional copies and to 80 % for the eleventh and following copies)									
2.9.1	Quarterly report (26) (26 x 15)	piece	435.00	100	43,500	375.00	37,500	86.21		
2.9.2	Reports on monitoring (3) (4 x 15)	piece	60.00	200	12,000	45.00	9,000	75.00		
2.9.3	Evaluation reports (2) (2 x 15)	piece	30.00	500	15,000	-	-	-		
TO BE CARRIED FORWARD					DM		3,274,405			

Note: The rates refer to the basic unit rates as per Consulting Agreement of October 14, 1991

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CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
	CARRIED FORWARD				3,967,600		3,274,405		
2.9.4	Manuals and guidelines	piece	30.00	1,000	30,000				
2.9.5	Tender documents (2 sites)	piece	40.00	300	12,000	40.00	12,000	100.00	
2.9.6	Video, 30 min., commented	piece	1.35	48,700	65,900	1.00	48,700	73.90	
2.10	Ground Transport and miscellaneous costs for staff trips EUR - Dhaka	trip	118.00	330	38,940	102.00	33,660	86.44	
2.11	Excess baggage for some staff EUR - DHAKA	trip	50.00	750	37,500	35.00	26,250	70.00	
2.12	Transport to sites (air and train)	site	6.00	15,000	90,000	4.00	60,000	66.67	
2.13	Consultant's home office staff activities on the occasion of Client's staff trips to Europe at the Consultant's headquarters	man - week	3.00	6,000	18,000	3.00	18,000	100.00	
2.14	Allowance for Consultant's staff travelling for Project purposes	day	70.00	150	10,500	59.00	8,850	84.29	
2.15	Travel expenses (ground travel, Europe) for Consultant's staff travelling for Project purpose	trip	40.00	500	20,000	30.00	15,000	75.00	
TOTAL ITEM 2				DM	4,290,440		3,496,865	81.50	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

			Revision No.3				up to 30.06.99			
Item	Description	Unit	Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	Remarks	
3	REIMBURSABLES									
3.1	Site offices, construction and installation of semi-permanent buildings, inclusive local phone	piece		32,200	-				will not be used	
3.2	Construction of semi-permanent living units on site	piece		45,000	-				will not be used	
3.3	Office equipment for sites (fax, copier etc.)	site	3.00	7,500	22,500	3.00	22,500	100.00		
3.4.1	Jeep (Toyota Land Cruiser or equivalent) 2nd hand long wheel base	piece	1.00	33,301	33,301	1.00	33,301	100.00	New cars, procurement of 2nd hand cars was not possible due	
3.4.2	Jeep (Toyota Land Cruiser or equivalent) 2nd hand short wheel base	piece	1.00	33,301	33,301	1.00	33,301	100.00	do	
3.4.3	Motor bykes		4.00	4,543	18,173	4.00	18,173			
3.5	Consultant's air travel									
3.5.1	Staff, C-class, EUR - DHAKA#	trip	67.00	4,500	301,500	50.00	218,306	72.41	estimate	
3.5.2	Staff and dependants, exc. fare, EUR - DHAKA#	trip	97.00	2,750	266,750	85.00	196,967	73.84	estimate	
3.5.3	Staff, Regional air travel, Asia	trip	6.00	3,000	18,000	4.00	4,406	24.48		
3.5.4	Staff, Regional air travel, Europe#	trip	17.00	1,500	25,500	11.00	12,160	47.69		
TO BE CARRIED FORWARD					DM	719,025		539,114		

new unit rates due to favourable fares

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CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

			Revision No. 3				up to 30.06.99			
Item	Description	Unit	Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	Remarks	
	CARRIED FORWARD				719,025		539,114			
3.6	Hotel accommodation acc. to item 2.14	night	20	200	4,000	16.00	3,200	80.00		
3.7	Air freight for equipment	kg		12	4,785		3,697	77.26		
3.8	Sea freight	cmb		10,000			-	-		
3.9	* Cost for performance bond (To be valid until approval of the final invoice for each respective test work package)	constr. year	-	15,000	-		-		will not be used	
3.10	* * Miscellaneous costs for unforeseeable items (inspection flights, etc.)	to be detailed	0.50	40,000	20,000		4,951 1,531 12,500	24.76	Inspect. flight + others Flight for Video 12.97 workshop	
OBSERVATION :										
* The costs are estimated for bonds concluded with European Insurance companies in Europe i.e no Bangladeshi bond is contemplated										
** Subject to prior approval by the Client / KfW										
TOTAL ITEM 3					DM	747,810	564,993	75.55		

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
4	LUMPSUMS FOR SPECIAL ITEMS AND TASKS								
4.1	Physical modelling of falling aprons (CNR), (details see Table 4.1)	to be detailed	1	-	299,000	(1)	299,000	100.00	
4.2	Remote sensing evaluations (details see Table 4.2)	to be detailed	8	30,000	240,000	7	210,000	87.50	
TOTAL ITEM 4			DM				539,000	94.43	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES **- Test and Implementation Phase -**

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
4.1	PHYSICAL MODELLING OF FALLING APRONS (CNR - LABORATORY) for scope for works for the investigations references is made to subsection 11.2.4.2 of the Final Report, Vol. IA								
4.1.1	Lumpsums - Staff	LS			150,000	1.00	150,000	100.00	
	- Model construction / Instrumentation	LS			50,000	1.00	50,000	100.00	
	- Running cost	LS			25,000	1.00	25,000	100.00	
	- Reporting cost (up to 15 copies, further copies DM 500 each)	LS			15,000	1.00	15,000	100.00	
4.1.2	Lumpsums Cost for Bangladeshi graduate engineer with model testing experience								
	- accommodation + allowance	month	5.87	6,500	38,155	5.87	38,155	100.00	
	- fees for CNR	month	5.87	3,000	17,610	5.87	17,610	100.00	
4.1.3	Reimbursables Air travel, excursion fee for Bangladeshi engineer	trip	1	3,235	3,235	1.00	3,235	100.00	
TOTAL ITEM 4.1				DM	299,000		299,000	100.00	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -

			Revision No. 3				up to 30.06.99		
Item	Description	Unit	Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	Remarks
4.2	REMOTE SENSING EVALUATIONS								
4.2.1	Lumpsums Processing of status and multitemporal pictures (details see Item 4.2.2)	l.s. / year	8	11,280	90,240	7.00	78,960.00	87.50	93 -99
4.2.2	Reimbursables Purchase of Landsat TM Computer Compatible Tapes 1 x Jamuna North	year	8	18,720	149,760	7.00	131,040.00	87.50	93-99
TOTAL ITEM 4.2					DM	240,000		210,000.00	87.50

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
5	SUBCONTRACTS								
5.1	Surveys, (details see Table 5.1)	to be detailed			132,000	-	101,944	77.23	
5.2	Filter test rig. (details see Table 5.2)		1	(100,000)	80,824	-	80,824	100.00	
5.3	Physical modelling of sites (RRI)	to be detailed	1	(100,000)	184,548	-	184,548	100.00	additional model tests for test site I
5.4	Subsoil investigations	to be detailed	1	(30,000)	12,600	-	12,600	100.00	
TOTAL ITEM 5				DM	409,972		379,916	92.67	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES **- Test and Implementation Phase -**

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
5.1	SURVEYS								
5.1.1	Topographic Surveys for detailed design	site		30,000	-		-		will not be used
5.1.2	Cadastral Surveys for compensation	site		15,000	-		-		will not be used
5.1.3	Bankline Surveys on each site after each monsoon	site year	11.00	12,000	132,000	8.50	101,944	77.23	
TOTAL ITEM 5.1				DM	132,000		101,944	77.23	

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -

Item	Description	Unit	Revision No. 3			Up To 31.12.96			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
5.2	FILTER TEST RIG								
5.2.1	Construction and Supervision and installation	piece	1	52,031	52,031	1.00	52,031	100.00	
5.2.2	Testing as per Scope of Works, Chapter 0-4	LS	1	17,982	17,982	-	17,982	100.00	
5.2.3	Material etc.	LS	1	10,811	10,811	-	10,811	100.00	
TOTAL ITEM 5.2					80,824		80,824	100.00	

CONSULTANCY SERVICES FOR FAP 21 PHASE II - TEST STRUCTURES **- Test and Implementation Phase -**

Item	Description	Unit	Revision No. 3			up to 30.06.99			Remarks
			Quantity	Unit Rate DM	Total DM	Quantity	Total DM	%	
6	CLIENT'S TRAINING, INFORMATION TOURS, CONFERENCES								
6.1	Air travel to Europe and other places (C-class), (reimb.)	trip	8	3,829	30,635	8.00	30,635	100.00	
6.2	Allowance and accommodation for Client's staff trips to Europe at the Consultant's head quarters	l.s per week	5	2,651	13,257	5.00	13,257	100.00	
6.3	Hotel accommodation acc. to item 6.2 (reimb.)	nights	54	168	9,089	54.00	9,089	100.00	
6.4	Allowance at other places	days		150	-	-	-	-	included in 6.2
6.5	Miscellaneous costs, conference fees, ground travel etc. (reimb.)	to be detailed	0.75	20,000	14,996	1.00	14,996	100.00	
TOTAL ITEM 6				DM	67,977		67,977	100.00	

C - PART 2
REVISION OF RATES
(FAP 21)

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

REVISION OF RATES

Description	06/93 - 03/99 DM #	06/93 - 06/99 DM estimate*	REMARKS
Expert Professional Staff			
Fees	958,020.24	983,620.52	
Allowance	121,689.64	123,289.72	
Local Professional Staff	230,065.27	242,054.61	
Lumpsums	483,608.71	505,208.04	
	1,793,383.86	1,854,172.89	

For details refer to ADM.-FIN., REP No. 23

* estimate with 21.1 % for the period 3/99-06/99

D

**ADMINISTRATIVE SUBJECTS
(FAP 22)**

D ADMINISTRATIVE SUBJECTS (FAP 22)

No activities during the period under report.

E**FINANCIAL ASPECTS
(FAP 22)**

E - PART 1

**EXTENDED STUDIES ON RECURRENT
MEASURES (FAP 22)**

COSTS OF CONSULTANCY

CONSULTANCY SERVICE FOR FAP 22
- EXTENDED STUDIES ON RECURRENT MEASURES-

Item	Summary	Per Agreement/Modified Proposal		
		DM	DM	%
1	MANPOWER COSTS *	1,195,350	958,047	80.15
2	LUMPSUMS PER UNIT #	224,350	81,935	36.52
3	REIMBURSABLES #	66,000	36,349	55.07
4	LUMPSUMS #	67,500	-	-
	SUBTOTAL (sum item 2 to 4)	1,553,200	1,076,331 118,284	69.30
	PHYSICAL CONTINGENCIES FINANCIAL CONTINGENCIES (15 % of Subtotal), not included in Totals	353,200 232,980		-
	PRICE ESCALATION REPLACING FINANCIAL CONTINGENCIES OBSERVATION : * Price basis of the unit rates as Consulting Agreement of October 14, 1991 # Price basis of the unit as per Letter to Proceed of May 15, 1993		216,094	
	Total	1,200,000 800,000	1,292,425 571,721	107.70 71.47
	Grand Total FAP 22	2,000,000	1,864,146	93.21

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E - PART 2

REVISION OF RATES

CONSULTANCY SERVICES FOR FAP 22
- EXTENDED STUDIES ON RECURRENT MEASURES-
REVISION OF RATES

Description	06/93 - 03/99 DM #	06/93 - --/99 DM estimate*	REMARKS
Expert Professional Staff			
Fees	145,816.01		
Allowance	14,721.18		
Local Professional Staff	40,661.91		
Lumpsums	14,894.75		
	216,093.84	0.00	

For details refer to ADM.-FIN., REP No. 23

* estimate with ---- % for the period 4/99-----/99

FAP 21/22, ADM.-FIN.- 24

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E - PART 3

EXPERTS DISCUSSION

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERTS DISCUSSION

October-November 1993

Version : Rep. No. 10

Item	Summary	Per Consulting Agreement		Up to 31.12.93		REMARKS
		DM	DM	DM	DM	
1	MANPOWER COSTS	428,900		415,753		
2	LUMPSUMS PER UNIT	62,300		50,810		
3	REIMBURSABLES	84,000		61,837		
	SUBTOTAL	575,200		528,400		
	PHYSICAL CONTINGENCIES	140,000				
	FINANCIAL CONTINGENCIES	84,800		43,321		
	* OBSERVATION : Price basis of the unit rates is May 1991					
	Total	946,300		571,721		

For details refer to ADM.-FIN., REP. No. 10

F

**PROCUREMENT OF EQUIPMENT AND
MATERIALS
SUBCONTRACTS FOR THE TEST STRUCTURES
(FAP 21 AND FAP 22)**

F - PART 1

TEST SITE KAMARJANI
(FAP 21)

F PROCUREMENT OF EQUIPMENT AND MATERIALS, SUBCONTRACTS FOR THE TEST STRUCTURES (FAP21 AND FAP22)

Chapter F was built up completely new in report no. 18 in order to allow an easier and faster view over procurements supplies and subcontracts for each of the test structures. The last table of each subchapter is a summary per main items of all costs of the test structure so far accrued. For those chapters who have final figures only the summary table is shown.

