

**FAP24**

Government of  
the People's  
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Bangladesh

Water Resources  
Planning  
Organization

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Commission

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Hydraulics



4  
37  
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Hydroland  
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Osiris

Call - 938  
FAP-24  
(72)

# RIVER SURVEY PROJECT

BN-787  
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## Special Report No.22

River Data Book  
January 1993 - March 1995

Part B.5: Baruria

October 1996

**Special Report 22**  
**River Data Book**  
**January 1993 - March 1995**

**Part B.5: Baruria**

**June 1996**





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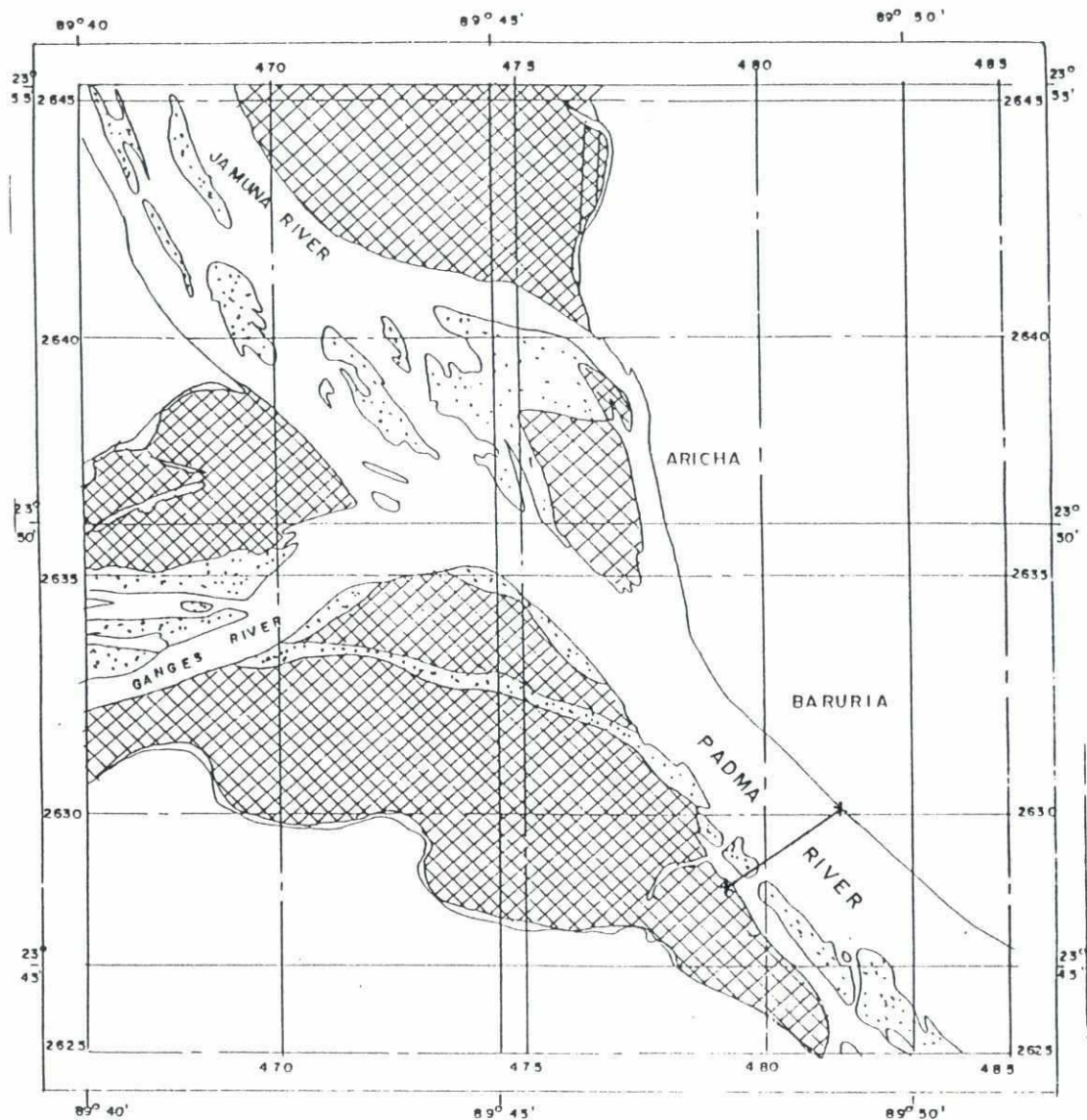
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**LEGEND:-**

- X—X Measurement Cross Section
- High land
- Unstable/Low land
- BWDB Embankment



5000m 2500m 0

Map is based on satellite image of March 1993



**RIVER SURVEY PROJECT**

Delft Hydraulics/Danish Hydraulic Institute  
in association with Oskiris/Approtech/Hydroland

**Survey Bulletin No. 9 - Aug, 1993**

**Location No.5 : Padma River at Baruria**

**File:**

**Date:**

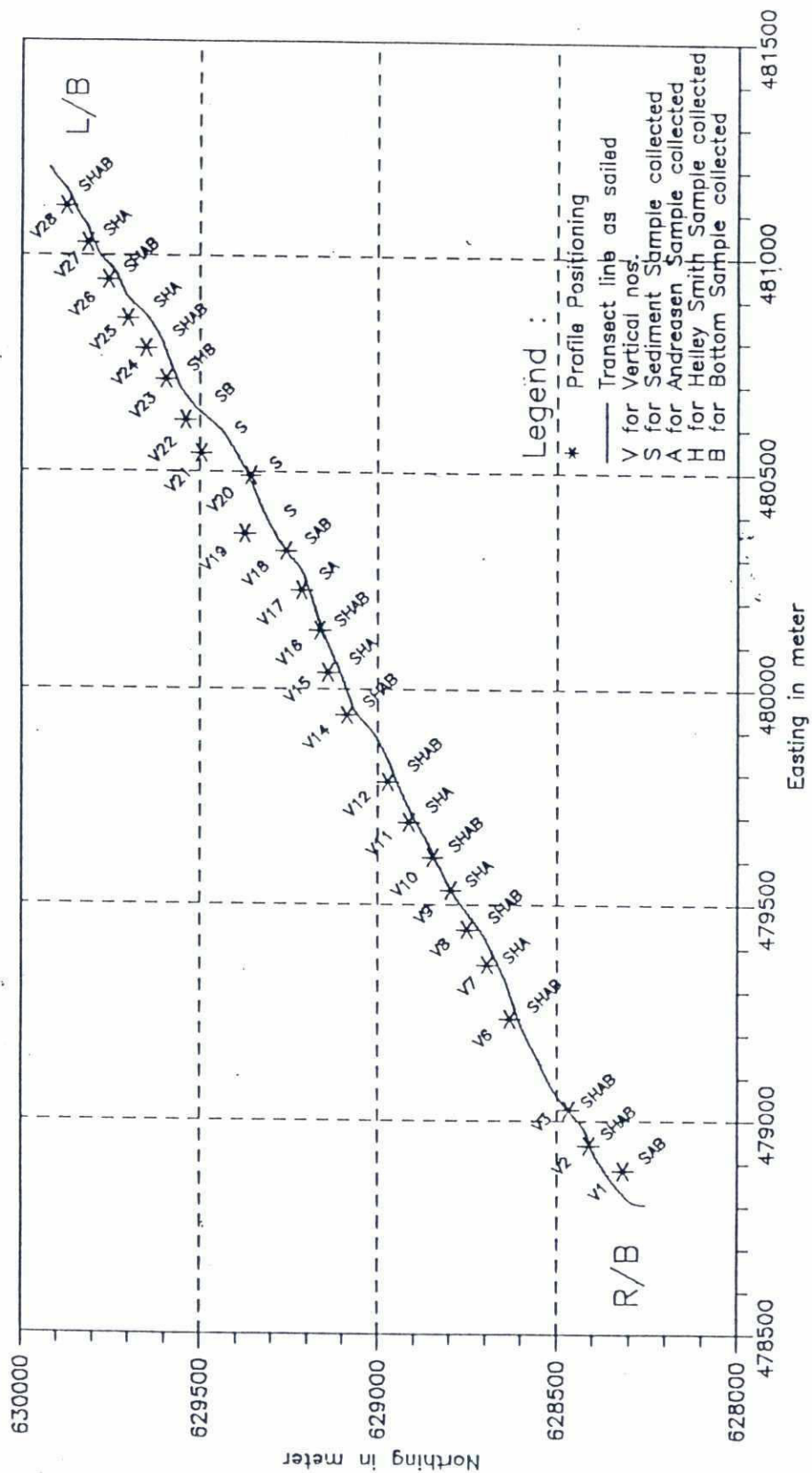
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**KEY PLAN**

