

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

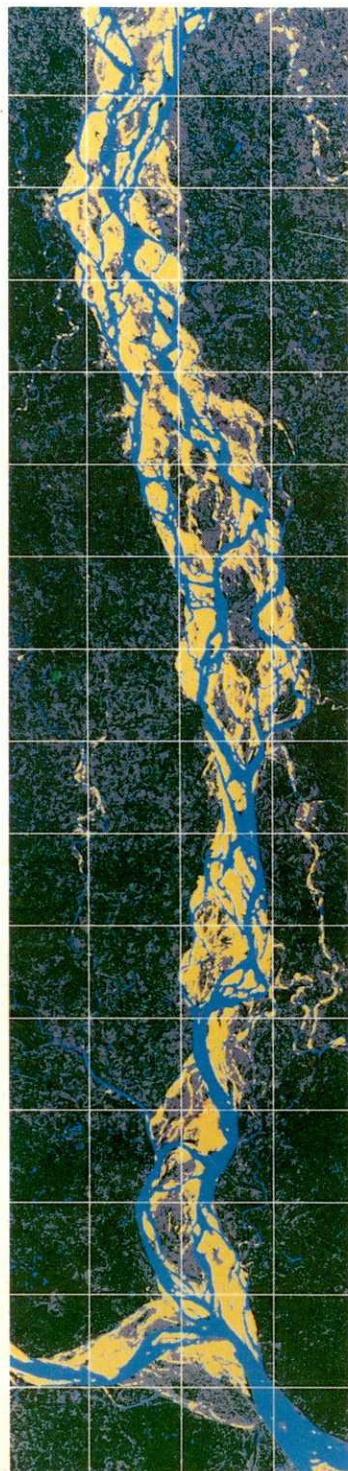
FEDERAL REPUBLIC OF GERMANY

KREDITANSTALT FÜR
WIEDERAUFBAU (KfW)

50

FRENCH REPUBLIC

CAISSE FRANCAISE DE
DEVELOPPEMENT (CFD)



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

**TEST
AND
IMPLEMENTATION
PHASE**

**ADMINISTRATIVE AND
FINANCIAL REPORT
REFERRING TO
PROGRESS REPORT NO.30
(Draft Final)**

MARCH 2000



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)

MFN
2712

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. 30
(Draft Final)**

MARCH 2000

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. 30
(Draft Final)**

December 2000

Table of Contents

| | | |
|------------------|---|-----|
| A | INTRODUCTION | |
| 1 | BACKGROUND | A-1 |
| 2 | IMPORTANT DATES AND EVENTS | A-3 |
| B | ADMINISTRATIVE SUBJECTS (FAP 21) | |
| 1 | STAFFING | |
| 1.1 | Professional Staff Fielded | B-1 |
| 1.2 | Staff Schedule | B-1 |
| 2 | SUBCONTRACTS | |
| 2.1 | General | B-2 |
| 2.2 | Subcontracts Concluded | B-2 |
| C | FINANCIAL ASPECTS (FAP 21) | |
| C-PART 1: | COSTS OF CONSULTANCY | |
| 1 | GENERAL | C-1 |
| 2 | STAFFING COSTS | C-1 |
| C-PART 2: | REVISION OF RATES (FAP 21) | |
| D | ADMINISTRATIVE SUBJECTS (FAP 22) | |
| E | FINANCIAL ASPECTS (FAP 22) | |
| E-PART 1: | EXTENDED STUDIES ON RECURRENT MEASURES (FAP 22) COSTS OF CONSULTANCY | |
| E-PART 2: | REVISION OF RATES | |
| E-PART 3: | EXPERTS DISCUSSION | |

| | | |
|------------------|---|-------------|
| F | PROCUREMENT OF EQUIPMENT AND MATERIALS, SUBCONTRACTS FOR THE TEST STRUCTURES (FAP 21 AND FAP 22) | F-1 |
| F-PART 1: | TEST SITE KAMARJANI | |
| F-PART 2: | TEST SITE BAHADURABAD | |
| F-PART 3: | TEST SITE KAMARJANI ADAPTATION WORKS (FAP 21) | |
| F-PART 4: | TEST SITE BAHADURABAD ADAPTATION WORKS (FAP 21) | |
| F-PART 5: | TEST SITE KATLAMARI BANDALS AND FLOATING SCREENS (FAP 22) | |
| F-PART 6: | THIRD TEST SITE (FAP 21) | |
| G to L | | GL-1 |
| M | OVERALL COSTS OF THE PROJECT | M-1 |

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 2000 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: Costs of the Test Structures;
- Part G to L: *not more represented*, 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 | Financial Audit for Test Site No. I by Deutsche Treuarbeit on behalf of FPCO/KfW/CFD |
| 20.05 to 25.05.1995 | |
| 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 | Subcontract signed for construction works at Third Test Site |
| 23.06.1999 | Order to commence with fabrication of cc-blocks for Third Test Site |
| 17.12.1999 | Start of construction works for Third Test Site |
| 23.12.1999 | Letter from the Client authorizing the extension of the Project up to December 2000 |
| 26.02 to 05.03.2000 | Technical Review Mission of KfW/AFD |
| 15.06.2000 | Substantial completion of Third Test Site |
| 29.08. to 07.09.2000 | Audit of Technical Assessment of Procurement Arrangements of the Consultant by Dr. Friedrich von Raumer on behalf of WARPO/KfW/CFD |
| 12.09. to 19.09.2000 | Financial Audit for all test sites by "PwC Deutsche Revision" on behalf of WARPO/KfW/CFD |
| 14.12.2000 | Handing over of the Revetment Test Structures at Bahadurabad and Ghutail to BWDB |

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. 3 (Proposal for Modification of Consulting Services for Test Site 3, Revision No. 1, May 1999).

Revision No. 3 is the agreed Schedule and represents the prolongation of the project up to 12/2000 as agreed upon by the Donors in July 1999 and by the Client (GoB) in December 1999. Table 4 of Part 1 shows the related Work Plan.

Modification of staff arrangement:

Expatriate Staff (according to Staffing Schedule Revision No. 3)

| No. | Function | Person | Schedule Revision No. 3 (Project Duration :Total 91 Month) | | | | | | Fielded up to 31.12.00 | Modified MM | Remarks |
|-------|------------------------------------|---|--|------|-------|---------------------------------------|-------|---------------|------------------------------|----------------|-----------------|
| | | | Total | | | up to 31.12.00 (P. Dur.: 91 month) | | | | | |
| | | | Bd | Eu | Total | Bd | Eu | Total | | | |
| 1.1 | Project Director | Dr. Neuhaus/ Dr. Kramer | 3.00 | 9.00 | 12.00 | 1.71 | 10.29 | 12.00 | 11.98 | -0.02 | |
| 1.3.1 | Project Manager | C. Netzeband | 76.50 from unallocated | 2.50 | 79.00 | 76.60 | 2.64 | 79.24 0.84 | | | |
| 1.4 | Chief Hydraulic Design Engineer | Dr. Kramer | 24.00 from unallocated | 6.00 | 30.00 | 22.11 | 7.71 | 29.82 1.22 | | | |
| | | | | | | | | 31.04 | 31.05 | 0.00 | |
| 2.1.1 | Hydraulic Design E. | M. Schwarz | 23.00 from unallocated | 3.00 | 26.00 | 18.64 | 7.27 | 25.91 3.14 | | | |
| | | | | | | | | 29.05 | 29.04 | 0.00 | |
| 2.2 | Structural Engineer | K. Schnackenberg | 2.13 | | 2.13 | 2.13 | 0.00 | 2.13 | 2.13 | 0.00 | |
| 2.3.1 | Mechanical Engineer | Dos Santos | 1.00 | 0.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 0.00 | |
| 2.4.1 | Procurement Expert | Dos Santos | 0.00 | 3.00 | 3.00 | | 3.00 | 3.00 | 3.00 | 0.00 | |
| 2.5.1 | Subsoil Engineer | H. Wessling | 1.20 | 2.06 | 3.26 | 1.20 | 2.06 | 3.26 | 3.27 | 0.01 | |
| 3.1 | Chief Supervising Engineer | Delille/Bouard/ Oberhagemann Gruener | | | | | | | 22.84 8.63 | | |
| | | | 29.27 from unallocated | 0.00 | 29.27 | 29.27 | 0.00 | 29.27 1.14 | 31.47 | | |
| | | | | | | | | 30.41 | 31.47 | 1.06 | |
| 3.2.1 | Supervising Engineer | Rouyer/Hourseau | 18.96 | 0.00 | 18.96 | 18.96 | 0.00 | 18.96 | 18.99 | 0.03 | |
| 3.4.1 | Surveyor | J. Heise | 4.44 | | 4.44 | 4.44 | 0.00 | 4.44 | 4.45 | 0.01 | |
| 3.5 | Administrator | B. Thomas | 30.00 | 0.00 | 30.00 | 30.00 | 0.00 | 30.00 | 28.78 | -1.22 | |
| 3.6.1 | Monitoring Expert | T. Doescher L&P T. Doescher RRI T. Doescher CNR | | | | | | | 11.37 0.77 9.03 | | |
| | | | 23.00 | 0.00 | 0.00 | 23.00 | 0.00 | 23.00 | 21.17 | -1.83 | |
| 4.1.1 | Morphologist | Dr. Mosselman | 9.00 | 2.00 | 11.00 | 8.16 | 2.98 | 11.14 | 10.17 | -0.97 | |
| 4.2.1 | Modelling Expert | M.v.d. Wal/ J.Lambeek Dive/Carrion | | | | | | | 20.46 3.84 | | |
| | | | 23.50 | 2.00 | 25.50 | 22.97 | 2.52 | 25.49 | 24.30 | -1.19 | |
| 4.3.1 | Environmental Expert | C. Bertrand | 2.00 | 0.00 | 2.00 | 2.00 | 0.00 | 2.00 | 1.44 | -0.56 | |
| 4.5.1 | Economist | NN | 1.00 | 0.00 | 1.00 | 1.00 | | 1.00 | 0.00 | -1.00 | |
| 4.6.1 | Unallocated Site Supervision | J.C. Thiesson | 7.00 | 1.44 | 8.44 | | | 6.34 2.10 | 6.34 2.10 | 0.00 | interim site II |
| Total | | | | | | | | | | -5.90 | |

Local Staff (according to Staffing Schedule Revision No.3)

| No. | Function | Person | Schedule | | Fielded up to 31.12.00 | Modified MM | Remarks |
|-------|--------------------------------|--------------------------------------|-------------|-------------------------|------------------------------|----------------|---------------|
| | | | Total Bd | Up to 31.12.00 Bd | | | |
| 1.3.2 | DeputyProject Manager | S.Mansur | 89.00 | 89.00 | 88.49 | - 0.51 | |
| 2.1.2 | Hydraulic Design Engineer 2 | A.Q.M. Ali | 35.00 | 35.00 | 31.51 | - 3.49 | |
| 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 | 71.00 | 73.31 | 2.31 | |
| 3.3 | Quantity Surveyor | Faizur R. Khan | 26.80 | 26.80 | 26.80 | - | |
| | Monitoring Expert 2 | Anwar Haider | 68.20 | 68.20 | 67.64 | - 0.56 | |
| 3.4.2 | Surveyor 2 | A.H.M.Kamal | 44.00 | 44.00 | 43.96 | - 0.04 | |
| 3.6.2 | Monitoring Expert 3+4 | P.K. Maitra/Y.Khayer | 98.00 | 98.00 | 89.10 | - 8.90 | |
| 4.1.2 | Morphologist 2 | Salahuddin/Sarker | 5.08 | 5.08 | 5.08 | - | |
| 4.2.2 | Modelling Expert 2+3 | Q. Saifuddin/SRKhan J.Islam/Kader | 20.00 | 20.00 | 19.97 | - 0.03 | |
| 4.3.2 | Environmental Expert 2 | Dr. N. Islam | 2.50 | 2.50 | 2.50 | - | |
| 4.4 | Socio Economist | T Nabi | 33.00 | 33.00 | 35.72 | 2.72 | 3rd test site |
| 4.5.2 | Economist 2 | Dr. Lutfur Rahman | 1.00 | 1.00 | 3.70 | 2.70 | |
| | | | | | Total | - 5.80 | |

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 and No. 4 have been concluded. Subcontract 1 is scheduled over several periods and is still going on. 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 31.12.00 | | 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 | Finalized |
| 5.1.3 | All sites | Globe | 12,240,300 | 63,479 | Finalized |
| | | | 13,699,220 | 122,176 | |
| 5.2 | Filter Test Rig: | | | | |
| 5.2.1 | Constr. & Installation | AIR | 1,275,183 | 52,031 | Finalized |
| 5.2.2 | Guarding | AIR | 228,117 | 8,774 | Finalized |
| 5.2.2 | Testing | AIR | 310,440 | 11,940 | Finalized |
| 5.2.3 | Filter Material | AIR | 263,761 | 10,811 | Finalized |
| | | | 2,077,501 | 83,556 | |
| 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 | 55,780 | |
| 5.3.2a | Model Tests Adaptation: Site I: 1st part 1995/96 Site I: 2nd part 1997/98 | RRI-Faridpur | 926,000 | 33,581 | |
| | | RRI-Faridpur | 2,287,181 | 89,734 | |
| | | | 4,744,181 | 185,302 | |
| 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 31.12.00

| No. | Function | Name | Time Spent cumulated long + short term assignments | Assignment Break-down | | | 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) | - | - | - | 10.02 | - | 1.71 | - | 1.23 | - | - | - | | |
| | | | 01.01.99 - 31.12.99 | - | - | - | 0.38 | - | - | - | - | - | - | - | | |
| | | | 01.01.00 - 31.12.00 | - | - | - | 1.58 | - | - | - | - | - | - | - | | |
| | | | | | | | | | | 11.98 | 1.71 | 1.23 | | | | |
| 1.2 | Home Office Support | RRI, CNR, L&P, DELFT | 01.06.93 - 31.12.97 1-4) | - | - | - | 8.20 | - | - | - | - | - | - | | | |
| | | | 01.01.98 - 30.09.98 | - | - | - | - | - | - | - | - | - | - | | | |
| | | | 01.01.99 - 31.12.99 | - | - | - | 0.48 | - | - | - | - | - | - | | | |
| | | | 01.01.00 - 31.12.00 | - | - | - | 1.32 | - | - | - | - | - | - | | | |
| | | | | | | | 10.00 | - | - | - | - | | | | | |
| 1.3.1 | Project Manager | C. Netzeband | 01.06.93 - 31.12.93 1) | - | - | - | 5.77 | - | 5.77 | - | - | - | 7.00 | - | | |
| | | | 01.01.94 - 31.12.94 1) | - | - | - | 10.60 | - | 10.40 | - | - | - | 12.00 | - | | |
| | | | 01.01.95 - 31.12.95 2) | - | - | - | 10.33 | - | 10.30 | - | - | - | 12.00 | - | | |
| | | | 01.01.96 - 31.12.96 3) | - | - | - | 10.83 | - | 10.45 | - | - | - | 12.00 | - | | |
| | | | 01.01.97 - 31.12.97 4) | - | - | - | 10.77 | - | 10.50 | - | - | - | 12.00 | - | | |
| | | | 01.01.98 - 31.12.98 5) | - | - | - | 9.77 | - | 9.20 | - | - | - | 12.00 | - | | |
| | | | 01.01.99 - 31.12.99 6) | - | - | - | 10.80 | - | 10.41 | - | - | - | 12.00 | - | | |
| | | | 01.01.00 - 31.12.00 | 9 | 24 | 12 | 10.20 | - | 10.20 | - | - | - | 12.00 | - | | |
| | | | 01.01.00 - 31.12.00 7) | - | 24 | - | 0.80 | - | - | - | - | - | - | - | | |
| | | | | | | | | | | 79.87 | 77.23 | - | - | 91.00 | | |
| 1.4 | Chief Hydraulic Design Engineer | Dr H Kramer | 07.08.93 - 31.12.93 1) | - | - | - | 2.30 | - | 2.03 | - | 1.90 | - | - | - | | |
| | | | 01.01.94 - 31.12.94 1) | - | - | - | 3.61 | - | 2.97 | - | 2.70 | - | - | - | | |
| | | | 10.02.95 - 29.12.95 2) | - | - | - | 4.30 | - | 3.27 | - | 2.87 | - | - | - | | |
| | | | 01.01.96 - 31.12.96 3) | - | - | - | 2.94 | - | 2.27 | - | 2.06 | - | - | - | | |
| | | | 01.01.97 - 31.03.97 4) | - | - | - | 3.06 | - | 2.26 | - | 2.00 | - | - | - | | |
| | | | 01.01.98 - 31.12.98 5) | - | - | - | 3.47 | - | 2.37 | - | 2.07 | - | - | - | | |
| | | | 01.01.99 - 31.12.99 6) | - | - | - | 5.60 | - | 4.83 | - | 3.53 | - | - | - | | |
| | | | 01.01.00 - 31.12.00 | 3 | 3 | 7 | 3.33 | - | 3.33 | - | 3.10 | - | - | - | | |
| | | | 01.01.00 - 31.12.00 7) | - | 73 | - | 2.43 | - | - | - | - | - | - | - | | |
| | | | | | | | | | | 31.05 | 23.33 | 20.23 | | | | |
| 2.1.1 | Hydraulic Design Engineer | M. Schwarz | 03.09.93 - 22.12.93 1) | - | - | - | 3.80 | - | 3.80 | - | 3.67 | - | - | - | | |
| | | | 01.01.94 - 31.12.94 1) | - | - | - | 5.53 | - | 4.90 | - | 4.63 | - | - | - | | |
| | | | 01.01.95 - 29.12.95 2) | - | - | - | 7.70 | - | 7.04 | - | 6.40 | - | - | - | | |
| | | | 02.01.96 - 31.12.96 3) | - | - | - | 3.37 | - | 3.07 | - | 2.73 | - | - | - | | |
| | | | 27.05.97 + 03.06.97 4) | - | - | - | 0.07 | - | - | - | - | - | - | - | | |
| | | | 01.01.98 - 31.12.98 5) | - | - | - | 1.30 | - | 0.60 | - | 0.47 | - | - | - | | |
| | | | 01.01.99 - 31.12.99 6) | - | - | - | 3.54 | - | 1.90 | - | 1.63 | - | - | - | | |
| | | | 01.01.00 - 31.12.00 | - | 12 | 2 | 0.47 | - | 0.47 | - | 0.40 | - | - | - | | |
| | | | 01.01.00 - 31.12.00 7) | - | 20 | - | 3.27 | - | - | - | - | - | - | - | | |
| | | | | | | | | | | 29.04 | 21.75 | 19.93 | | | | |
| 2.2 | Structural Engineer | K. Schnackenberg | 09.09.93 - 08.11.93 1) | - | - | - | 2.13 | - | 2.13 | - | 2.00 | - | - | | | |
| | | | | | | | 2.13 | 2.13 | 2.00 | | | | | | | |
| 2.3 | Mechanical Engineer | Dos Santos | 03.10.93 - 29.10.93 1) | - | - | - | 1.00 | - | 1.00 | - | 0.90 | - | - | | | |
| | | | | | | | 1.00 | 1.00 | 0.90 | | | | | | | |
| 2.4 | Procurement Expert | Dos Santos | 01.11.93 - 31.12.93 1) | - | - | - | 2.00 | - | - | - | - | - | - | | | |
| | | | 01.01.94 - 31.01.94 1) | - | - | - | 1.00 | - | - | - | - | - | - | | | |
| | | | | | | | 3.00 | | | | | | | | | |
| 2.5 | Subsoil Engineer | H. Wessling | 15.11.93 - 16.12.93 1) | - | - | - | 1.20 | - | 1.20 | - | 1.07 | - | - | | | |
| | | | 01.02.94 - 24.02.94 1) | - | - | - | 0.80 | - | - | - | - | - | - | | | |
| | | | 01.03.95 - 16.11.95 2) | - | - | - | 1.27 | - | - | - | - | - | - | | | |
| | | | | | | | 3.27 | 1.20 | 1.07 | | | | | | | |
| 3.1 | Chief Supervision Engineer | C. Delille J.Y. Bouard K. Oberhagemann | 04.09.94 - 22.12.94 1) | - | - | - | 3.77 | - | 3.77 | - | 3.63 | - | - | | | |
| | | | 02.01.95 - 02.07.95 2) | - | - | - | 5.77 | - | 5.77 | - | 5.40 | - | - | | | |
| | | | 16.09.95 - 31.12.95 2) | - | - | - | 3.20 | - | 3.20 | - | 3.00 | - | - | | | |
| | | | 01.01.96 - 31.03.96 3) | - | - | - | 3.00 | - | 3.00 | - | 2.93 | - | - | | | |
| | | | 25.11.99 - 31.12.99 6) | - | 28 | 3 | 1.03 | - | 1.03 | - | 0.93 | - | - | | | |
| | | | 01.01.00 - 31.07.00 | 5 | 24 | 6 | 6.00 | - | 6.00 | - | 5.80 | - | - | | | |
| | | | 01.01.00 - 31.07.00 7) | - | 2 | - | 0.07 | - | - | - | - | - | - | | | |
| | | | | | | | | | | 22.84 | 22.77 | 21.69 | | | | |
| | | | | | HJ Gruener/KO | 20.10.96 - 31.12.96 3) | - | - | - | 2.40 | - | 2.40 | - | 2.33 | - | - |
| | | | | | | 01.01.97 - 04.06.97 | - | - | - | 5.13 | - | 5.13 | - | 5.07 | - | - |
| 01.08.00 - 31.12.00 | - | 29 | | | | 4 | 1.10 | - | 1.10 | - | 0.97 | - | - | | | |
| | | | | | | | 8.63 | 8.63 | 8.37 | | | | | | | |
| 3.2.1 | Supervision Engineer | Rouyer / Hourseau G. Hourseau | 03.10.94 - 31.12.94 1) | - | - | - | 3.00 | - | 3.00 | - | 2.87 | - | - | | | |
| | | | 01.01.95 - 31.12.95 2) | - | - | - | 10.36 | - | 10.36 | - | 9.93 | - | - | | | |
| | | | 01.01.96 - 02.07.96 3) | - | - | - | 5.63 | - | 5.63 | - | 5.33 | - | - | | | |
| | | J.C. Thiesson | 20.04.96 - 22.06.96 3) | - | - | - | 2.10 | - | 2.10 | - | 1.97 | - | - | | | |
| | | | | | | | 2.10 | 2.10 | 1.97 | | | | | | | |
| 3.4.1 | Surveyor | J. Heise H. Andrejewski J. Heise | 15.10.93 - 31.12.93 1) | - | - | - | 0.53 | - | 0.53 | - | 0.46 | - | - | | | |
| | | | 18.03.94 - 24.07.94 1) | - | - | - | 0.77 | - | 0.77 | - | 0.47 | - | - | | | |
| | | | 20.02.95 - 11.07.95 2) | - | - | - | 0.92 | - | 0.92 | - | 0.92 | - | - | | | |
| | | | 17.04.95 - 11.05.95 2) | - | - | - | 0.83 | - | 0.83 | - | 0.70 | - | - | | | |
| | | | 13.08.96 - 26.08.96 3) | - | - | - | 0.47 | - | 0.47 | - | 0.47 | - | - | | | |
| | | | 28.04.97 - 25.05.97 4) | - | - | - | 0.93 | - | 0.93 | - | 0.80 | - | - | | | |
| | | | | | | | 4.45 | 4.45 | 3.82 | | | | | | | |
| 3.5 | Administrator | B. Thomas | 19.06.94 - 22.12.94 1) | - | - | - | 6.27 | - | 6.27 | - | 6.13 | - | - | | | |
| | | | | | | | 10.90 | 10.90 | 2.90 | 9.00 | | | | | | |
| | | | | | | | 10.44 | 10.44 | - | 12.00 | | | | | | |
| | | | | | | | 1.17 | 1.17 | 1.03 | - | | | | | | |
| | | | | | | | 28.78 | 28.78 | 10.06 | 21.00 | | | | | | |
| 3.6.1 | Monitoring Expert | T. Döscher | 01.06.95 - 01.10.95 2) | - | - | - | 4.07 | - | 4.05 | - | 3.90 | - | - | | | |
| | | | 01.06.96 - 30.09.96 3) | - | - | - | 4.00 | - | 4.00 | - | 3.87 | - | - | | | |
| | | | 02.06.97 - 22.09.97 4) | - | - | - | 3.30 | - | 3.30 | - | 3.23 | - | - | | | |
| | | | | | | | 11.37 | 11.35 | 11.00 | | | | | | | |
| | | | 01.04.97 - 23.04.97 4) | - | - | - | 0.77 | - | 0.77 | - | 0.70 | - | - | | | |
| | | | | | | | 0.77 | 0.77 | 0.70 | | | | | | | |
| | | | 24.02.98 - 08.09.98 5) | - | - | - | 3.93 | - | 3.93 | - | 3.80 | - | - | | | |
| | | | 23.02.99 - 30.11.99 6) | - | - | - | 3.13 | - | 3.13 | - | 2.93 | - | - | | | |
| | | | 25.01.00 - 07.03.00 | - | 1 | - | 1.47 | - | 1.47 | - | 1.40 | - | - | | | |
| | | | 01.01.00 - 31.12.00 7) | - | 15 | 2 | 0.50 | - | - | - | - | - | - | | | |
| | | | | | | | | | | 9.03 | 8.53 | 8.13 | | | | |
| | | | | | | | | | | 10.17 | 7.19 | 6.20 | | | | |
| 4.1.1 | Morphologist | Dr. E. Mosselman | 09.09.93 - 08.11.93 1) | - | - | - | 2.20 | - | 2.20 | - | 2.07 | - | - | | | |
| | | | 09.06.94 - 14.06.94 1) | - | - | - | 1.67 | - | 1.43 | - | 1.16 | - | - | | | |
| | | | 06.02.95 - 15.09.95 2) | - | - | - | 1.00 | - | 1.00 | - | 0.87 | - | - | | | |
| | | | 18.02.96 - 15.09.96 3) | - | - | - | 1.67 | - | 1.30 | - | 1.03 | - | - | | | |
| | | | 13.08.97 - 15.12.97 4) | - | - | - | 0.70 | - | 0.70 | - | 0.60 | - | - | | | |
| | | | 01.01.98 - 31.12.98 5) | - | - | - | 0.87 | - | 0.56 | - | 0.47 | - | - | | | |
| | | | 01.01.99 - 31.03.99 6) | - | - | - | 1.26 | - | - | - | - | - | - | | | |
| | | | 01.01.00 - 31.12.00 7) | - | 24 | - | 0.80 | - | - | - | - | - | - | | | |
| | | | | | | | | | | 10.17 | 7.19 | 6.20 | | | | |
| | | | | | | | | | | 10.17 | 7.19 | 6.20 | | | | |
| 4.2.1 | Modelling Expert | M. vd Wal J. Lambeek | 06.06.93 - 12.12.93 1) | - | - | - | 4.63 | - | 4.63 | - | 0.23 | - | 5.00 | - | | |
| | | | 06.03.94 - 31.12.94 1) | - | - | - | 3.71 | - | 3.41 | - | 3.34 | - | - | - | | |
| | | | 01.01.95 - 31.12.95 2) | - | - | - | 2.31 | - | 2.20 | - | 2.13 | - | - | - | | |
| | | | 01.01.96 - 31.10.96 3) | - | - | - | 1.83 | - | 1.83 | - | 1.77 | - | - | - | | |
| | | | 23.05.97 - 15.12.97 4) | - | - | - | 1.58 | - | 1.10 | - | 1.00 | - | - | - | | |
| | | | 01.01.98 - 31.12.98 5) | - | - | - | 1.43 | - | 1.13 | - | 1.03 | - | - | - | | |
| | | | 01.01.99 - 31.12.99 6) | - | - | - | 3.40 | - | 2.17 | - | 2.00 | - | - | - | | |
| | | | 01.01.00 - 31.03.00 7) | - | - | - | - | - | - | - | - | - | - | - | | |
| | | | 28.11.95 - 23.12.95 2) | - | - | - | 1.00 | - | 0.90 | - | 0.77 | - | - | - | | |
| | | | 18.02.96 - 05.03.96 3) | - | - | - | 0.57 | - | 0.57 | - | 0.43 | - | - | - | | |
| | | | | | | | 20.46 | 17.94 | 12.70 | | | | | | | |
| | Modelling Expert | E. Divet/D. Carrion | 27.05.97 - 06.12.97 4) | - | - | - | 2.87 | - | 2.80 | - | 2.73 | - | - | | | |
| | | | 10.01.98 - 07.02.98 5) | - | - | - | 0.97 | - | 0.97 | - | 0.90 | - | - | | | |
| | | | | | | | 3.84 | 3.77 | 3.63 | 5.00 | | | | | | |
| 4.3.1 | Environmental Expert | C. Bertrand | 28.10.95 - 25.11.95 2) | - | - | - | 0.97 | - | 0.97 | - | 0.83 | - | - | | | |
| | | | 01.01.00 - 31.03.00 3) | - | 14 | - | 0.47 | - | - | - | - | - | - | | | |
| | | | | | | | 1.44 | 0.97 | 0.83 | | | | | | | |
| 4.5.1 | Economist | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| * Home Office Work ** Decimal fractions of months are based on 30 days/month | | | | | | | 314.20 | 264.62 | 152.89 | 117.00 | | | | | | |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES
- Test and Implementation Phase -
LOCAL PROFESSIONAL STAFF
up to 31.12.00