Table F1-10 shows the **final** data for Test Structure Kamarjani (FAP 21).

Table F2-8 shows the **final** data for Test Structure Bahadurabad (FAP 21).

Table F3-1 to F3-5 shows the data for Adaptation Works Kamarjani (FAP 21).

Table F4-1 to F4-4 shows the data for Adaptation Works Bahadurabad (FAP 21).

Table F5-1 to F5-4 shows the data for Improved Bandaling and Floating Screens (FAP 22).

Table F6-1 to F6-3 shows the data for the 3rd test site (FAP21)

Table F1-10

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 TEST STRUCTURES KAMARJANI
 Summary F1-1 to F1-9

up to 31.12.97

Description	Paid To	Table	Amount D.M.	Amount Tk.
<u>In Bangladesh:</u>				
A. WORKS:				
Construction contract	Engineers & Corolla Co.	F1-1	4,964,033.90	133,509,188
B. Procurement & Supply:				
Supply of concrete elements	GEMCON Ltd.	F1-3	379,222.00	9,848,975
Hiring of equipment	Bengal Electric Ltd.	F1-4	409,747.44	10,521,792
Supply of stones and boulders	Exchange International Ltd.	F1-5	299,054.08	7,692,763
Port Carges & Demmorage	Bengal Bay + other	F1-6	190,710.12	5,078,922
Other		F1-7	256,777.83	6,698,314
Insurance premium	Sadharan Bima Co.	F1-8	188,453.42	4,777,054
			1,723,964.89	44,617,820
<u>Outside Bangladesh:</u>				
C. Procurement & Supply:				
C.1 Steel pipes & Construction steel		F1-2	1,940,130.74	50,443,399
C.2 Other		F1-9	3,163,234.56	82,244,099
			5,103,365.30	132,687,498
Total			11,791,364.09	310,814,506

F - PART 2

TEST SITE BAHADURABAD
(FAP 21)

Table F2-8

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD
 Summary F2-1 to F2-7

up to 30.06.98

Description	Paid To	Table	Amount D.M.	Amount TK.
<u>In Bangladesh:</u> A. WORKS: Construction contract	EC-MB Joint Venture	F2-1	10,621,822.38	283,120,435
<u>In and outside Bangladesh:</u> B. Procurement & Supply: Supply of stones and boulders Hiring of equipment Filter & Revetment Other Insurance premium	Exchange International Ltd. Multiple Engineering Sadharan Bima Co.	F2-2 F2-3 F2-4 F2-5 F2-6	1,279,652.51 374,588.75 1,522,118.25 339,300.69 157,345.99	33,972,311 10,412,000 40,204,183 8,988,030 4,466,514
<u>Outside Bangladesh:</u> C. Procurement & Supply:		F2-7	3,673,006.19 790,858.67	98,043,038 20,562,325
Total			15,085,687.24	401,725,798

F - PART 3

**TEST SITE KAMARJANI
ADAPTATION WORKS
(FAP 21)**

Table F3 -1

**JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI**

Works: Engineers & Corolla, Construction contract

Date	Description	Paid To	Amount DM	Amount TK
18.12.95	Interim payment certificate No. 1	Engineers & Corolla Co.	55,944.36	1,580,708
10.02.96	Advance payment to Contractor	Engineers & Corolla Co.	365,477.04	10,000,000
19.03.96	Interim payment certificate No. 2	Engineers & Corolla Co.	589,889.77	16,177,727
08.04.96	Interim payment certificate No. 3	Engineers & Corolla Co.	442,425.86	12,334,833
22.05.96	Interim payment certificate No. 4	Engineers & Corolla Co.	557,814.82	14,913,012
26.06.96	Interim payment certificate No. 5	Engineers & Corolla Co.	321,822.21	8,721,929
27.06.96	Interim payment certificate No. 7	Engineers & Corolla Co.	68,881.40	1,866,803
25.07.96	Interim payment certificate No. 6	Engineers & Corolla Co.	229,620.91	6,410,327
13.10.96	Interim payment certificate No. 8	Engineers & Corolla Co.	102,462.00	2,818,617
23.12.96	Payment of claims	Engineers & Corolla Co.	83,963.91	2,317,513
13.11.96	Interim payment certificate No. 9	Engineers & Corolla Co.	108,535.32	3,033,801
19.12.96	Interim payment certificate No. 10	Engineers & Corolla Co.	232,707.99	6,287,607
20.04.97	Interim payment certificate No. 11	Engineers & Corolla Co.	43,923.47	1,108,905
08.06.97	Release Retention Money	Engineers & Corolla Co.	87,120.70	2,205,809
14.07.97	Interim payment certificate No. 12	Engineers & Corolla Co.	98,320.69	2,378,810
09.11.97	Interim payment certificate No. 13	Engineers & Corolla Co.	59,906.73	1,565,207
17.11.97	Advance payment	Engineers & Corolla Co.	58,232.07	1,500,000
25.01.98	Interim payment certificate No. 14	Engineers & Corolla Co.	194,546.63	4,906,466
02.04.98	Interim payment certificate No. 15	Engineers & Corolla Co.	50,678.33	1,262,360
05.08.98	Interim payment certificate No. 16	Engineers & Corolla Co.	71,346.18	1,825,442
21.10.98	Interim payment certificate No. 17	Engineers & Corolla Co.	35,414.67	1,025,963
10.01.99	Interim payment certificate No. 18	Engineers & Corolla Co.	39,403.37	1,119,032
21.03.99	Interim payment certificate No. 19	Engineers & Corolla Co.	27,504.15	736,444
21.06.99	Interim payment certificate No. 20	Engineers & Corolla Co.	46,204.00	1,177,083
Total			3,972,146.58	107,274,398

Table F3 -2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI

1. Supply of welded Steel Pipes, Supplier: Starval
2. Supply of Boulders, Supplier: Exchange International
3. Hire of Equipment (Crawler Crane & Barge), Supplier: Multiple Equipment,
4. Supply of Geo-Textile Filter Material
5. Adaption Model: River Research Institute

Date	Description	Paid To	Amount DM	Amount TK
1. Steel Pipes:				
02.01.96	Welded steel pipes	Starval, France	775,863.85	20,172,460
12.03.96	Welded steel pipes	Starval, France	86,007.23	2,236,188
		Sub Total	861,871.08	22,408,648
2. Supply of Boulders:				
11.04.96	Supply of boulders	Exchange International	170,421.56	4,641,738
23.05.96	Supply of boulders	Exchange International	167,160.60	4,465,545
05.06.96	Supply of boulders	Exchange International	35,996.91	971,017
04.07.96	Supply of boulders	Exchange International	199,180.05	5,377,065
25.07.96	Supply of boulders (final)	Exchange International	38,323.39	1,069,874
		Sub Total	611,082.51	16,525,238
3. Hire of Equipment:				
31.03.96	Hiring of equipment	Multiple Engineering	19,685.61	540,000
01.05.96	Hiring of equipment	Multiple Engineering	19,940.55	540,000
04.06.96	Hiring of equipment	Multiple Engineering	20,006.67	540,000
04.11.96	Hiring of equipment	Multiple Engineering	24,526.60	680,000
03.12.96	Hiring of equipment	Multiple Engineering	26,777.05	720,000
		Sub Total	110,936.48	3,020,000
4. Geotextile Filter Material:				
28.01.96	Geotextile rolls	DIRD Pvt. Ltd.	120,437.16	3,306,000
23.05.96	Geo-jute material	Bangl. Jute Mills Corp.	2,052.65	55,121
		Sub Total	122,489.81	3,361,121
Total			1,706,379.88	48,676,128

Table F3-3

JAMUNA TEST WORKS CONSULTANTS

FAP 21 Adaption Works Kamarjani

Different Suppliers outside Bangladesh

Supplier	Specification	Invoice Amount	Payment		Total
			Date	Amount	DM
PTC Pantin, France	Pilling equipment, spare parts	FF 4,875.88	28.11.95	DM 1,422.25	16,192.05
		FF 9,356.78	17.01.96	DM 2,741.35	
		FF 19,238.15	23.05.96	DM 5,697.57	
		FF 21,433.00	20.06.96	DM 6,330.88	
OSAE Bremen, Germany	Repair Ashtech Receiver Repair Navipro Computer	DM 2,456.92	08.11.96	DM 2,456.92	5,508.06
		DM 3,051.14	04.12.96	DM 3,051.14	
ADM Warnau, Germany	Repair current meter	DM 7,650.00	31.05.96	DM 7,650.00	7,650.00
Wicking GmbH Hofgeismar, Germany	Spare parts for monitoring boat	DM 345.65	23.09.97	DM 345.65	345.65
PEGEDO Dortmund, Germany	Spare parts for monitoring boat	DM 1,402.70	10.05.96	DM 1,402.70	2,974.61
		DM 896.10	16.09.96	DM 896.10	
		DM 479.90	16.09.96	DM 479.90	
		DM 195.91	23.09.97	DM 195.91	
Knittel Dortmund, Germany	Foto equipment for monitoring	DM 462.16	16.09.96	DM 462.16	896.07
		DM 433.91	23.09.97	DM 433.91	
Labor für Wasserbau Bremen, Germany	Current measurements with drifter bouys, campagne 1997 Flight costs Prof. Nasner (BRE-DAC-BRE) Flight costs Mr. Torn (BRE-DAC-BRE) Flight costs Mr. Pieper (BRE-DAC-BRE) Final Invoice	DM 30,946.92	05.06.97	DM 30,946.92	132,670.84
		DM 29,551.00	11.09.97	DM 29,551.00	
		DM 5,985.78	23.09.97	DM 5,985.78	
		DM 1,630.00	23.09.97	DM 1,630.00	
		DM 1,476.00	23.09.97	DM 1,476.00	
TOTAL		DM 63,081.14	06.02.98	DM 63,081.14	166,237.28
approx. TK (rate 26)					4,322,169

**JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI**

Other, Different Suppliers in Bangladesh

Date	Description	Paid To	Amount DM	Remarks	Amount TK
07.03.96	Port charge & demurrage	Bengal Bay	25,571.34		700,000
25.04.96	Port charge & demurrage	Bengal Bay	44,390.19		1,200,000
29.06.96	Port charge & demurrage	Bengal Bay	4,212.67		114,491
	to be carried forward to last page of F3-4		74,174.20		2,014,491
	50 % share with Bahadurabad:				
04.09.94	C & F charge of testing equipment	Tivoli Enterprise	113.21	cash	2,931
21.09.97	Misc. Expenses for equipment & materials	Mr. Kamal	144.07	cash	3,730
26.09.94	C & F charge of spare parts for crane	Tivoli Enterprise	122.11	cash	3,162
16.10.94	C & F charge of survey instrument	Tivoli Enterprise	519.22	cash	13,444
25.10.94	Paid to MATWS for support of echo-sounder	MATWS	176.51	cash	4,570
06.11.94	C & F charge of computer accessories	Tivoli Enterprise	178.69	cash	4,627
15.11.94	Paid to MATWS, Calibration of echo-sounder	MATWS	356.00	cash	9,218
17.12.94	Advance for construction of boat	MATWS	965.57	563404	25,000
31.12.94	C & F charge of droppweight buffer	Tivoli Enterprise	710.23	cash	18,190
08.01.95	C & F charge of spare parts for crane	Tivoli Enterprise	378.26	cash	9,646
05.02.95	Paid Famous for furniture	Famous	333.33	cash	8,500
07.02.95	Final Payment construction of boat	MATWS	1,515.65	563408	38,621
14.02.95	Paid for Monitoring items to Md. Abu Bakar	Md. Abu Bakar	90.11	cash	2,300
20.02.95	Paid for Monitoring diskettes	Libra computer	446.66	cash	11,400
11.03.95	C & F charge of Monitor	Tivoli Enterprise	108.28	cash	2,760
30.03.95	Paid for steel cabinet	Showrab Engineering	124.40	cash	3,478
19.04.95	C & F charge of fuse import	Tivoli Enterprise	42.85	cash	1,198
30.04.95	Purchase of voltmeter, plug, stroke oil	B. F. Enterprise	54.90	cash	1,535
15.05.95	Purchase of voltmeter, raincoat etc.	Shahnoor, Sumuns	75.20	cash	2,103
18.05.95	Paid for repairing of boat	B. F. Enterprise	89.42	cash	2,500
20.05.95	Purchase of stop watch	Amir Biponi	14.31	cash	400
28.05.95	Payment for Aluminium works of boat	MATWS	590.43	563411	16,886
29.05.95	Purchase of gumboot	Progoti shoe house	5.36	cash	150
30.05.95	C & F charge of monitoring equipment	Tivoli Enterprise	197.76	cash	5,529
30.05.95	Purchase of outboard engine	B. F. Enterprise	2,028.10	563442	58,000
31.05.95	Purchase of thermometer	Conrad electronic	12.55	cash	351
04.06.95	Purchase of hose clip	Gulshan hardware	8.94	cash	250
05.06.95	Purchase of ronald equipment	Impulse computer	524.50	563414	15,000
12.06.95	Payment for Hood of Monitoring boat	MATWS	264.17	563415	7,555
02.07.95	Paid for Boat (Propellor)	B. F. Enterprise	259.32	cash	7,250
25.07.95	Payment for Misc. Works of Monitoring boat	B. F. Enterprise	489.54	563417	14,000
14.08.95	Engine oil for boat	B. F. Enterprise	56.70	cash	1,620
	to be carried forward		10,996.35		295,904

**JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI**

Other, Different Suppliers in Bangladesh

Date	Description	Paid To	Amount DM	Remarks	Amount TK.
	50 % share with Bahadurabad:	carried forward:	10,996.35		295,904
16.08.95	Purchase Boat accessories	B.F. Enterprise	117.17	cash	3,350
22.08.95	C&F charge for metal clamps of boat	Tivoli Enterprise	694.46	cash	19,857
28.08.95	Purchase Battery cell for monitoring	Safe way	10.05	cash	288
30.08.95	Processing charge of Radio Equipment	Mr. Mokshed	87.43	cash	2,500
04.09.95	Purchase spark plug	B.F. Enterprise	23.07	cash	660
30.09.95	C&F charge of Radio Equipment	Tivoli Enterprise	1,401.20	cash	40,072
10.10.95	Spares for outboard engine	B.F. Enterprise	431.85	cash	12,350
12.10.95	C&F charge for metal clamps of boat	Tivoli Enterprise	368.50	cash	10,539
28.10.95	Paid for Monitoring diskettes	Libra computer	87.41	cash	2,500
31.10.95	Purchase remote control for boat	B.F. Enterprise	68.18	cash	1,950
04.11.95	Paper for Monitoring	Book Villa	35.84	cash	1,025
18.11.95	Engine oil for boat	B.F. Enterprise	47.20	cash	1,350
29.11.95	C & F charge of monitoring equipment	Tivoli Enterprise	499.62	cash	14,289
15.12.95	C & F charge of Incomat sand flex mattress	Tivoli Enterprise	474.88	cash	13,691
10.01.96	Spares for Engine boat	B.F. Enterprise	322.58	cash	9,300
11.01.96	Paid for chemical	Gazi hardware	1.14	cash	33
28.01.96	Engine oil for boat	B.F. Enterprise	77.66	cash	2,250
12.02.96	Payment to DHL for monitoring boat	DHL	27.61	cash	800
14.02.96	C & F charge of measuring equipment	Tivoli Enterprise	261.54	cash	7,578
19.02.96	Sundry Expenses for boat	Sundry Debtors	30.00	cash	869
03.03.96	Purchase computer for monitoring	Libra computer	4,614.78	609357	133,500
16.03.96	Purchase colour printer for monitoring	Libra computer	4,350.96	609358	125,000
10.04.96	C & F charge for spare parts	Tivoli Enterprise	390.57	cash	11,316
23.04.96	C & F charge for spare parts	Tivoli Enterprise	868.60	cash	25,132
28.04.96	Misc Works for boat	MATWS	164.17	cash	4,750
28.04.96	Paid for fabrication of a small boat	Sanora Engineers	432.02	cash	12,500
14.05.96	Paid for rain coat purchase	Sumans	27.65	cash	800
20.06.96	Paid for purchase of silicon	Amazonas hardware	6.05	cash	175
20.06.96	Paid for purchase of scale	Asha hardware	4.32	cash	125
15.07.96	C & F charge for current meter	Tivoli Enterprise	854.98	cash	24,738
19.07.96	Purchase remote control for boat	B.F. Enterprise	311.05	cash	9,000
19.07.96	Purchase Mobil Engine oil	B.F. Enterprise	171.42	cash	4,960
20.07.96	Purchase Tyre & Tube	B.F. Enterprise	179.72	cash	5,200
30.08.96	Paid for sending measuring equipment	KLM Cargo	770.01	cash	22,272
08.09.96	C & F charge for measuring equipment Back	Tivoli Enterprise	459.12	cash	13,281
		to be carried forward:	29,669.16		833,904

Table F3-4

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**JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI**

Other, Different Suppliers in Bangladesh

Date	Description	Paid To	Amount DM	Remarks	Amount TK.
	50 % share with Bahadurabad:	carried forward:	29,669.16		833,904
03.10.96	Spares for outboard engine	B.F. Enterprise	641.82	cash	18,565
03.10.96	Engine oil for boat	B.F. Enterprise	112.01	cash	3,240
08.12.96	Paid for repairing of boat	B.F. Enterprise	93.33	cash	2,700
08.12.96	Paid for repairing of boat	B.F. Enterprise	895.67	cash	25,910
13.12.96	Paid for new phone line	T & T	321.49	cash	9,300
23.12.96	Paid for computer maintenance	Mr. Sikder	263.32	cash	7,618
20.02.97	Paid for repairing of boat	B.F. Enterprise	818.40	cash	23,675
28.02.97	Paid for repairing of boat	B.F. Enterprise	414.81	cash	12,000
22.03.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	302.47	cash	8,750
08.04.97	Spares for engine boat	B.F. Enterprise	328.39	cash	9,500
04.06.97	Purchase of outboard engine	B.F. Enterprise	3,067.87	609372	88,750
08.06.97	C & F charge for Survey equipment	Tivoli Enterprise	696.90	cash	20,161
08.06.97	C & F charge for Echolot paper	Tivoli Enterprise	499.37	cash	14,446
13.06.97	C & F charge for Radio Communication	Tivoli Enterprise	597.89	cash	17,291
22.06.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	164.20	cash	4,750
24.06.97	Spares for outboard engine	B.F. Enterprise	677.52	609375	19,600
25.06.97	Commission for Radio Communication	Mr. Mokshed	67.40	cash	1,950
24.07.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	285.19	cash	8,250
05.08.97	Float bodies	MAWTS	159.87	cash	4,625
02.09.97	Paid for repairing of boat	B.F. Enterprise	584.57	cash	14,328
04.09.97	Paid for exporting of Survey equipment	British Airways	1,006.26	cash	24,663
15.09.97	C & F charge for Survey equipment	Tivoli Enterprise	542.98	cash	13,308
30.10.97	Repairing & Spares for engine boat	B.F. Enterprise	1,370.50	cash	33,590
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	3,104.30	996861	79,945
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	1,941.52	996862	50,000
18.12.97	Payment for Sonar + Transducer repairing	Chowdhury Trading & Co.	749.73	996869	19,000
07.01.98	C & F charge for Measuring Equipment	Tivoli Enterprise	176.69		4,331
20.01.98	Transfer fee for shifting	T & T	51.00		1,250
28.01.98	Payment for Boat repair	B.F. Enterprise	3,862.54	996876	96,100
09.03.98	C & F charge for EDM	Tivoli Enterprise	139.83	996878	3,510
22.03.98	C & F charge for Nautical equipment	Tivoli Enterprise	544.76	996882	13,677
03.05.98	Customs Dues Collection	Custom House	5,852.15	1008104	149,117
20.05.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	196.23	1008105	5,000
20.05.98	C & F charge for E Sea Sound	Tivoli Enterprise	197.15	1008106	5,024
21.05.98	Repairing & Spares for engine boat	B.F. Enterprise	897.54	1008107	22,870
14.06.98	C & F charge for Measuring equipment	Tivoli Enterprise	734.94	cash	18,721
Total			62,029.57		1,689,418

**JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS KAMARJANI**

Other, Different Suppliers in Bangladesh

Date	Description	Paid To	Amount DM	Remarks	Amount TK.
	50 % share with Bahadurabad:	carried forward:	62,029.57		1,689,418
14/07/98	Repairing & Spares for engine boat	B.F.Enterprise	1,726.94	1008110	44,185
02/08/98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	196.28	cash	5,000
03/08/98	Renewal fee for Radio	T & T	439.68	cash	11,200
25/08/98	Repairing & Spares for engine boat	B.F.Enterprise	1,398.03	cash	35,770
25/08/98	C & F charge for Measuring equipment re-ext	Tivoli Enterprise	515.50	cash	13,189
05/10/98	Air Way bill for Measuring equipment re-ext	KLM Cargo	951.99	cash	24,357
05/10/98	Repairing & Spares for engine boat	B.F.Enterprise	1,367.95	cash	35,000
15/10/98	Paid for computer	Business Technologies	820.77	cash	21,000
20/10/98	Paid for computer	Business Technologies	195.42	cash	5,000
08/11/98	Repairing & Spares for engine boat	B.F.Enterprise	1,197.93	cash	30,650
08/12/98	Repairing & Spares for engine boat	B.F.Enterprise	582.36	cash	14,900
15/12/98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	439.70	cash	11,250
12/01/99	Payment for monitoring	A.B.C. Camera Inc.	2,058.01	996900	57,933
07/03/99	Advance payment to DM C.C for monitoring	Consulting Consortium	50,000.00	1141353	1,319,555
11/03/99	Payment for Boat repair & Engine purchase	B.F.Enterprise	2,837.35	1141355	75,800
31/03/99	Payment for Plotter repair	Bangladesh Tele. Co.	950.46	1141357	25,000
13/04/99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	288.46	cash	7,500
15/04/99	Paid for computer consumables	Business Technologies	22.12	cash	575
15/04/99	Paid for computer consumables	Business Technologies	13.46	cash	350
21/04/99	Paid for Monitoring Equipment repair	S.O. & S.E Works	125.00	cash	3,250
13/05/99	Paid for computer consumables	Business Technologies	15.38	cash	400
31/05/99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	230.77	cash	6,000
18/05/99	Repairing & Spares for engine boat	B.F.Enterprise	1,691.35	1008126	43,975
02/06/99	Paid for computer consumables	Business Technologies	57.69	cash	1,500
07/06/99	Paid for computer consumables	Business Technologies	163.46	cash	4,250
24/06/99	Repairing & Spares for engine boat	B.F.Enterprise	215.19	cash	5,595
		Sub-Total 50% share	130,530.82		3,492,602
		carried forward from F3-4 page 1	74,174.20		2,014,491
		Total	204,705.02		5,507,093

Table F3-5

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI
Summary F3-1 to F3-4

Description	Paid To	Table	Amount D.M.	Amount TK.
<u>A. WORKS:</u> Construction contract (including maintenance)	Engineers & Corolla Co.	F3-1	3,972,146.58	107,274,398
<u>B. Procurement & Supply:</u>				
Steel Pipes	Starval, France	F3-2	861,871.08	22,408,648
Supply of stones and boulders	Exchange International Ltd.	F3-2	611,082.51	16,525,238
Hiring of equipment	Multiple Engineering	F3-2	110,936.48	3,020,000
Geo-Textile Material	DIRD Pvt. Ltd.	F3-2	122,489.81	3,361,121
Other outside Bangladesh		F3-3	166,237.28	4,322,169
Other in Bangladesh		F3-4	204,705.02	5,507,093
	Sub-Total		2,077,322.18	55,144,269
Total			6,049,468.76	162,418,667

F - PART 4

TEST SITE BAHADURABAD

ADAPTATION WORKS

(FAP 21)

Table F4 -1

JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS BAHADURABAD

Works: EC-MB Joint Venture, Construction contract

Date	Description	Paid To	Amount DM	Amount TK
	<u>Works:</u>			
20.04.98	Interim payment certificate No. 24	EC-MB Joint Venture	47,210.42	1,202,643
05.05.98	Interim payment certificate No. 24/25	EC-MB Joint Venture	94,505.80	2,448,787
02.06.98	Interim payment certificate No. 26	EC-MB Joint Venture	40,385.46	1,044,477
15.07.98	Interim payment certificate No. 27	EC-MB Joint Venture	12,379.26	316,732
03.08.98	Interim payment certificate No. 28	EC-MB Joint Venture	16,725.98	427,946
04.10.98	Interim payment certificate No. 29	EC-MB Joint Venture	23,393.07	598,528
18.11.98	Interim payment certificate No. 30	EC-MB Joint Venture	11,358.49	290,615
01.12.98	Interim payment certificate No. 31	EC-MB Joint Venture	10,243.96	262,099
10.01.99	Interim payment certificate No. 32	EC-MB Joint Venture	9,521.96	270,418
17.02.99	Interim payment certificate No. 33	EC-MB Joint Venture	9,565.32	264,243
11.03.99	Interim payment certificate No. 34	EC-MB Joint Venture	9,193.60	245,607
15.04.99	Interim payment certificate No. 35	EC-MB Joint Venture	9,951.07	264,062
08.06.99	Interim payment certificate No. 36	EC-MB Joint Venture	10,000.66	252,849
08.06.99	Interim payment certificate No. 37	EC-MB Joint Venture	11,383.36	287,808
Total			315,818.41	8,176,814

Table F4-2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Adaption Works Bahadurabad
Different Suppliers outside Bangladesh