**Fig.**

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FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 09 : August 1993

Location 5 : Padma River , Baruria

Date :

Init :

Location of Measurements



River : Padma  
ADCP/EMF Discharge

Date of Survey : 03-08 August 1993  
Location : Padma River at Baruria  
Station No. 5

Date	Transect	Bank		Water Level	Total Width	Area	Discharge
		From	To	(m+PWD)	(m)	(sq.m)	(cumec)
04/08/93	U3841T01	Right	Left	7.35	2960	28565	52654
05/08/93	U3851T01	Left	Right	7.30	2949	27366	50310
05/08/93	U3851T02	Right	Left	7.30	2963	27934	50606
06/08/93	U3861T01	Left	Right	7.29	2963	27731	51027
06/08/93	U3861T02	Right	Left	7.29	2946	28252	54604
07/08/93	U3871T01	Left	Right	7.35	2792	26577	51712
07/08/93	U3871T02	Left	Right	7.35	2967	28522	57135
08/08/93	U3881T06	Left	Right	7.44	2968	27931	56876

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)

River : Padma  
S4 velocity

Date of survey : 03-08 August 1993

Location : Padma River at Baruria

Station No. 5

Vertical 1	
Total depth = 11.50	
Depth	Velocity
[m]	[m/s]
0.53	0.33
2.40	0.44
4.50	0.58
6.79	0.33
9.03	0.45
11.31	0.40

Vertical 2	
Total depth = 6.60	
Depth	Velocity
[m]	[m/s]
0.52	0.49
2.51	0.72
3.68	0.74
4.86	0.94

Vertical 3	
Total depth = 6.80	
Depth	Velocity
[m]	[m/s]
0.60	1.17
1.29	0.86
2.55	0.97
3.96	1.11
5.26	0.95

Vertical 4	
Total depth = 6.60	
Depth	Velocity
[m]	[m/s]
0.48	0.26
1.05	0.74
2.14	0.79
3.09	0.65
4.12	0.58

Vertical 6	
Total depth = 5.25	
Depth	Velocity
[m]	[m/s]
0.50	0.74
0.98	0.72
2.56	0.89
3.33	0.83

Vertical 7	
Total depth = 3.95	
Depth	Velocity
[m]	[m/s]
0.50	1.15
2.33	1.37
3.02	1.30

Vertical 8	
Total depth = 4.80	
Depth	Velocity
[m]	[m/s]
0.50	1.16
2.90	1.55
3.81	1.43

Vertical 9	
Total depth = 5.50	
Depth	Velocity
[m]	[m/s]
0.50	1.47
1.20	1.63
2.20	1.82
3.25	1.72
4.31	1.60
4.96	1.41

Vertical 10	
Total depth = 6.20	
Depth	Velocity
[m]	[m/s]
0.50	0.54
2.42	1.94
3.55	1.76
4.83	1.60
5.52	1.51

Vertical 11	
Total depth = 6.70	
Depth	Velocity
[m]	[m/s]
0.50	1.78
2.64	2.07
3.84	1.95
5.09	1.80
5.97	1.64

Vertical 12	
Total depth = 6.80	
Depth	Velocity
[m]	[m/s]
0.50	1.91
2.57	2.25
4.04	2.23
5.30	2.06
6.22	1.80

Vertical 14	
Total depth = 8.70	
Depth	Velocity
[m]	[m/s]
0.50	1.96
1.70	2.52
3.24	2.33
5.03	2.34
6.65	2.10
7.88	1.78

Vertical 15	
Total depth = 9.70	
Depth	Velocity
[m]	[m/s]
0.50	2.19
1.91	2.44
3.77	2.36
5.66	2.28
7.44	2.11
9.24	1.80

Qw = 59,305 (m<sup>3</sup>/s)

Table : 3.2 SUMMARY OF RESULTS (S4 Currents)



River : Padma  
S4 velocity

Date of survey : 03-08 August 1993

Location : Padma River at Baruria

Station No. 5

Vertical 16	
Total depth = 11.70	
Depth	Velocity
[m]	[m/s]
0.50	1.29
2.31	2.77
4.60	2.52
7.05	2.38
9.18	2.17
11.47	1.72

Vertical 17	
Total depth = 13.80	
Depth	Velocity
[m]	[m/s]
0.50	2.65
6.40	2.44
9.01	2.36
2.81	2.70
5.51	2.65
8.12	2.63
10.84	2.42
13.28	1.86

Vertical 18	
Total depth = 14.20	
Depth	Velocity
[m]	[m/s]
0.50	2.94
2.83	3.08
5.55	2.88
8.62	2.88
11.55	2.49
13.75	1.90

Vertical 19	
Total depth = 15.50	
Depth	Velocity
[m]	[m/s]
0.50	3.06
3.07	3.29
6.22	3.20
9.96	2.92
11.82	2.75
15.02	2.05

Vertical 20	
Total depth = 14.90	
Depth	Velocity
[m]	[m/s]
0.50	3.26
3.42	3.52
5.45	3.17
9.08	2.93
11.21	2.66
13.81	2.32
12.78	2.69

Vertical 21	
Total depth = 15.00	
Depth	Velocity
[m]	[m/s]
0.50	3.10
2.99	3.39
6.18	3.23
8.77	3.24
12.19	2.90

Vertical 22	
Total depth = 13.80	
Depth	Velocity
[m]	[m/s]
0.50	2.99
2.89	3.11
5.57	3.07
7.85	3.01
10.57	2.76