| No. | Function | Person | Assignment | | Man-Month | |
|-------|---|--|--|--|---|---|
| | | | From | To | Fees | Total |
| 1.2 | Home Office Support | Dr S K Chowdhury | 01.06.93 01.01.94 01.01.95 01.01.96 01.01.97 01.01.98 01.01.99 01.01.00 | 31.12.93 31.12.94 31.12.95 31.12.96 31.12.97 31.12.98 31.12.99 31.12.00 | 0.70 1.20 1.20 1.20 1.20 0.60 0.60 0.30 | 7.00 |
| 1.3.2 | Deputy Project Manager | S M Mansur | 01.06.93 01.01.94 01.01.95 01.01.96 01.01.97 01.01.98 01.01.99 01.01.00 | 31.12.94 31.12.94 31.12.95 31.12.96 31.12.97 31.12.98 31.12.99 31.12.00 | 7.00 11.84 11.74 10.88 11.68 11.93 11.51 11.91 | 88.49 |
| 2.1.2 | Hydraulic Design Engineer - 2 | A Q M Ali | 08.09.93 01.01.94 31.01.95 01.01.96 01.01.97 | 26.12.93 31.12.94 31.12.95 31.12.96 31.01.97 | 3.60 11.28 11.34 4.29 1.00 | 31.51 |
| 2.3.2 | Mechanical Engineer - 2 | Masih-ur-Rahman | 04.10.93 29.01.94 01.01.95 01.01.96 | 03.11.93 31.12.94 31.12.95 31.12.96 | 1.00 1.81 5.85 3.55 | 12.21 |
| 2.4.2 | Procurement - 2 | Masih-ur-Rahman | 04.11.93 01.11.94 | 15.12.93 09.11.94 | 0.70 0.30 | 1.00 |
| 2.5.2 | Subsoil Expert - 2 | Muzharul Haque | 12.09.93 01.01.94 | 31.12.93 10.02.94 | 1.67 1.44 | 3.11 |
| 3.2.2 | Supervising Engineer - 2 | Fazlur Rahman Golam Quader | 30.10.94 01.01.95 01.01.96 01.01.97 01.01.98 01.08.98 01.01.99 01.01.00 | 31.12.94 31.12.95 31.12.96 31.12.97 31.07.98 31.12.98 31.12.99 31.12.00 | 2.07 11.70 11.70 11.84 7.00 5.00 12.00 12.00 | 44.31 29.00 73.31 |
| 3.3 | Quantity Surveyor - 2 | Faizur Rahman Khan | 20.10.94 01.01.95 01.01.96 01.03.97 | 31.12.94 31.12.95 31.12.96 31.03.97 | 2.40 11.90 12.00 0.50 | 26.80 |
| | Monitoring Expert - 2 / Quantity Surveyor - 3 | A B M Anwar Haider | 01.10.94 01.01.95 01.01.96 01.01.97 01.01.98 01.01.99 01.01.00 | 31.12.94 31.12.95 31.12.96 31.12.97 31.12.98 31.12.99 11.08.00 | 2.77 11.83 11.67 10.00 12.00 12.00 7.37 | 67.64 |
| 3.4.2 | Surveyor - 2 | A H M Kamal | 27.09.93 01.01.94 01.01.95 01.01.96 01.01.97 | 31.12.93 31.12.94 31.12.95 31.03.96 11.07.97 | 3.10 10.97 11.97 11.80 6.12 | 43.96 |
| 3.6.2 | Monitoring Expert - 3 | Pankaj Kumar Maitra | 04.05.95 01.01.96 01.01.97 01.01.98 01.01.99 01.01.00 | 31.12.95 30.11.96 31.12.97 31.12.98 31.12.99 31.12.00 | 7.93 11.00 4.00 9.00 11.93 12.00 | 55.86 |
| | Monitoring Expert - 4 (Data Processor) | Yasmin Khayer | 05.09.96 28.10.96 20.01.97 01.01.98 01.01.99 | 20.10.96 14.11.96 31.12.97 31.12.98 31.12.99 | 1.53 0.57 11.14 9.00 11.00 | 33.24 89.10 |
| 4.1.2 | Morphologist - 2 | M Salahuddin Khan M.H. Sarker | 20.08.93 01.10.96 | 09.11.93 14.10.96 | 4.61 0.47 | 5.08 |
| 4.2.2 | Modelling Expert - 2 + 3 | Q Saifuddin / S R Khan Jahangir Islam M. Kader M.H. Sarker | 20.08.93 21.07.93 25.05.94 01.10.95 01.01.96 15.09.97 11.01.98 11.09.96 | 15.12.93 09.09.93 30.09.94 31.12.95 10.01.96 11.12.97 19.02.98 30.09.96 | 5.87 1.63 4.23 3.00 0.35 2.89 1.33 0.67 | 5.87 5.86 3.35 4.22 0.67 19.97 |
| 4.3.2 | Environmental Expert - 2 | Dr. Nazrul Islam | 01.11.95 01.10.99 | 09.12.95 31.12.99 | 1.30 1.20 | 2.50 |
| 4.4 | Socio-Economist - 2 | Tauhidun Nabi | 09.05.94 01.01.95 01.01.96 01.01.97 01.04.99 | 31.12.94 31.12.95 31.12.96 31.01.97 31.12.99 | 7.33 7.57 11.45 1.00 8.37 | 35.72 |
| 4.5.2 | Economist - 2 | Dr. Lutfur Rahman | 25.01.00 | 18.05.00 | 3.70 | 3.70 |
| 4.6.2 | Unallocated - 2 | nn | - | - | | |
| | | | | | Total | 511.10 |

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

STAFFING SCHEDULE

REVISION NO. 3

[illegible]

C

**FINANCIAL ASPECTS
(FAP 21)**

27

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 31.12.00 | |
|------|--|---------------|----------------|--------------------------|-----------------|
| | | DM | DM | DM | % |
| 1 | MANPOWER COSTS * | 7,807,650 | 10,551,824 | 10,341,416 | 98.01 |
| 2 | LUMPSUMS PER UNIT # | 3,090,915 | 4,305,830 | 4,304,770 | 99.98 |
| 3 | REIMBURSABLES # | 866,400 | 747,810 | 663,801 | 88.77 |
| 4 | LUMPSUMS # | 480,000 | 539,000 | 485,860 | 90.14 |
| 5 | SUBCONTRACTS # | 416,000 | 409,972 | 403,634 | 98.45 |
| 6 | CLIENT'S TRAINING, INFORMATION TOURS, CONFERENCES # | 81,500 | 67,977 | 67,974 | 100.00 |
| | SUBTOTAL (Sum item 2 to 6) | 12,742,465 | 16,622,413 | 16,267,455 5,926,039 | 97.86 |
| | PHYSICAL CONTINGENCIES | 1,200,000 | | | |
| | FINANCIAL CONTINGENCIES | 2,057,535 | | | |
| | PRICE ESCALATION REPLACING FINANCIAL CONTINGENCIES (ESTIMATE) | | 2,340,880 | 2,467,942 | 105.43 |
| | 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 (agreement) Total (revisin no. 3) | 16,000,000 | 18,963,293 | 18,735,397 18,735,397 | 117.10 98.80 |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| | | Revision No. 3 | | up to 31.12.00 | |
|---------------------|--|----------------|------------|----------------|-------|
| 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 | 7,637,189 | | 98.30 |
| 1.1.2 | Living Allowances | 976,850 | 926,158 | | 94.81 |
| | Subtotal | 8,746,383 | 8,563,347 | | |
| 1.2 | Local Staff (see Table 1.2) | 1,805,441 | 1,778,069 | | 98.48 |
| | * 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 | 10,341,416 | 98.01 | |

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 31.12.00 | |
|-------|-------------------------------|------------------------------------|----------------|---------|------------------|------------------|----------------|------------------|
| | | | Fees (DM) | | | Amount | Fees (DM) | |
| | | | MM | MM-Rate | Incl. Allowances | | MM | Amount |
| 1.2 | Home Office Support | Dr. S K Chowdhury | 7.00 | 4,650 | | 32,550 | 7.00 | 32,550 |
| 1.3.2 | Deputy Project Manager | S M Mansur | 89.00 | 4,800 | | 427,200 | 88.49 | 424,752 |
| 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 | 73.31 | 197,937 |
| 3.3 | Quantity Surveyor - 2 | Faizur Rahman Khan | (26.8) | | | | 26.80 | 71,020 |
| | | | 95.00 | 2,650 | | 251,750 | | |
| | | | (68.2) | | | | | |
| | Monitoring Expert - 2 | Anwar Haider | | | | | | |
| 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 | 89.10 | 236,115 |
| 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 | 2.50 | 10,000 |
| 4.4 | Socio-Economist - 2 | T. Nabi | 33.00 | 4,100 | | 135,300 | 35.72 | 146,452 |
| 4.5.2 | Economist - 2 | Dr. Lutfur Rahman | 1.00 | 3,800 | | 3,800 | 3.70 | 14,060 |
| 4.6.2 | Unallocated - 2 | nn | 3.10 | 4,500 | | 13,950 | - | - |
| | | Sub-Total Item 1.2 | 520.00 | | | 1,805,441 | 511.10 | 1,778,069 |

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 -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.00 | | | Remarks |
|------------------------------|--|--------------|----------------|--------------|-----------|----------------|------------------|--------|--|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | |
| 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 | 91.00 | 15,545 | 1,414,595 | 92.00 | 1,430,140 | 101.10 | |
| 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 | 124.00 | 136,400 | 100.00 | Kamariani 61(closed) Bahadurabad 63 |
| 2.4 | House running costs for long term exp. staff | month | 116.00 | 3,000 | 348,000 | 117.00 | 351,000 | 100.86 | |
| 2.5 | Hotel / guesthouse for short term exp. staff | month | 160.00 | 3,500 | 560,000 | 152.59 | 534,065 | 95.37 | |
| 2.6 | Jeep running costs incl. microbus | veh. - month | 540.00 | 2,200 | 1,188,000 | 540.00 | 1,188,000 | 100.00 | (7 jeeps) from 1.7.98 only 6 |
| 2.7 | Sedan running costs | veh. - month | 137.00 | 1,650 | 226,050 | 137.00 | 226,050 | 100.00 | (2 sedan) from 1.4.98 only 1 |
| 2.8 | Car rental costs | veh. - month | 12.00 | 3,300 | 39,600 | 12.00 | 39,600 | 100.00 | |
| 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 (29) (29 x 15) | piece | 435.00 | 100 | 43,500 | 435.00 | 43,500 | 100.00 | |
| 2.9.2 | Reports on monitoring (4) (4 x 15) | piece | 60.00 | 200 | 12,000 | 60.00 | 12,000 | 100.00 | |
| 2.9.3 | Evaluation reports (2) (2 x 15) | piece | 30.00 | 500 | 15,000 | 30.00 | 15,000 | 100.00 | |
| TO BE CARRIED FORWARD | | | | | DM | | 3,975,755 | | |

Note: The rates 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 -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.00 | | | Remarks |
|---------------------|--|------------|----------------|--------------|------------------|----------------|------------------|--------------|--------------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | |
| | CARRIED FORWARD | | | | 3,983,145 | | 3,975,755 | | |
| 2.9.4 | Manuals and guidelines | piece | 30.00 | 1,000 | 30,000 | 30.00 | 30,000 | 100.00 | |
| 2.9.5 | Tender documents (3 sites) | piece | 40.00 | 300 | 12,000 | 60.00 | 18,000 | 150.00 | 3. Test Site |
| 2.9.6 | Video, 30 min., commented | piece | 1.35 | 48,700 | 65,745 | 1.35 | 65,745 | 100.00 | |
| 2.10 | Ground Transport and miscellaneous costs for staff trips EUR - Dhaka | trip | 118.00 | 330 | 38,940 | 119.00 | 39,270 | 100.85 | |
| 2.11 | Excess baggage for some staff EUR - DHAKA | trip | 50.00 | 750 | 37,500 | 50.00 | 37,500 | 100.00 | |
| 2.12 | Transport to sites (air and train) | site | 6.00 | 15,000 | 90,000 | 6.00 | 90,000 | 100.00 | |
| 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 | 70.00 | 10,500 | 100.00 | |
| 2.15 | Travel expenses (ground travel, Europe) for Consultant's staff travelling for Project purpose | trip | 40.00 | 500 | 20,000 | 40.00 | 20,000 | 100.00 | |
| TOTAL ITEM 2 | | | | DM | 4,305,830 | | 4,304,770 | 99.98 | |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| | | | Revision No.3 | | | up to 31.12.00 | | | |
|-----------------------|--|-------|---------------|-----------------|-------------|----------------|-------------|---------|--|
| 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 | 16,292 | 72.41 | |
| 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 to custom problems |
| 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 | 16,696 | | |
| 3.5 | Consultant's air travel | | | | | | | | |
| 3.5.1 | Staff, C-class, EUR - DHAKA# | trip | 67.00 | 4,500 | 301,500 | 63.00 | 278,678 | 92.43 | |
| 3.5.2 | Staff and dependants, exc. fare, EUR - DHAKA# | trip | 97.00 | 2,750 | 266,750 | 93.50 | 234,793 | 88.02 | |
| 3.5.3 | Staff, Regional air travel, Asia | trip | 6.00 | 3,000 | 18,000 | 6.00 | 8,426 | 46.81 | |
| 3.5.4 | Staff, Regional air travel, Europe# | trip | 17.00 | 1,500 | 25,500 | 13.00 | 15,583 | 61.11 | |
| TO BE CARRIED FORWARD | | | | | DM | 719,025 | | 637,070 | |

new unit rates due to favourable fares

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.00 | | | Remarks |
|---------------------|---|-------------------|----------------|-----------------|-------------|----------------|----------------|--------------|--------------------------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | |
| 3.6 | CARRIED FORWARD | | | | 719,025 | | 637,070 | | |
| | Hotel accommodation acc. to item 2.14 | night | 20 | 200 | 4,000 | 17.00 | 907 | 22.68 | |
| 3.7 | Air freight for equipment | kg | | 12 | 4,785 | 398.75 | 4,532 | 94.72 | |
| 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 | | 8,846 | 44.23 | Inspect. flight + others |
| | | | | | | | 12,446 | 62.23 | Flight for Video 12.97 |
| | | | | | | | | 106.46 | Inauguration 1.7.00 |
| TOTAL ITEM 3 | | | DM | | | | 663,801 | 88.77 | |

29

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.00 | | | 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 | 8 | 186,860 | 77.86 | |
| TOTAL ITEM 4 | | | | | DM | | 485,860 | 90.14 | |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| Item | Description | Unit | Revision No. 3 | | | | up to 31.12.00 | | Remarks |
|----------------|---|----------------------|----------------|-----------------|---------------------------------------|------------------------------|---------------------------------------|--------------------------------------|---------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | |
| 4.1 | PHYSICAL MODELLING OF FALLING APRONS (CNR - LABORATORY) for scope fo works for the investigations references is made to subsection 11.2.4.2 of the Final Report, Vol. IA | | | | | | | | |
| 4.1.1 | Lumpsums - Staff - Model construction / Instrumentation - Running cost - Reporting cost (up to 15 copies, further copies DM 500 each) | LS LS LS LS | | | 150,000 50,000 25,000 15,000 | 1.00 1.00 1.00 1.00 | 150,000 50,000 25,000 15,000 | 100.00 100.00 100.00 100.00 | |
| 4.1.2 | Lumpsums Cost for Bangladeshi graduate engineer with model testing experience - accommodation + allowance - fees for CNR | month month | 5.87 5.87 | 6,500 3,000 | 38,155 17,610 | 5.87 5.87 | 38,155 17,610 | 100.00 100.00 | |
| 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 | | | | | 299,000 | | 299,000 | 100.00 | |

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

| Item | Description | Unit | Revision No. 3 | | | | up to 31.12.00 | | | Remarks |
|-------|--|-------------|----------------|------------------|--------------------|----------|----------------|--------|----------|---------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | | |
| 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 | 8.00 | 90,240.00 | 100.00 | 93 -2000 | |
| 4.2.2 | Reimbursables Purchase of Landsat TM Computer Compatible Tapes 1 x Jamuna North | year | 8 8 | 18,720 13,000 | 149,760 104,000 | 8.00 | 96,620.00 | 92.90 | 93-99 | |
| | TOTAL ITEM 4.2 | | | DM | 240,000 | | 186,860.00 | 77.86 | | |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| | | | Revision No. 3 | | | up to 31.12.00 | | | |
|--------------|--|-------------------|----------------|-----------------|-------------|----------------|-------------|--------|--|
| Item | Description | Unit | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | Remarks |
| 5 | SUBCONTRACTS | | | | | | | | |
| 5.1 | Surveys, (details see Table 5.1) | to be detailed | | | 132,000 | - | 122,176 | 92.56 | finalized |
| 5.2 | Filter test rig. (details see Table 5.2) | | 1 | (100,000) | 80,824 | - | 83,556 | 103.38 | finalized |
| 5.3 | Physical modelling of sites (RRI) | to be detailed | 1 | (100,000) | 184,548 | - | 185,302 | 100.41 | additional model tests for test site I finalized |
| 5.4 | Subsoil investigations | to be detailed | 1 | (30,000) | 12,600 | - | 12,600 | 100.00 | finalized |
| TOTAL ITEM 5 | | | | DM | 409,972 | | 403,634 | 98.45 | |

CONSULTANCY SERVICES FOR FAP 21 - TEST STRUCTURES

- Test and Implementation Phase -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.00 | | | 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 | 10.18 | 122,176 | 92.56 | finalized |
| TOTAL ITEM 5.1 | | | | DM | 132,000 | | 122,176 | 92.56 | |

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 | finalized |
| 5.2.2 | Testing as per Scope of Works, Chapter 0-4 | LS | 1 | 17,982 | 17,982 | - | 20,714 | 115.19 | |
| 5.2.3 | Material etc. | LS | 1 | 10,811 | 10,811 | - | 10,811 | 100.00 | |
| TOTAL ITEM 5.2 | | | | DM | 80,824 | | 83,556 | 103.38 | |

CONSULTANCY SERVICES FOR FAP 21 PHASE II - TEST STRUCTURES

- Test and Implementation Phase -

| Item | Description | Unit | Revision No. 3 | | | up to 31.12.98 | | | 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 | 30,632 | 99.99 | |
| 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 | | 67,974 | 100.00 | |

C - PART 2

**REVISION OF RATES
(FAP 21)**

CONSULTANCY SERVICES FAP 21/22 STUDY PHASE
REVISION OF RATES
PERIOD : 01.04.93 TO 31.12.2000

According to Section 5.04 of the Consulting Agreement, the rates quoted in Annex 2 have been applicable until March 31, 1993. For services rendered after March 31, 1993, all rates and prices shall be basically subject to adjustment.