Supplier	Specification	Invoice Amount	Payment		Total
			Date	Amount	
VALEPORT	Spare parts for current meter Spare parts for current meter	GBP 406.00 GBP 816.00	12.06.98 DM 26.06.99 DM	1,202.37 2,418.12	3,620.49
Labor für Wasserbau Bremen, Germany	Current measurements with Drifter Bouys, campagne 1998 'Flight costs Mr. Torn (BRE-DAC-BRE) Airfreight of Equipment Instalment No. 2 Final Invoice	DM 28,125.00 DM 1,417.50 DM 1,616.71 DM 28,383.97 DM 36,583.00	29.06.98 DM 29.06.98 DM 29.06.98 DM 18.09.98 DM 11.02.99 DM	28,125.00 1,417.50 1,616.71 28,383.97 36,583.00	96,126.18
OSAE Bremen, Germany	Side sonar and bottom profiler scanning	DM 31,153.80 DM 10,049.35	21.04.98 DM 05.11.98 DM	31,153.80 10,049.35	41,203.15
Wiking GmbH Hofgeismar, Germany GEBIG	Spare parts for monitoring boat GPS Antenna	DM 307.00 DM 1,200.00	09.12.98 DM 09.12.98 DM	307.00 1,200.00	307.00
Instrument Technology Bremen, Germany	MICROTEL repair	DM 354.50	21.04.98 DM	354.50	1,200.00
Mutron Müller Bremen, Germany	Spare parts "monitoring"	DM 44.01	01.03.99 DM	44.01	354.50
STN ATLAS Elektronik Bremen, Germany	Distance Marker	DM 2,358.81	18.05.98 DM	2,358.81	44.01
Leica München, Germany	Repair TC 1600 Spare Parts	DM 4,770.00	18.05.98 DM	4,770.00	2,358.81
Gerling Dortmund, Germany	Insurance "Sub-Bottom-Profilier"	DM 1,262.00	09.12.98 DM	1,262.00	4,770.00
Schenker Dortmund, Germany	Transport monitoring equipment	DM 310.00	09.12.98 DM	310.00	1,262.00
Marimatech	Echosounder	DM 27,858.46	08.04.98 DM	27,858.46	310.00
EIVA Aarhus, Denmark	Navigation Board	USD 915.00 DKK 805.00	09.12.98 DM	1,838.23	27,858.46
Roda Computer Lichtenau, Germany	Monitoring Computer	DM 7,229.56	11.02.99 DM	7,229.56	1,838.23
					7,229.56
					188,482.39

approx. TK (rate 26)

Table F4-3

JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS BAHADURABAD

Other, Different Suppliers in Bangladesh

Date	Description	Paid To	Amount DM	Remarks	Amount TK.
01.04.98	Freight charge for return of sub-bottom profiler	Tivoli Enterprise	1,934.76		48,161
05.11.97	50 % share with Kamarjani:				
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	3,104.30	996861	79,945
18.12.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	1,941.52	996862	50,000
07.01.98	Sonar + Transducer repairing	Chowdhury Trading & Co.	749.72	996869	19,000
20.01.98	C & F charge for Measuring equipment	Tivoli Enterprise	176.69		4,331
28.01.98	Transfer fee for shifting	T & T	51.00		1,250
09.03.98	Payment for Boat repair	B.F. Enterprise	3,862.54	996876	96,100
22.03.98	C & F charge for EDM	Tivoli Enterprise	139.83	996878	3,510
03.05.98	C & F charge for Nautical equipment	Tivoli Enterprise	544.76	996882	13,677
20.05.98	Customs Dues Collection	Custom House	5,852.15	1008104	149,117
20.05.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	196.23	1008105	5,000
21.05.98	C & F charge for E. Sea Sound	Tivoli Enterprise	197.15	1008106	5,023
14.06.98	Repairing & Spares for engine boat	B.F. Enterprise	897.54	1008107	22,870
14.07.98	C & F charge for Measuring equipment	Tivoli Enterprise	734.94	cash	18,722
02.08.98	Repairing & Spares for engine boat	B.F. Enterprise	1,726.94	1008110	44,185
03.08.98	Renewal fee for Radio	Bangladesh Tele. Co.	196.28	cash	5,000
25.08.98	Repairing & Spares for engine boat	T & T	439.68	cash	11,200
25.08.98	C & F charge for Measuring equipment re-ex	B.F. Enterprise	1,398.03	cash	35,770
05.10.98	Air Way bill for Measuring equipment re-ext	Tivoli Enterprise	515.50	cash	13,190
15.10.98	Repairing & Spares for engine boat	KLM Cargo	951.99	cash	24,358
20.10.98	Paid for computer	B.F. Enterprise	1,367.95	cash	35,000
08.11.98	Repairing & Spares for engine boat	Business Technologies	820.77	cash	21,000
08.12.98	Repairing & Spares for engine boat	Business Technologies	195.42	cash	5,000
15.12.98	Repairing charge for Radio Communication	B.F. Enterprise	1,197.93	cash	30,650
12.01.99	Payment for monitoring	B.F. Enterprise	582.36	cash	14,900
07.03.99	Advance payment to DM C.C for monitoring	Bangladesh Tele. Co.	439.70	cash	11,250
11.03.99	Payment for Boat repair & Engine purchase	A.B.C. Camera Inc.	2,058.01	996900	57,933
31.03.99	Payment for Plotter repair	Consulting Consortium	50,000.00	1141353	1,319,555
13.04.99	Repairing charge for Radio Communication	B.F. Enterprise	2,837.36	1141355	75,800
15.04.99	Paid for Computer consumables	Bangladesh Tele. Co.	950.46	1141357	25,000
15.04.99	Paid for Monitoring Equipment repair	Bangladesh Tele. Co.	288.46	cash	7,500
13.05.99	Paid for Computer consumables	Business Technologies	22.12	cash	575
18.05.99	Repairing & Spares for engine boat	Business Technologies	13.46	cash	350
02.06.99	Paid for Computer consumables	S.O. & S.E. Works	125.00	cash	3,250
07.06.99	Paid for Computer consumables	Business Technologies	15.38	cash	400
24.06.99	Repairing & Spares for engine boat	Bangladesh Tele. Co.	230.77	cash	6,000
		B.F. enterprise	1,691.35	1008126	43,975
		Business Technologies	57.69	cash	1,500
		Business Technologies	163.46	cash	4,250
		B. F. enterprise	215.19	cash	5,595
		Total	88,884.39		2,319,892

Table F4-4

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS BAHADURABAD
 Summary F4-1 to F4-3

Description	Paid To	Table	Amount D.M.	Amount TK.
<u>A. WORKS:</u> Construction contract	EC-MB Joint Venture	F4-1	315,818.41	8,176,814
<u>B. Procurement & Supply:</u> Other outside Bangladesh Other in Bangladesh		F4-2 F4-3	188,482.39 88,884.39	4,900,542 2,319,892
	Sub-Total		277,366.78	7,220,434
Total			593,185.19	15,397,248

F - 15

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F - PART 5

**TEST SITE KATLAMARI
BANDALS AND FLOATING SCREENS
(FAP 21)**

JAMUNA TEST WORKS CONSULTANTS
FAP 22 IMPROVED BANDALING KATLAMARI

Date	Description	Paid To	Amount DM	Amount TK
24.12.96	Advance Payment, Improved Bandals	The Engineers & Corolla	33,258.56	900,000
05.02.97	IPC - No.- 1, Improved Bandals	The Engineers & Corolla	67,436.06	1,725,628
22.03.97	IPC - No.- 2, Improved Bandals	The Engineers & Corolla	145,112.02	3,671,334
15.07.97	IPC - No.- 3, Improved Bandals	The Engineers & Corolla	3,060.26	73,795
13.08.97	IPC - No.- 4, Improved Bandals	The Engineers & Corolla	22,589.92	533,122
25.01.98	IPC-5, Final payment, Improved Bandals	The Engineers & Corolla	40,977.56	1,033,454
			312,434.38	7,937,333
02.12.96	Paid for soil tests (Katlamari, FAP-22)	Subsoil Engineering & Cons.	3,422.20	99,000
24.03.97	Ropes	DIRD	9,429.47	237,750
07.01.97	Ropes	DIRD	5,366.93	144,000
03.05.97	Paid RRI Faridpur(Sediment Testing)	RRI, Faridpur	86.42	2,500
02.07.97	Paid RRI Faridpur(Sediment Testing)	RRI, Faridpur	108.02	3,125
14.12.97	Paid RRI Faridpur(Sediment Testing)	RRI, Faridpur	1,760.36	44,550
28.04.98	Paid RRI Faridpur(Sediment Testing)	RRI, Faridpur	481.47	11,825
			20,654.87	542,750
Total			333,089	8,480,083

JAMUNA TEST WORKS CONSULTANTS
FAP 22 Floating Screens KATLAMARI

Date	Description	Paid To	Amount DM	Amount TK.
15.07.97	IPC-No-1, Floating Screens	The Engineers & Corolla	36,932.75	888,000
24.07.97	Ropes	DIRD	1,578.84	37,500
13.08.97	IPC-No-2, Floating Screens	The Engineers & Corolla	39,604.24	934,660
25.01.98	IPC-3, Final payment, Floating Screens	The Engineers & Corolla	38,104.68	961,000
Total			116,220.51	2,821,160

F5-3

JAMUNA TEST WORKS CONSULTANTS
FAP 22 Bandaling & Floating Screens Kundarapara

Date	Description	Paid To	Amount DM	Amount Tk.
	Works:			
20.01.98	Advance payment, Kundarapara	The Engineers & Corolla	142,781.38	3,500,000
01.04.98	Kundarapara IPC- No- 1	The Engineers & Corolla	77,600.58	1,926,574
21.06.98	Kundarapara IPC- No 2	The Engineers & Corolla	97,033.71	2,480,958
15.11.98	Kundarapara IPC- No 3	The Engineers & Corolla	9,971.82	255,136
25.04.99	Kundarapara IPC- No 4	The Engineers & Corolla	12,481.07	325,885
			339,868.56	8,488,553
	Procurement:			
02.12.97	Hiring of Equipment	SWMC	694.43	17,583
13.02.98	Current Meter	Valeport	6,324.35	161,271
16.02.98	Load Transducer	Spectris	9,650.00	246,075
17.02.98	Transport of Equipment	Kühne & Nagel	1,570.74	40,054
09.03.98	C & F charge for equipment, Kundarapara	Tivoli Enterprise	1,282.60	32,200
09.03.98	C & F charge for equipment, Kundarapara	Tivoli Enterprise	1,820.89	45,714
10.03.98	Load Transducer Equipment	Spectris	5,977.30	152,421
10.03.98	Transport of Equipment	Schenker	344.80	8,792
10.03.98	Transport of Equipment	Schenker	437.65	11,160
01.04.98	C & F charge for equipment	Tivoli Enterprise	317.36	7,900
05.04.98	C & F charge for equipment	Tivoli Enterprise	406.35	10,108
16.03.98	Shackles, wire ropes, snatchblocks	Vierodam, Netherlands	75,222.05	1,955,773
02.04.98	Load Transducer	PIAB	7,975.00	207,350
03.06.98	C & F charge for equipment	Tivoli Enterprise	3,203.68	81,632
18.06.98	Wire Clamp	Haroon Enterprise	117.77	3,000
			115,344.97	2,981,034
	Total		455,213.53	11,469,587

JAMUNA TEST WORKS CONSULTANTS **FAP 22 KATLAMARI & KUNDARAPARA**

Summary F5-1 to F5-3

Description	Table	Amount DM	Amount TK.
Improved Bandels:			
Works:	F5-1	312,434.38	7,937,333.00
Other:	F5-1	20,654.87	542,750.00
Total:	F5-1	333,089.25	8,480,083.00
Floating Screens:			
Works	F5-2	116,220.51	2,821,160
Bandals & Floating Screens Kundarapara:			
Works:	F5-3	339,868.56	8,488,553
Other:	F5-3	115,344.97	2,981,034
Total:	F5-3	455,213.53	11,469,587
Works Total:			
Other Total:		768,523.45	19,247,046
		135,999.84	3,523,784
Total		904,523.29	22,770,830

F - PART 6

THIRD TEST SITE
(FAP 21)

Table F6 -1

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Test Site 3

Works: Engineers & Corolla, Construction contract

Date	Description	Paid To	Amount DM	Amount TK
22.06.99	<u>Works:</u> Advance Payment	EC-MB Joint Venture	902,520.15	22,914,422
Total			902,520.15	22,914,422

Table F6-4

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA

FAP 21 Test Site 3

Summary F6-1 to F6-3

Description	Paid To	Table	Amount D.M.	Amount TK.
<u>A. WORKS:</u> Construction contract (including maintenance)	Engineers & Corolla Co.	F6-1	902,520.15	22,914,422
<u>B. Procurement & Supply:</u> Other outside Bangladesh Other in Bangladesh		F6-2 F6-3	- -	- -
	Sub-Total		-	-
Total			902,520.15	22,914,422

G

**EXPENDITURES FOR THE WORKS
(FAP 21)**

FIRST TEST SITE AT KAMARJANI

G EXPENDITURES FOR THE WORKS (FAP 21)

- FIRST TEST SITE AT KAMARJANI

A. SUB CONTRACT MANAGEMENT REPORT FOR THE IMPLEMENTATION OF WORKS AWARDED TO CONSORTIUM: THE ENGINEERS LTD. AND COROLLA CO. LTD.