Vertical 23	
Total depth = 12.10	
Depth	Velocity
[m]	[m/s]
0.50	2.40
2.36	2.74
5.16	2.39
7.19	2.46
10.02	2.19
12.75	1.44

Vertical 24	
Total depth = 11.40	
Depth	Velocity
[m]	[m/s]
0.50	1.98
2.20	2.26
4.78	2.10
6.77	2.05
9.20	1.84
11.00	1.40

Vertical 25	
Total depth = 10.70	
Depth	Velocity
[m]	[m/s]
0.50	1.74
2.00	2.24
4.28	2.22
6.42	1.94
8.65	1.86
10.05	1.54

Vertical 26	
Total depth = 10.80	
Depth	Velocity
[m]	[m/s]
2.17	2.31
4.23	2.27
6.58	2.21
8.58	1.99

Vertical 27	
Total depth = 11.25	
Depth	Velocity
[m]	[m/s]
0.50	1.96
2.16	2.46
4.60	2.34
6.64	2.36
8.99	2.02
10.25	1.79

Vertical 28	
Total depth = 10.90	
Depth	Velocity
[m]	[m/s]
0.50	1.46
2.26	1.83
4.24	1.74
6.49	1.83
8.67	1.68
10.13	1.51

Qw = 59,305 (m³/s)

Table 3.3 SUMMARY OF RESULTS ( S4 Current )

River : Padma  
Concentration

Date of survey : 03-08 August 1993

Location : Padma River at Baruria

Station No. 5

Vertical 1	
Total depth = 11.50	
Depth	Con.
[m]	[mg/l]
0.53	1383.61
2.40	570.42
4.50	560.27
6.79	814.81
9.03	638.52
11.31	919.18

Vertical 2	
Total depth = 6.60	
Depth	Con.
[m]	[mg/l]
0.52	511.11
2.51	554.05
3.68	641.18
4.86	763.16

Vertical 3	
Total depth = 6.80	
Depth	Con.
[m]	[mg/l]
0.60	634.57
1.29	636.62
2.55	807.19
3.96	826.57
5.26	1083.02

Vertical 4	
Total depth = 6.60	
Depth	Con.
[m]	[mg/l]
0.48	679.72
1.05	813.85
2.14	795.83
3.09	1137.93
4.12	1030.89

Vertical 6	
Total depth = 5.25	
Depth	Con.
[m]	[mg/l]
0.98	797.32
2.56	926.56
3.33	971.21

Vertical 7	
Total depth = 3.95	
Depth	Con.
[m]	[mg/l]
0.50	717.29
2.33	967.46
3.02	1043.17

Vertical 8	
Total depth = 4.80	
Depth	Con.
[m]	[mg/l]
0.50	649.65
2.90	968.35
3.81	1120.96

Vertical 9	
Total depth = 5.50	
Depth	Con.
[m]	[mg/l]
0.50	709.49
1.20	696.35
2.20	988.15
3.25	940.85
4.31	1027.50
4.96	1247.77

Vertical 10	
Total depth = 6.20	
Depth	Con.
[m]	[mg/l]
0.50	783.70
2.42	894.52
3.55	946.75
4.83	1102.48
5.52	1347.76

Vertical 11	
Total depth = 6.70	
Depth	Con.
[m]	[mg/l]
0.50	889.55
2.64	878.87
3.84	988.71
5.09	1050.00
5.97	1148.09

Vertical 12	
Total depth = 6.80	
Depth	Con.
[m]	[mg/l]
0.50	818.63
2.57	961.97
4.04	992.11
5.30	1112.57
6.22	1301.30

Vertical 14	
Total depth = 8.70	
Depth	Con.
[m]	[mg/l]
0.50	850.36
1.70	890.70
3.24	896.15
5.03	932.86
6.65	1067.13
7.88	2303.33

Vertical 15	
Total depth = 9.70	
Depth	Con.
[m]	[mg/l]
0.50	813.53
1.91	770.54
3.77	856.00
5.66	906.06
7.44	941.25
9.24	1573.17

Ss = 56392 (Kg/s)

Table 3.4 SUMMARY OF RESULTS ( Suspended Sediment Concentration )



River : Padma  
Concentration

Date of survey : 03-08 August 1993

Location : Padma River at Baruria

Station No. 5

Vertical 16		Vertical 17		Vertical 18		Vertical 19	
Total depth = 11.70		Total depth = 13.80		Total depth = 14.20		Total depth = 15.50	
Depth	Con.	Depth	Con.	Depth	Con.	Depth	Con.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	566.91	0.50	564.49	0.50	523.08	0.50	560.26
2.31	698.57	2.81	744.30	2.83	740.00	3.07	916.08
4.60	846.38	5.51	913.70	5.55	961.84	6.22	1164.14
7.05	1011.11	8.12	1011.58	8.62	1207.74	9.96	1362.69
9.18	1122.37	10.84	1170.59	11.55	1583.56	11.82	1321.79
11.47	1520.00	13.28	4293.42	13.75	5114.47		

Vertical 20		Vertical 21		Vertical 22		Vertical 23	
Total depth = 14.90		Total depth = 15.00		Total depth = 13.80		Total depth = 12.10	
Depth	Con.	Depth	Con.	Depth	Con.	Depth	Con.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	678.58	0.50	787.32	0.50	684.15	0.50	587.80
3.42	607.50	2.99	588.31	2.89	637.91	2.36	481.48
5.45	742.67	6.18	749.41	5.57	740.00	5.16	564.03
9.08	1297.93	8.77	796.15	7.85	911.27	7.19	1178.08
11.21	1154.17	12.19	960.58	10.87	1219.13	10.02	1176.64
13.81	1245.51					12.75	3748.57

Vertical 24		Vertical 25		Vertical 26		Vertical 27	
Total depth = 11.40		Total depth = 10.70		Total depth = 10.80		Total depth = 11.25	
Depth	Con.	Depth	Con.	Depth	Con.	Depth	Con.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	511.11	0.50	609.15	2.17	586.08	0.50	265.48
2.20	640.30	2.00	581.50	4.23	793.63	2.16	380.28
4.78	554.05	4.28	661.54	6.58	909.88	4.60	611.83
6.77	554.05	6.42	952.87	8.58	920.00	6.64	742.03
11.00	1573.08	8.65	1081.36			8.99	1396.08
		10.05	1543.62			10.25	1937.66

Vertical 28	
Total depth = 10.90	
Depth	Con.
[m]	[mg/l]
0.50	363.53
2.26	492.22
4.24	679.14
6.49	889.29
8.67	1353.10
10.13	2002.67

Ss = 56392 (Kg/s)

Table 3.5 SUMMARY OF RESULTS ( Suspended Sediment Concentration )

River : Padma

Bed load

Date of Survey : 03-08 August 1993

Location : Padma River at Baruria

Station No. 5

Helley-Smith samples		
	Bed load sb in Kg/ms	
Vertical no.	1	2
2	0.031996	0.038816
3	0.001075	0.036556
4	0.129440	0.156853
6	0.000658	0.000582
7	0.000932	0.004496
8	0.075380	0.044790
9	0.061952	0.072094
10	0.086180	0.136623
11	0.008618	0.083991
12	0.199890	0.175548
12A	0.285307	0.165350
14	0.157675	0.243420
15	0.168640	0.187609
16	0.215240	0.108553
23	0.057565	0.005855
24	0.062938	0.031250
25	0.015088	0.050548
26	0.079715	0.051206
27	0.080921	0.039912
28	0.453940	0.055044