The escalation of rates shall be calculated using the following formula:

$$R = 0.05 R_o + 0.95 R_o (1 + (I/100))$$

where

R = Adjusted prices

R_o = Amount of the respective prices, applicable before the respective date of increase

I = Increase of salaries in per cent, as agreed by "Tarifkommission für Angestellte des Baugewerbes", for "Tarifgruppe TH" (Commission for collective wage agreement for employees of the Construction Industry, wage rate bracket TH) since May 1991.
 (The relevant increase to be certified by the Chamber of Industry and Commerce in Dortmund)

As certified by the Chamber of Industry and Commerce in Dortmund, factor I of the escalation clause was:

5.80% on April 1, 1992
 3.85% on April 1, 1993
 2.40% on April 1, 1994
 3.80% on April 1, 1995
 1.85% on April 1, 1996
 1.30% on April 1, 1997
 1.50% on April 1, 1998
 2.87% on April 1, 1999

For the period April 1993 to March 1994 the escalation factor has been calculated as follows:

$$R_{92} = 0.05 R_o + 0.95 R_o (1 + (5.80/100)) = 1.0551 R_o$$

$$R_{93} = 0.05 R_{92} + 0.95 R_{92} (1 + (3.85/100)) = 1.0366 R_{92}$$

$$R_{93} = 1.0551 R_o \times 1.0366 = 1.0937 R_o$$

For the period April 1994 to March 1995 the escalation factor has been calculated as follows:

$$R_{94} = 0.05 R_{93} + 0.95 R_{93} (1 + (2.40/100)) = 1.0228 R_{93}$$

$$R_{94} = 1.0937 R_o \times 1.0228 = 1.1186 R_o$$

For the period April 1995 to March 1996 the escalation factor has been calculated as follows:

$$R_{95} = 0.05 R_{94} + 0.95 R_{94} (1 + (3.80/100)) = 1.0361 R_{94}$$

$$R_{95} = 1.1186 R_o \times 1.0361 = 1.1590 R_o$$

9

For the period April 1996 to March 1997 the escalation factor has been calculated as follows:

$$R96 = 0.05 R95 + 0.95 R95 (1 + (1.85/100)) = 1.0176 R95$$

$$R96 = 1.1590 R_o \times 1.0176 = 1.1794 R_o$$

For the period April 1997 to March 1998 the escalation factor has been calculated as follows:

$$R97 = 0.05 R96 + 0.95 R96 (1 + (1.30/100)) = 1.0124 R96$$

$$R97 = 1.1794 R_o \times 1.0124 = 1.1940 R_o$$

For the period April 1998 to March 1999 the escalation factor has been calculated as follows:

$$R98 = 0.05 R97 + 0.95 R97 (1 + (1.50/100)) = 1.01425 R97$$

$$R98 = 1.1940 R_o \times 1.01425 = 1.2110 R_o$$

For the period April 1999 to March 2000 the escalation factor has been calculated as follows:

$$R99 = 0.05 R98 + 0.95 R98 (1 + (2.9/100)) = 1.0273 R98$$

$$R99 = 1.2110 R_o \times 1.0273 = 1.2440 R_o$$

For the period April 2000 to December 2000 the escalation factor has been calculated as follows:

$$R2000 = 0.05 R99 + 0.95 R99 (1 + (1.75/100)) = 1.0193 R99$$

$$R2000 = 1.2440 R_o \times 1.0193 = 1.2680 R_o$$

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

| Description | 06/93 - 12/00 DM | REMARKS |
|--|----------------------|---------|
| Expert Professional Staff Fees Allowance | 1,315,362 156,020 | |
| Local Professional Staff | 309,988 | |
| Lumpsums | 686,572 | |
| | 2,467,942 | |

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

| Item | Description | Unit | Rate | R o R 93-94 9.37 % | R o R 94-95 11.86 % | R o R 95-96 15.90 % | R o R 96-97 17.94 % | R o R 97-98 19.40 % | R o R 98-99 21.1 % | R o R 99-00 24.4 % | Total 12/00 MM | Quantity | DM | R o R 400-12/00 26.8 % | R o R 93-12/00 Total |
|-------------------|-----------------------------|------|--------|-----------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-------------------|----------|------------|---------------------------|-------------------------|
| Fees | | | | | | | | | | | | | | | |
| 1.1 | Project Director | MM | 29,500 | 4,975.47 | 7,942.05 | 10,319.10 | 8,996.91 | 1,888.59 | 10,830.63 | 5,542.46 | 11.98 | 1.17 | 34,515.00 | 9,250.02 | 59,745.23 |
| 1.2 | Home Office Support | MM | 26,500 | 2,483.05 | 7,008.67 | 7,688.57 | 7,131.15 | 10,796.10 | (2,516.18) | 5,237.46 | 10.00 | 0.99 | 26,235.00 | 7,030.98 | 44,839.80 |
| 1.3.1 | Project Manager | MM | 25,400 | 20,539.23 | 30,937.76 | 43,616.88 | 49,349.71 | 48,783.24 | 57,024.02 | 66,934.08 | 79.87 | 8.00 | 203,200.00 | 54,457.60 | 371,642.61 |
| 1.4 | Chief Hydr. Design Engineer | MM | 25,400 | 8,234.73 | 9,157.82 | 18,052.64 | 13,989.25 | 17,000.22 | 18,597.12 | 41,957.75 | 31.05 | 3.32 | 84,243.33 | 22,577.21 | 149,566.65 |
| 2.1.1 | Hydr. Design Engineer | MM | 25,400 | 15,017.67 | 17,852.90 | 26,452.63 | 7,746.49 | 3,301.49 | 6,967.22 | 23,550.88 | 29.04 | 2.85 | 72,474.67 | 19,423.21 | 120,112.70 |
| 2.2 | Structural Engineer | MM | 23,100 | 4,610.32 | - | - | - | - | - | - | 2.13 | - | - | - | 4,610.32 |
| 2.3 | Mechanical Engineer | MM | 23,100 | 2,164.47 | - | - | - | - | - | - | 1.00 | - | - | - | 2,164.47 |
| 2.4 | Procurement Expert | MM | 23,100 | 6,493.41 | - | - | - | - | - | - | 3.00 | - | - | - | 6,493.41 |
| 2.5.1 | Subsoil Expert | MM | 20,200 | 3,785.48 | 646.84 | 3,179.68 | - | - | - | - | 3.27 | 0.01 | 202.00 | 54.14 | 7,666.14 |
| 3.1.1 | Chief Supervising Engineer | MM | 25,400 | - | 20,002.60 | 36,751.26 | - | - | - | 24,976.33 | 22.84 | 3.07 | 77,893.33 | 20,875.41 | 102,605.60 |
| | * | MM | 25,400 | - | - | - | 24,606.50 | 10,495.79 | - | - | 8.63 | 1.10 | 27,940.00 | 7,487.92 | 42,590.21 |
| 3.2.1 | Supervising Engineer | MM | 23,100 | - | 15,698.25 | 38,198.16 | 11,727.92 | - | - | - | 18.99 | 0.03 | 693.00 | 185.72 | 65,810.05 |
| 3.4.1 | Surveyor | MM | 20,200 | 1,570.97 | 1,653.05 | 4,881.94 | 1,703.22 | 3,644.48 | - | - | 4.45 | 0.01 | 202.00 | 54.14 | 13,507.80 |
| 3.5.1 | Administrator | MM | 20,200 | - | 22,136.45 | 34,366.26 | 27,795.16 | 4,585.00 | - | - | 28.78 | - | - | - | 88,892.87 |
| 3.6.1 | Monitoring Expert | MM | 20,200 | - | - | 13,072.03 | 14,495.52 | - | 14,065.26 | - | 11.37 | 0.00 | 0.00 | 0.00 | 41,632.81 |
| | Monitoring Expert | MM | 20,200 | - | - | - | - | 3,017.48 | - | - | 0.77 | - | - | - | 3,017.48 |
| | Monitoring Expert | MM | 20,200 | - | - | - | - | 18,733.28 | 2,003.23 | 18,877.30 | 9.03 | 0.46 | 9,224.67 | 2,472.21 | 40,086.02 |
| 4.1.1 | Morphologist | MM | 24,600 | 5,071.04 | 5,922.65 | 4,537.22 | 5,031.09 | 3,674.75 | 5,865.38 | 7,202.68 | 10.17 | 0.54 | 13,284.00 | 3,560.11 | 40,865.13 |
| 4.2.1 | Modelling Expert | MM | 24,600 | 10,833.59 | 12,662.21 | 14,276.61 | 5,002.01 | 8,256.25 | 12,820.78 | 13,385.35 | 20.46 | (0.02) | (492.00) | (131.86) | 78,104.95 |
| | Modelling Expert | MM | 24,600 | - | - | - | - | 18,326.02 | - | - | 3.64 | - | - | - | 18,326.02 |
| 4.3.1 | Environmental Expert | MM | 20,200 | - | - | 3,115.45 | - | - | - | 1,626.50 | 1.44 | 0.14 | 2,760.67 | 739.86 | 5,481.81 |
| 4.5.1 | Economist | MM | 25,400 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4.6.1 | Site Supervisor | MM | 20,200 | - | - | - | 7,610.15 | - | - | - | 2.10 | - | - | - | 7,610.15 |
| Total Fees | | | | 85,779.45 | 151,421.25 | 258,488.63 | 186,185.09 | 150,502.68 | 125,657.46 | 209,291.00 | 314.20 | 21.66 | 552,375.67 | 148,036.68 | 1,315,362.12 |

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

| Item | Description | Unit | Rate | R o R 93.94 | R o R 94.95 | R o R 95.96 | R o R 96.97 | R o R 97.98 | R o R 98.99 | R o R 99.00 | Total 12/00 | Quantity | DM | R o R 400-12/00 | R o R 93-12/00 |
|------------------------|-----------------------------|------|-------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|--------------|------------------|------------------|-------------------|
| | | | | 9.37 % | 11.86 % | 15.90 % | 17.94 % | 19.40 % | 21.1 % | 24.4 % | MM | | | 26.8 % | Total |
| Allowances | | | | | | | | | | | | | | | |
| 1.1 | Project Director | MM | 3,500 | 196.77 | 307.17 | 205.91 | - | - | - | - | 1.71 | - | - | - | 709.85 |
| 1.2 | Home Office Support | MM | | | | | | | | | | | | | |
| 1.3.1 | Project Manager | MM | 3,500 | 2,830.21 | 4,167.60 | 5,893.34 | 6,825.27 | 6,477.66 | 7,510.55 | 8,907.22 | 77.23 | 6.96 | 24,360.00 | 6,528.48 | 49,140.33 |
| 1.4 | Chief Hydr. Design Engineer | MM | 3,500 | 1,049.44 | 1,257.75 | 1,469.16 | 1,506.96 | 1,670.34 | 1,801.94 | 5,004.44 | 23.33 | 1.30 | 4,561.67 | 1,222.53 | 14,982.66 |
| 2.1.1 | Hydr. Design Engineer | MM | 3,500 | 1,892.27 | 2,461.54 | 3,133.10 | 923.01 | 407.40 | 369.25 | 1,596.98 | 21.78 | 0.01 | 23.33 | 6.25 | 10,769.81 |
| 2.2 | Structural Engineer | MM | 3,500 | 698.53 | - | - | - | - | - | - | 2.13 | - | - | - | 698.53 |
| 2.3 | Mechanical Engineer | MM | 3,500 | 327.95 | - | - | - | - | - | - | 1.00 | - | - | - | 327.95 |
| 2.4 | Procurement Expert | MM | 3,500 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2.5.1 | Subsoil Expert | MM | 3,500 | 393.54 | - | - | - | - | - | - | 1.20 | - | - | - | 393.54 |
| 3.1.1 | Chief Supervising Engineer | MM | 3,500 | - | 2,756.26 | 5,064.15 | - | - | - | 3,441.62 | 22.77 | 3.00 | 10,500.00 | 2,814.00 | 14,076.03 |
| | Chief Supervising Engineer | MM | 3,500 | | | | 3,390.66 | 1,446.27 | - | - | 8.63 | 1.10 | 3,850.00 | 1,031.80 | 5,868.73 |
| 3.2.1 | Supervising Engineer | MM | 3,500 | - | 2,378.52 | 5,787.60 | 1,776.96 | - | - | - | 18.99 | 0.03 | 105.00 | 28.14 | 9,971.22 |
| 3.4.1 | Surveyor | MM | 3,500 | 272.20 | 286.42 | 845.88 | 295.11 | 631.47 | - | - | 4.45 | 0.01 | 35.00 | 9.38 | 2,340.46 |
| 3.5.1 | Administrator | MM | 3,500 | - | 3,835.52 | 5,964.55 | 4,815.99 | 794.43 | - | - | 28.78 | - | - | - | 15,400.50 |
| 3.6.1 | Monitoring Expert | MM | 3,500 | - | - | 2,242.70 | 2,536.72 | - | 2,437.05 | - | 11.35 | (0.02) | (70.00) | (18.76) | 7,197.70 |
| | Monitoring Expert | MM | 3,500 | | | | | 522.83 | - | - | 0.77 | - | - | - | 522.83 |
| | Monitoring Expert | MM | 3,500 | | | | | 2,899.33 | 347.10 | 3,270.82 | 6.53 | (0.04) | (151.67) | (40.65) | 6,476.60 |
| 4.1.1 | Morphologist | MM | 3,500 | 721.49 | 747.18 | 645.54 | 483.48 | 427.77 | 716.35 | - | 7.19 | (0.34) | (1,190.00) | (318.92) | 3,422.89 |
| 4.2.1 | Modelling Expert | MM | 3,500 | 1,541.37 | 1,677.00 | 1,919.93 | 853.94 | 746.90 | 1,698.55 | 854.00 | 17.94 | (0.01) | (35.00) | (9.38) | 9,282.31 |
| | Modelling Expert | MM | 3,500 | | | | | 2,559.83 | - | - | 3.77 | (0.00) | (0.00) | (0.00) | 2,559.83 |
| 4.3.1 | Environmental Expert | MM | 3,500 | - | - | 539.81 | - | - | - | - | 0.97 | - | - | - | 539.81 |
| 4.5.1 | Economist | MM | 3,500 | | | | | | - | - | - | - | - | - | - |
| 4.6.1 | Site Supervisor | MM | 3,500 | - | - | - | 1,318.59 | - | - | - | 2.10 | - | - | - | 1,318.59 |
| Total Allowance | | | | 9,923.77 | 19,874.99 | 33,701.64 | 24,726.70 | 18,564.23 | 14,880.78 | 23,075.08 | 264.62 | 12.00 | 41,988.33 | 11,252.87 | 156,020.06 |

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

| Item | Description | Unit | Rate | R o R 93-94 | R o R 94-95 | R o R 95-96 | R o R 96-97 | R o R 97-98 | R o R 98-99 | R o R 99-00 | Total 12/00 | Quantity | DM | R o R 4/00-12/00 | R o R 93-12/00 |
|--------------------------------|---------------------------|------|-------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|--------------|-------------------|------------------|-------------------|
| | | | DM | 937 % | 1186 % | 1590 % | 1794 % | 1940 % | 211 % | 244 % | MM | | | 258 % | Total |
| Local Prof. | | | | | | | | | | | | | | | |
| 1.2 | Home Office Support | MM | 4,650 | 435.71 | 661.79 | 887.22 | 1,001.05 | 1,082.52 | 441.52 | 624.03 | 7.00 | 0.20 | 930.00 | 249.24 | 5,383.07 |
| Staff | | | | | | | | | | | | | | | |
| 1.3.2 | Deputy Project Manager | MM | 4,800 | 4,497.60 | 6,683.35 | 8,990.50 | 9,420.65 | 10,839.17 | 12,123.22 | 13,445.38 | 88.49 | 8.94 | 42,912.00 | 11,500.42 | 77,500.27 |
| 2.1.2 | Hydraulic Design Eng - 2 | MM | 3,800 | 2,350.00 | 4,993.53 | 6,350.14 | 2,263.31 | - | (0.00) | 0.00 | 31.51 | (0.00) | (0.00) | (0.00) | 15,966.98 |
| 2.3.2 | Mechanical Engineer - 2 | MM | 4,000 | 550.96 | 1,679.38 | 3,720.60 | 968.76 | - | - | - | 12.21 | - | - | - | 6,919.69 |
| 2.4.2 | Procurement Expert - 2 | MM | 4,100 | 265.92 | 145.88 | - | - | - | - | - | 1.00 | - | - | - | 414.80 |
| 2.5.2 | Subsoil Engineer - 2 | MM | 4,150 | 1,176.23 | 39.38 | - | - | - | - | - | 3.11 | - | - | - | 1,217.61 |
| 3.2.2 | Supervision Engineer - 2 | MM | 2,700 | - | 1,623.52 | 5,022.81 | 5,667.25 | 6,201.79 | 6,836.40 | 7,905.60 | 73.31 | 9.00 | 24,300.00 | 6,512.40 | 39,769.76 |
| 3.3 | Quantity Surveyor - 2 | MM | 2,650 | - | 1,697.17 | 5,014.07 | 4,516.40 | - | - | - | 26.80 | - | - | - | 11,227.63 |
| 3.3 | Monitoring Expert - 2 | MM | 2,650 | - | 1,782.02 | 5,026.71 | 5,548.03 | 5,141.00 | 6,709.80 | 7,759.20 | 67.64 | 4.37 | 11,580.50 | 3,103.57 | 35,070.34 |
| 3.4.2 | Surveyor - 2 | MM | 3,700 | 1,823.59 | 5,162.46 | 7,253.74 | 6,597.97 | 3,316.24 | - | - | 43.96 | - | - | - | 24,174.00 |
| 3.6.2 | Monitoring Expert - 3 & 4 | MM | 2,650 | - | - | 4,605.36 | 6,532.13 | 8,225.60 | 10,903.43 | 12,886.74 | 89.10 | 9.00 | 23,850.00 | 6,391.80 | 49,546.05 |
| 4.1.2 | Morphologist - 2 | MM | 4,300 | 1,881.59 | - | - | 316.28 | - | - | - | 5.08 | - | - | - | 2,197.87 |
| 4.2.2 | Modelling Expert - 2 | MM | 4,800 | 3,373.20 | 2,345.43 | 2,579.62 | 645.84 | 3,929.66 | - | - | 19.97 | - | - | - | 12,873.75 |
| 4.3.2 | Environmental Expert - 2 | MM | 4,000 | - | - | 926.80 | - | - | - | 1,171.20 | 2.50 | - | - | - | 1,998.00 |
| 4.4 | Socio-Economist - 2 | MM | 4,100 | - | 3,695.58 | 6,675.46 | 6,994.99 | - | - | 8,373.35 | 35.72 | - | - | - | 25,739.37 |
| Total Local Prof. Staff | | | | 16,359.79 | 30,529.48 | 56,953.01 | 50,472.87 | 38,735.98 | 37,014.36 | 52,165.49 | 507.40 | 31.51 | 103,672.50 | 27,757.43 | 309,988.19 |

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

| Item | Description | Unit | Rate | R o R 93-94 | R o R 94-95 | R o R 95-96 | R o R 96-97 | R o R 97-98 | R o R 98-99 | R o R 99-00 | Total 12/00 | Quantity | DM | R o R 400-12/00 | R o R 93-12/00 |
|-----------------------|---------------------------|----------|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|----------|-------------------|------------------|-------------------|
| | | | DM | 9.37 % | 11.86 % | 15.90 % | 17.94 % | 19.40 % | 21.1 % | 24.4 % | MM | | | 26.8 % | Total |
| Lumpsums | | | | | | | | | | | | | | | |
| 2 1 | Main office running costs | month | 15,545 | 14,565.67 | 22,123.64 | 29,659.86 | 33,465.28 | 36,188.76 | 39,359.94 | 45,515.76 | 92.00 | 10.00 | 155,450.00 | 41,660.80 | 262,539.51 |
| per unit | | | | | | | | | | | | | | | |
| 2 3 | Site office running costs | month | 1,100 | - | 913.22 | 3,148.20 | 4,736.16 | 5,121.60 | 5,570.40 | 4,831.20 | 124.00 | 9.00 | 9,900.00 | 2,653.20 | 26,973.98 |
| 2 4 | House running costs | month | 3,000 | 4,216.50 | 4,269.60 | 11,448.00 | 11,302.20 | 6,984.00 | 7,596.00 | 8,784.00 | 117.00 | 9.00 | 27,000.00 | 7,236.00 | 61,836.30 |
| 2 5 | Hotel / Guesthouse | month | 3,500 | 5,253.76 | 14,802.47 | 20,028.44 | 12,526.61 | 11,244.24 | 6,698.19 | 13,365.10 | 152.59 | 3.69 | 12,915.00 | 3,461.22 | 87,380.02 |
| 2 6 | Jeep running costs * | v -month | 2,200 | 7,007.00 | 11,659.56 | 17,890.40 | 22,231.44 | 26,352.48 | 21,332.96 | 22,274.12 | 540.00 | 41.00 | 90,200.00 | 12,862.52 | 141,610.48 |
| 2 7 | Sedan running costs * | v -month | 1,650 | 2,102.10 | 3,179.88 | 4,237.20 | 4,763.88 | 2,568.19 | 2,823.48 | 3,058.77 | 137.00 | 9.00 | 14,850.00 | 2,117.61 | 24,871.11 |
| 2 8 | Car rental costs * | v -month | 3,300 | - | 2,914.89 | 353.10 | - | - | - | - | 12.00 | - | - | - | 3,267.99 |
| 2 9 1 | Quarterly | piece | 100 | 281.10 | 711.60 | 954.00 | 807.30 | 1,164.00 | 949.50 | 2,562.00 | 435.00 | 30.00 | 3,000.00 | 804.00 | 8,233.50 |
| 2 9 2 | Monitoring | piece | 200 | - | - | - | 538.20 | 582.00 | 633.00 | 732.00 | 60.00 | - | - | - | 2,485.20 |
| 2 9 3 | Evaluation | piece | 500 | - | - | - | - | 2,910.00 | (3,165.00) | - | 30.00 | 30.00 | 15,000.00 | 4,020.00 | 3,765.00 |
| 2 9 4 | Manual | piece | 1,000 | - | - | - | - | 5,820.00 | (6,330.00) | - | 30.00 | 30.00 | 30,000.00 | 8,040.00 | 7,530.00 |
| 2 9 5 | Tender | piece | 300 | 562.20 | - | 954.00 | - | - | - | 1,464.00 | 60.00 | - | - | - | 2,980.20 |
| 2 9 6 | Video | piece | 48,700 | - | - | 3,097.32 | - | 5,668.68 | - | 1,782.42 | 1.35 | 0.20 | 9,740.00 | 2,610.32 | 13,168.74 |
| 2 10 | Ground transport | trip | 330 | 432.89 | 587.07 | 1,626.57 | 296.01 | 384.12 | 1,949.64 | 1,610.40 | 119.00 | - | - | - | 6,886.70 |
| 2 11 | Excess luggage | trip | 750 | 983.85 | 266.85 | 954.00 | 672.75 | - | 791.25 | 2,013.00 | 50.00 | 4.00 | 3,000.00 | 804.00 | 6,486.70 |
| 2 12 | Transport to sites | site | 15,000 | - | 1,067.40 | 1,550.25 | 2,018.25 | 2,910.00 | 3,165.00 | 4,575.00 | 6.00 | 0.75 | 11,250.00 | 3,015.00 | 18,300.90 |
| 2 13 | Cons HO staff activities | man-week | 6,000 | - | - | 2,862.00 | - | - | - | - | 3.00 | - | - | - | 2,862.00 |
| 2 14 | Allowance Europe | day | 150 | 126.50 | 249.06 | 168.95 | - | 484.70 | 253.20 | 292.80 | 70.00 | 7.00 | 1,050.00 | 281.40 | 1,864.61 |
| 2 15 | Travel expenses Europe | trip | 500 | 327.95 | 355.80 | 556.50 | - | 679.00 | 316.50 | 366.00 | 40.00 | 7.00 | 3,500.00 | 938.00 | 3,639.75 |
| Total Lumpsums | | | | 35,859.51 | 63,101.04 | 99,486.79 | 93,358.07 | 72,164.85 | 72,164.85 | 72,164.85 | | | 386,855.00 | 72,164.85 | 686,571.68 |

*) Revision of Rates for items 2 6 - 2 8 are calculated with 6.37% (06/93-03/94), 8.03% (04/94-03/95), 10.70% (04/95-03/96) and 12.03% (04/96-03/97) and 14.26 % (04/97-03/00)
FAP 21/22 ADM -FIN - 30

D**ADMINISTRATIVE SUBJECTS
(FAP 22)**

D ADMINISTRATIVE SUBJECTS (FAP 22)

No activities during the last trimester.