1. Basic Data

Original contract amount based upon original tender design:

Basic contract:	112,770,590	TK.
Day-works (Prov.):	10,509,637	TK.
Contingencies (Prov.):	11,277,059	TK.

Total	134,557,286	TK. (excluding VAT)
	=====	

2. Issuance of Variations Orders, Revised Design

Three variations orders were issued to the Contractor during the implementation phase to cover the various changes (omission or addition) to the original design (V.O.1 and V.O.2) mainly due to the actual conditions of the bankline and water level during the last quarter 1994. V.O. 3 covers only a listing of numerous minor works and adaptation works, together with the reconstruction of two small buildings affected by the construction of the groynes.

The theoretical new amount of the contract including the issued V.O. is as follows:

Basic contract:	112,770,590	TK.
V.O.1:	-14,030,510	TK.
V.O.2:	+15,862,998	TK.
V.O.3:	+17,892,770	TK.

Total	132,495,848	TK. (excluding VAT)
	=====	

3. Final Measurement, Actual Amount of Works Executed

As per contract conditions, most of the items of works being part of the basic contract or the variation orders are to be re-measured as per as built drawings. The works being substantially complete, an agreement of the final quantities of works executed by the Contractor took place in May/June 1995 and is supported by an internal document signed by the Consultant and the Contractor representatives.

The actual amount of agreed re measured works is as follows:

Basic contract:	70,316,928	TK.
V.O.1:	+7,896,175	TK.
V.O.2:	+31,109,969	TK.
V.O.3:	+17,892,770	TK.

Total	127,215,842	TK. (excluding VAT)
	=====	

Last payment to the Contractor (IPC No. 13 - final account) is TK. 133,509,188, cumulative, which amount is slightly in excess of the contracted amount, due to longer maintenance of the Engineer's Camp facilities.

Retention guarantee and performance bond have been released to the Contractor in February 96 due to the implementation of adaptation works.

No more payment for works are expected under this section of contract, since from the 1st of January, 1996 all cost would be managed under adaptation works section as per V.O. No. 04 issued on 12.02.1996 and Chapter I of this report.

B. Actual total amount of works, supplies and equipment

The cumulative amount (excl. VAT) is:

DM 11,791,364 equivalent to TK 310,814,506

These are the final figures for Kamarjani test site I. Further expenditures are accounted under Adaptation Works at Kamarjani in Part I.

H

**EXPENDITURES FOR THE WORKS
(FAP 21)**

SECOND TEST SITE AT BAHADURABAD

H EXPENDITURES FOR THE WORKS

- SECOND TEST SITE AT BAHADURABAD

Chapter H shows the expenditures (real payments) for the works of the Test Site II - Bahadurabad effected up to 30.06.98.

Table H-1 shows the payments effected in Bangladesh for the works including the payments for the procurement of equipment and materials.

Table H-2 shows the payments effected in Bangladesh for the different insurance purchase.

Table H-3 shows the payments effected in Germany for the procurement of equipment and materials.

Table H-4 shows the payments effected in Bangladesh for the procurement of equipment and materials.

A. SUB CONTRACT MANAGEMENT REPORT FOR THE IMPLEMENTATION OF WORKS AWARDED TO CONSORTIUM: EC-MB Joint Venture.

1. Basic Data

Original contract amount based upon original tender design:

Basic contract:	243,318,395	TK.
Day-works (Prov.):	7,570,099	TK.
Contingencies (Prov.):	33,985,259	TK.

Total	284,873,753	TK. (excluding VAT)
	=====	

2. Issuance of Variation Orders, Revised Design (1995-96)

Prevailing conditions in the selected area of Bahadurabad Ghat lead to a substantial revision of the original design. In this regard V.O. No. 1 was issued end of October '95. Due to the postponement of the works V.O. No. 2 was issued on first of December 1996.

The new breakdown is therefore:

Basic contract as per V.O. No. 2:	260,210,097	TK.
Day-works (Prov.):	7,570,099	TK.
Contingencies (Prov.):	17,093,557	TK.

Total	284,873,753	TK. (excluding VAT)
	=====	

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3. Actual amount of works executed:

The cumulative amount of works by end of June 1998 is TK 283,120,435 (excl. VAT) which includes works and supplies under the above mentioned contract as well as cost of maintenance of Employer's camp and treated claims.

B. Actual total amount of works, supplies and equipment

The cumulative amount (excl. VAT) up to end of June 1998 is:

	DM 15,085,687
equivalent to	TK 401,725,798

These are the final figures for Bahadurabad test site I. Further expenditures are accounted under Adaptation Works at Bahadurabad in Part J.

I**EXPENDITURES FOR THE WORKS
(FAP 21)*****ADAPTATION WORKS AT KAMARJANI***

I EXPENDITURES FOR ADAPTATION WORKS IN KAMARJANI

Chapter I shows the expenditures (real payments) for the adaptation works of the Test Site I - Kamarjani effected up to 30.06.1999.

Table I-1 shows the payment effected from the DM A/C in Bangladesh for the works including the payment for the procurement of materials.

Table I-2 shows the payments effected in Germany for the procurement of materials.

Table I-3 shows the payment effected from the TK A/C in Bangladesh for the works including the payment for the procurement of materials

A. SUB CONTRACT MANAGEMENT REPORT FOR THE IMPLEMENTATION OF ADAPTATION WORKS ATTRIBUTED TO CONSORTIUM: THE ENGINEERS LTD. AND COROLLA CORP (BD) LTD.

1. Basic Data

In order to implement these works, the Consultant has decided to issue a variation order to the Contractor in charge of the works of Kamarjani I, rather than going to a new tendering procedure, by using updated rates and in order to keep both original administrative and technical contract conditions.

V.O. No. 4 was therefore issued on 12.02.1996, which is financially independent from the Test Site I accounts, since a final account was agreed with the contractor as reported previously.

The Adaptation works under V.O. could not been finalized in 1996/1997 season. Works continued in December 97.

The scope of works was extended by some additional items including the maintenance of the site and the camp up to December 1999. The new figures are:

The extended V.O. No. 4 is detailed below:

Total of Bills :	$87,107,118 + 12,157,028 =$	99,264,146 TK.
Provision for day-works:	$4,355,356 + 607,851 =$	4,963,207 TK.
Contingencies:	$8,710,712 + 1,215,073 =$	9,916,785 TK.
	Total	114,144,138 TK.(excluding VAT)

3. Actual amount of works executed:

The cumulative amount of works by end of June 1999 is TK 107.274.398 (excl. VAT) which includes works and supplies under the above mentioned contract as well as cost of maintenance of Employer's camp and treated claims.

B. Actual total amount of works, supplies , equipment and maintenance

The cumulative amount (excl. VAT) up to end of June 99 is:

DM 6,066,124 equivalent to TK 175,458,135

Note: This amount includes an amount of TK 19,559,039 equivalent to DM 719,6178 for the delivery of boulders. These boulders had been ordered for adaptation works but finally will not be used at Kamarjani site. Most of the boulders have been shifted to Bahadurabad site in April/May 97.

Table I-1

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI
Expenditures DM Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka

Date	Description	Paid To	Amount DM Equivalent	Cheque No.	Remarks	Amount Tk.
18.12.95	Interim payment certificate No. 1	Engineers & Corolla Co	55,944.36	881188		1,580,708
28.01.96	Geotextile rolls	DIRD PM Ltd	120,437.16	881197		3,306,000
10.02.96	Advance payment to Contractor	Engineers & Corolla Co	365,477.04	933505		10,000,000
07.03.96	Port charge & demurrage	Bengal Bay	25,571.34	933510		700,000
19.03.96	Interim payment certificate No. 2	Engineers & Corolla Co	589,889.77	933514		16,177,727
31.03.96	Hiring of equipment	Multiple Engineering	19,685.61	933516		540,000
08.04.96	Interim payment certificate No. 3	Engineers & Corolla Co	442,425.86	933517		12,334,833
11.04.96	Supply of boulders	Exchange International	170,421.56	933518		4,641,738
25.04.96	Port charge & demurrage	Bengal Bay	44,330.19	933520		1,200,000
01.05.96	Hiring of equipment	Multiple Engineering	19,940.55	933521		540,000
22.05.96	Interim payment certificate No. 4	Engineers & Corolla Co	557,814.82	933525		14,913,012
23.05.96	Supply of boulders	Exchange International	167,160.60	933527		4,465,545
05.06.96	Supply of boulders	Exchange International	35,996.91	933530		971,017
04.06.96	Hiring of equipment	Multiple Engineering	20,006.67	933528		540,000
26.06.96	Interim payment certificate No. 5	Engineers & Corolla Co	321,822.21	933535		8,721,929
27.06.96	Interim payment certificate No. 7	Engineers & Corolla Co	68,881.40	933537		1,866,803
29.06.96	Port charge & demurrage	Bengal Bay	4,212.67	933536		114,491
04.07.96	Supply of boulders	Exchange International	199,180.05	933538		5,377,065
25.07.96	Interim payment certificate No. 6	Engineers & Corolla Co	229,620.91	933540		6,410,327
25.07.96	Supply of boulders (final)	Exchange International	38,323.39	933541		1,069,874
13.10.96	Interim payment certificate No. 8	Engineers & Corolla Co	102,462.00	654102		2,818,617
23.12.96	Payment of claims	Engineers & Corolla Co	83,963.91	654105		2,317,513
04.11.96	Hiring of equipment	Multiple Engineering	24,526.60	654106		680,000
13.11.96	Interim payment certificate No. 9	Engineers & Corolla Co	108,535.32	654107		3,033,801
03.12.96	Hiring of equipment	Multiple Engineering	26,777.05	654109		720,000
19.12.96	Interim payment certificate No. 10	Engineers & Corolla Co	232,707.99	654110		6,287,607
20.04.97	Interim payment certificate No. 11	Engineers & Corolla Co	43,923.47	654136		1,108,905
08.06.97	Release Retention Money	Engineers & Corolla Co	87,120.70	654147		2,205,809
14.07.97	Interim payment certificate No. 12	Engineers & Corolla Co	98,320.69	654150		2,378,810
09.11.97	Interim payment certificate No. 13	Engineers & Corolla Co	59,906.73	996863		1,565,207
17.11.97	Advance payment	Engineers & Corolla Co	58,232.07	996864		1,500,000
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co	3,104.30	996861	#	79,945
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co	1,941.52	996862	#	50,000
18.12.97	Payment for Sonar & Transducer repairing	Chowdhury Trading & Co	1,499.45	996869	#	38,000
25.01.98	Interim payment certificate No. 14	Engineers & Corolla Co	194,546.63	996875	#	4,906,466
28.01.98	Payment for Boat repair	B F Enterprise	3,862.54	996876	#	96,100
09.03.98	C & F charge for EDM	Tivoli Enterprise	139.83	996878	#	3,510
22.03.98	C & F charge for Nautical equipment	Engineers & Corolla Co	544.76	996882	#	13,677
02.04.98	Interim payment certificate No. 15	Engineers & Corolla Co	50,678.33	996886	#	1,282,360
05.08.98	Interim payment certificate No. 16	Engineers & Corolla Co	71,346.18	1008115	#	1,825,442
22.10.98	Interim payment certificate No. 17	Engineers & Corolla Co	35,414.67	996897	#	1,025,963
10.01.99	Interim payment certificate No. 18	Engineers & Corolla Co	39,403.37	996898	#	1,119,032
12.01.99	Payment for monitoring	A B C Camera Inc.	2,058.01	996900	#	57,933
07.03.99	Advance payment to DM C C for monitoring	Consulting Consortium	50,000.00	1141353	#	1,319,555
11.03.99	Payment for Boat repair & Engine purchase	B F Enterprise	2,837.35	1141355	#	75,800
21.03.99	Interim payment certificate No. 19	Engineers & Corolla Co	27,504.15	1141356	#	736,444
31.03.99	Payment for Plotter repair	Bangladesh Tele Co	950.46	1141357	#	25,000
21.06.99	Interim payment certificate No. 20	Engineers & Corolla Co	46,204.00	1141365	#	1,177,083
Total			4,955,715.15			133,899,647
# = 50 % share with Adaptation Bahadurabad						
# paid from TK Account 41587-201-88						

Table I-2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Procurement for Adaption Works Kamarjani
Expenditures DM Account with Dresdner Bank, Dortmund