Table 3.6 Summary of results (Sediment transport, bed load)

River : Padma  
Grain size bed material

Date of Survey : 03-07 August 1993  
Location : Padma River at Baruria  
Station No. 5

Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHC-1	03/08/93	13:28	0.080	0.118	0.144	0.228	1.628
DHC-1	05/08/93	09:48	0.068	0.077	0.087	0.137	1.342
DHA-2	05/08/93	12:05	0.078	0.098	0.119	0.216	1.611
DHA-3	05/08/93	16:00	0.080	0.106	0.132	0.220	1.608
DHA-1	06/08/93	10:34	0.134	0.148	0.167	0.229	1.316
DHA-1	07/08/93	09:49	0.125	0.144	0.163	0.233	1.396
DHA-2	07/08/93	13:03	0.100	0.139	0.160	0.236	1.484
DHA-3	07/08/93	16:09	0.096	0.138	0.159	0.238	1.517
DHA-2	04/08/93	14:40	0.097	0.138	0.160	0.241	1.518
DHA-1	04/08/93	10:37	0.076	0.103	0.131	0.226	1.648
DHA-1	03/08/93	12:45	0.059	0.074	0.085	0.121	

Table 3.7 SUMMARY OF RESULTS (Grain size bed material)



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River : Padma

Grain size of Suspended sediment

Date of Survey : 03-07 August 1993

Location : Padma River at Baruria

Station No. 5

Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
20	03/08/93	13:28	0.004	0.010	0.017	0.045	3.301
22	03/08/93	15:22	0.004	0.080	0.015	0.040	3.309
23	03/08/93	16:42	0.003	0.008	0.013	0.035	3.321
502	05/08/93	09:48	--	0.008	0.015	0.045	--
501	05/08/93	11:00	--	0.009	0.016	0.041	--
2000	05/08/93	12:08	0.012	0.025	0.035	0.055	3.158
31(B)	05/08/93	13:14	0.010	0.025	0.033	0.060	2.345
2003	05/08/93	14:50	0.008	0.019	0.025	0.045	2.467
2001	05/08/93	16:00	0.007	0.016	0.025	0.045	2.763
2002	06/08/93	10:34	0.013	0.025	0.035	0.052	1.989
2004	07/08/93	09:49	0.006	0.015	0.024	0.046	2.875
2005	07/08/93	11:21	0.008	0.017	0.025	0.046	2.527
2007	07/08/93	13:02	0.009	0.020	0.027	0.060	2.518
2009	07/08/93	14:29	0.006	0.016	0.015	0.050	2.717
2011	07/08/93	16:09	0.013	0.025	0.035	0.065	2.203
31(A)	03/08/93	18:07	0.018	0.035	0.042	0.070	2.024
30	03/08/93	16:05	0.017	0.035	0.045	0.065	2.001
28	03/08/93	14:35	0.006	0.018	0.027	0.057	3.176
26	03/08/93	12:42	0.008	0.025	0.035	0.049	2.830

Table 3.8 SUMMARY OF RESULTS (grain size of suspended sediment)

River : Padma

Grain size of bed load

Date of Survey : 03-07 August 1993

Location : Padma River at Baruria

Station No. 5

Sample No	Date	Time	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
1	03/08/93	15:22	0.156	0.176	0.198	1.310
2	03/08/93	15:29	0.152	0.172	0.196	1.335
3	03/08/93	16:38	0.215	0.270	0.327	1.643
4	03/08/93	16:42	0.146	0.166	0.190	1.393
70	03/08/93	18:05	0.138	0.160	0.184	1.515
111	03/08/93	18:15	0.135	0.156	0.181	1.556
138	05/08/93	09:48	0.235	0.289	0.344	1.739
139	05/08/93	09:56	0.247	0.294	0.347	1.666
141	05/08/93	11:00	0.239	0.291	0.345	1.734
142	05/08/93	11:05	0.095	0.116	0.156	1.820
144	05/08/93	12:08	0.090	0.107	0.129	1.635
145	05/08/93	12:18	0.092	0.111	0.137	1.646
106	05/08/93	13:14	0.100	0.123	0.156	1.656
107	05/08/93	13:20	0.096	0.117	0.149	1.656
63	05/08/93	14:56	0.099	0.121	0.152	1.639
100	05/08/93	14:50	0.105	0.132	0.161	1.634
500	05/08/93	16:05	0.107	0.135	0.166	1.677
501	05/08/93	16:00	0.114	0.143	0.175	1.684
503	06/08/93	10:42	0.143	0.164	0.187	1.419
504	06/08/93	10:35	0.145	0.166	0.189	1.387
5	06/08/93	16:05	0.144	0.166	0.192	1.486
61	06/08/93	16:10	0.143	0.164	0.188	1.436
601	07/08/93	09:49	0.147	0.167	0.190	1.344
602	07/08/93	09:55	0.149	0.169	0.191	1.325
603	07/08/93	11:25	0.148	0.169	0.194	1.376
604	07/08/93	11:21	0.149	0.169	0.192	1.331
606	07/08/93	13:03	0.148	0.169	0.193	1.365
607	07/08/93	13:10	0.148	0.170	0.195	1.376
136	04/08/93	13:05	0.141	0.163	0.189	1.511
137	04/08/93	13:10	0.298	0.338	0.384	1.333
112	04/08/93	10:37	0.106	0.134	0.164	1.676
127	04/08/93	10:45	0.090	0.113	0.147	1.781
109	03/08/93	18:08	0.120	0.152	0.190	1.795
128	03/08/93	18:15	0.087	0.108	0.136	1.741
99	03/08/93	16:05	0.083	0.100	0.122	1.794
113	03/08/93	16:10	0.082	0.101	0.123	1.789
66	03/08/93	14:36	0.078	0.092	0.108	1.562
130	03/08/93	14:40	0.081	0.097	0.116	1.674
103	03/08/93	12:45	0.081	0.098	0.118	1.720
105	03/08/93	12:48	0.079	0.093	0.109	1.565

Table 3.9 SUMMARY OF RESULTS (grain size bed load)



23

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Profile	12:44:20	13:31:29	U3831P01	28	481113	629876	P	P	P	P	P	6	1	2	1	1
Profile	14:35:22	15:21:40	U3831P02	27	481028	629814	P	P	P	P	P	6	1	2		
Profile	16:03:52	17:08:52	U3831P04	26	480943	629756	P	P	P	P	P	6	1	2	1	1
Profile	18:07:21	18:42:42	U3831P05	25	480853	629702	P	P	P	P	P	6	1	2		
Profile	13:34:47	14:19:09	U3832P01	1	478884	628317		P		P		6	1			1
Profile	15:19:12	15:40:29	U3832P04	2	478943	628411		P		P		5	1	2		1
Profile	16:40:29	17:15:15	U3832P05	3	479027	628467		P		P		5	1	2		1
Profile	18:08:50	18:33:12	U3832P06	4	479068	628527		P		P		5		2		