88

D. Part 1, Table 1

CONSULTANCY SERVICES FOR FAP 22
- EXTENDED STUDIES ON RECURRENT MEASURES -
EXPATRIATE PROFESSIONAL STAFF
up to 31.12.00

| No. | Function | Name | Time Spent | Assignment Breakdown | | | Total Man Month** | | | | | | | | | |
|--|---------------------------------|---|---|--------------------------------------|--------------------------------------|-------------|--|--------------------------------------|--|--|----------|-------|----------------|-------|--|------|
| | | | | Full Months | Working Days | Travel Days | Fees *** | | Allowance *** | | Hotel | | | | | |
| | | | | | | | Fees | Total | Allow. | Total | Item 2.5 | Total | House Item 2.4 | Total | | |
| 1.1 | Project Director | Dr D Neuhaus / Dr H Kramer | | | | | | | | | | | | | | |
| 1.2 | Home Office Support | RRI DELT DELT RRI RRI RRI RRI | 01.11.96 - 31.12.96 01.07.95 - 31.12.95 01.10.96 - 31.12.96 01.01.97 - 31.12.97 01.01.98 - 30.06.98 01.01.99 - 31.12.99 01.01.00 - 31.12.00 | 4 6 4 12 1 3 15 | | | 0.13 0.20 0.13 0.40 0.03 0.11 0.50 | 0.00 | | 0.00 | | | | | | 0.00 |
| 1.4 | Chief Hydraulic Design Engineer | Dr H Kramer | 01.10.96 - 31.12.96 01.01.97 - 31.12.97 01.01.98 - 30.06.98 01.01.00 - 31.12.00 01.01.00 - 31.12.00 | 3 20 9 9 6 | 3 4 3 9 6 | | 0.70 0.80 0.36 0.30 0.20 | 1.50 | 0.30 0.30 0.37 0.30 0.30 | 0.00 0.20 0.20 0.23 0.30 | | | 0.00 | | | 0.00 |
| 5.1.1 | River Engineer 1 | P van Groen | 29.07.95 - 19.11.95 01.05.96 - 31.12.96 14.08.97 - 25.09.97 01.01.98 - 30.06.98 01.01.98 - 30.06.98 01.07.95 - 31.08.95 | 1 2 2 2 2 2 | 16 6 13 16 2 14 | 2 | 1.60 2.50 2.50 0.60 0.06 0.47 | 1.53 2.03 1.43 0.60 0.47 | 1.27 | 1.47 1.73 1.37 0.53 0.47 | | | 0.93 | | | 0.00 |
| 5.2 | Hydraulic Design Engineer | M Schwarz | 01.10.96 - 31.12.96 01.01.97 - 31.12.97 | 1 20 | 23 20 | 2 | 1.83 0.67 | 7.73 | 1.00 | 6.06 0.93 | | | 5.57 | | | 0.00 |
| 5.3.1 | Surveyor | | | | | | | 2.50 | 1.00 | | 0.93 | | | | | |
| 5.4.1 | Morphologist 1 | E Mosselman | 01.07.95 - 31.12.95 17.09.96 - 27.09.96 01.01.97 - 31.12.97 01.01.98 - 30.06.98 01.01.00 - 31.12.00 | 2 2 20 2 8 | 22 14 20 2 8 | 2 | 0.80 0.50 0.77 0.07 0.27 | 0.00 | 0.50 0.37 0.33 | 0.43 0.33 0.27 | | | 0.00 | | | 0.00 |
| 5.5 | System Analyst | R.H. Buysrogge | 01.07.95 - 31.12.95 | 27 | 27 | | 0.90 | 2.41 | 1.20 | | 1.03 | | | | | 0.00 |
| 5.6 | Programmer | M Witteveen | 01.07.95 - 31.12.95 | 7 | 7 | | 0.23 | 0.23 | 0.00 | | 0.00 | | | | | 0.00 |
| 5.6.A | Programmer/Modeler | J.J. Crabas | 01.11.96 - 31.12.96 01.01.97 - 30.09.97 | 16 19 | 16 19 | | 0.53 0.64 | 0.23 | 0.00 | 0.00 | 0.00 | | | | | 0.00 |
| 5.7 | GIS Specialist | G.H. Hesselmann | 01.07.95 - 31.12.95 | 3 | 3 | | 0.10 | 1.17 | 0.00 | | 0.00 | | | | | 0.00 |
| 5.8.1 | Supervising Engineer 1 | K. Oberhagenmann | 01.12.96 - 31.12.96 01.01.97 - 22.03.97 01.01.97 - 31.12.97 01.07.97 - 01.08.97 01.01.98 - 05.11.98 14.09.98 - 09.10.99 27.07.00 - 23.06.00 | 2 20 12 28 4 25 27 | 2 20 12 28 4 25 27 | 2 | 1.00 2.77 0.40 1.10 4.43 0.87 0.97 | 1.00 | 1.00 2.77 1.10 4.43 0.87 0.97 | 0.97 2.70 0.93 4.27 0.83 0.90 | | | 0.00 | | | 0.00 |
| 5.9.1 | Monitoring Expert 1 | T. Döschler | 22.10.96 - 04.12.96 24.03.97 - 31.03.97 11.09.97 - 22.09.97 06.07.98 - 07.07.98 | 1 6 6 2 | 4 2 2 1 | 4 | 1.33 0.27 0.40 0.07 | 1.14 | 1.33 0.27 0.40 0.07 | 1.20 0.20 0.36 0.07 | | | 10.60 | | | 0.00 |
| 5.10 | Economist | (Lammer) | | | | | | 2.07 | 0.07 | 2.07 | 1.83 | | | | | 0.00 |
| | | | | | | | 0.00 | | 0.00 | | 0.00 | | | | | 0.00 |
| | | | | | | | 32.51 | | 22.74 | | 20.89 | | | | | 0.00 |
| * Home Office Work ** Decimal fractions of months are based on 30 days/month | | | | | | | | | | | | | | | | |

* 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

CONSULTANCY SERVICES FOR FAP 22
- EXTENDED STUDIES ON RECURRENT MEASURES-
LOCAL PROFESSIONAL STAFF
up to 31.12.00

| No. | Function | Person | Assignment | | Man-Month | |
|-------|--|--------------------------------|--|--|------------------------------|-------|
| | | | From | To | Fees | Total |
| 1.2 | Home Office Support | Dr S K Chowdhury | | | | 0.00 |
| 1.3.2 | Deputy Project Manager | S M Mansur | | | | 0.00 |
| 5.1.2 | River Engineer - 2 | S.R. Khan | 23.07.95 01.01.96 12.04.96 01.01.97 | 31.12.95 16.01.96 31.12.96 31.03.97 | 5.13 0.53 8.43 3.00 | 17.09 |
| 5.3.2 | Surveyor - 2 | | | | | 0.00 |
| 5.4.2 | Morphologist - 2 | M.H. Sarker Salahuddin Khan | 15.10.96 01.01.97 11.01.98 20.09.99 | 31.12.96 15.10.97 31.07.98 11.10.99 | 3.53 9.50 6.68 0.74 | 20.45 |
| 5.8.2 | Supervising Engineer - 2 | Faizur Rahman Khan | 01.01.97 | 31.03.97 | 2.50 | 2.50 |
| 5.9.2 | Monitoring Expert - 2 | Anwar Haider | 21.10.96 01.01.97 | 31.10.96 30.06.97 | 0.33 2.00 | 2.33 |
| | | Pankash Maitra | 01.12.96 01.01.97 01.01.98 | 31.12.96 31.12.97 30.09.98 | 1.00 8.00 3.00 | 12.00 |
| | Monitoring Expert - 4 (Data Processor) | Yasmin Khayer | 21.10.96 01.02.97 | 27.10.96 28.02.97 | 0.23 0.20 | 0.43 |
| 5.10 | Economist - 2 | | | | | 14.76 |
| | | | | | | |
| | | | | | Total | 54.80 |

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

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 | | | up to 31.12.00 | |
|------|--|---------------------------------|---------------------------------|-----------|----------------|--------|
| | | DM | DM | DM | DM | % |
| 1 | MANPOWER COSTS * | 1,195,350 | | 1,064,491 | | 89.05 |
| 2 | LUMPSUMS PER UNIT # | 224,350 | | 89,985 | | 40.11 |
| 3 | REIMBURSABLES # | 66,000 | | 35,787 | | 54.22 |
| 4 | LUMPSUMS # | 67,500 | | - | | - |
| | SUBTOTAL (sum item 2 to 4) | 1,553,200 | | 1,190,263 | | 76.63 |
| | PHYSICAL CONTINGENCIES FINANCIAL CONTINGENCIES (15 % of Subtotal), not included in Totals | 353,200 232,980 | | 125,772 | | - |
| | 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 | | | 243,943 | | - |
| | Total | 1,200,000 | | 1,434,206 | | 119.52 |
| | Expert Discussion , October-November 1993 | hide 800,000 | a)sum 2+3+4 125,772 | 569,021 | | 71.13 |
| | Grand Total FAP 22 | hide 2,000,000 | b)sum 2+3 sum a+b 235,719 | 2,003,227 | | 100.16 |

CONSULTANCY SERVICE FOR FAP 22

- EXTENDED STUDIES ON RECURRENT MEASURES-

| Item | Description | Agreement/M. Proposal | | up to 31.12.00 | |
|---------------------|--|-----------------------|------------------|----------------|--|
| | | 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 | 909,500 | 782,742 | 86.06 | |
| 1.1.2 | Living Allowances | 82,250 | 79,590 | 96.77 | |
| | Subtotal | 991,750 | 862,332 | 86.95 | |
| 1.2 | Local Staff (see Table 1.2) | 203,600 | 202,159 | 99.29 | |
| | * 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 | | 1,195,350 | 1,064,491 | 89.05 | |

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

CONSULTANCY SERVICE FOR FAP 22
- EXTENDED STUDIES ON RECURRENT MEASURES-
LOCAL PROFESSIONAL STAFF

| Sl. | Function | Person | PER AGREEMENT/Modified Proposal | | | | | up to 31.12.00 | |
|-------|--------------------------|----------------------------|---------------------------------|---------|------------------|--------------|----------------|------------------|--------|
| | | | Fees (DM) | | | Amount | Fees (DM) | Incl. Allowances | |
| | | | MM | MM-Rate | Incl. Allowances | | | | |
| 1.2 | Home Office Support | Dr. S K Chowdhury | | 4,650 | - | - | | MM | Amount |
| 5.1.2 | River Engineer - 2 | S.R. Khan | 12.00 | 4,000 | 48,000 | 17.09 | 68,360 | | |
| 5.4.2 | Morphologist - 2 | M.H. Sarker/salahudin Khan | 17.00 | 4,300 | 73,100 | 20.45 | 87,935 | | |
| 5.8.2 | Supervising Engineer - 2 | F. Rahman Khan | 14.00 | 2,700 | 37,800 | 2.50 | 6,750 | | |
| 5.9.2 | Monitoring Expert - 2 | Haider/Maitra/Khayer | 14.00 | 2,650 | 37,100 | 14.76 | 39,114 | | |
| | Unallocated | | 2.00 | 3,800 | 7,600 | | - | | |
| | | | | | | | | | |
| | | Sub-Total Item 1.2 | 59.00 | | 203,600 | 54.80 | 202,159 | | |

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

E. - Part 1, Table 2

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

| Item | Description | Unit | Per Agreement/Modified Proposal | | | up to 31.12.00 | | | Remarks |
|--------------|--|--------------|---------------------------------|--------------|----------|----------------|----------|--------|---------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | |
| 2 | LUMPSUMS PER UNIT (Payment per unit performed) | | | | | | | | |
| 2.1 | office running since FAP 21 office can be used, only for further equipment | ls | 1.00 | 10,000 | 10,000 | 1.00 | 10,000 | 100.00 | |
| 2.5 | Hotel / guesthouse for short term exp. staff | month | 27.00 | 3,500 | 94,500 | 20.89 | 73,115 | 77.37 | |
| 2.8 | Car rental costs | veh. - month | 20.00 | 3,300 | 66,000 | | - | - | |
| 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 | Evaluation Report | piece | 30.00 | 500 | 15,000 | | - | - | |
| 2.9.2 | Draft Final Report | piece | 15.00 | 800 | 12,000 | | - | - | |
| 2.9.3 | Final Report | piece | 15.00 | 1,200 | 18,000 | | | | |
| 2.10 | Ground Transport and miscellaneous costs for staff trips EUR - Dhaka | trip | 20.00 | 330 | 6,600 | 14.00 | 4,620 | 70.00 | |
| 2.11 | Excess baggage for some staff EUR - DHAKA | trip | 3.00 | 750 | 2,250 | 3.00 | 2,250 | 100.00 | |
| TOTAL ITEM 2 | | | | DM | 224,350 | | 89,985 | | |

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

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

| Per Agreement/Modified Proposal | | | | | up to 31.12.00 | | | Remarks | |
|---------------------------------|--|------|----------|-----------------|----------------|----------|-------------|---------|-------|
| Item | Description | Unit | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | | |
| 3 | REIMBURSABLES | | | | | | | | |
| 3.5 | Consultant's air travel | | | | | | | | |
| 3.5.1 | Staff, C-class, EUR - DHAKA | trip | 3 | 5,000 | 15,000 | 2.00 | 8,572 | | 57.15 |
| 3.5.2 | Staff and dependants, exc. fare, EUR - DHAKA | trip | 17 | 3,000 | 51,000 | 12.00 | 27,215 | | 53.36 |
| TOTAL ITEM3 | | | | | DM | 66,000 | | 35,787 | |

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

| | | | Per Agreement/Modified Proposal | | | | up to 31.12.00 | | |
|------|--|------|---------------------------------|-----------------|-------------|----------|----------------|---|--|
| Item | Description | Unit | Quantity | Unit Rate DM | Total DM | Quantity | Total DM | % | Remarks |
| | <u>Lumpsums per Item:</u> | | | | | | | | |
| 4.2 | Satellite Images: | ls | 1 | 30,000 | 30,000 | | | - | accounted under: JTWC, FAP 22, works accounted under: JTWC, FAP 22, works |
| | Phase 1 Phase 2 + 3 | | 1 | 10,000 | 10,000 | | | - | |
| 4.3 | Handheld Current Meter | ls | 1 | 2,500 | 2,500 | | | - | |
| 4.4 | Devices for Measuring Anchoring Forces | ls | 1 | 25,000 | 25,000 | | | - | |
| | TOTAL ITEM 4.2 | | | DM | 67,500 | | | - | |

E - PART 2

REVISION OF RATES

E. - Part 2, Table 0

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

| Description | 06/93 - 12/00 DM | REMARKS |
|---------------------------|---------------------|---------|
| Expert Professional Staff | | |
| Fees | 170,471.90 | |
| Allowance | 15,439.66 | |
| Local Professional Staff | 41,438.32 | |
| Lumpsums | 16,593.30 | |
| | 243,943.18 | |

* estimate with 24 % for the period 4/99-12/99

29

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

| | Item | Description | Unit | Rate | R o R 95-96 | R o R 96-97 | R o R 97-98 | R o R 98-99 | R o R 99-00 | Total 12/00 | 04/00 - 12/00 | | R o R 04/00-12/00 | R o R 93-12/00 |
|--|-------|--------------------------|----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-----------|-------------------|----------------|
| | | | | DM | 15,90 % | 17,94 % | 19,40 % | 21,1 % | 24,4 % | MM | Quantity | DM | 26,8 % | Total |
| Fees | 1.2 | Home Office Support | MM | 26,500.00 | 716.30 | 1,378.69 | 3,084.60 | - | 1,293.20 | 1.50 | 0.41 | 10,865.00 | 2,911.82 | 9,384.60 |
| | 1.4 | Chief Hydr. Design Eng. | MM | 25,400.00 | - | 3,189.73 | 3,252.22 | - | - | 2.36 | 1.00 | 25,400.00 | 6,807.20 | 13,249.15 |
| | 5.1.1 | River Engineer | MM | 25,400.00 | 8,359.90 | 13,351.31 | 24,342.34 | (696.72) | - | 7.73 | (0.01) | (254.00) | (68.07) | 46,268.76 |
| | 5.2 | Hydraulic Design Eng. | MM | 25,400.00 | - | 8,338.87 | 3,104.39 | 214.38 | (247.90) | 2.50 | 0.04 | 1,016.00 | 272.29 | 11,682.02 |
| | 5.4.1 | Morphologist | MM | 24,600.00 | 3,129.12 | 4,722.17 | 5,726.88 | (674.78) | - | 2.41 | 0.27 | 6,642.00 | 1,780.06 | 14,683.44 |
| | 5.5 | System Analyst | MM | 21,000.00 | 3,005.10 | - | 3,666.60 | - | - | 0.90 | - | - | - | 6,671.70 |
| | 5.6 | Programmer | MM | 23,100.00 | 844.77 | - | 1,030.72 | - | - | 0.23 | - | - | - | 1,875.49 |
| | 5.6.A | Programmer/Modeler | MM | 24,600.00 | - | 5,119.36 | - | - | - | 1.17 | 0.01 | 246.00 | 65.93 | 5,185.29 |
| | 5.7 | GIS Specialist | MM | 24,600.00 | 391.14 | - | 477.24 | - | - | 0.10 | - | - | - | 868.38 |
| | 5.8.1 | Supervising Eng 1 | MM | 23,100.00 | - | 15,457.64 | 19,718.16 | 7,116.19 | 4,734.58 | 11.54 | 1.11 | 25,718.00 | 6,892.42 | 63,918.99 |
| | 5.9.1 | Monitoring Expert 1 | MM | 20,200.00 | - | 5,798.21 | 1,567.52 | 298.35 | - | 2.07 | - | - | - | 7,664.08 |
| | | | | | 16,446.32 | 57,355.97 | 65,970.67 | 6,257.42 | 5,779.87 | 32.51 | 2.83 | 69,633.00 | 18,681.64 | 170,471.90 |
| | | | | | | | | | | | | | | |
| Allowances | 1.4 | Chief Hydr. Design Eng. | MM | 3,500.00 | - | 188.37 | 224.07 | - | - | 1.27 | 0.64 | 0.19 | 0.05 | 412.49 |
| | 5.1.1 | River Engineer | MM | 3,500.00 | 1,113.00 | 1,274.64 | 2,736.37 | - | - | 6.06 | (0.00) | (0.00) | (0.00) | 5,124.01 |
| | 5.2 | Hydraulic Design Eng. | MM | 3,500.00 | - | 627.90 | - | - | - | 1.00 | - | - | - | 627.90 |
| | 5.4.1 | Morphologist | MM | 3,500.00 | 278.25 | 339.07 | 454.93 | - | - | 1.20 | (0.01) | (0.01) | (0.00) | 1,072.24 |
| | 5.5 | System Analyst | MM | 3,500.00 | - | - | - | - | - | - | - | - | - | - |
| | 5.6 | Programmer | MM | 3,500.00 | - | - | - | - | - | - | - | - | - | - |
| | 5.6.A | Programmer/Modeler | MM | 3,500.00 | - | - | - | - | - | - | - | - | - | - |
| | 5.7 | GIS Specialist | MM | 3,500.00 | - | - | - | - | - | - | - | - | - | - |
| | 5.8.1 | Supervising Eng 1 | MM | 3,500.00 | - | 2,342.07 | 2,736.37 | 1,078.21 | 717.36 | 11.14 | 1.08 | 4.03 | 1.08 | 6,876.09 |
| | 5.9.1 | Monitoring Expert 1 | MM | 3,500.00 | - | 1,004.64 | 271.60 | 51.69 | - | 2.07 | - | - | - | 1,327.94 |
| | | | | | 1,391.25 | 5,776.68 | 6,423.34 | 1,129.91 | 717.36 | 22.74 | 1.71 | 4.22 | 1.13 | 15,439.69 |
| | | | | | | | | | | | | | | |
| Local Prof. | 1.2 | Home Office Support | MM | 4,650.00 | - | - | - | - | - | - | - | - | - | - |
| | 5.1.2 | River Engineer - 2 | MM | 4,000.00 | 3,345.36 | 8,489.21 | 4,081.76 | - | - | 17.09 | - | - | - | 15,916.33 |
| | 5.4.2 | Morphologist - 2 | MM | 4,300.00 | - | 5,037.37 | 10,994.76 | - | 776.41 | 20.45 | - | - | - | 16,808.54 |
| | 5.8.2 | Supervision Engineer - 2 | MM | 2,700.00 | - | - | 1,309.50 | - | - | 2.50 | - | - | - | 1,309.50 |
| | 5.9.2 | Monitoring Expert - 2 | MM | 2,650.00 | - | 2,262.95 | 5,141.00 | - | - | 14.76 | - | - | - | 7,403.96 |
| | | | | | 3,345.36 | 15,789.53 | 21,527.02 | - | 776.41 | 54.80 | - | - | - | 41,438.32 |
| | | | | | | | | | | | | | | |
| Lumpsums | 2.5 | Hotel / Guesthouse | month | 3,500.00 | 1,318.91 | 5,249.24 | 6,946.17 | 1,698.55 | - | 20.89 | - | - | - | 15,212.87 |
| per unit | 2.8 | Car rental costs * | v.-month | 3,300.00 | - | - | - | - | - | - | - | - | - | - |
| | 2.9.1 | Quarterly | piece | 100 | - | - | - | - | - | - | - | - | - | - |
| | 2.9.2 | Monitoring | piece | 200 | - | - | - | - | - | - | - | - | - | - |
| | 2.9.3 | Evaluation | piece | 500 | - | - | - | - | - | - | - | - | - | - |
| | 2.10 | Ground transport | trip | 330.00 | 52.47 | 59.20 | 832.26 | - | - | 14.00 | - | - | - | 943.93 |
| | 2.11 | Excess luggage | trip | 750.00 | - | - | 436.50 | - | - | 3.00 | - | - | - | 436.50 |
| | | | | | 1,371.38 | 5,308.45 | 8,214.93 | 1,698.55 | - | - | - | - | - | 16,593.30 |
| | | | | | | | | | | | | | | |
| Total Revision of Rates for the period 04/95 - 03/98 | | | | | 22,554.31 | 84,230.63 | 102,135.96 | 9,085.87 | 7,273.64 | | | | 18,682.77 | 243,943.18 |