Supplier	Specification	Invoice Amount	Payment		Total
			Date	Amount	DM
PTC Pantin, France	Pilling equipment	FF 4,875.88	28.11.95	DM 1,422.25	16,192.05
		FF 9,356.78	17.01.96	DM 2,741.35	
		FF 19,238.15	23.05.96	DM 5,697.57	
		FF 21,433.00	20.06.96	DM 6,330.88	
OSAE Bremen, Germany	Repair Ashtech Receiver Repair Navipro Computer	DM 2,456.92	08.11.96	DM 2,456.92	5,508.06
		DM 3,051.14	04.12.96	DM 3,051.14	
Starval St. Quentin, France	Welded steel pipes	FF 2,645,500.80	02.01.96	DM 775,863.85	861,871.08
		FF 293,911.20	12.03.96	DM 86,007.23	
ADM Warnau, Germany	Repair current meter	DM 7,650.00	31.05.96	DM 7,650.00	7,650.00
Wicking GmbH Hofgeismar, Germany	Spare parts for monitoring boat	DM 345.65	23.09.97	DM 345.65	345.65
PEGEDO Dortmund, Germany	Spare parts for monitoring boat	DM 1,402.70	10.05.96	DM 1,402.70	2,974.61
		DM 896.10	16.09.96	DM 896.10	
		DM 479.90	16.09.96	DM 479.90	
		DM 195.91	23.09.97	DM 195.91	
Knittel Dortmund, Germany	Foto equipment for monitoring	DM 462.16	16.09.96	DM 462.16	896.07
		DM 433.91	23.09.97	DM 433.91	
Labor für Wasserbau Bremen, Germany	Current measurements with Drifter Bouys, campagne 1997 Flight costs Prof. Nasner (BRE-DAC-BRE) 'Flight costs Mr. Torn (BRE-DAC-BRE) 'Flight costs Mr. Pieper (BRE-DAC-BRE) Final Invoice	DM 30,946.92	05.06.97	DM 30,946.92	132,670.84
		DM 29,551.00	11.09.97	DM 29,551.00	
		DM 5,985.78	23.09.97	DM 5,985.78	
		DM 1,630.00	23.09.97	DM 1,630.00	
		DM 1,476.00	23.09.97	DM 1,476.00	
		DM 63,081.14	06/02/98	DM 63,081.14	
1,028,108.36					1,028,108.36
equivalent in TK approx (26)					26,730.817

Table I-3

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI
 Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka and cash

Date	Description	Paid To	Amount TK	Cheque No.	Amount TK. part Kamarjani	Remarks
28.09.97	Advance payment for additional Model Tests	RRI, Faridpur	1,072,500	1008102	1,072,500	wrongly booked
29.04.98	Reimbursement by Consulting Consortium	JTWC	1,072,500	1004200	1,072,500	
	50 % share with Bahadurabad		100 %		50 %	
04.09.94	C & F charge of testing equipment	Tivoli Enterprise	5,862	cash	2,931	
21.09.97	Misc. Expenses for equipment & materials	Mr. Kamal	7,460	cash	3,730	
26.09.94	C & F charge of spare parts for crane	Tivoli Enterprise	6,323	cash	3,162	
16.10.94	C & F charge of survey instrument	Tivoli Enterprise	26,887	cash	13,444	
25.10.94	Paid to MATWS for support of echo-sounder	MATWS	9,140	cash	4,570	
06.11.94	C & F charge of computer accessories	Tivoli Enterprise	9,253	cash	4,627	
15.11.94	Paid to MATWS, Calibration of echo-sounder	MATWS	18,435	cash	9,218	
17.12.94	Advance for construction of boat	MATWS	50,000	563404	25,000	Advance Payment
31.12.94	C & F charge of droppweight buffer	Tivoli Enterprise	36,380	cash	18,190	
08.01.95	C & F charge of spare parts for crane	Tivoli Enterprise	19,291	cash	9,646	
05.02.95	Paid Famous for furniture	Famous	17,000	cash	8,500	
07.02.95	Final Payment construction of boat	MATWS	77,241	563408	38,621	Final Payment
14.02.95	Paid for Monitoring items to Md Abu Bakar	Md. Abu Bakar	4,600	cash	2,300	
20.02.95	Paid for Monitoring diskettes	Libra computer	22,800	cash	11,400	
11.03.95	C & F charge of Monitor	Tivoli Enterprise	5,520	cash	2,760	
30.03.95	Paid for steel cabinet	Showrab Engineering	6,956	cash	3,478	
19.04.95	C & F charge of fuse import	Tivoli Enterprise	2,396	cash	1,198	
30.04.95	Purchase of voltmeter, plug, stroke oil	B. F. Enterprise	3,070	cash	1,535	
15.05.95	Purchase of voltmeter, raincoat etc.	Shahnoor, Sumuns	4,205	cash	2,103	
18.05.95	Paid for repairing of boat	B. F. Enterprise	5,000	cash	2,500	
20.05.95	Purchase of stop watch	Amir Biponi	800	cash	400	
28.05.95	Payment for Aluminium works of boat	MATWS	33,771	563411	16,886	
29.05.95	Purchase of gumbboot	Progot shoe house	300	cash	150	
30.05.95	C & F charge of monitoring equipment	Tivoli Enterprise	11,058	cash	5,529	
30.05.95	Purchase of outboard engine	B. F. Enterprise	116,000	563442	58,000	
31.05.95	Purchase of thermometer	Conrad electronic	702	cash	351	
04.06.95	Purchase of hose clip	Gulshan hardware	500	cash	250	
05.06.95	Purchase of ronaid equipment	Impulse computer	30,000	563414	15,000	
12.06.95	Payment for Hood of Monitoring boat	MATWS	15,100	563415	7,550	
02.07.95	Paid for Boat (Propellor)	B. F. Enterprise	14,500	cash	7,250	
25.07.95	Payment for Misc. Works of Monitoring boat	B. F. Enterprise	28,000	563417	14,000	
14.08.95	Engine oil for boat	B. F. Enterprise	3,240	cash	1,620	
					295,895	
			to be carried forward:		295,895	

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Table I-3 cont.

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI
 Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka and cash

Date	Description	Paid To	Amount TK.	Cheque No.	Amount TK. part Kamarjani	Remarks
	50 % share with Bahadurabad		carried forward:		295,895	
			100 %		50 %	
16.08.95	Purchase Boat assesories	B. F. Enterprise	6,700	cash	3,350	
22.08.95	C&F charge for metal clamps of boat	Tivoli Enterprise	39,714	cash	19,857	
28.08.95	Purchase Battery cell for monitoring	Safe way	575	cash	288	
30.08.95	Processing charge of Radio Equipment	Mr. Mokshed	5,000	cash	2,500	
04.09.95	Purchase spark plug	B. F. Enterprise	1,320	cash	660	
30.09.95	C&F charge of Radio Equipment	Tivoli Enterprise	80,143	cash	40,072	
10.10.95	Spares for outboard engine	B. F. Enterprise	24,700	cash	12,350	
12.10.95	C&F charge for metal clamps of boat	Tivoli Enterprise	21,077	cash	10,539	
28.10.95	Paid for Monitoring diskettes	Libra computer	5,000	cash	2,500	
31.10.95	Purchase remote control for boat	B. F. Enterprise	3,900	cash	1,950	
04.11.95	Paper for Monitoring	Book Villa	2,050	cash	1,025	
18.11.95	Engine oil for boat	B. F. Enterprise	2,700	cash	1,350	
28.11.95	C & F charge of monitoring equipment	Tivoli Enterprise	28,577	cash	14,289	
15.12.95	C & F charge of Incomat sand flex mattress	Tivoli Enterprise	27,382	cash	13,691	
10.01.96	Spares for Engine boat	B. F. Enterprise	18,600	cash	9,300	
11.01.96	Paid for chemical	Gazi hardware	66	cash	33	
28.01.96	Engine oil for boat	B. F. Enterprise	4,500	cash	2,250	
12.02.96	Payment to DHL for monitoring boat	DHL	1,600	cash	800	
14.02.96	C & F charge of measuring equipment	Sundry Debtors	15,155	cash	7,578	
19.02.96	Sundry Expenses for boat	Tivoli Enterprise	1,738	cash	869	
03.03.96	Purchase computer for monitoring	Libra computer	267,000	609357	133,500	
16.03.96	Purchase colour printer for monitoring	Libra computer	250,000	609358	125,000	
10.04.97	C & F charge for spare parts	Tivoli Enterprise	22,631	cash	11,316	
23.04.96	C & F charge for spare parts	Tivoli Enterprise	50,264	cash	25,132	
28.04.96	Misc. Works for boat	MATWS	9,500	cash	4,750	
28.04.96	Paid for fabrication of a small boat	Sanora Engineers	25,000	cash	12,500	
14.05.96	Paid for rain coat purchase	Sumans	1,600	cash	800	
20.06.96	Paid for purchase of silicon	Amazonas hardware	350	cash	175	
20.06.96	Paid for purchase of scale	Asha hardware	250	cash	125	
15.07.96	C & F charge for current meter	Tivoli Enterprise	49,476	cash	24,738	
19.07.96	Purchase remote control for boat	B. F. Enterprise	18,000	cash	9,000	
19.07.96	Purchase Mobil Engine oil	B. F. Enterprise	9,920	cash	4,960	
20.07.96	Purchase Tyre & Tube	B. F. Enterprise	10,400	cash	5,200	
30.08.96	Paid for sendind measuring equipment	KLM Cargo	44,543	cash	22,272	
08.09.96	C & F charge for measuring equipment, Back	Tivoli Enterprise	26,561	cash	13,281	
03.10.96	Spares for outboard engine	B. F. Enterprise	37,130	cash	18,565	
03.10.96	Engine oil for boat	B. F. Enterprise	6,480	cash	3,240	
08.12.96	Paid for repairing of boat	B. F. Enterprise	5,400	cash	2,700	
08.12.96	Paid for repairing of boat	B. F. Enterprise	51,820	cash	25,910	
13.12.96	Paid for new phone line	T & T	18,600	cash	9,300	
Total			to be carried forward:		893,606	

Table I-3 cont.

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JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI

Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka and cash

Date	Description	Paid To	Amount TK.	Cheque No.	Amount TK. part Kamarjani	Remarks
	50 % share with Bahadurabad		carried forward:		893,606	
			100 %		50 %	
23.12.96	Paid for computer maintenance	Mr. Sikder	15,235	cash	7,618	
20.02.97	Paid for repairing of boat	B.F. Enterprise	47,350	cash	23,675	
28.02.97	Paid for repairing of boat	B.F. Enterprise	24,000	cash	12,000	
22.03.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	17,500	cash	8,750	
08.04.97	Spares for engine boat	B.F. Enterprise	19,000	cash	9,500	
04.06.97	Purchase of outboard engine	B.F. Enterprise	177,500	609372	88,750	
08.06.97	C & F charge for Survey equipment	Tivoli Enterprise	40,321	cash	20,161	
08.06.97	C & F charge for Echolot paper	Tivoli Enterprise	28,892	cash	14,446	
13.06.97	C & F charge for Radio Communication	Tivoli Enterprise	34,581	cash	17,291	
22.06.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	9,500	cash	4,750	
24.06.97	Spares for outboard engine	B.F. Enterprise	39,200	609375	19,600	
25.06.97	Commission for Radio Communication	Mr. Mokshed	3,900	cash	1,950	
24.07.97	Repairing charge for Radio Communication	Bangladesh Tele. Co.	16,500	cash	8,250	
05.08.97	Float bodies	MAWTS	9,250	cash	4,625	
02.09.97	Paid for repairing of boat	B.F. Enterprise	28,655	cash	14,328	
04.09.97	Paid for exporting of Survey equipment	British Airways	49,326	cash	24,663	
15.09.97	C & F charge for Survey equipment	Tivoli Enterprise	26,616	cash	13,308	
30.10.97	Repairing & Spares for engine boat	B.F. Enterprise	67,180	cash	33,590	
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	3,104.30	996861	79,945	
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	1,941.52	996862	50,000	
18.12.97	Sonar + Transducer repairing	Chowdhury Trading & Co.	749.72	996869	19,000	
07.01.98	C & F charge for Measuring equipment	Tivoli Enterprise	8,661	cash	4,330	
20.01.98	Transfer fee for shifting	T & T	2,500	cash	1,250	
03.05.98	Customs Dues Collection	Custom House	298,234	1008104	149,117	
20.05.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	10,000	1008105	5,000	
20.05.98	C & F charge for E Sea Sound	Tivoli Enterprise	10,047	1008106	5,024	
21.05.98	Repairing & Spares for engine boat	B.F. Enterprise	45,740	1008107	22,870	
14.06.98	C & F charge for Measuring equipment	Tivoli Enterprise	37,443	cash	18,721	
14.07.98	Repairing & Spares for engine boat	B.F. Enterprise	86,370	1008110	44,185	
02.08.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	10,000	cash	5,000	
03.08.98	Renewal fee for Radio	T & T	22,400	cash	11,200	
25.08.98	Repairing & Spares for engine boat	B.F. Enterprise	71,540	cash	35,770	
25.08.98	C & F charge for Measuring equipment re-ext	Tivoli Enterprise	26,379	cash	13,189	
25.08.98	Air Way bill for Measuring equipment re-ext	KLM Cargo	48,715	cash	24,357	
05.10.98	Repairing & Spares for engine boat	B.F. Enterprise	70,000	cash	35,000	
15.10.98	Paid for computer	Business Technologies	42,000	cash	21,000	
20.10.98	Paid for computer	Business Technologies	10,000	cash	5,000	
08.11.98	Repairing & Spares for engine boat	B.F. Enterprise	61,300	cash	30,650	
08.12.98	Repairing & Spares for engine boat	B.F. Enterprise	29,800	cash	14,900	
15.12.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	22,500	cash	11,250	
	Total			Total	934,011	
					1,827,647	