Date of Survey : 03 August 1993  
Location : Padma River at Baruria

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	09:30:40	09:52:15	U3841T01*				T	T	T							
Profile	10:37:09	12:09:28	U3841P01	24	480781	629651	P	P	P	P	P	6	1	2	1	1
Profile	13:04:37	15:00:05	U3841P02	23	480710	629595	P	P	P	P	P	6		2		
Profile	15:03:03	15:36:37	U3841P03	22	480617	629540	P	P	P	P	P	5				1

\* transect in PSD 24 data base

Date of Survey : 04 August 1993  
Location : Padma River at Baruria  
Station No. 5

Table 2.1 SURVEY PROGRAMME AS MADE



Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	08:29:04	08:53:57	U3851T01				T	T	T							
Transect	16:59:24	17:24:32	U3851T02				T	T	T							
Profile	09:48:13	10:12:07	U3851P01	6	479239	628632	P	P	P	P	P	3	1	2	1	1
Profile	10:59:06	11:23:05	U3851P02	7	479364	628696	P	P	P	P	P	3	1	2		
Profile	12:04:32	12:27:13	U3851P03	8	479444	628751	P	P	P	P	P	3	1	2	1	1
Profile	13:14:09	14:09:47	U3851P04	9	479535	628797	P	P	P	P	P	6	1	2		
Profile	14:50:39	15:25:29	U3851P05	10	479609	628848	P	P	P	P	P	6	1	2	1	1
Profile	15:59:21	16:39:34	U3851P06	11	479690	628915	P	P	P	P	P	6	1	2		

Date of Survey : 05 August 1993  
Location : Padma River at Baruria

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	08:03:16	08:29:09	U3861T01				T	T	T							
Transect	17:23:16	17:47:14	U3861T02				T	T	T							
Profile	10:33:59	11:28:44	U3861P01	12	479784	628973	P	P	P	P	P	6	1	2	1	1

Date of Survey : 06 August 1993  
Location : Padma River at Baruria  
Station No. 5

Table 2.2 SURVEY PROGRAMME AS MADE

28

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	07:42:24	08:04:12	U3871T01				T	T	T							
Transect	17:13:51	17:36:55	U3871T02				T	T	T							
Profile	09:49:29	10:43:14	U3871P01	14	479940	629089	P	P	P	P	P	6	1	2	1	1
Profile	11:20:39	12:02:18	U3871P02	15	480038	629142	P	P	P	P	P	6	1	2		
Profile	13:02:52	13:54:23	U3871P03	16	480134	629164	P	P	P	P	P	6	1	2	1	1
Profile	14:29:35	15:22:32	U3871P04	17	480226	629215	P	P	P	P	P	6	1			
Profile	16:09:22	16:52:27	U3871P05	18	480316	629259	P	P	P	P	P	6	1		1	1

Date of Survey : 07 August 1993  
Location : Padma River at Baruria

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	08:57:55	09:22:02	U3881T06				T	T	T							
Profile	10:28:43	11:17:16	U3881P01	19	480356	629375	P	P	P	P	P	5				
Profile	11:46:24	12:35:18	U3881P02	20	480490	629357	P	P	P	P	P	6				
Profile	13:40:17	14:18:24	U3881P03	21	480542	629496	P	P	P	P	P	5				

Date of Survey : 08 August 1993  
Location : Padma River at Baruria  
Station No. 5

Table 2.3 SURVEY PROGRAMME AS MADE



Type Of Samples	Sample Nos.	Total No.	Vertical No.
Point Integrated Samples	03,64,1204,1207,1200,1201	6	1
	1202,1203,1205,1206,1199	5	2
	1198,197,1196,1195,1195	5	3
	1193,16,68,153,154,	5	4
	8000,8001,8002,8003,8004,	5	5
	55,119,147,	3	6
	171,175,181,	3	7
	508,514,519	3	8
	531,521,533,522,540,529	6	9
	173,188,124,501,59,187	6	10
	158,97,123,527,159,541	6	11
	523,169,163,127,542,504	6	12
	517,304,302,310,303,	5	12A
	311,309,312,316,317,314,	6	14
	318,332,301,319,315,330	6	15
	329,306,326,323,322,324	6	16
	321,305,308,320,328,331	6	17
	325,313,307,333,334,335	6	18
	350,351,349,338,347	5	19
	344,345,348,352,353,354	6	20
	355,356,341,337,343	5	21
	1214,1215,1216,15,17	5	22
	1208,1209,1210,1211,1212,1213	6	23
	1202,1203,1204,1205,1206,1207	6	24
	1196,1197,1198,1199,1200,1201	6	25
	1185,1186,1187,1193,1194,1195	6	26
	1179,1180,1181,1182,1183,1184	6	27
	1188,1189,1190,1191,1192,1178	6	28
Depth Integrated Samples	140	1	6
	143	1	8
	5	1	10
	67	1	12
	600	1	14
	605	1	16
	609	1	18
	135	1	24
	6	1	26
Andreasen Tube Sample	101	1	28
	20	1	1
	22	1	2
	23	1	3
	502	1	6
	501	1	7
	2000	1	8
	31(B)	1	9
	1203	1	10
	2001	1	11
	2002	1	12
	2004	1	14
	2005	1	15
	2007	1	16
	2009	1	17
	2011	1	18
	31(A)	1	25
	30	1	26
	28	1	27
	26	1	28

Date of Survey : 03-08 August 1993  
Location : Padma River at Baruria  
Station No. 5

Table : 2.4 List of Sediment Samples



Type Of Samples	Sample	Total	Vertical
	Nos.	No.	No.
Helley-Smith Samples	01,02	2	2
	03,04	2	3
	70,111	2	4
	138,139	2	6
	141,142	2	7
	144,145	2	8
	106,107	2	9
	100,63	2	10
	500,501	2	11
	503,504	2	12
	61,05	2	12A
	601,602	2	14
	603,604	2	15
	606,607	2	16
	136,137	2	23
	112,127	2	24
	128,109	2	25
	99,113	2	26
	130,66	2	27
	103,105	2	28
Vanveen Samples	DHC-1	1	1
	DHC-2	1	5
	DHA-1	1	6
	DHA-2	1	8
	DHA-3	1	10
	DHA-1	1	12
	DHA-1	1	14
	DHA-2	1	16
	DHA-3	1	18
	DHA-2	1	22
	DHA-1	1	24
	DHA-2	1	26
	DHA-1	1	28