*) Revision of Rates for item 2.8 is calculated with 10.70% (04/95-12/95) , 12.03% (04/96-03/97) and 14.26% (04/97-03/98)

46

E - PART 3

EXPERTS DISCUSSION

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERTS DISCUSSION

October-November 1993

| 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 | | 59,137 | | |
| | SUBTOTAL | 575,200 | | 525,700 | | |
| | PHYSICAL CONTINGENCIES | 140,000 | | | | |
| | FINANCIAL CONTINGENCIES | 84,800 | | 43,321 | | |
| | * OBSERVATION : Price basis of the unit rates is May 1991 | | | | | |
| | Total | 946,300 | | 569,021 | | |

E. Part 3, Table 1

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERT'S DISCUSSION

| Item | Description | Per Agreement DM | Up to 31.12.00 DM |
|----------|-----------------------|---------------------|----------------------|
| 1 | MANPOWER COSTS | | |
| 1.1 | Expatriate Staff | | |
| 1.1.1 | Fees | 404,275 | 393,753 |
| 1.1.2 | Living Allowances | 16,625 | 14,000 |
| 1.2 | Local Staff | 8,000 | 8,000 |
| | TOTAL ITEM 1 | 428,900 | 415,753 |

E. Part 3, Table 1.1

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERT'S DISCUSSION

| No. | Function | Name | Time spent | Home Off. MM | Bangladesh | | Fees MM | Allowance MM | Hotel month |
|-------|----------------------------|---|---|-----------------|----------------------------|----------------------------|--|--|--|
| | | | | | work. days | travel days | | | |
| | Invited Experts: | Prof. J.F. Agema Dr. Vic Galay Mr. Max S. Lamb Prof. J.J. Peters Prof. C.R. Thorne Prof. Wan Zhaohui | July - Sept. 93 27.10.93 - 06.11.93 28.10.93 - 06.11.93 28.10.93 - 06.11.93 28.10.93 - 02.11.93 28.10.93 - 06.11.93 28.10.93 - 06.11.93 | 2.50 | 7 6 6 4 6 6 | 4 4 4 2 4 4 | 2.50 0.37 0.33 0.33 0.33 0.33 0.33 | 0.37 0.33 0.33 0.33 0.33 | 0.23 0.20 0.20 0.20 0.20 |
| | Subtotal | | | | | | 4.19 | 1.69 | 1.03 |
| 1.1 | Project Director | Dr. H. Kramer | June - Dec. 93 27.10.93 - 09.11.93 | 1.50 | 10 | 4 | 1.50 0.47 | 0.47 | 0.33 |
| 1.2 | Techn. Home Office Support | | June - Dec. 93 | 1.00 | | | 1.00 | 1.00 | |
| 4.1.1 | Senior Morphologist | G. Klaassen | June - Dec. 93 | 1.00 | | | 1.00 | | |
| 4.7.1 | Sr. River Training Eng. | | 25.10.93 - 07.11.93 | | 10 | 4 | 0.47 | 0.47 | 0.33 |
| | | F. Koch | June - Dec. 93 | 1.50 | | | 1.50 | | |
| | | F. vd Knaap | 27.10.93 - 06.11.93 | | 7 | 4 | 0.37 | 0.37 | |
| 4.7.2 | River Training Eng. 2 | K. Oberhagemann | 27.10.93 - 07.11.93 | | 8 | 4 | 0.40 | 0.40 | 0.50 |
| | | | June - Dec. 93 | 3.40 | | | 3.40 | 0.77 | |
| 4.7.3 | River Training Eng. 3 | S.R. Khan | 23.10.93 - 09.11.93 | | 14 | 4 | 0.60 | 0.60 | 0.47 |
| | | | 10.09.93 - 09.11.93 | | 60 | | 2.00 | | |
| | TOTAL | | | | | | 16.90 | 4.00 | 2.66 |

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERT'S DISCUSSION

| No. | Function | Name | Per Agreement | | | | Up to 31.12.00 | | | |
|-------|----------------------------|-------------------|---------------|---------|-----------------|-------------|----------------|---------------|-----------------|----------------|
| | | | Fees (DM) | | Allowances (DM) | | Fees (DM) | | Allowances (DM) | |
| | | | MM | MM-Rate | Amount | MM | MM-Rate | Amount | MM | Amount |
| | Invited Experts: | Prof. J.F. Agema | 4.50 | 30,000 | 135,000 | 2.00 | 3,500 | 7,000 | 2.50 | 75,000 |
| | | Dr. Vic Galay | | 30,000 | | | 3,500 | | 0.37 | 11,100 |
| | | Mr. Max S. Lamb | | 30,000 | | | 3,500 | | 0.33 | 9,900 |
| | | Prof. J.J. Peters | | 30,000 | | | 3,500 | | 0.33 | 9,900 |
| | | Prof. C.R. Thorne | | 30,000 | | | 3,500 | | 0.33 | 9,900 |
| | | Prof. Wan Zhaohui | | 30,000 | | | 3,500 | | 0.33 | 9,900 |
| | Subtotal | | 4.50 | | 135,000 | 2.00 | | 7,000 | 4.19 | 125,700 |
| | | | | | | | | | 1.69 | 5,915 |
| | | | | | | | | | | 131,615 |
| 1.1 | Project Director | Dr. H. Kramer | 2.00 | 29,500 | 59,000 | 0.50 | 3,500 | 1,750 | 1.97 | 58,115 |
| 1.2 | Techn. Home Office Support | | 1.00 | 26,500 | 26,500 | | | | 1.00 | 26,500 |
| 4.1.1 | Senior Morphologist | G. Klaassen | 1.50 | 28,900 | 43,350 | 0.50 | 3,500 | 1,750 | 1.47 | 42,483 |
| 4.7.1 | Sr. River Training Eng | Koch / vd Knaap | 2.25 | 26,500 | 59,625 | 0.75 | 3,500 | 2,625 | 2.27 | 60,155 |
| 4.7.2 | River Training Eng. 2 | K. Oberhagemann | 4.00 | 20,200 | 80,800 | 1.00 | 3,500 | 3,500 | 4.00 | 80,800 |
| | | | | | | | | | 0.60 | 2,100 |
| 4.7.3 | River Training Eng. 3 | S.R. Khan | 2.00 | 4,000 | 8,000 | | | | 2.00 | 8,000 |
| | TOTAL | | 17.25 | | 412,275 | 4.75 | | 16,625 | 16.90 | 401,753 |
| | | | | | | | | | 4.00 | 14,000 |
| | | | | | | | | | | 415,753 |

26

E. Part 3, Table 2

CONSULTANCY SERVICES FOR FAP 22 PHASE II - EXPERT'S DISCUSSION

| Item | Description | Unit | Per Agreement | | | Up to 31.12.00 | |
|----------|---|------------|---------------|-----------------|---------------|----------------|---------------|
| | | | Quantity | Unit Rate DM | Total DM | Quantity | Total DM |
| 2 | LUMPSUMS PER UNIT | | | | | | |
| 2.1 (a) | Main office, additional costs | month | 1 | 1,500 | 1,500 | 1 | 1,500 |
| 2.5 | Hotel/Guesthouse for short term exp. staff | month | 5 | 3,500 | 17,500 | 3 | 9,310 |
| 2.8 | Car rental costs | veh.-month | 5 | 3,300 | 16,500 | 4 | 13,200 |
| 2.9 | Reporting | copy | 40 | 350 | 14,000 | 40 | 14,000 |
| 2.10 | Ground transport | trip | 10 | 330 | 3,300 | 10 | 3,300 |
| 2.11 | Excess baggage | trip | 2 | 750 | 1,500 | 2 | 1,500 |
| 2.15 | Travel exp. Cons. staff travelling for Project purposes | trip | 6 | 500 | 3,000 | 6 | 3,000 |
| 2.16 | Additional communication costs | l.s. | 1 | 5,000 | 5,000 | 1 | 5,000 |
| | TOTAL ITEM 2 | | | | 62,300 | | 50,810 |
| 3 | REIMBURSABLES | | | | | | |
| 3.5 | Consultant's air travel | | | | | | |
| 3.5.1 | Staff, C-class, Europe-Dhaka | trip | 10 | 6,000 | 60,000 | 10 | 45,235 |
| 3.5.4 | Staff, regional air travel, Europe | trip | 2 | 2,000 | 4,000 | 1 | 902 |
| 3.10 | Misc. costs for organizing expert's discussion | | | | 20,000 | | |
| 3.10.1 | Courir services | | | | | | 4,000 |
| 3.10.2 | Rental of venue | | | | | | 9,000 |
| | TOTAL ITEM 3 | | | | 84,000 | | 59,137 |

E. Part 3, Table 3

CONSULTANCY SERVICES FOR FAP 22 PHASE II
- EXPERT'S DISCUSSION -

Revision of Rates (06/93 - 12/00)

| | Amount | Rev. (%) | Rev. (DM) |
|------------------------------------|---------|----------|------------------|
| Manpower costs | 415,753 | 9.37 | 38,956.06 |
| Lumpsums (items 2.1-2.5, 2.9-2.16) | 37,610 | 9.37 | 3,524.06 |
| Lumpsums (item 2.8) | 13,200 | 6.37 | 840.84 |
| | | | 43,320.96 |

٤٤

F

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

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

Chapter F allow an easy and fast view over procurements supplies and subcontracts for each of the test structures. The last table of each sub-chapter is a summery per main items of all costs of the test structure.

Table F1-1 to F1-10 shows the **final** data for Test Structure Kamarjani (FAP 21).

Table F2-1 to F2-8 shows the **final** data for Test Structure Bahadurabad (FAP 21).

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

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

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

Table F6-1 to F6-3 shows the **final** data for Test Structure Ghutail (the 3rd test site) (FAP21)

at

F - PART 1

**TEST SITE KAMARJANI
(FAP 21)**

Table F1-1

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

Works: Engineers & Corolla, Construction contract

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|--------------|-------------------------------------|-------------------------|---------------------|--------------------|
| 15.09.94 | Advance payment | Engineers & Corolla Co. | 658,457.98 | 16,915,588 |
| 03.11.94 | Interim payment certificate No.01 | Engineers & Corolla Co. | 537,103.19 | 14,092,245 |
| 10.12.94 | Interim payment certificate no. 02 | Engineers & Corolla Co. | 269,360.83 | 6,779,812 |
| 18.01.95 | Interim payment certificate No. 03 | Engineers & Corolla Co. | 385,311.91 | 10,000,000 |
| 21.01.95 | Interim payment certificate No. 03 | Engineers & Corolla Co. | 168,027.43 | 4,416,349 |
| 08.02.95 | Interim payment certificate No. 04 | Engineers & Corolla Co. | 384,593.20 | 10,000,000 |
| 18.02.95 | Interim payment certificate No. 04 | Engineers & Corolla Co. | 388,565.37 | 10,410,249 |
| 27.02.95 | Interim payment certificate No. 05 | Engineers & Corolla Co. | 183,188.43 | 5,000,000 |
| 14.03.95 | Interim payment certificate No. 05 | Engineers & Corolla Co. | 222,612.71 | 6,239,567 |
| 06.04.95 | Interim payment certificate No. 06 | Engineers & Corolla Co. | 485,299.16 | 13,857,475 |
| 20.05.95 | Interim payment certificate No. 07 | Engineers & Corolla Co. | 465,255.26 | 12,746,831 |
| 27.06.95 | Interim payment certificate No. 08 | Engineers & Corolla Co. | 467,737.95 | 13,400,926 |
| 14.08.95 | Interim payment certificate no. 09 | Engineers & Corolla Co. | 9,636.92 | 258,305 |
| 02.10.95 | Interim payment certificate no. 10 | Engineers & Corolla Co. | 115,423.31 | 3,224,881 |
| 13.12.95 | Interim payment certificate no. 11 | Engineers & Corolla Co. | 79,526.39 | 2,214,810 |
| 30.01.96 | Interim payment certificate no. 12 | Engineers & Corolla Co. | 121,213.48 | 3,327,310 |
| 13.03.96 | Payment certificate No. 13. (final) | Engineers & Corolla Co. | 22,720.38 | 624,840 |
| Total | | | 4,964,033.90 | 133,509,188 |

Table F1-2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES KAMARJANI

Supply of steel piles and construction steel, Supplier: 1. Starval, 2. Lille Acier, 3. Midi Acier

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|----------|---------------------------------------|-------------------|--------------|------------|
| 25.07.94 | Tubular steel pile material | Starval | 889,487.07 | 23,126,664 |
| 22.08.94 | Tubular steel pile material | Starval | 626,959.43 | 16,300,945 |
| 07.10.94 | Tubular steel pile material | Starval | 168,733.11 | 4,387,061 |
| | | Total Starval | 1,685,179.61 | 43,814,670 |
| 15.08.94 | Acceptance tes of steel piles | Thyssen Kloenne | 4,781.01 | 124,306 |
| 28.07.94 | Steel plates and profiles | Lille Acier | 41,422.84 | 1,076,994 |
| 02.09.94 | Steel plates and profiles | Lille Acier | 4,598.61 | 119,564 |
| | | Total Lille Acier | 46,021.45 | 1,196,558 |
| 08.07.94 | Steel sheet piles and anchor material | Midi Acier | 183,702.94 | 4,776,276 |
| 17.08.94 | Steel sheet piles and anchor material | Midi Acier | 20,445.73 | 531,589 |
| | | Total Midi Acier | 204,148.67 | 5,307,865 |
| Total | | | 1,940,130.74 | 50,443,399 |

Table F1-3

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

Supply of spun piles & cc-sheet piles, Supplier: GEMCON

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|--------------|--|-------------|-------------------|------------------|
| 23.06.94 | Advance payment | GEMCON Ltd. | 35,166.00 | 856,662 |
| 23.06.94 | Advance payment | GEMCON Ltd. | 17,583.00 | 427,794 |
| 23.06.94 | Advance payment | GEMCON Ltd. | 17,583.00 | 427,794 |
| 11.09.94 | Supply of concrete elements | GEMCON Ltd. | 124,664.00 | 3,227,737 |
| 13.10.94 | Supply of concrete elements | GEMCON Ltd. | 101,114.00 | 2,629,162 |
| 05.12.94 | Final payment for supply of concrete el. | GEMCON Ltd. | 40,667.00 | 1,057,423 |
| 19.03.95 | Supply of concrete elements (contract-2) | GEMCON Ltd. | 42,445.00 | 1,222,403 |
| Total | | | 379,222.00 | 9,848,975 |

Table F1-4

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES KAMARJANI

Hire of Equipment (Crawler Crane & Barge), Supplier: Bengal Electric,

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|----------|--------------------------------------|----------------------|-------------|------------|
| 09.03.94 | Advance payment | Bengal Electric Ltd. | 93,423.81 | 2,200,000 |
| 04.09.94 | Hiring of equipment and repairs | Bengal Electric Ltd. | 52,256.22 | 1,335,000 |
| 04.09.94 | Hiring of equipment | Bengal Electric Ltd. | 19,963.05 | 510,000 |
| 03.10.94 | Hiring of equipment | Bengal Electric Ltd. | 21,024.03 | 540,000 |
| 08.11.94 | Hiring of equipment & transportation | Bengal Electric Ltd. | 50,383.74 | 1,290,000 |
| 06.12.94 | Hiring of equipment | Bengal Electric Ltd. | 21,195.59 | 540,000 |
| 07.01.95 | Hiring of equipment | Bengal Electric Ltd. | 37,019.39 | 940,000 |
| 14.02.95 | Hiring of equipment | Bengal Electric Ltd. | 35,681.88 | 940,000 |
| 26.02.95 | Hiring of equipment | Bengal Electric Ltd. | 16,853.34 | 460,000 |
| 06.04.95 | Hiring of equipment | Bengal Electric Ltd. | 22,826.24 | 651,792 |
| 07.05.95 | Hiring of equipment | Bengal Electric Ltd. | 18,557.34 | 540,000 |
| 06.06.95 | Hiring of equipment | Bengal Electric Ltd. | 20,562.81 | 575,000 |
| Total | | | 409,747.44 | 10,521,792 |

Table F1-5

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES KAMARJANI

Supply of Boulders, Supplier: Exchange International

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|----------|-------------------------------|-----------------------------|-------------|------------|
| 09.11.94 | Supply of stones and boulders | Exchange International Ltd. | 118,116.00 | 3,024,183 |
| 15.12.94 | Supply of stones and boulders | Exchange International Ltd. | 82,825.74 | 2,102,697 |
| 06.02.95 | Supply of stones and boulders | Exchange International Ltd. | 98,112.34 | 2,565,883 |
| Total | | | 299,054.08 | 7,692,763 |

FAP 21/22, ADM.-FIN.- 30

Table F1-6

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

Port Charges & Demmurae

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|--------------|---|----------------------|-------------------|------------------|
| 03.09.94 | Clearance of pipes consignment | Bengal Bay | 18,112.14 | 466,630 |
| 03.09.94 | Removal charges of pipes | Bengal Bay | 14,338.95 | 369,420 |
| 25.09.94 | Shipping charges of pipes | Eastern Overseas | 6,196.09 | 160,250 |
| 28.09.94 | Clearance of piling consignment | Bengal Bay | 30,102.36 | 775,530 |
| 03.10.94 | Port charge & demmurae | Bengal Bay | 8,722.12 | 250,000 |
| 08.11.97 | Port charge & demmurae | Bengal Bay | 1,972.15 | 52,139 |
| 15.11.94 | Port charge & demmurae | Neptune Orient Lines | 5,847.41 | 151,800 |
| 15.11.94 | Port charge & demmurae | Bengal Bay | 9,004.32 | 233,754 |
| 20.11.94 | Port charge & demmurae of boat | Tivoli Enterprise | 3,927.69 | 140,000 |
| 21.12.94 | Import charge & C&F fees of Pipes | Bengal Bay | 14,701.65 | 374,720 |
| 08.01.95 | Port charges of Geo-textile | Bengal Bay | 11,784.35 | 300,000 |
| 23.01.95 | Import charge & C&F fees of Spares | Bengal Bay | 1,910.69 | 50,611 |
| 24.01.95 | Import charge & Delevary of Geo-Textile | Bengal Bay | 1,512.69 | 40,000 |
| 11.02.95 | Import charge & C&F fees of Spares | Tivoli Enterprise | 7,764.82 | 204,731 |
| 26.02.95 | import charge & C&F fees of Radio | Tivoli Enterprise | 13,105.22 | 359,337 |
| 14.08.95 | Port charge & demmurae | Bengal Bay | 41,707.47 | 1,150,000 |
| Total | | | 190,710.12 | 5,078,922 |

Table F1-7

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

Other: Different Suppliers

| Date | Description | Paid To | Amount D.M. | Amount TK. |
|----------|--|--------------------------|-------------------|------------------|
| 16.05.94 | Purchase of survey boat from Dynaglass | Ahmed's Trading Co. | 27,572.06 | 659,190 |
| 20.04.95 | Purchase of spare parts | Dynaglass Singapore | 124.20 | 4,027 |
| 03.08.95 | Purchase of spare parts JOHNSON | Dynaglass Private Ltd. | 5,924.20 | 172,206 |
| | | | 33,620.46 | 835,423 |
| 22.06.94 | Part payment to ACORN (See F1-9) | Seamore B.V. Ltd. | | |
| | '50,000 US\$ | | | |
| 28.06.94 | Part payment | Seamore B.V. Ltd. | 79,738.53 | 1,940,038 |
| 26.09.94 | Balance payment of camp facilities | Seamore B.V. Ltd. | 15,622.80 | 400,000 |
| | | | 95,361.33 | 2,340,038 |
| 05.04.94 | Radio frequency allocation | Technology Liaison Corp. | 846.52 | 20,000 |
| 03.10.94 | Radio frequency allocation | Technology Liaison Corp. | 775.30 | 20,000 |
| 29.11.94 | Purchase of radio equipment | Yeasu Musen Co. | 29,296.87 | 761,777 |
| 26.02.95 | Installation of Radio - equipment | Famous Refrigeration Co. | 634.95 | 17,410 |
| 22.03.95 | Licence fee for radio equipment | Bangladesh T&T Board | 4,240.14 | 119,800 |
| 27.03.95 | Balance payment Radio - equipment | Logistics & Services | 1,919.00 | 55,266 |
| | | | 37,712.78 | 994,253 |
| 31.12.94 | Purchase of ceramic backing | Bangladesh Oxygen Ltd. | 15,756.41 | 405,600 |
| 26.02.95 | Purchase of geo-jute material | Adamjee Jute Mills Co. | 2,516.48 | 69,000 |
| 27.06.95 | Purchase of geotextile bags | DIRD Private Ltd. | 21,701.01 | 625,000 |
| 17.07.95 | Purchase of geotextile bags | DIRD Private Ltd. | 44,021.19 | 1,255,000 |
| | | | 65,722.20 | 1,880,000 |
| 13.07.95 | Purchase of YAMAHA engine | B. F. International Ltd. | 6,088.17 | 174,000 |
| | | | 256,777.83 | 6,698,314 |