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JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS KAMARJANI

Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka and cash

Date	Description	Paid To	Amount TK.	Cheque No.	Amount TK. part Kamarjani	Remarks
	50 % share with Bahadurabad		carried forward:		1,827,617	
			100 %		50 %	
25.01.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	22,000	cash	11,000	
14.02.99	Repairing & Spares for engine boat	B.F. Enterprise	5,850	cash	2,925	
16.02.99	Paid for Monitoring Equipment repair	S.O. & S.E Works	6,500	cash	3,250	
18.02.99	Repairing & Spares for engine boat	B.F. Enterprise	9,300	cash	4,650	
28.02.99	Repairing & Spares for engine boat	B.F. Enterprise	15,000	cash	7,500	
16.03.99	Paid for computer consumables	Business Technologies	4,750	cash	2,375	
17.03.99	Paid for Monitoring	ATA Auto	230	cash	115	
22.03.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	23,900	cash	11,950	
22.03.99	Paid for Diving	Oceanic Scuba Diving Service	43,334	cash	21,667	
13.04.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	15,000	cash	7,500	
15.04.99	Paid for computer consumables	Business Technologies	1,150	cash	575	
15.04.99	Paid for computer consumables	Business Technologies	700	cash	350	
21.04.99	Paid for Monitoring Equipment repair	S.O. & S.E Works	6,500	cash	3,250	
13.05.99	Paid for computer consumables	Business Technologies	800	cash	400	
31.05.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	12,000	cash	6,000	
18.05.99	Repairing & Spares for engine boat	B.F. Enterprise	87,950	1008126	43,975	
02.06.99	Paid for computer consumables	Business Technologies	3,000	cash	1,500	
07.06.99	Paid for computer consumables	Business Technologies	8,500	cash	4,250	
24.06.99	Repairing & Spares for engine boat	B.F. Enterprise	11,190	cash	5,595	
Total				Total	1,966,444	

J

**EXPENDITURES FOR THE WORKS
(FAP 21)**

ADAPTATION WORKS AT BAHADURABAD

J EXPENDITURES FOR ADAPTATION WORKS IN BAHADURABAD

Chapter J shows the expenditures (real payments) for the adaptation works of the Test Site II – Bahdurabad effected up to 30.06.1999.

Table J-1 shows the payment effected from the DM A/C in Bangladesh.

Table J-2 shows the payment effected from the DM A/C in Dortmund

Table J-3 shows the payments effected from the TK A/C and cash in Bangladesh.

A. SUB CONTRACT MANAGEMENT REPORT FOR THE IMPLEMENTATION OF ADAPTATION WORKS ATTRIBUTED TO EC-MB JOINT VENTURE

1. Basic Data

The adaptation works for the Bahadurabad test site planned and scheduled for the dry season 1997/1998 are of relatively small amounts. Therefor only a variation order “Adaptation Works” (V.O no. 3) for repair and adaptation including maintenance for the site and the camp up to December 1999 was issued under the works contract (Part H).

Up to IPC No. 23 works are accounted under Part I, from IPC No.24 onwards works are accounted under Part J.

The V.O. “Adaptation Works” is detailed below:

Total of Bills :	7,648,675	TK.
Contingencies:	<u>764,867</u>	TK
Total	8,413,542	TK.(excluding VAT)

2. Actual amount of works executed:

The cumulative amount of works by end of June 1999 is TK 8,176,814 (excl. VAT) which includes works and supplies under the above mentioned contract as well as cost of maintenance of Employer's camp and treated claims.

B. Actual total amount of works, supplies , equipment and maintenance

The cumulative amount (excl. VAT) up to end of June 99 is:

DM 593.185 equivalent to TK 15,397,248

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Table J - 1

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS BAHADURABAD

Expenditures DM Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka

up to 31.03.99

Date	Description	Paid To	Amount DM Equivalent	Cheque No.	Remarks	Amount Tk.
07.01.97	Ropes	DIRD	5,366.93	654116		144,000
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	3,104.30	996861	#	79,945
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	1,941.52	996862	#	50,000
28.01.98	Payment for Boat repair	B.F. Enterprise	3,862.54	996876	#	96,100
09.03.98	C & F charge for EDM	Tivoli Enterprise	139.83	996878	#	3,510
22.03.98	C & F charge for Nautical equipment	Tivoli Enterprise	544.76	996882	#	13,677
01.04.98	F charge for return of sub-bottom profile	Tivoli Enterprise	1,934.76	996884		48,161
20.04.98	Interim payment certificate No. 24	EC-MB Joint Venture	47,210.42	996888		1,202,643
05.05.98	Interim payment certificate No. 24/25	EC-MB Joint Venture	94,505.80	996891		2,448,787
07.06.98	Interim payment certificate No. 26	EC-MB Joint Venture	40,385.46	996893		1,044,477
15.07.98	Interim payment certificate No. 27	EC-MB Joint Venture	12,379.26	1008111	##	316,732
03.08.98	Interim payment certificate No. 28	EC-MB Joint Venture	16,725.98	1008114	##	427,946
05.10.98	Interim payment certificate No. 29	EC-MB Joint Venture	23,393.49	1008118	##	598,528
18.11.98	Interim payment certificate No. 30	EC-MB Joint Venture	11,358.49	1008121	##	290,615
07.12.98	Interim payment certificate No. 31	EC-MB Joint Venture	10,243.96	1008122	##	262,099
10.01.99	Interim payment certificate No. 32	EC-MB Joint Venture	9,521.96	996899		270,418
12.01.99	Payment for monitoring	A.B.C. Camera Inc.	2,058.01	996900		57,933
17.02.99	Interim payment certificate No. 33	EC-MB Joint Venture	9,565.32	1141352		264,243
07.03.99	Advance payment to DM C.C for monitoring	Consulting Consortium	50,000.00	1141353		1,319,555
11.03.99	Interim payment certificate No. 34	EC-MB Joint Venture	9,193.60	1141354		245,607
11.03.99	Payment for Boat repair & Engine purchase	B.F. Enterprise	2,837.36	1141355		75,800
31.03.99	Payment for Plotter repair	Bangladesh Tele. Co.	950.46	1141357		25,000
15.04.99	Interim payment certificate No. 35	EC-MB Joint Venture	9,951.07	1141358		264,062
08.06.99	Interim payment certificate No. 36	EC-MB Joint Venture	10,000.66	1141362		252,849
08.06.99	Interim payment certificate No. 37	EC-MB Joint Venture	11,383.36	1141361		287,808
Total			383,192.37			9,946,495

= 50 % share with Adaptation Kamarjani
 ## paid from TK Account 41587-201-88

Table J-2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Procurement for Adaption Works Bahadurabad
Expenditures DM Account with Dresdner Bank, Dortmund

Supplier	Specification	Invoice Amount		Date	Payment		Total
					Amount	DM	
VALEPORT	Spare parts for current meter Spare parts for current meter	GBP GBP	406 00 816 00	12.06.98 26.06.99	DM DM	1,202 37 2,418 12	3,620.49
Labor für Wasserbau Bremen, Germany	Current measurements with Drifter Bouys, campagne 1998 'Flight costs Mr. Torn (BRE-DAC-BRE) Airfreight of Equipment Instalment No. 2 Final Invoice	DM DM DM DM DM	28,125 00 1,417 50 1,616 71 28,383 97 36,583 00	29.06.98 29.06.98 29.06.98 18.09.98 11.02.99	DM DM DM DM DM	28,125 00 1,417 50 1,616 71 28,383 97 36,583 00	96,126.18
OSAE Bremen, Germany	Side sonar and bottom profiler scanning	DM DM	31,153 80 10,049 35	21.04.98 05.11.98	DM DM	31,153 80 10,049 35	41,203.15
Wiking GmbH Hofgeismar, Germany GEBIG	Spare parts for monitoring boat GPS Antenna	DM DM	307 00 1,200 00	09.12.98 09.12.98	DM DM	307 00 1,200 00	307.00
Instrument Technology Bremen, Germany	MICROTEL repair	DM	354 50	21.04.98	DM	354 50	1,200.00
Mütron Müller Bremen, Germany	Spare parts "monitoring"	DM	44 01	01.03.99	DM	44 01	354.50
STN ATLAS Elektronik Bremen, Germany	Distance Marker	DM	2,358 81	18.05.98	DM	2,358 81	44.01
Leica München, Germany	Repair TC 1600 Spare Parts	DM	4,770 00	18.05.98	DM	4,770 00	2,358.81
Gerling Dortmund, Germany	Insurance "Sub-Bottom-Profilier"	DM	1,262 00	09.12.98	DM	1,262 00	4,770.00
Schenker Dortmund, Germany	Transport monitoring equipment	DM	310 00	09.12.98	DM	310 00	1,262.00
Marimatech	Echosounder	DM	27,858 46	08.04.98	DM	27,858 46	310.00
EIVA Aarhus, Denmark	Navigation Board	USD	915 00	09.12.98	DM	1,838 23	27,858.46
Roda Computer Lichtenau, Germany	Monitoring Computer	DKK DM	805 00 7,229 56	09.12.98 11.02.99	DM DM	1,838 23 7,229 56	1,838.23
approx. TK (rate 26)							7,229.56
188,482.39							4,900.542

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Table J-3

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 ADAPTATION WORKS BAHADURABAD
 Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka and cash

Date	Description	Paid To	Amount Tk	Cheque No.	Amount Tk part Bahadurabad	Remarks
09.06.98	Stamp for Guarantee	Banque Indosuez	300	cash	300	
	<u>50 % share with Kamariani</u>		100 %		50 %	
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	3,104.30	996861	79,945	
05.11.97	Payment for Echo-Sounder repairing	Chowdhury Trading & Co.	1,941.52	996862	50,000	
18.12.97	Sonar + Transducer repairing	Chowdhury Trading & Co.	749.72	996869	19,000	
07.01.98	C & F charge for Measuring equipment	Tivoli Enterprise	8,661	cash	4,331	
20.01.98	Transfer fee for shifting	T & T	2,500	cash	1,250	
03.05.98	Custom Dues Collection	Custom house	298,234	1008104	149,117	
20.05.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	10,000	1008105	5,000	
20.05.98	C & F charge for E. Sea sound	Tivoli Enterprise	10,047	1008106	5,023	
21.05.98	Repairing & Spares for engine boat	B. F. enterprise	45,740	1008107	22,870	
14.06.98	C & F charge for Measuring equipment	Tivoli Enterprise	37,443	cash	18,722	
14.07.98	Repairing & Spares for engine boat	B. F. enterprise	88,370	1008110	44,185	
02.08.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	10,000	cash	5,000	
03.08.98	Renewal fee for Radio	T & T	22,400	cash	11,200	
25.08.98	Repairing & Spares for engine boat	B. F. enterprise	71,540	cash	35,770	
25.08.98	C & F charge for Measuring equipment re-ex	Tivoli Enterprise	26,379	cash	13,190	
25.08.98	Air Way bill for Measuring equipment. re-ex	KLK Cargo	48,715	cash	24,358	
05.10.98	Repairing & Spares for engine boat	B. F. enterprise	70,000	cash	35,000	
15.10.98	Paid for Computer	Business Technologies	42,000	cash	21,000	
20.10.98	Paid for Computer	Business Technologies	10,000	cash	5,000	
08.11.98	Repairing & Spares for engine boat	B. F. enterprise	61,300	cash	30,650	
08.12.98	Repairing & Spares for engine boat	B. F. enterprise	29,800	cash	14,900	
15.12.98	Repairing charge for Radio Communication	Bangladesh Tele. Co.	22,500	cash	11,250	
25.01.99	Repairing & Spares for engine boat	Bangladesh Tele. Co.	22,000	cash	11,000	
14.02.99	Repairing & Spares for engine boat	B. F. enterprise	5,850	cash	2,925	
16.02.99	Paid for Monitoring Equipment repair	S.O. & S.E. Works	6,500	cash	3,250	
18.02.99	Repairing & Spares for engine boat	B. F. enterprise	9,300	cash	4,650	
28.02.99	Repairing & Spares for engine boat	B. F. enterprise	15,000	cash	7,500	
16.03.99	Paid for Computer consumables	Business Technologies	4,750	cash	2,375	
17.03.99	Paid for Monitoring	ATA Auto	230	cash	115	
22.03.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	23,900	cash	11,950	
22.03.99	Paid for Diving	Oceanic Scuba Diving Service	43,334	cash	21,667	
13.04.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	15,000	cash	7,500	
15.04.99	Paid for Computer consumables	Business Technologies	1,150	cash	575	
15.04.99	Paid for Computer consumables	Business Technologies	700	cash	350	
21.04.99	Paid for Monitoring Equipment repair	S.O. & S.E. Works	6,500	cash	3,250	
13.05.99	Paid for Computer consumables	Business Technologies	800	cash	400	
31.05.99	Repairing charge for Radio Communication	Bangladesh Tele. Co.	12,000	cash	6,000	
18.05.99	Repairing & Spares for engine boat	B. F. enterprise	87,950	1008126	43,975	
02.06.99	Paid for Computer consumables	Business Technologies	3,000	cash	1,500	
07.06.99	Paid for Computer consumables	Business Technologies	8,500	cash	4,250	
24.06.99	Repairing & Spares for engine boat	B. F. enterprise	11,190	cash	5,595	
	Total		745,888	Total	745,888	

K

**EXPENDITURES FOR
THE RIVER TRAINING WORKS
(FAP 22)**

27

K EXPENDITURES FOR THE RIVER TRAINING WORKS (FAP 22)

Chapter K shows the expenditures (real payments) for the construction of improved bandals and floating screens at construction site Katlamari and Kundarapara effected up to 30.06.1999.