Date of Survey : 03-08 August 1993

Location : Padma River at Baruria

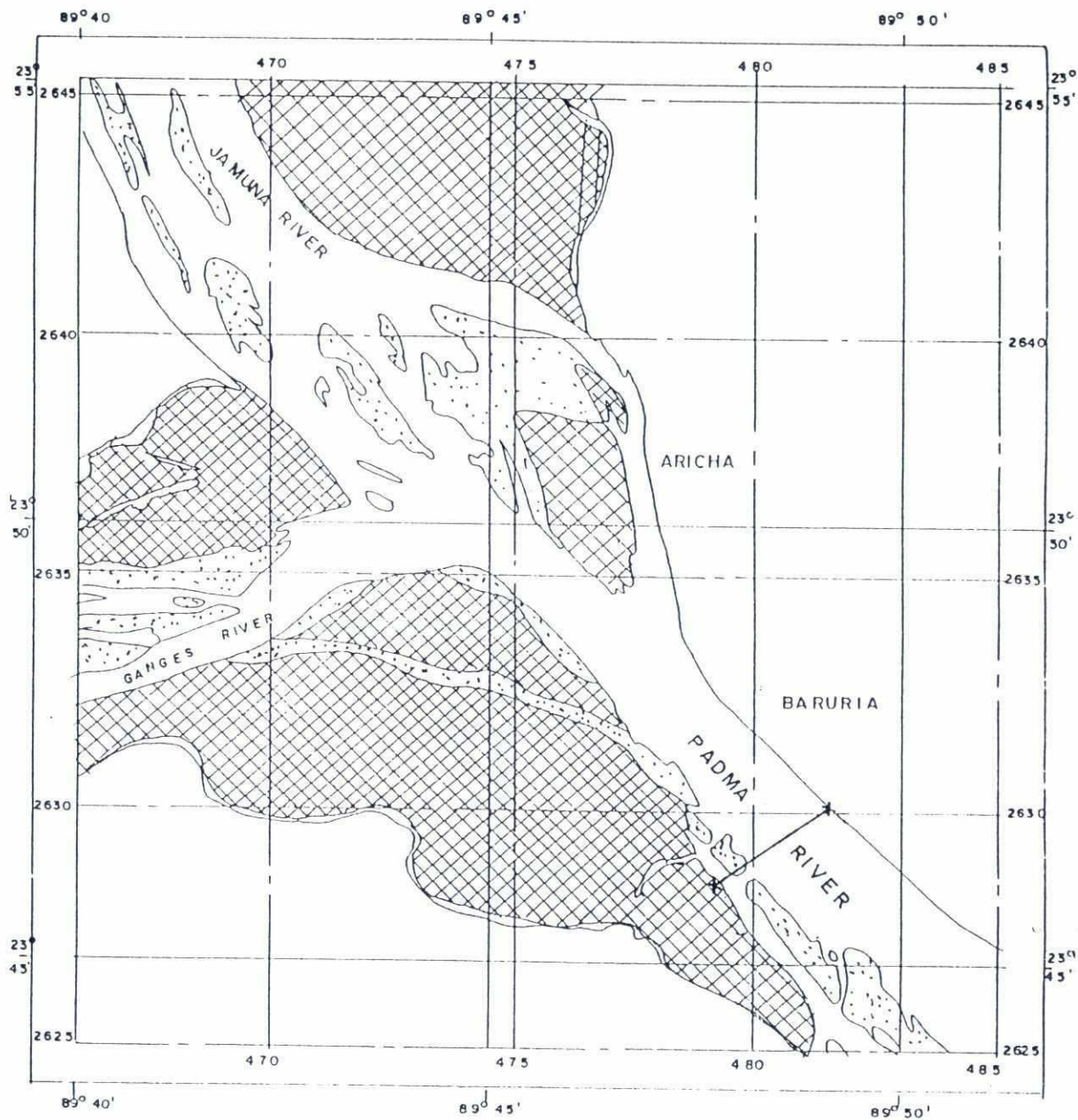
Station No. 5

Table : 2.5 List of Sediment Samples

Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U3841T01 .ase
Echosounder	1	QUATTRO	U3841T01 .ech
Sediment transport data	1	QUATTRO	U3841T01 .sed
Bed load sediment analysis	1	QUATTRO	U3841T01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U3841T01 .ssc
Transect plot data	1	QUATTRO	U3841T01 .trs
Iso-velocity plot data	1	MIKE 21	U3841T01 .ct2 U3841T01 .dt2

Table 5.1 PSD 24 Database file description

22



LEGEND:—

- X—X Measurement Cross Section
- High land
- Unstable/Low land
- BWDB Embankment



5000m 2500m 0

Map is based on satellite  
image of March 1993



RIVER SURVEY PROJECT

Delft Hydraulics/Danish Hydraulic Institute  
in association with Osiris/Approtech/Hydroland

Survey Bulletin No. 14 - Sep, 1993

Location No.5 : Padma River at Baruria

File:

Date:

Scale:

Init:

KEY PLAN

Fig.



Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To														
Transect	14:08:31	14:37:26	U39J1T01*				ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples

\* transect in PSD 24 data base

Date of Survey : 19 September 1993  
 Location : Padma River at Baruria  
 Station No. 5

Tabel 2.1 SURVEY PROGRAMME AS MADE

29

River : Padma  
ADCP/EMF Discharge

Date of Survey : 19 September 1993  
Location : Padma River at Baruria  
Station No. 5

Date	Transect	Bank		Water-level (m+PWD)	Width (m)	Area (sq.m)	Discharge (cumec)
		From	To				
19-09-93	U39J1T01	Left	Right	7.73	3138	30426	68288

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-Discharge)