Table F1-8

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

Insurance, Supplier: Sadharan Bima, Insurance

| Date | Description | Paid To | Amount D.M. | TK |
|--------------|--------------------------|-------------------|-------------------|------------------|
| 23.08.94 | CAR Insurance premium | Sadharan Bima Co. | 87,767.20 | 2,215,279 |
| 23.08.94 | HULL Insurance premium | Sadharan Bima Co. | 15,372.18 | 388,000 |
| 28.08.94 | CPM Insurance premium | Sadharan Bima Co. | 47,324.28 | 1,192,165 |
| 19.09.94 | Marine Insurance premium | Sadharan Bima Co. | 30,881.29 | 798,532 |
| 20.11.94 | Marine Insurance premium | Sadharan Bima Co. | 7,108.47 | 183,079 |
| Total | | | 188,453.42 | 4,777,054 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Procurement for Test Structures Kamarjani

Procurement of Equipment /Material & Services, Supplier outside Bangladesh

| Supplier | Specification | Invoice Amount | Payment | | Total DM |
|--|------------------------------------|-----------------|----------------------|------------------------------|--------------|
| | | | Date | Amount | |
| PTC Pantin, France | Pilling equipment | FF 1,123,467.60 | 23/02/94 | DM 331,243.19 | 1,670,969.60 |
| | | FF 3,932,136.60 | 26/07/94 | DM 1,152,902.45 | |
| | | FF 52,264.20 | 12/10/94 | DM 15,302.44 | |
| | Ticket Mr. Kasten | TK 73,470 | 11/12/94 | DM 2,892.03 | |
| | | FF 561,733.80 | 18/01/95 | DM 162,739.90 | |
| | Ticket Mr. Kasten | TK 107,523 | 26/01/95 | DM 4,073.20 | |
| | Accommodation Mr. Kasten, Mr. Pere | TK 16,340 | | DM 637.99 | |
| | Ticket Mr. Kasten | TK 32,098 | 23/02/95 | DM 1,178.40 | |
| Steen Elmshorn, Germany | Winches Wire Ropes | DM 102,384.50 | 29.08.94 03.05.96 | DM 102,384.50 DM 1,904.74 | 104,289.24 |
| PROTEM Etoile sur Rhone, France | Rubber tyred rollers | FF 87,260.00 | 05.04.94 | DM 25,584.63 | 127,439.73 |
| | | FF 305,410.00 | 08.07.94 | DM 89,085.04 | |
| | | FF 43,630.00 | 12.09.94 | DM 12,770.06 | |
| OSAE Bremen, Germany | Survey equipment | DM 127,971.41 | 28.09.94 | DM 127,971.41 | 215,555.94 |
| | | US\$ 29,700.00 | 28.09.94 | DM 46,171.62 | |
| | | GBP 3,190.50 | 28.09.94 | DM 7,816.73 | |
| | | DM 13,606.37 | 25.11.94 | DM 13,606.37 | |
| | | US\$ 3,300.00 | 25.11.94 | DM 5,130.18 | |
| | | GBP 354.50 | 25.11.94 | DM 868.53 | |
| | Batteries + charging system | DM 13,991.10 | 26.06.95 | DM 13,991.10 | |
| Lackner & Partner Bremen, Germany | Monitoring equipment | DM 4,150.00 | 19.09.94 | DM 4,150.00 | 4,150.00 |
| Lambrecht Göttingen, Germany | Hydrograph | DM 1,682.10 | 30.06.94 | DM 1,682.10 | 1,682.10 |
| Gebr. Wichmann Willich, Germany | Level Instrument | DM 3,084.24 | 22.08.94 | DM 3,084.24 | 3,663.50 |
| | Batteries | DM 518.50 | 16.08.94 | DM 518.50 | |
| | Handbooks | DM 60.76 | 12.01.95 | DM 60.76 | |
| Hemsoth Dortmund, Germany | Transport testing equipment | DM 652.70 | 09.08.94 | DM 652.70 | 652.70 |
| Gerling Dortmund, Germany | Transport insurance | DM 45.70 | 24.08.94 | DM 45.70 | 45.70 |
| Vliero dam Rhoon, NL | Shackles | NLG 29,680.38 | 13.07.94 | DM 26,520.90 | 58,082.59 |
| | | NLG 3,297.82 | 06.10.94 | DM 2,948.75 | |
| | Wire ropes | NLG 32,038.50 | 20.02.95 | DM 28,612.94 | |
| ACORN (Seamore BV) Dhaka, BD | Moveable camp facilities | US\$ 50,000.00 | 22.06.94 | DM 80,150.00 | 80,150.00 |
| Naue Fasertechnik Lemforde, Germany | Geotextiles | DM 222,653.76 | 08.08.94 | DM 222,653.76 | 247,393.07 |
| | | DM 24,739.31 | 06.10.94 | DM 24,739.31 | |
| Long International Mina Sulman, Bahrain | Pendants and wire ropes | US\$ 5,254.06 | 01.09.94 | DM 8,323.48 | 70,362.44 |
| | | US\$ 21,147.82 | 29.09.94 | DM 32,817.19 | |
| | | US\$ 583.78 | 09.09.94 | DM 908.98 | |
| | | US\$ 2,349.76 | 31.10.94 | DM 3,562.24 | |
| | | US\$ 15,655.00 | 27.12.94 | DM 24,750.55 | |
| to be carried forward | | | | | 2,584,436.61 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Procurement for Test Structures Kamarjani

Procurement of Equipment /Material & Services, Supplier outside Bangladesh

| Supplier | Specification | Invoice Amount | Payment | | Total DM |
|--|---|----------------|----------|-----------------|---------------------|
| | | | Date | Amount | |
| | | | | carried forward | 2,584,436.61 |
| Atlantique Dragage Nanterre, France | Ticket Mr. Meeuwsen | TK 65,341 | 11/12/94 | DM 2,572.04 | |
| | Management support | FF 337,424.58 | 18/01/95 | DM 97,755.28 | |
| | | FF 241,792.73 | 03/04/95 | DM 69,278.45 | |
| | | FF 242,617.00 | 16/06/95 | DM 69,298.69 | |
| | Ticket Mr. Hoekmann DAC-AMS-DAC | US\$ 1,128.00 | 29/06/95 | DM 1,593.51 | |
| | Accommodation Mr. Hoekman | TK 271,432 | | DM 9,502.59 | |
| | Accommodation Mr. Meeuwsen | TK 81,666 | | DM 3,131.10 | |
| | | FF 33,688.25 | 02/10/95 | DM 9,800.92 | |
| | | | | | 262,932.58 |
| OSAE Bremen, Germany | Ticket Mr. Hodshon BRE-DAC-BRE | DM 6,167.50 | 30/11/94 | DM 6,167.50 | |
| | Ticket Mr. Hodshon | TK 117,114 | 11/12/94 | DM 4,610.01 | |
| | Documentation and Training | DM 37,143.98 | 14/12/94 | DM 37,143.98 | |
| | | DM 650.00 | 23/12/94 | DM 650.00 | |
| | Ticket Mr. Hodshon credit note | DM - 3,086.50 | 18/01/95 | DM - 3,086.50 | |
| | Ticket Mr. Hodshon | TK 30,488 | 19/02/95 | DM 1,127.12 | |
| | Accommodation Mr. Hodshon, Mr. Pasche | TK 36,130 | | DM 1,391.14 | |
| | | DM 49,181.83 | 12/04/95 | DM 49,181.83 | |
| | | DM 5,460.00 | 10/05/95 | DM 5,460.00 | |
| | | DM 26,856.50 | 11/08/95 | DM 26,856.50 | |
| | | | | | 129,501.58 |
| ADM Warnau, Germany | Check of current meter | DM 8,877.78 | 31.10.94 | DM 8,877.78 | |
| | Repair current meter / training | DM 16,165.00 | 02.10.95 | DM 16,165.00 | |
| | Ticket Mr. Düsterhoeft | DM 1,525.00 | 23.11.95 | DM 1,525.00 | |
| | Accommodation Mr. Düsterhoeft | TK 3,979 | 29.08.95 | DM 139.16 | |
| | | | | | 26,706.94 |
| BSP Intl. Foundation Ltd. Ipswich, Suffolk / U.K. | Drop weight con-rod assembly | GBP 2,310.21 | 12.01.95 | DM 5,549.12 | |
| | Drop weight buffers | | | | |
| | | | | | 5,549.12 |
| Wicking GmbH | Spare parts for monitoring boat | DM 262.38 | 29.06.95 | DM 262.38 | 262.38 |
| PEGEDO | Spare parts for monitoring boat | DM 328.65 | 29.06.95 | DM 328.65 | 328.65 |
| Knittel Dortmund, Germany | Foto equipment for monitoring | DM 675.63 | 29.06.95 | DM 675.63 | |
| | | DM 503.04 | 23.11.95 | DM 503.04 | |
| | | | | | 1,178.67 |
| High Tech Ritterhude, Germany | Video camera | DM 2,152.17 | 17.08.95 | DM 2,152.17 | 2,152.17 |
| Labor für Wasserbau Bremen, Germany | Current measurements with | DM 33,250.00 | 12.03.96 | DM 33,250.00 | |
| | drifter bouys | DM 33,250.00 | 26.09.96 | DM 33,250.00 | |
| | Air freight monitoring equipment | DM 1,435.06 | 16.09.96 | DM 1,435.06 | |
| | Flight costs Mr. Torn (BRE-DAC-BRE) | DM 2,067.94 | 16.09.96 | DM 2,067.94 | |
| | Flight costs Mr. Pieper (BRE-DAC-BRE) | DM 2,067.94 | 16.09.96 | DM 2,067.94 | |
| | Flight costs Prof. Nasner (BRE-DAC-BRE) | DM 5,412.92 | 10.03.97 | DM 5,412.92 | |
| | Accommodation Nasner, Thorn, Piper | TK 35,896 | | DM 1,271.55 | |
| | Final Payment | DM 71,430.45 | 22.05.97 | DM 71,430.45 | |
| | | | | | 150,185.86 |
| Total DM | | | | | 3,163,234.56 |

approx. TK (rate 26)

82,244,099

Table F1-10

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

Summary F1-1 to F1-9

| 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)**

fo

Table F2-1

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Works: EC-MB, Construction contract

| Date | Description | Paid To | Amount DM | Remarks | Amount TK |
|----------|--------------------------------------|---------------------------|---------------|---------------|-------------|
| 28.09.95 | Supply of 1st class bricks | Engineers and Corolla Co. | 286,225.40 | | 8,000,000 |
| 15.10.95 | Advance payment to Contractor | EC-MB Joint Venture | 1,095,465.66 | | 31,532,760 |
| 18.10.95 | Advance payment to Contractor | EC-MB Joint Venture | 180,000.00 | to Boskalis | 4,965,000 |
| 18.12.95 | Interim payment certificate No.1 | EC-MB Joint Venture | 368,041.34 | | 10,399,008 |
| 21.12.95 | Balance payment for supply of bricks | Engineers and Corolla Co. | 127,965.88 | | 3,600,000 |
| 10.01.96 | Interim payment certificate No.2 | EC-MB Joint Venture | 548,324.01 | | 15,520,969 |
| 07.02.96 | Interim payment certificate No.3 | EC-MB Joint Venture | 362,515.86 | Part payment | 10,000,000 |
| 10.02.96 | Interim payment certificate No.3 | EC-MB Joint Venture | 365,477.04 | Part payment | 10,000,000 |
| 13.02.96 | Interim payment certificate No. 3 | EC-MB Joint Venture | 109,522.40 | Bal. payment | 3,061,151 |
| 12.03.96 | Interim payment certificate No. 4 | EC-MB Joint Venture | 710,320.42 | | 19,534,735 |
| 11.04.96 | Interim payment certificate No. 5 | EC-MB Joint Venture | 210,232.37 | | 5,744,957 |
| 09.05.96 | Interim payment certificate No. 6 | EC-MB Joint Venture | 265,490.67 | | 7,189,620 |
| 04.06.96 | Interim payment certificate No. 7 | EC-MB Joint Venture | 307,900.39 | | 8,339,913 |
| 25.07.96 | Interim payment certificate No. 8 | EC-MB Joint Venture | 162,159.47 | | 4,527,006 |
| 11.08.96 | Interim payment certificate No. 9 | EC-MB Joint Venture | 134,260.44 | | 3,800,000 |
| 16.10.96 | Interim payment certificate No. 10 | EC-MB Joint Venture | 312,873.16 | | 8,507,866 |
| 21.12.96 | Interim payment certificate No. 11 | EC-MB Joint Venture | 159,220.42 | | 4,319,650 |
| 21.12.96 | Payment of claim | EC-MB Joint Venture | 150,837.67 | | 4,092,226 |
| 15.01.97 | Interim payment certificate No. 12 | EC-MB Joint Venture | 173,399.42 | | 4,596,836 |
| 20.01.97 | Advance payment reimbursement | EC-MB Joint Venture | 180,000.00 | from Boskalis | 4,965,000 |
| 05.02.97 | Interim payment certificate No. 13 | EC-MB Joint Venture | 371,825.03 | | 9,514,668 |
| 06.03.97 | Advance payment correction | EC-MB Joint Venture | 58,073.00 | to Boskalis | 1,581,600 |
| 08.03.97 | Interim payment certificate No. 14 | EC-MB Joint Venture | 616,235.89 | | 15,237,973 |
| 05.04.97 | Interim payment certificate No. 15 | EC-MB Joint Venture | 711,355.61 | part payment | 18,000,000 |
| 20.04.97 | Interim payment certificate No. 15 | EC-MB Joint Venture | 234,555.40 | bal. payment | 5,921,656 |
| 05.05.97 | Interim payment certificate No. 16 | EC-MB Joint Venture | 753,372.59 | part payment | 18,910,330 |
| 26.05.97 | Interim payment certificate No. 16 | EC-MB Joint Venture | 79,681.00 | part to Bosk | 2,000,000 |
| 03.06.97 | Interim payment certificate No. 17 | EC-MB Joint Venture | 613,772.15 | | 15,406,172 |
| 14.07.97 | Interim payment certificate No. 18 | EC-MB Joint Venture | 263,649.73 | part payment | 6,378,847 |
| 22.07.97 | Release of Retention Money | EC-MB Joint Venture | 217,971.64 | | 6,305,658 |
| 24.07.97 | Payment of claim | EC-MB Joint Venture | 334,407.62 | | 8,000,000 |
| 01.08.97 | Interim payment certificate No. 18 | EC-MB Joint Venture | 39,518.00 | part to Bosk | 1,000,000 |
| 01.10.97 | Interim payment certificate No. 20 | EC-MB Joint Venture | 60,442.95 | | 1,502,376 |
| 19.10.97 | Interim payment certificate No. 19 | EC-MB Joint Venture | 121,556.93 | | 3,045,767 |
| 09.12.97 | Interim payment certificate No. 21 | EC-MB Joint Venture | 21,198.97 | | 533,508 |
| 20.01.98 | Interim payment certificate No. 22 | EC-MB Joint Venture | 18,713.54 | | 458,725 |
| 23.03.98 | Interim payment certificate No. 23 | EC-MB Joint Venture | 9,999.40 | | 250,800 |
| 28.05.98 | Release retention money | EC-MB Joint Venture | 245,260.91 | | 6,305,658 |
| Total | | | 10,621,822.38 | | 283,120,435 |

Table F2-2

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Supply of Boulders & Hard Rock, Supplier: 1. Exchange International 2. M/S Sapphire

| Date | Description | Paid To | Amount DM | Remarks | Amount TK |
|----------|---|------------------------|--------------|---------|------------|
| 03.08.95 | Supply of boulders | Exchange International | 105,031.35 | | 3,000,000 |
| 26.11.95 | Supply of boulders | Exchange International | 97,044.40 | | 2,765,814 |
| 28.01.96 | Supply of boulders | Exchange International | 145,719.49 | | 4,000,000 |
| 05.06.96 | Supply of boulders | Exchange International | 62,151.40 | | 1,676,534 |
| 25.07.96 | Supply of boulders | Exchange International | 24,501.20 | | 684,000 |
| 30.12.96 | Supply of boulders | Exchange International | 23,242.85 | | 628,131 |
| 01.04.97 | Supply of boulders | Exchange International | 85,766.36 | | 2,193,389 |
| 07.04.97 | Supply of boulders | Exchange International | 78,369.60 | | 2,000,000 |
| 29.05.97 | Supply of boulders | Exchange International | 284,697.19 | | 7,250,611 |
| 02.06.97 | Supply of boulders | Exchange International | 49,397.35 | | 1,250,000 |
| 02.06.97 | Supply of boulders | Exchange International | 23,710.72 | | 600,000 |
| 25.06.97 | Supply of boulders | Exchange International | 139,281.31 | | 3,500,000 |
| 24.07.97 | Supply of boulders | Exchange International | 19,476.40 | | 465,932 |
| | | | 1,138,389.62 | | 30,014,411 |
| 24.07.95 | Advance payment for supply of hard rock | M/S. Sapphire | 100,320.89 | | 2,876,200 |
| 27.09.95 | Supply of hard rock | M/S. Sapphire | 52,020.04 | | 1,453,960 |
| 23.12.95 | Supply of hard rocks | M/S. Sapphire | 27,351.08 | | 771,366 |
| 20.03.96 | Supply of hard rocks | M/S. Sapphire | 21,224.58 | | 582,084 |
| 19.02.96 | Encashment of Bank Guarantee | M/S. Sapphire | 59,653.70 | | 1,725,710 |
| | | | 141,262.89 | | 3,957,900 |
| Total | | | 1,279,652.51 | | 33,972,311 |

Table F2-3

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Hire of Equipment (Crawler Crane & Barge), Supplier: Multiple Equipment