Table K-1 and K-2 show the payments effected in Bangladesh for the works including the payment for the procurement of materials.

Table K-3 shows the payments effected outside Bangladesh.

(A) KATLAMARI WITH THE CONSORTIUM: THE ENGINEERS LTD. AND COROLLA CORPORATION (BD) LTD.**1. Basic Data**

1.1 An Agreement was signed with The Consortium: The Engineers Ltd. and Corolla Corporation (BD) Ltd. for the execution of the works for improved bandals at Katlamari. Since the volume of the works is relatively small the works have been considered as an amendment to existing contract for the construction of permeable Groynes. Only a BoQ and Special Technical Specifications have been added to the existing contract.

Contract value for Improved Bandals:

Total of bills	6,777,725	TK
Contingencies	<u>1,016,659</u>	TK
Total	7,794,384	TK

1.2 In addition, Floating Screens have been ordered under the same Agreement.

Contract value for Floating Screens::

Total of bills	2,071,000	TK
Contingencies	<u>310,650</u>	TK
Total	2,381,650	TK

1.2 At a new selected site named Kundarapara, new works and supplies have been ordered under the same Agreement

Contract value for bandaling and floating screens:

Total of bills	7,104,500	TK
Contingencies	<u>1,065,675</u>	TK
Total	8,170,175	TK

1.3 Total of all 3 sites:

Total of bills	15,953,225	TK
Contingencies	<u>2,392,984</u>	TK
Total	18,346,209	TK

2. Actual amount of works executed:

The cumulative amount of works by end of June 99 is TK 19,247,046 (excl. VAT) i.e. TK 7,937,333 for improved bandals and TK 2,821,160 for floating screens at Katlamari, and TK 8,488,553 for Kundarapara. It includes works and supplies under the above mentioned contract as well as cost of maintenance of Employer's camp and treated claims.

B. Actual total amount of works, supplies and equipment

1. The cumulative amount (excl. VAT) up to end of December 98 for the Improved Bandals Katlamari is:
DM 333,089 equivalent to TK 8,480,083
2. The cumulative amount (excl. VAT) up to end of December 98 for the Floating Screens Katlamari is:
DM 116,221 equivalent to TK 2,821,160
3. The cumulative amount (excl. VAT) up to end of June 99 for the Floating Screens and Bandals Kundarapara is:
DM 455,214 equivalent to TK 11,469,587
4. The cumulative amount (excl. VAT) up to end of June 98 for all 3 sites is
DM 904,523 equivalent to TK 22,770,830

Table K-1

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 22 TEST STRUCTURES KATLAMARI + KUNDARAPARA
 Expenditures DM Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka

Date	Description	Paid To	Amount DM	Cheque No.	Amount TK
24.12.96	Advance Payment, Improved Bandals	The Engineers & Corolla	33,258.56	654114	900,000
05.02.97	IPC - No.- 1, Improved Bandals	The Engineers & Corolla	67,436.06	654125	1,725,628
22.03.97	IPC - No.- 2, Improved Bandals	The Engineers & Corolla	145,112.02	654128	3,671,334
24.03.97	Ropes	DIRD	9,429.47	654130	237,750
07.01.97	Ropes	DIRD	5,366.93	654116	144,000
15.07.97	IPC - No.- 3, Improved Bandals	The Engineers & Corolla	3,060.26	996852	73,795
15.07.97	IPC-No-1, Floating Screens	The Engineers & Corolla	36,932.75	996851	888,000
24.07.97	Ropes	DIRD	1,578.84	996855	37,500
13.08.97	IPC-No-2, Floating Screens	The Engineers & Corolla	39,604.24	996857	934,660
13.08.97	IPC - No.- 4, Improved Bandals	The Engineers & Corolla	22,589.92	996856	533,122
01.12.97	Equipment Hiring	SWMC	694.43	996655	17,583
14.12.97	Payment for Sediment test	RRI, Faridpur	1,760.36	996866	44,550
20.01.98	Advance payment, Kundarapara	The Engineers & Corolla	142,781.38	996872	3,500,000
25.01.98	Final payment, Floating Screens	The Engineers & Corolla	38,104.68	996871	961,000
25.01.98	Final payment, Improved Bandals	The Engineers & Corolla	40,977.56	996870	1,033,454
09.03.98	C & F charge for equipment	Tivoli Enterprise	1,282.60	996877	32,200
09.03.98	C & F charge for equipment	Tivoli Enterprise	1,820.89	996879	45,714
01.04.98	C & F charge for equipment	Tivoli Enterprise	317.36	996883	7,900
01.04.98	Kundarapara IPC- No- 1	The Engineers & Corolla	77,600.58	996885	1,926,574
05.04.98	C & F charge for equipment	Tivoli Enterprise	406.35	996887	10,108
29.04.98	Payment for Sediment test	RRI, Faridpur	481.47	996889	11,825
22.06.98	Kundarapara IPC- No 2	The Engineers & Corolla	97,033.71	996894	2,480,958
15.11.98	Kundarapara IPC- No 3	The Engineers & Corolla	9,667.50	1008120	255,136
25.04.99	Kundarapara IPC- No 4	The Engineers & Corolla	12,481.07	1141360	325,885
Total			789,778.99		19,798,676

Table K-2

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 22 TEST STRUCTURES KATLAMARI + KUNDARAPARA
 Expenditures TK Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka

Date	Description	Paid To	Amount TK.	Cheque No.	Remarks
02.02.96	Paid for soil tests (Katlamari, FAP-22)	Subsoil Engineering & Cons	99,000	603966	
03.05.97	Paid RRI Faridpur (Sediment Testing)	RRI, Faridpur	2,500	609371	
02.07.97	Paid RRI Faridpur (Sediment Testing)	RRI, Faridpur	3,125	609374	
03.06.98	Paid for Lifting equipment (Kundarapara)	Tivoli Enterprise	81,632	1008108	
18.06.98	Wire Clamp (Kundarapara)	Haroon Enterprise	3,000	cash	
Total			189,257		

Table K-3

JAMUNA TEST WORKS CONSULTANTS
FAP 22 TEST STRUCTURES KATLAMARI + KUNDARAPARA

Expenditures DM Account with Dresdner Bank, Dortmund

Supplier	Specification	Invoice Amount	Payment		Total
			Date	Amount	
Vlirodam Rhoon, NL	Shackles, wire ropes, snatchblocks	NLG 84,679.00	16/03/98	DM 75,222.05	75,222.05
Valeport	Current Meter	£ 2,103.00	22/04/98	DM 6,324.35	6,324.35
PIAB	Load Transducer	DM 7,975.00	18/05/98	DM 7,975.00	7,975.00
Spectris	Load Transducer	DM 9,650.00	18/05/98	DM 9,650.00	15,627.30
	Load Transducer Equipment	DM 5,977.30	18/05/98	DM 5,977.30	
Kühne und Nagel	Transport of Equipment	DM 1,570.74	18/05/98	DM 1,570.74	1,570.74
Schenker	Transport of Equipment	DM 344.80	10.03.98	DM 344.80	782.45
	Transport of Equipment	DM 437.65	10.03.98	DM 437.65	
107,501.89					2,795,049

equivalent in TK approx. (26)

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L

**EXPENDITURES FOR THE WORKS
(FAP 21)**

THIRD TEST SITE

L EXPENDITURES FOR Third TEST SITE

Chapter L shows the expenditures (real payments) for the works of the Test Site III –effected up to 30.06.1999.

Table L-1 shows the payment effected from the DM A/C in Bangladesh.

Table L-2 shows the payment effected from the DM A/C in Dortmund

Table L-3 shows the payments effected from the TK A/C and cash in Bangladesh.

A. SUB CONTRACT MANAGEMENT REPORT FOR THE IMPLEMENTATION OF A THIRD TEST SITE ATTRIBUTED TO CONSORTIUM: THE ENGINEERS LTD. AND COROLLA CORP (BD) LTD.

1. Basic Data

The works for test site III are planned and scheduled for the dry season 1999/2000 The costs (works and supply) are estimated at TK 188,882,319, equivalent to DM 7.264,705 (at a rate of 26).

1.1 The contract for the works” is detailed below:

Total of Bills :	152,762,815	TK.
Daywork	1,527,628	TK
Contingencies:	<u>7,638,141</u>	TK
Total	161,928,584	TK.(excluding VAT)

2. Actual amount of works executed:

The cumulative amount of works by end of June 1999 is TK 22,941,422 (excl. VAT). equivalent to DM 902,529 as advance payment for the works and supplies under the above mentioned contract as well as cost of maintenance of Employer's camp.

B. SUPPLY ORDERS:

2.1 Boulders (3500 m ³),	7,780,500	TK	(with option for additional 1000 m ³) issued to Exchange International
2.2 Geo-Textile Filter Mat	51,543	US\$	issued to DIRD Private Limited
2.3 Reno Mattress	140,643	US\$	issued to DIRD Private Limited

C. Actual total amount of works, supplies , equipment and maintenance

The cumulative amount (excl. VAT) up to end of June 99 is:

DM 902,529 equivalent to TK 22,941,422

Table L -1

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA

FAP 21 Test Site 3

Expenditures DM Account No. 41587 - 201 - 88 with Banque Indosuez, Dhaka

Date	Description	Paid To	Amount DM Equivalent	Cheque No.	Remarks	Amount Tk.
22.06.99	Advance Payment	EC-MB Joint Venture	902,529.15	1141367		22,914,422
Total			902,529.15			22,914,422

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M

OVERALL COSTS OF THE PROJECT

M OVERALL COSTS OF THE PROJECT

Chapter L shows in two tables the overall costs of the project.

The tables follow in principally the scheme of the TAPP (GoB document).

Items 1 to 9 deal with the Consultancy Services and items 10 to 20 with the different Test Structures/Test Sites.

Table M-1 is based on a total project budget of DM 63,0000,000 which is the budget of the agreement between the Government of Bangladesh and the Governments of Germany and France.

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Table M-1

CONSULTANCY SERVICE FOR FAP 21/22

OVERALL COSTS OF THE PROJECT PHASE II (DM)

No.	Item	Revision 2 (agreed schedule) up to 12/99			Realisation			Total
		FAP 21	FAP 22	Total	FAP 21	FAP 22	Total	
1	Expatriates	8,746,383	547,444	9,293,827	7,145,496	1,166,823	8,312,319	
2	Local Exp.	1,805,441	20,000	1,825,441	1,503,465	206,977	1,710,442	
3	Unallocated		1,200,000	1,200,000			-	
4	Other	6,055,199 *	112,647	6,167,846	5,018,751	230,931	5,249,682	
5	Escalation		43,321	43,321	1,793,384	259,415	2,052,799	
6	Conting. Phy.	-	-	-			-	
7	Conting. Fin.	2,340,880	-	2,340,880			-	
8	Conting. Gen.		76,588	76,588			-	
9	Sub. Total 1	18,947,903 *	2,000,000	20,947,903	15,461,095	1,864,146	17,325,240	
10	Works S.I	11,044,260		11,044,260	11,791,364		11,791,364	
11	Works S. II	15,006,500		15,006,500	15,085,687		15,085,687	
12	Works S. III	7,264,705			902,520		902,520	
13	Works S I+II+III	33,315,465	-	33,315,465	27,779,571		27,779,571	
14	Adaptation I	6,300,000		6,300,000	6,049,469	-	6,049,469	
15	Adaptation II	3,150,000		3,150,000	593,185	-	593,185	
16	Adaptation I+II	9,450,000	-	9,450,000	6,642,654	-	6,642,654	
17	Total Works I+II+III	42,765,465		42,765,465	34,422,225		34,422,225	
18	Works (F22)					904,523	904,523	
19	Total Works F21/22						35,326,749	
20	Subtotal 2	61,713,368 *	2,000,000	63,713,368	49,883,320	2,768,669	52,651,989	
21	Unallocated	-	2,000,000	-			-	
22	Total	59,000,000	4,000,000	63,000,000	49,883,320	2,768,669	52,651,989	

up to 30.06.99

* DM 38,700 +/- Difference to Report No 20 (correction for the project video)