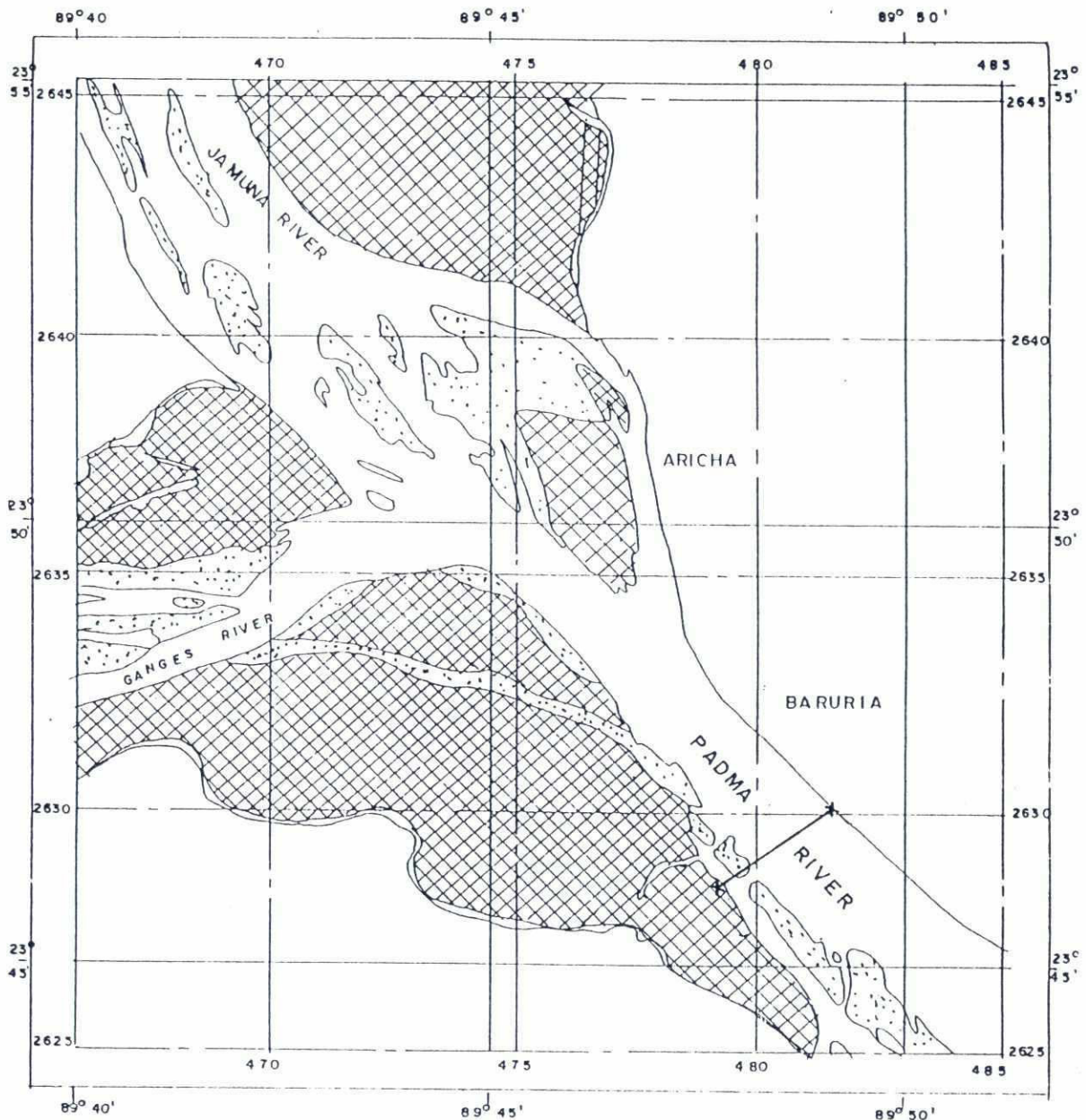
27

Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U39J1T01 .ase
Echosounder	1	QUATTRO	U39J1T01 .ech
Sediment transport data	1	QUATTRO	U39J1T01 .sed
Bed load sediment analysis	1	QUATTRO	U39J1T01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U39J1T01 .ssc
Transect plot data	1	QUATTRO	U39J1T01 .trs
Iso-velocity plot data	1	MIKE 21	U39J1T01 .ct2 U39J1T01 .dt2

Table 5.1 PSD 24 Database file description



27




LEGEND:-

- ✕—✕ Measurement Cross Section
- High land
- Unstable/Low land
- BWDB Embankment



5000m 2500m 0

Map is based on satellite  
image of March 1993

FAP 24 RIVER SURVEY PROJECT  
 Delft Hydraulics/Danish Hydraulic Institute  
 in association with Osiris/Approtech/Hydroland

Survey Bulletin No. 17 - Oct. , 1993

Location No.5 : Padma River at Baruria

File:

Date:

Scale:

Init:

KEY PLAN

Fig.

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To														
Transect	14:14:25	14:43:33	U3A11T04*													
Transect	14:48:57	15:16:45	U3A11T05				T	T	T							
* transect in FAP 24 data base																

Date of Survey : 01 October 1993  
 Location : Padma River at Baruria  
 Station No. 5

Table 2.1 SURVEY PROGRAMME AS MADE

28  
River : Padma  
ADCP/EMF Discharge

Date of Survey : 01 October 1993  
Location : Padma River at Baruria  
Station No. 5

Date	Transect	Bank		Water Level	Total Width	Area	Discharge
		From	To	(m+PWD)	(m)	(sq.m)	(cumec)
01/10/93	U3A11T04	Left	Right	7.72	2896	31228	71099
01/10/93	U3A11T05	Right	Left	7.72	2904	31358	71382

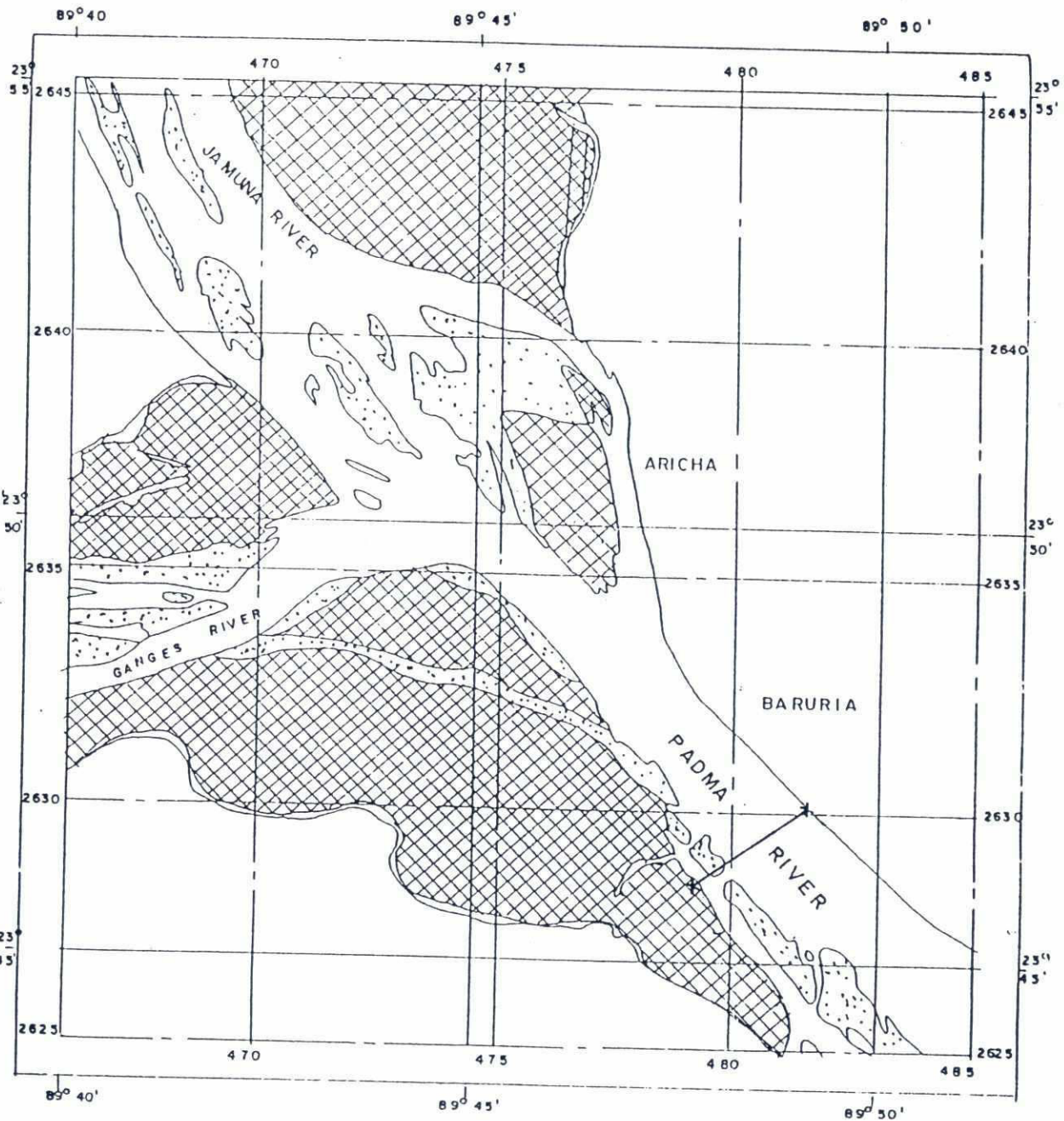
Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)