| Date | Description | Paid To | Amount DM | Remarks | Amount TK |
|--------------|--|--------------------|-------------------|---------|-------------------|
| 06.08.95 | Advance payment for leasing of equipment | Multiple Equipment | 63,141.28 | | 1,800,000 |
| 10.10.95 | Leasing of equipment | Multiple Equipment | 45,310.22 | | 1,280,000 |
| 05.11.95 | Leasing of equipment | Multiple Equipment | 18,926.32 | | 540,000 |
| 03.12.95 | Leasing of equipment | Multiple Equipment | 19,157.16 | | 540,000 |
| 02.01.96 | Leasing of equipment | Multiple Equipment | 19,179.54 | | 540,000 |
| 01.02.96 | Hiring of equipment | Multiple Equipment | 19,611.40 | | 540,000 |
| 03.03.96 | Hiring of equipment | Multiple Equipment | 35,236.03 | | 972,000 |
| 30.06.96 | Hiring of equipment | Multiple Equipment | 26,570.03 | | 720,000 |
| 05.08.96 | Hiring of equipment | Multiple Equipment | 24,277.91 | | 680,000 |
| 01.09.96 | Hiring of equipment | Multiple Equipment | 24,105.87 | | 680,000 |
| 02.10.96 | Hiring of equipment | Multiple Equipment | 24,567.36 | | 680,000 |
| 02.01.97 | Hiring of equipment | Multiple Equipment | 26,411.36 | | 720,000 |
| 01.02.97 | Hiring of equipment | Multiple Equipment | 28,094.27 | | 720,000 |
| Total | | | 374,588.75 | | 10,412,000 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Filter and Revetment materials / Suppliers in and outside Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK |
|----------|--|------------------------------|------------|---------|------------|
| 05.08.95 | Concrete elements: | | | | |
| | Advance payment for precast concrete | Mimpex International | 58,184.57 | | 1,611,800 |
| 22.10.95 | Supply of precast concrete | Mimpex International | 39,512.98 | | 1,141,700 |
| 20.11.95 | Supply of precast concrete | Mimpex International | 40,300.07 | | 1,155,000 |
| 18.12.95 | Supply of precast concrete | Mimpex International | 36,182.17 | | 1,016,900 |
| 05.03.96 | Supply of precast concrete | Mimpex International | 34,641.67 | | 952,691 |
| 05.08.96 | Supply of precast concrete | Mimpex International | 32,268.06 | | 910,269 |
| 09.04.97 | Supply of precast concrete | Mimpex International | 26,151.83 | | 657,130 |
| | | Sub-Total CC-elements | 267,241.35 | | 7,445,490 |
| 25.08.95 | Geotextile filter materials & mattresses: | | | | |
| | Geotextile filter materials | Huesker | 113,330.70 | | 2,946,598 |
| 25.08.95 | Geotextile filter materials | Huesker | 12,592.30 | | 327,400 |
| 01.03.96 | Geotextile filter materials | Huesker | 19,650.00 | | 510,900 |
| 23.05.96 | Geotextile filter materials | Huesker | 129,794.00 | | 3,374,644 |
| | | | 275,367.00 | | 7,159,542 |
| 03.08.95 | Geotextile filter materials | BIDIM | 266,177.35 | | 6,920,611 |
| 10.11.95 | Geotextile filter materials | BIDIM | 28,581.18 | | 743,111 |
| | | | 294,758.53 | | 7,663,722 |
| 21.08.95 | Geotextile filter materials | Thermolite | 201,988.66 | | 5,251,705 |
| 10.11.95 | Geotextile filter materials | Thermolite | 22,264.39 | | 578,874 |
| 13.11.96 | Geotextile filter materials | Thermolite | 10,348.89 | | 269,071 |
| | | | 234,601.94 | | 6,099,650 |
| | | to be forwarded (Geotextile) | 804,727.47 | | 20,922,914 |
| | | | | | |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Filter and Revetment materials, Supplpier in and outside Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount Tk |
|----------|---|------------------------------|---------------------|---------|-------------------|
| 28.08.95 | Profix Mattresses | carried forward (Geotextile) | 804,727.47 | | 20,922,914 |
| 28.11.95 | Profix Mattresses | Boskalis | 76,341.88 | | 1,984,889 |
| | | Boskalis | 19,145.27 | | 497,777 |
| | | | 95,487.15 | | 2,482,666 |
| 04.10.95 | Purchase of rubber hose | Foreshore Protection Ltd. | 3,800.82 | | 102,736 |
| 26.10.95 | Collapsible block mattress | Foreshore Protection Ltd. | 112,568.23 | | 2,926,774 |
| 12.12.95 | Collapsible block mattress | Foreshore Protection Ltd. | 12,732.30 | | 331,040 |
| 15.04.96 | Purchase of concrete pump | Foreshore Protection Ltd. | 21,100.53 | | 577,177 |
| | | | 150,201.88 | | 3,937,727 |
| 28.09.95 | Reno mattresses and gabion sacks | France Gabions | 113,780.28 | | 2,958,287 |
| 17.01.96 | Reno mattresses and gabion sacks | France Gabions | 12,774.81 | | 332,145 |
| | | | 126,555.09 | | 3,290,432 |
| 06.02.96 | Stitching of geotextile bags | DIRD Pvt. Ltd. | 18,273.85 | | 500,000 |
| 09.06.96 | Supply of thread | DIRD Pvt. Ltd. | 7,131.53 | | 192,500 |
| 09.06.96 | Stitching of geotextile bags | DIRD Pvt. Ltd. | 8,694.17 | | 234,680 |
| 08.08.96 | Stitching of geotextile bags | DIRD Pvt. Ltd. | 27,724.38 | | 784,600 |
| 13.01.97 | Advance payment for Tailoring ,Geotextile bag | DIRD Pvt. Ltd. | 6,040.17 | | 160,000 |
| 22.03.97 | Final payment for Tailoring ,Geotextile bag | DIRD Pvt. Ltd. | 10,041.21 | | 253,174 |
| | | | 77,905.31 | | 2,124,954 |
| | | Sub-Total Geotextile | 1,254,876.90 | | 32,758,693 |
| | | Total | 1,522,118.25 | | 40,204,183 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Other: Different Supplier in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount Tk |
|----------|--|-----------------------------|------------|---------|-----------|
| 30.05.95 | Purchase of radio equipment | Logistic & Services | 5,589.70 | | 155,485 |
| 13.07.95 | Advance payment for survey boat | B.F. Enterprise | 20,993.70 | | 600,000 |
| 16.08.95 | Advance payment for pulling beam | Highspeed Ship Building | 10,257.71 | | 275,000 |
| 06.11.95 | Balance payment for pulling beam | Highspeed Ship Building | 9,564.02 | | 275,000 |
| 19.11.95 | License fee of radio equipment | Telephone Revenue | 385.63 | | 11,100 |
| 27.11.95 | Paid for Port charge & demmorage | B.Rahman | 70,314.56 | | 2,000,000 |
| 24.12.95 | Part payment for survey boat | B.F. Enterprise | 10,637.39 | | 300,000 |
| 15.01.96 | Paid for Port charge & demmorage | B.Rahman | 60,540.15 | | 1,700,000 |
| 23.01.96 | Balance payment for survey boat | B.F. Enterprise | 7,292.35 | | 200,000 |
| 04.02.96 | Additional works to Survey Boat | B.F. Enterprise | 4,710.37 | | 129,700 |
| 08.02.96 | Paid for Port charge & demmorage | B.Rahman | 25,376.11 | | 700,000 |
| 20.08.96 | Licence fee for radio equipment | Telephone & Telegraph | 4,640.03 | | 130,900 |
| 16.10.96 | Purchase of Side Scan Sonar | River Survey Project FAP 24 | 57,987.19 | | 1,580,000 |
| 20.11.96 | Land lease, crop compensation | WARPO | 178,571.43 | | 5,000,000 |
| 19.01.97 | Licence fee for Radio Equipment | Telephone & Telegraph | 4,594.53 | | 119,800 |
| 23.01.97 | Purchase of Radio Equipment | Yaesu Musen Co. | 2,161.61 | | 56,363 |
| 05.03.97 | Land lease, crop compensation | WARPO | 201,758.53 | | 5,000,000 |
| 30.06.96 | Bengal bay re-imbursement custom fees | JTWC | 2,219.60 | - | 64,210 |
| 19.11.95 | WARPO Reimbursement, custom fees | JTWC | 2,352.78 | - | 68,063 |
| 22.05.95 | WARPO Reimbursement, custom fees | JTWC | 11,676.14 | - | 333,918 |
| 03.07.97 | WARPO Reimbursement, land lease | JTWC | 209,306.99 | - | 6,055,000 |
| 23.06.98 | WARPO Reimbursement, land lease | JTWC | 154,100.00 | - | 3,945,000 |
| | to be carried forward to last page of F2-5 | | 295,719.50 | | 7,767,157 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Other, Different Supplier in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK |
|----------|---|-----------------------|-----------|---------|-----------|
| 04.09.94 | 50 % share with Kamarjani Adaptation: | | | | |
| 21.09.97 | C & F charge of testing equipment | Tivoli Enterprise | 113.21 | cash | 2,931 |
| 26.09.94 | Misc.Expences for equipment & materials | Mr.Kamal | 144.07 | cash | 3,730 |
| 16.10.94 | C & F charge of spare parts for crane | Tivoli Enterprise | 122.11 | cash | 3,162 |
| 25.10.94 | C & F charge of survey instrument | Tivoli Enterprise | 519.22 | cash | 13,444 |
| 06.11.94 | Paid to MATWS for support of echo-sounder | MATWS | 176.51 | cash | 4,570 |
| 15.11.94 | C & F charge of computer accessories | Tivoli Enterprise | 178.69 | cash | 4,627 |
| 17.12.94 | Paid to MATWS,Calibration of echo-sounder | MATWS | 356.00 | cash | 9,218 |
| 31.12.94 | Advance for construction of boat | MATWS | 965.57 | 563404 | 25,000 |
| 08.01.95 | C & F charge of droppweight buffer | Tivoli Enterprise | 710.23 | cash | 18,190 |
| 05.02.95 | C & F charge of spare parts for crane | Tivoli Enterprise | 378.26 | cash | 9,646 |
| 07.02.95 | Paid Famous for furniture | Famous | 333.33 | cash | 8,500 |
| 14.02.95 | Final Payment construction of boat | MATWS | 1,515.65 | 563408 | 38,621 |
| 20.02.95 | Paid for Monitoring items to Md.Abu Bakar | Md.Abu Bakar | 90.11 | cash | 2,300 |
| 11.03.95 | Paid for Monitoring diskettes | Libra computer | 446.66 | cash | 11,400 |
| 30.03.95 | C & F charge of Monitor | Tivoli Enterprise | 108.28 | cash | 2,760 |
| 19.04.95 | Paid for steel cabinet | Showrab Engineering | 124.40 | cash | 3,478 |
| 30.04.95 | C & F charge of fuse import | Tivoli Enterprise | 42.85 | cash | 1,198 |
| 15.05.95 | Purchase of voltmeter, plug, stroke oil | B.F.Enterprise | 54.90 | cash | 1,535 |
| 18.05.95 | Purchase of voltmeter, raincoat etc. | Shahmoor, Sumuns | 75.20 | cash | 2,103 |
| 20.05.95 | Paid for repairing of boat | B.F.Enterprise | 89.42 | cash | 2,500 |
| 28.05.95 | Purchase of stop watch | Amir Biponi | 14.31 | cash | 400 |
| 29.05.95 | Payment for Aluminium works of boat | MATWS | 590.43 | 563411 | 16,886 |
| 30.05.95 | 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 |
| 31.05.95 | Purchase of outboard engine | B.F.Enterprise | 2,028.10 | 563442 | 58,000 |
| 04.06.95 | Purchase of thermometer | Conrad electronic | 12.55 | cash | 351 |
| 05.06.95 | Purchase of hose clip | Gulshan hardware | 8.94 | cash | 250 |
| 12.06.95 | Purchase of ronald equipment | Impulse computer | 524.50 | 563414 | 15,000 |
| 02.07.95 | Payment for Hood of Monitoring boat | MATWS | 264.17 | 563415 | 7,555 |
| 25.07.95 | Paid for Boat (Propellor) | B.F.Enterprise | 259.32 | cash | 7,250 |
| 14.08.95 | Payment for Misc.Works of Monitoring boat | B.F.Enterprise | 489.54 | 563417 | 14,000 |
| | 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 SUB-ACCOUNT - DHAKA
FAP 21 TEST STRUCTURES BAHADURABAD

Other, Different Supplier in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK. |
|----------|--|-------------------------------|------------------|---------|----------------|
| | 50 % share with Kamarjani Adaptation: | carried forward: | 10,996.35 | | 295,904 |
| 16.08.95 | Purchase Boat assesories | 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 | Spare 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 | Spare 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 Expences 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 |
| 10.04.97 | 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 |
| 30.09.96 | Paid for sendind measuring equipment | KLM Cargo | 770.01 | cash | 22,272 |
| | Total | to be carried forward: | 29,210.04 | | 820,623 |

Table F2-5 cont.

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

Other, Different Supplier in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK. |
|----------|--|---|-------------------|---------|------------------|
| | 50 % share with Kamarjani Adaptation: | carried forward: | 29,210.04 | | 820,623 |
| 08.09.96 | C & F charge for measuring equipment, Back | Tivoli Enterprise | 459.12 | cash | 13,281 |
| 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 | 597.69 | 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 |
| | | Sub-Total 50% share | 43,581.19 | | 1,220,873 |
| | | carried forward from first page of F2-5 | 295,719.50 | | 7,767,157 |
| | | Total | 339,300.69 | | 8,988,030 |

Table F2-6

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURES BAHADURABAD

Insurance, Supplier: Sadharan Bima, Insurance

| Date | Description | Paid To | Amount DM | Amount TK |
|--------------|--------------------------|---------------------------|-------------------|------------------|
| 31.08.95 | Marine insurance premium | Sadharan Bima Corporation | 25,074.07 | 695,068 |
| 30.10.95 | C.A.R. Policy | Sadharan Bima Corporation | 96,621.65 | 2,754,683 |
| 30.10.95 | C.P.M. Policy | Sadharan Bima Corporation | 28,299.74 | 806,826 |
| 21.11.95 | Hull Policy | Sadharan Bima Corporation | 8,401.74 | 240,000 |
| 12.07.95 | Reimbursement | Sadharan Bima Corporation | - 1,051.21 | 30,063 |
| Total | | | 157,345.99 | 4,466,514 |

FAP 21/22, ADM.-FIN. - 30

Table F2-7

JAMUNA TEST WORKS CONSULTANTS
FAP 21 Procurement for Test Structures Bahadurabad

Other / Different Suppliers outside Bangladesh

| Supplier | Specification | Invoice Amount | | Payment | | Total |
|--|--|----------------|------------|----------|--------|------------|
| | | | | Date | Amount | DM |
| OSAE Bremen, Germany | PC, software, echosounder | DM | 130,589.04 | 28.11.95 | DM | 130,589.04 |
| | Repair Ashtech receiver | DM | 1,214.27 | 17.01.96 | DM | 1,214.27 |
| | Repair Ashtech receiver | DM | 890.00 | 26.09.96 | DM | 890.00 |
| | Repair Ashtech receiver | DM | 676.05 | 07.02.97 | DM | 676.05 |
| | Repair echosounder | DM | 689.72 | 10.03.97 | DM | 689.72 |
| | | | | | | 134,059.08 |
| Valeport Devon, England | Current Meter (2 Nos.) | GBP | 9,655.00 | 26.10.95 | DM | 20,674.51 |
| | | GBP | 299.00 | 17.01.96 | DM | 672.90 |
| | | GBP | 9,181.00 | 31.05.96 | DM | 21,736.02 |
| | | GBP | 186.00 | 16.09.96 | DM | 427.19 |
| | | | | | | 43,510.62 |
| Union Special Germany | Spare parts for sewing machine | DM | 4,224.87 | 17.11.95 | DM | 4,224.87 |
| Atlantique Dragages Nanterre, France | Management support and supply of heavy equipment | FF | 210,800.00 | 10.11.95 | DM | 61,161.51 |
| | | | | 23.11.95 | DM | 917.05 |
| | | FF | 657,304.63 | 28.11.95 | DM | 191,729.19 |
| | | FF | 173,219.12 | 17.01.96 | DM | 50,749.74 |
| | | FF | 165,949.67 | 24.05.96 | DM | 49,145.99 |
| | | FF | 19,493.34 | 20.06.96 | DM | 5,757.94 |
| | | FF | 29,240.01 | 23.08.96 | DM | 8,591.30 |
| | | FF | 113,475.00 | 01.10.96 | DM | 33,599.95 |
| | | FF | 468,171.25 | 07.02.97 | DM | 139,023.45 |
| | | FF | 18,569.67 | 28.04.97 | DM | 5,520.21 |
| | | FF | 12,257.58 | 21.08.97 | DM | 3,645.53 |
| | | | | | | 549,841.86 |
| OSAE Bremen, Germany | Monitoring Training | DM | 20,937.00 | 01.03.96 | DM | 20,937.00 |
| | | DM | 1,314.23 | 16.09.96 | DM | 1,314.23 |
| | | | | | | 22,251.23 |
| Hewlett Packard Böblingen, Germany | Spare parts for monitoring equipment | DM | 313.41 | 26.02.96 | DM | 313.41 |
| Instrument Technology Bremen, Germany | Spare parts for monitoring equipment | DM | 198.69 | 19.06.96 | DM | 198.69 |
| | | DM | 382.58 | 23.08.96 | DM | 382.58 |
| | | DM | 243.80 | 28.08.96 | DM | 243.80 |
| | | DM | 2,267.57 | 02.05.97 | DM | 2,267.57 |
| | | DM | 2,375.35 | 12.06.97 | DM | 2,375.35 |
| | | | | | | 5,467.99 |
| Lambrecht Göttingen, Germany | Spare parts for monitoring equipment | DM | 81.65 | 26.02.96 | DM | 81.65 |
| | | DM | 341.76 | 23.09.97 | DM | 341.76 |
| | | | | | | 423.41 |
| STN Atlas Elektronik Bremen, Germany | Service manual echosounder | DM | 492.50 | 01.10.96 | DM | 492.50 |
| | Spare parts echosounder | DM | 4,901.70 | 23.09.97 | DM | 4,901.70 |
| | Repair and spare parts echosounder | DM | 11,968.80 | 23.09.97 | DM | 11,968.80 |
| | | | | | | 17,363.00 |
| Roda Computer Lichtenau, Germany | Monitoring Computer | DM | 5,529.85 | 16.04.97 | DM | 5,529.85 |
| | | | | | | 5,529.85 |
| Ashtech Long Hanborough, U.K. | Repair of locating device | USD | 1,525.00 | 10.03.97 | DM | 2,481.18 |
| | | | | | | 2,481.18 |
| MARIMATECH Aarhus, Denmark | Monitoring paper and equipment | DM | 2,415.00 | 23.09.97 | DM | 2,415.00 |
| | | DM | 342.00 | 23.09.97 | DM | 342.00 |
| | | | | | | 2,757.00 |
| EIVA Aarhus, Denmark | Marine antenna | DM | 1,425.99 | 10.03.97 | DM | 1,425.99 |
| | | | | | | 1,425.99 |
| BOSS Dortmund, Germany | Battery loader | DM | 160.43 | 23.09.97 | DM | 160.43 |
| | | | | | | 160.43 |
| Kühne & Nagel Bremen, Germany | Freight costs for monitoring equipment | DM | 406.00 | 07.03.97 | DM | 406.00 |
| | | | | | | 406.00 |
| Schenker Hagen, Germany | Freight costs for monitoring equipment | DM | 642.75 | 23.09.97 | DM | 642.75 |
| | | | | | | 642.75 |
| Total | | | | | | 790,858.67 |

approx. TK (rate 26) **20,562,325.42**

Table F2-8

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

| 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 | 790,858.67 | 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 |
| 26.09.99 | Interim payment certificate No. 21 | Engineers & Corolla Co. | 14,325.04 | 374,937 |
| 11.11.99 | Interim payment certificate No. 22 | Engineers & Corolla Co. | 4,455.97 | 116,606 |
| Total | | | 3,990,927.59 | 107,765,941 |

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 | 45,315,007 |

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 | |
| | | 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 | 5,508.06 |
| Wicking GmbH Hofgeismar, Germany | Spare parts for monitoring boat | DM 345.65 | 23.09.97 | DM 345.65 | 7,650.00 |
| PEGEDO Dortmund, Germany | Spare parts for monitoring boat | DM 1,402.70 | 10.05.96 | DM 1,402.70 | 345.65 |
| | | 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 | 2,974.61 |
| | | 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 | 896.07 |
| | | 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 | |
| TOTAL | | | | | 132,670.84 |
| | | | | | 166,237.28 |

approx. TK (rate 26)

**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 | Progot 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 | 7,563 |
| 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 | | 295,902 |

Table F3-4

**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 | | 295,902 |
| 16.08.95 | Purchase Boat assesories | 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 Batery 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 Expences 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 sendind 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 | | 833,902 |

**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 | | 833,902 |
| 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 | 597.69 | 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 | cash | 4,331 |
| 20.01.98 | Transfer fee for shifting | T & T | 51.00 | cash | 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 | 6,092.68 | 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 |
| | | to be carried forward: | 62,270.10 | | 1,689,417 |

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

Other, Different Suppliers in Bangladesh

Table F3-4

| Date | Description | Paid To | Amount DM | Remarks | Amount TK. |
|----------|--|-------------------------------|-------------------|---------|------------------|
| | 50 % share with Bahadurabad: | carried forward: | 62,270.10 | | 1,689,417 |
| 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-ex | Tivoli Enterprise | 515.50 | cash | 13,189 |
| 25/08/98 | Air Way bill for Measuring equipment re-ex | KLM Cargo | 951.99 | cash | 24,357 |
| 05/10/98 | Repairing & Spares for engine boat | B.F.Enterprise | 1,387.95 | 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 |
| 25/01/99 | Paid for repair of power supply | Bangladesh Tele. Co. | 432.08 | cash | 11,000 |
| 14/02/99 | Repairing & Spares for engine boat | B.F.Enterprise | 106.35 | cash | 2,925 |
| 16/02/99 | Paid for Monitoring Equipment repair | S.O. & S.E Works | 118.17 | cash | 3,250 |
| 18/02/99 | Repairing & Spares for engine boat | B.F.Enterprise | 169.08 | cash | 4,650 |
| 28/02/99 | Repairing & Spares for engine boat | B.F.Enterprise | 272.71 | cash | 7,500 |
| 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 |
| 16/03/99 | Paid for computer consumables | Business Technologies | 86.36 | cash | 2,375 |
| 22/03/99 | Payment for diving survey works | Oceanic Scuba Diving Service | 787.82 | cash | 21,667 |
| 22/03/99 | Repairing charge for Radio Communication | Bangladesh Tele. Co. | 434.51 | cash | 11,950 |
| 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. | 272.83 | cash | 7,500 |
| 15.04.99 | Paid for computer consumables | Business Technologies | 20.92 | cash | 575 |
| 15.04.99 | Paid for computer consumables | Business Technologies | 12.73 | cash | 350 |
| 21.04.99 | Paid for Monitoring Equipment repair | S.O. & S.E Works | 123.20 | cash | 3,250 |
| 13.05.99 | Paid for computer consumables | Business Technologies | 15.17 | cash | 400 |
| 31.05.99 | Repairing charge for Radio Communication | Bangladesh Tele. Co. | 227.45 | 1008126 | 6,000 |
| 18.05.99 | Repairing & Spares for engine boat | B.F.Enterprise | 1,659.96 | cash | 43,975 |
| 02.06.99 | Paid for computer consumables | Business Technologies | 56.86 | cash | 1,500 |
| 07.06.99 | Paid for computer consumables | Business Technologies | 161.11 | cash | 4,250 |
| 24.06.99 | Repairing & Spares for engine boat | B.F.Enterprise | 212.10 | cash | 5,595 |
| 07.07.99 | Paid for Monitoring Equipment repair | Bangladesh Tele. Co. | 473.85 | cash | 12,500 |
| 19.07.99 | Paid for computer consumables | Business Technologies | 31.28 | cash | 825 |
| 24.07.99 | Paid for Monitoring | Zaman Stores | 4.74 | cash | 125 |
| 24.07.99 | Paid for Monitoring | Hasan Electrics | 16.11 | cash | 425 |
| 08.08.99 | Paid for Monitoring Battery | Bangladesh Tele. Co. | 432.15 | cash | 11,400 |
| 12.08.99 | Paid for Monitoring Equipment repair | Bangladesh Tele. Co. | 473.85 | cash | 12,500 |
| 16.08.99 | Paid for Monitoring Battery | Khan Tyre | 220.63 | cash | 5,820 |
| | | to be carried forward: | 134,770.49 | | 3,601,513 |

**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: | 134,770.49 | | 3,601,513 |
| 18.08.99 | Paid for Radio fee 98/99 | Bangladesh T & T | 4,962.91 | 1141368 | 130,900 |
| 19.08.99 | Paid for Monitoring Data | SWMC | 47.19 | 1008128 | 1,250 |
| 23.08.99 | Paid for computer cosumables | Business Technologies | 22.12 | cash | 587 |
| 08.09.99 | Paid for computer | Business Technologies | 734.03 | cash | 19,500 |
| 28.09.99 | Repairing & Spares for engine boat | B.F.Enterprise | 753.83 | cash | 19,842 |
| 07.10.99 | Paid for Monitoring(Site Air Cooler repairing) | Famous Refrigeration Co. | 1,103.62 | cash | 29,050 |
| 10.10.99 | Paid for computer cosumables | Business Technologies | 166.68 | cash | 4,388 |
| 17.11.99 | Paid for computer cosumables | Business Technologies | 22.32 | cash | 588 |
| 18.11.99 | Paid for Monitoring(Site Accomodation) | Famous Refrigeration Co. | 421.13 | cash | 11,085 |
| 18.11.99 | Paid for Monitoring (Analysis of Plantaion) | Geological Survey of Bangladesh | 285.19 | 1008130 | 7,500 |
| 30.11.99 | Repairing & Spares for engine boat | B.F.Enterprise | 539.46 | cash | 14,200 |
| | Custom due collection to be reimbursed | WARPO SEE 14.5.98 | 6,092.68 | - | 149,117 |
| | | Sub-Total 50% share | 137,736.29 | | 3,691,286 |
| | | carried forward from F3-4 page 1 | 74,174.20 | | 2,014,491 |
| | | Total | 211,910.49 | | 5,705,777 |

Table F3-5

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

Summary and Final Account *

| Description | Paid To | Table | Amount D.M. | Amount TK. |
|---|-----------------------------|-------|---------------------|--------------------|
| <u>A. WORKS:</u> Construction contract (including maintenance) | Engineers & Corolla Co. | F3-1 | 3,990,927.59 | 107,765,941 |
| <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 | 211,910.49 | 5,705,777 |
| | Sub-Total | | 2,084,527.65 | 55,342,954 |
| Total | | | 6,075,455.24 | 163,108,895 |

* For details refer to ADM.-FIN. Rep. No. 28

FAP 21/22, ADM.-FIN.- 30

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 |
|--------------|---------------------------------------|---------------------|-------------------|------------------|
| | Works: | | | |
| 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 |
| 05.07.99 | Interim payment certificate No. 38 | EC-MB Joint Venture | 9,883.64 | 248,304 |
| 11.08.99 | Interim payment certificate No. 39 | EC-MB Joint Venture | 10,844.54 | 291,061 |
| 12.09.99 | Interim payment certificate No. 40 | EC-MB Joint Venture | 12,367.82 | 321,435 |
| Total | | | 348,914.41 | 9,037,614 |

JAMUNA TEST WORKS CONSULTANTS
FAP 21 ADAPTATION WORKS BAHADURABAD

Other, Different Suppliers in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK. |
|----------|--|------------------------------|------------------|---------|------------------|
| | 50 % share with Kamarjani: | | | | |
| 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 | 176.69 | cash | 4,331 |
| 20.01.98 | Transfer fee for shifting | T & T | 51.00 | cash | 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 | 6,092.68 | 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 | 5,023 |
| 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 | 18,722 |
| 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-ex | Tivoli Enterprise | 515.50 | cash | 13,190 |
| 25.08.98 | Air Way bill for Measuring equipment re-ex | KLM Cargo | 951.99 | cash | 24,358 |
| 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 | 2,837.36 | 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. | 272.83 | cash | 7,500 |
| 15.04.99 | Paid for Computer consumables | Business Technologies | 20.92 | cash | 575 |
| 15.04.99 | Paid for Computer consumables | Business Technologies | 12.73 | cash | 350 |
| 21.04.99 | Paid for Monitoring Equipment repair | S.O. & S.E Works | 123.20 | cash | 3,250 |
| 13.05.99 | Paid for Computer consumables | Business Technologies | 15.17 | cash | 400 |
| 31.05.99 | Repairing charge for Radio Communication | Bangladesh Tele. Co. | 227.45 | cash | 6,000 |
| 18.05.99 | Repairing & Spares for engine boat | B. F. enterprise | 1,659.96 | 1008126 | 43,975 |
| | | to be carried forward | 86,699.54 | | 2,260,386 |

209

Table F4-3 cont.

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

Other, Different Suppliers in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount TK. |
|----------|--|---------------------------------|-------------------|------------------|------------------|
| | 50 % share with Kamarjani: | carried forward: | 86,699.54 | | 2,260,386 |
| 02.06.99 | Paid for Computer consumables | Business Technologies | 56.86 | cash | 1,500 |
| 07.06.99 | Paid for Computer consumables | Business Technologies | 161.11 | cash | 4,250 |
| 24.06.99 | Repairing & Spares for engine boat | B. F. enterprise | 212.10 | cash | 5,595 |
| 07.07.99 | Paid for Monitoring Equipment repair | Bangladesh Tele. Co. | 473.85 | cash | 12,500 |
| 19.07.99 | Paid for Computer consumables | Business Technologies | 31.28 | cash | 825 |
| 24.07.99 | Paid for Monitoring | Zaman Stores | 4.74 | cash | 125 |
| 24.07.99 | Paid for Monitoring | Hasan Electrics | 16.11 | cash | 425 |
| 08.08.99 | Paid for Monitoring Battery | Bangladesh Tele. Co. | 432.15 | cash | 11,400 |
| 12.08.99 | Paid for Monitoring Equipment repair | Bangladesh Tele. Co. | 473.85 | cash | 12,500 |
| 16.08.99 | Paid for Monitoring Battery | Khan Tyre | 220.63 | cash | 5,820 |
| 18.08.99 | Paid T & T for renewal of Radio | T & T | 9,925.82 | 1141368 | 261,800 |
| 19.08.99 | Paid for Monitoring Data | SMMC | 47.19 | 1008128 | 1,250 |
| 23.08.99 | Paid for Computer consumables | Business Technologies | 22.12 | cash | 588 |
| 08.09.99 | Paid for Computer | Business Technologies | 734.03 | cash | 19,500 |
| 28.09.99 | Repairing & Spares for engine boat | B. F. enterprise | 753.83 | cash | 19,843 |
| 07.10.99 | Paid for Monitoring(Site Air Cooler repairing) | Famous Refrigeration Co. | 1,103.62 | cash | 29,050 |
| 10.10.99 | Paid for Computer consumables | Business Technologies | 166.68 | cash | 4,388 |
| 17.11.99 | Paid for Computer consumables | Business Technologies | 22.32 | cash | 588 |
| 18.11.99 | Paid for Monitoring(Site Accommodation) | Famous Refrigeration Co. | 421.13 | cash | 11,085 |
| 18.11.99 | Paid for Monitoring (Analysis of Plantation) | Geological Survey of Bangladesh | 285.19 | 1008130 | 7,500 |
| 30.11.99 | Repairing & Spares for engine boat | B. F. enterprise | 539.46 | cash | 14,200 |
| | Custom due collection to be reimbursed | WARPO SEE 14.5.98 | 6,092.68 | - | 149,117 |
| | | Sub-Total 50% share | 96,710.93 | sub total | 2,536,001 |
| 29.06.00 | 100 % Bahadurabad Adaptation | | | | |
| | Paid for Camp Electrification (bank draft) | BWDB, Mymensingh | 4,635.93 | 1334653 | 111,338 |
| 16.07.00 | Repair works embankment | Contractor Mantu | 2,019.36 | cash | 50,387 |
| 16.07.00 | Repair works embankment & Carrying materials | Contractor Lablu | 2,537.96 | cash | 63,327 |
| 31.01.01 | Repair works embankment | Local contractors | 900.00 | 1334726 | 22,500 |
| 31.01.01 | Camp repair & fencing | Local contractors | 39,089.24 | 1334726 | 977,231 |
| 31.01.01 | Misc. Expenses | DC Jamalpur | 12,840.00 | | 321,000 |
| 19.04.01 | Compensation for Hospital | Ministry of Health | 60,000.00 | | 1,500,000 |
| | | sub total | 122,022.49 | sub total | 3,045,783 |
| | | Total | 218,733.42 | | 5,581,784 |

Table F4-4

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

Summary *

| Description | Paid To | Table | Amount D.M. | Amount TK. |
|---|---------------------|--------------|--------------------------|------------------------|
| <u>A. WORKS:</u> Construction contract | EC-MB Joint Venture | F4-1 | 348,914.41 | 9,037,614 |
| <u>B. Procurement & Supply:</u> Other outside Bangladesh Other in Bangladesh | | F4-2 F4-3 | 189,649.06 219,893.42 | 4,930,876 5,610,784 |
| | Sub-Total | | 409,542.48 | 10,541,660 |
| Total | | | 758,456.89 | 19,579,274 |

202

F - PART 5

**TEST SITE KATLAMARI
BANDALS AND FLOATING SCREENS
(FAP 22)**

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 | 22,589.42 | 533,122 |
| 25.01.98 | IPC-5, Final payment, Improved Bandals | The Engineers & Corolla | 40,977.56 | 1,033,454 |
| | | | 312,433.88 | 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 |

FAP 21/22, ADM.-FIN.- 30

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 |

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 |
| 03.01.00 | Kundarapara IPC- No 5 | The Engineers & Corolla | 3,430.98 | 91,530 |
| | | | 343,299.54 | 8,580,083 |
| | Procurement: | | | |
| 02.12.97 | Hiring of Equipment | SWMC | 694.43 | 17,583 |
| 13.02.98 | Current Meter | Valeport | 6,324.35 | 164,433 |
| 16.02.98 | Load Transducer | Spectris | 9,650.00 | 250,900 |
| 17.02.98 | Transport of Equipment | Kühne & Nagel | 1,570.74 | 40,839 |
| 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 | 155,410 |
| 10.03.98 | Transport of Equipment | Schenker | 344.80 | 8,965 |
| 10.03.98 | Transport of Equipment | Schenker | 437.65 | 11,379 |
| 01.04.98 | C & F charge for equipment | Tivoli Enterprise | 317.36 | 7,900 |
| 01.04.98 | C & F charge for equipment | Tivoli Enterprise | 1,934.76 | 48,161 |
| 05.04.98 | C & F charge for equipment | Tivoli Enterprise | 406.35 | 10,108 |
| 16.03.98 | Shackles, wire ropes, snatchblocks | Vlieroad, 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 |
| | | | 117,279.73 | 3,041,347 |
| | Total | | 460,579.27 | 11,621,430 |

**JAMUNA TEST WORKS CONSULTANTS
FAP 22 KATLAMARI & KUNDARAPARA
SUMMARY and FINAL ACCOUNT**

| Description | Table | Amount DM | Amount TK. |
|--|--------------|-------------------|-------------------|
| Improved Bandels: | | | |
| Works: | F5-1 | 312,433.88 | 7,937,333.00 |
| Other: | F5-1 | 20,654.87 | 542,750.00 |
| Total: | F5-1 | 333,088.75 | 8,480,083.00 |
| Floating Screens: | | | |
| Works | F5-2 | 116,220.51 | 2,821,160 |
| Bandals & Floating Screens Kundarapara: | | | |
| Works: | F5-3 | 343,299.54 | 8,580,083 |
| Other: | F5-3 | 117,279.73 | 3,041,347 |
| Total: | F5-3 | 460,579.27 | 11,621,430 |
| Works Total: | | 771,953.93 | 19,338,576 |
| Other Total: | | 137,934.60 | 3,584,097 |
| Total | Total | 909,888.53 | 22,922,673 |

F - PART 6

**THIRD TEST SITE
(FAP 21)**

Table F6 -1

JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURE GHUTAIL

Works: Engineers & Corolla, Construction contract

| Date | Description | Paid To | Amount DM | Amount TK |
|--------------|---|-------------------------|---------------------|--------------------|
| | Works: | | | |
| 22.06.99 | Advance Payment | The Engineers & Corolla | 902,520.15 | 22,914,422 |
| 05.10.99 | Interim payment certificate No. 01 | The Engineers & Corolla | 340,285.08 | 9,157,620 |
| 11.11.99 | Interim payment certificate No. 02a | The Engineers & Corolla | 191,460.85 | 5,000,000 |
| 22.11.99 | Interim payment certificate No. 02b | The Engineers & Corolla | 345,976.30 | 8,933,108 |
| 07.12.99 | Interim payment certificate No. 03 | The Engineers & Corolla | 360,138.46 | 9,514,858 |
| 03.01.00 | Interim payment certificate No. 04 | The Engineers & Corolla | 257,002.45 | 6,801,133 |
| 02.02.00 | Interim payment certificate No. 05 | The Engineers & Corolla | 517,175.75 | 13,139,367 |
| 02.03.00 | Interim payment certificate No. 06 | The Engineers & Corolla | 960,409.05 | 23,729,076 |
| 02.04.00 | Interim payment certificate No. 07, Advance | The Engineers & Corolla | 608,959.00 | 15,000,000 |
| 23.04.00 | Interim payment certificate No. 07, Balance | The Engineers & Corolla | 49,514.35 | 1,200,099 |
| 07.05.00 | Interim payment certificate No. 08 | The Engineers & Corolla | 664,643.76 | 15,407,772 |
| 18.06.00 | Interim payment certificate No. 09, Advance | The Engineers & Corolla | 302,981.34 | 7,500,000 |
| 06.07.00 | Interim payment certificate No. 09, Balance | The Engineers & Corolla | 84,680.57 | 2,066,206 |
| 06.07.00 | Release Rentention Money, 2.5% | The Engineers & Corolla | 151,384.43 | 3,693,780 |
| 10.07.00 | Release Rentention Money, 2.5% ag. Guaranty | The Engineers & Corolla | 149,801.69 | 3,693,780 |
| 20.08.00 | Interim payment certificate No. 08 | The Engineers & Corolla | 25,788.50 | 639,266 |
| 25.10.00 | Final payment certificate No. 09 | The Engineers & Corolla | 26,837.56 | 615,175 |
| Total | | | 5,939,559.29 | 149,005,662 |

22

Table F6-2

JAMUNA TEST WORKS CONSULTANTS

FAP 21 TEST STRUCTURE GHUTAIL

Different Suppliers outside Bangladesh

| Supplier | Specification | Invoice Amount | | Date | Payment | | Total |
|--------------------------------------|---|----------------|-----------|----------|---------|------------|------------|
| | | | | | Amount | DM | |
| Polyfelt, Austria (via DIRD, BD) | Geotextile filter mats (BIDIM, Polyfelt): LC 90% LC 10% | US\$ | 51,543.00 | 30/08/99 | DM | 87,105.41 | 96,607.11 |
| | | US\$ | | 26/10/99 | DM | 9,501.70 | |
| Maccaferri, Indonesia (via DIRD, BD) | RENO mattresses: LC 90% LC 10% | US\$ | 89,100.00 | 08/09/99 | DM | 148,703.91 | 165,518.32 |
| | | US\$ | | 17/11/99 | DM | 16,814.41 | |
| Valeport | Current Meter Repair | £ | 985.00 | 03/00 | DM | 3,151.47 | 3,151.47 |
| approx. TK (rate 26) | | | | | | | 265,276.90 |
| FAP 21/22, ADM.-FIN.- 30 | | | | | | | 6,897,199 |

22

Table F6-3

**JAMUNA TEST WORKS CONSULTANTS
FAP 21 TEST STRUCTURE GHUTAIL**

Other, Different Suppliers in Bangladesh

| Date | Description | Paid To | Amount DM | Remarks | Amount Tk. |
|--------------|--|--------------------------------------|-------------------|-----------|------------------|
| 08.09.99 | Payment for Boulders Supply | Exchange International | 75,345.65 | | 2,000,000 |
| 13.10.99 | Advance Payment for C & F of Geotextile | Tivoli Enterprise (incl. demurrage) | 9,251.55 | | 250,000 |
| 28.10.99 | Balance Payment of Geotextile C & F charge | Tivoli Enterprise (incl. demurrage) | 687.80 | | 18,088 |
| 23.01.00 | Paid for Current Meter repairing | Bangladesh Telecommunications Co | 1,899.52 | | 50,000 |
| 30.01.00 | Payment for Boulders Supply | Exchange International | 79,788.72 | | 2,000,000 |
| 31.01.00 | Paid for AC Power Supply repairing | Bangladesh Telecommunications Co | 387.50 | | 10,200 |
| 05.02.00 | Paid for Paint Purchasing | Hasan Hardware | 17.10 | | 450 |
| 27.02.00 | Thread for Geotextile filter mat | DIRD | 2,363.06 | | 59,000 |
| 08.03.00 | Radio Licence fees for year 2000 | T&T | 5,252.64 | | 130,900 |
| 28.03.00 | Paid for Boulders Testing | BUET, Dhaka | 24.71 | | 650 |
| 02.04.00 | Payment for Boulders Supply | Exchange International | 81,185.81 | | 2,000,000 |
| 02.05.00 | Payment for Boulders Supply | Exchange International | 84,463.03 | | 2,000,000 |
| 18.06.00 | Final Payment for Boulders Supply | Exchange International | 36,987.71 | | 921,645 |
| 02.04.00 | Paid for Diskette | Business Technologies | 44.67 | | 1,175 |
| 20.04.00 | Paid for Boat repairing | B.F Enterprise | 1,501.82 | | 39,500 |
| 25.06.00 | Paid for Current Meter repairing | Bangladesh Telecommunications Co | 1,033.19 | | 25,000 |
| 28.06.00 | Reimbursement for boulder delivery | From BWDB by check Janata Bank | 83,173.17 | | 1,996,988 |
| 29.06.00 | Paid for Boat repairing | B.F Enterprise | 3,971.05 | | 95,370 |
| 02.07.00 | BWDB, Mymensingh for camp electrification | BWDB, Mymensingh | 4,635.93 | | 111,338 |
| 16.07.00 | Reconstruction of Orphanage | different land owners | 3,980.97 | | 99,333 |
| 16.07.00 | Rent for boulder stack yard | different house owners | 1,649.17 | | 41,150 |
| 16.07.00 | House-shifting | Dulal B.S.C | 11,839.95 | | 295,430 |
| 16.07.00 | Boulder & Geo-Textile Carrying | Mr Lablu | 3,507.82 | | 87,527 |
| 16.07.00 | Boulder Staking | Mr Manju | 2,538.15 | | 63,327 |
| 16.07.00 | Slap Carrying | C.A Indosuez | 2,019.51 | | 50,387 |
| 30.07.00 | Paid for Bank Charge | Business Technologies | 120.24 | | 3,000 |
| 01.08.00 | Paid for Diskette | TK A/C. C.C | 37.67 | | 940 |
| 13.08.00 | Reimbursement for Monitoring expenses | From HAM by check C.A Indosuez | 41,638.39 | | 1,000,000 |
| 17.08.00 | Reimbursement for Site Office Utilities | From BWDB by check Janata Bank | 13,450.12 | | 323,022 |
| 07.09.00 | Reimbursement for boulder delivery | C.A Indosuez | 64,433.01 | | 1,547,436 |
| 30.09.00 | Paid for Bank Charge | B.F Enterprise | 96.83 | | 2,325 |
| 12.09.00 | Paid for Boat repairing | P.C.A/C Petty Cash A/c Sheet No. 136 | 4,234.64 | | 101,700 |
| 13.09.00 | Return Accommodation & Food money to C.A/C | Garmin satellite receiver | 3,327.96 | | 79,925 |
| 31.10.00 | Paid for Monitoring GPS Maps | Golden Bird | 458.33 | Cash | 11,000 |
| 01.11.00 | Paid for Guest house bill (Mr Zanke) | TK A/C. C.C | 187.50 | Cash | 4,500 |
| 07.11.00 | Reimbursement for Monitoring expenses | Local Contractors | 54,701.46 | 1334659 | 1,312,835 |
| 22.11.00 | Paid for Orphanage | C.A Indosuez | 4,166.67 | 1334660 | 100,000 |
| 30.11.00 | Advance for Site Maintenance & Construction | Local Contractors | 15,666.67 | 1334661 | 400,000 |
| 03.12.00 | Paid for Bank Charge | C.A Indosuez | 20.83 | Cash | 500 |
| 10.12.00 | Paid for Boat repairing | B.F Enterprise | 1,678.13 | 1334662 | 40,275 |
| 21.12.00 | Paid for Custom Tax | C.A Indosuez | 10.42 | Cash | 250 |
| 31.01.01 | Boulder geo-textile shifting ** | local contractors | 4,281.25 | Cash | 102,750 |
| 31.01.01 | Installation of Hospital ** | local contractors | 4,000.00 | Cash | 96,000 |
| 27.02.01 | Paid for Computer Consumable | Business Technologies | 2,006.25 | Cash | 48,150 |
| 28.02.01 | Paid for Computer Consumable | Albrecht | 37.92 | Cash | 910 |
| 25.03.01 | Reimbursement for Monitoring expenses | From JTWC, wrong booking, 7.11.00 | 54,701.46 | 1,312,835 | |
| 24.01.01 | Reimbursement for Monitoring expenses | DM. A/C C.C | 71,620.08 | check | 1,718,882 |
| 30.04.01 | Reimbursement for miscellaneous wrong bookings | From JTWC, | 8,811.68 | 1334724 | 211,460 |
| Total | | | 393,098.82 | | 9,982,651 |

Table F6-4

JAMUNA TEST WORKS CONSULTANTS SUB-ACCOUNT - DHAKA
FAP 21 TEST STRUCTURE GHUTAIL

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 | 5,939,559.29 | 149,005,662 |
| <u>B. Procurement & Supply:</u> Other outside Bangladesh Other in Bangladesh | | F6-2 F6-3 | 265,276.90 399,098.82 | 6,897,199 9,982,651 |
| | Sub-Total | | 664,375.72 | 16,879,850 |
| Total | | | 6,603,935.01 | 165,885,512 |

PART G to L

Part G to L are not more represented in this Report.

These parts in view of costs are identical with the tables of Part F. The only difference is that Part G to L show the actual costs by payments (per dates and by accounts) and Part F show the actual costs by subject area and a summary of costs per test structure.

820

M

OVERALL COSTS OF THE PROJECT

M OVERALL COSTS OF THE PROJECT

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

The table M-1 follows in principally the scheme of the TAPP (GoB document).

Items 1 to 11 deal with the Consultancy Services and items 12 to 24 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.

Table M-2 deals with the "Financial Situation" of the project as per 31. of December, 2000, showing The actual available funds, the realised expenditures and the remaining funds for the additional project part "Remaining Services in 2001"

Table M-1

CONSULTANCY SERVICE FOR FAP 21/22

OVERALL COSTS OF THE PROJECT PHASE II (DM)

up to 31.12.00

| No. | Item | FAP 21 | Revision 3 (agreed schedule) up to 12/2000 | | FAP 22 | Total | FAP 21 | FAP 22 | Total |
|-----|----------------------|-------------|---|-------------|------------|-------------|------------|-------------|-------|
| | | Realisation | | Realisation | | Realisation | | Realisation | |
| 1 | Expatriates | 8,746,383 | 547,444 | 9,293,827 | 8,563,347 | 1,270,085 | 9,833,432 | | |
| 2 | Local Exp. | 1,805,441 | 20,000 | 1,825,441 | 1,778,069 | 210,159 | 1,988,228 | | |
| 3 | Unallocated | | 1,200,000 | 1,200,000 | | | - | | |
| 4 | Other | 6,056,198 | 112,647 | 6,168,845 | 5,926,039 | 235,719 | 6,161,758 | | |
| 5 | Escalation | | 43,321 | 43,321 | 2,467,942 | 287,264 | 2,755,206 | | |
| 6 | Conting. Phy. | - | - | - | | | - | | |
| 7 | Conting. Fin. | 2,340,880 | - | 2,340,880 | | | - | | |
| 8 | Conting. Gen. | | 76,588 | 76,588 | | | - | | |
| 9 | Sub. Total 1 | 18,948,902 | 2,000,000 | 20,948,902 | 18,735,397 | 2,003,227 | 20,738,624 | | |
| 10 | Workshop | 150,000 | | 150,000 | | | | | |
| 11 | Sub. Total 2 | 19,098,902 | 2,000,000 | 21,098,902 | 18,735,397 | 2,003,227 | 20,738,624 | | |
| 12 | Works S.I | 11,044,260 | | 11,044,260 | 11,791,364 | | 11,791,364 | | |
| 13 | Works S. II | 15,006,500 | | 15,006,500 | 15,085,687 | | 15,085,687 | | |
| 14 | Works S. III | 7,206,414 | | 7,206,414 | 6,603,935 | | 6,603,935 | | |
| 15 | Works S I+II+III | 33,257,174 | - | 33,257,174 | 33,480,986 | | 33,480,986 | | |
| 16 | Adaptation I | 6,300,000 | | 6,300,000 | 6,075,455 | - | 6,075,455 | | |
| 17 | Adaptation II | 661,000 | | 661,000 | 757,297 | - | 757,297 | | |
| 18 | Adaptation I+II | 6,961,000 | - | 6,961,000 | 6,832,752 | - | 6,832,752 | | |
| 19 | Maintenance I+II | 275,000 | | 275,000 | | | | | |
| 20 | Total Works I+II+III | 40,493,174 | | 40,493,174 | 40,313,738 | | 40,313,738 | | |
| 21 | Works (F22) | | 1,000,000 | 1,000,000 | | 909,889 | 909,889 | | |
| 22 | Total Works F21/22 | | | | | | 41,223,627 | | |
| 23 | Subtotal 3 | 59,592,076 | 3,000,000 | 62,592,076 | 59,049,135 | 2,913,116 | 61,962,251 | | |
| 24 | Unallocated | 407,924 | - | 407,924 | | | - | | |
| 25 | Total | 60,000,000 | 3,000,000 | 63,000,000 | 59,049,135 | 2,913,116 | 61,962,251 | | |

26

Table M-2

CONSULTANCY SERVICE FOR FAP 21/22

Financial Situation

| | | up to 31.12.00 |
|--|----------------------------------|-------------------|
| | | DM |
| Expenditure for realized works : | | |
| FAP 21, Test Sites I & II & III | | 40,313,738 |
| FAP 22, Bandaling & Floating Screens | | 909,889 |
| | Total Works | 41,223,627 |
| Remaining Works (estimate): | | |
| Monitoring and Maintenance for Test Site II & III: | | - |
| Works & Supply for Test Site III: | | - |
| Total Remaining Works, estimate | | - |
| Works FAP21 & FAP22 | | 41,223,627 |
| Budget | | 41,990,037 |
| Expenditure for realized Consultant Services : | | |
| FAP 21 | | 18,735,397 |
| FAP 22 | | 2,003,227 |
| | Total Consultant Services | 20,738,624 |
| Remaining Consultant Services (estimate) | | |
| FAP 21 | | |
| FAP 22 | | |
| Workshop (provision shifted to "Remaining Services in 2001") | | |
| Total Remaining Consultant Services, estimate | | - |
| Consultancy | | 20,738,624 |
| Budget | | 21,098,902 |
| Total | | 61,962,251 |
| Remaining Over All Contingencies | | 1,117,749 |
| Total Budget | | 63,080,000 |