22

Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U3A11T04 .ase
Echosounder	1	QUATTRO	U3A11T04 .ech
Sediment transport data	1	QUATTRO	U3A11T04 .sed
Bed load sediment analysis	1	QUATTRO	U3A11T04 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U3A11T04 .ssc
Transect plot data	1	QUATTRO	U3A11T04 .trs
Iso-velocity plot data	1	MIKE 21	U3A11T04 .ct2 U3A11T04 .dt2

Table 5.1 PSD 24 Database file description



LEGEND:-

- X—X Measurement Cross Section
- High land
- Unstable/Low land
- BWDB Embankment



5000m 2500m 0

Map is based on satellite  
image of March 1993



RIVER SURVEY PROJECT

Delft Hydraulics/Danish Hydraulic Institute  
in association with Osiris/Approtech/hydroland

Survey Bulletin No. 22 - Oct. , 1993

Location No.5 : Padma River at Baruria

File:

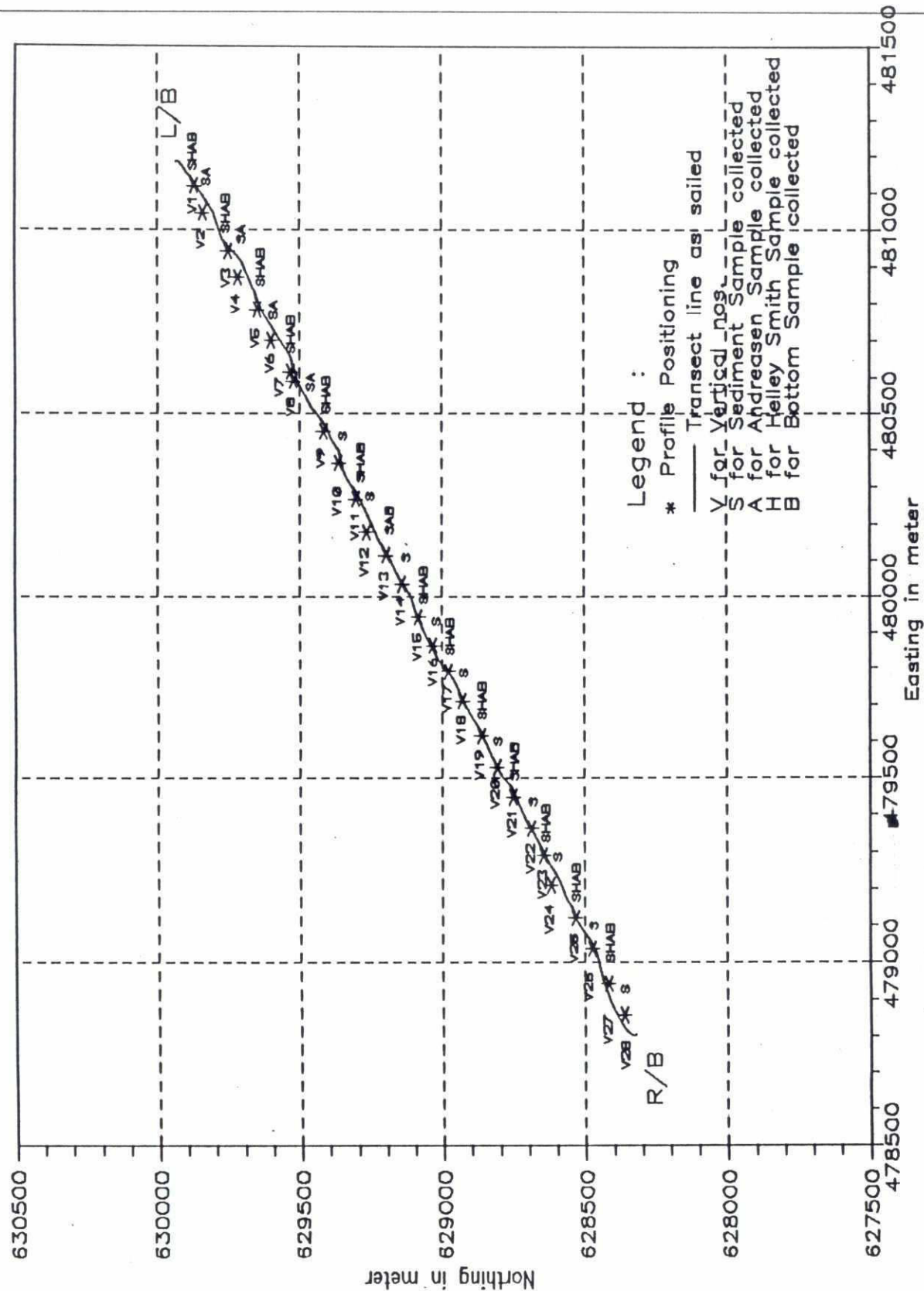
Date:

Scale:

Init:

KEY PLAN

Fig.



FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 22 : October 1993

Location 5 : Padma River, Baruria

Date :

Init :

Location of Measurments



River : Padma  
ADCP/EMF Discharge

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Date	Transect	Bank		Water Level (m+PWD)	Total Width (m)	Area (sq.m)	Discharge (cumec)
		From	To				
19/10/93	U3AJ1T01	Left	Right	6.56	2921	27788	39840
19/10/93	U3AJ1T02	Right	Left	6.56	2920	27918	41651
19/10/93	U3AJ1T03	Left	Right	6.51	2914	27795	39154
19/10/93	U3AJ1T04	Right	Left	6.50	2939	27884	39960
20/10/93	U3AK1T01	Left	Right	6.44	2911	27577	37595
20/10/93	U3AK1T02	Right	Left	6.44	2931	27812	39564
20/10/93	U3AK1T03	Left	Right	6.41	2910	27179	36978
20/10/93	U3AK1T04	Right	Left	6.40	3335	30111	39588
21/10/93	U3AL1T01	Left	Right	6.35	2920	27354	34945
21/10/93	U3AL1T03	Left	Right	6.33	2911	26948	37068
22/10/93	U3AM1T01	Left	Right	6.29	2924	26696	36782
22/10/93	U3AM1T02	Right	Left	6.29	2922	26707	37407
22/10/93	U3AM1T03	Left	Right	6.27	2925	26798	36409

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Vertical 1		Vertical 2		Vertical 3		Vertical 4	
Total depth = 10.90 m		Total depth = 9.40 m		Total depth = 12.70 m		Total depth = 16.50 m	
Depth	Velocity	Depth	Velocity	Depth	Velocity	Depth	Velocity
[m]	[m/s]	[m]	[m/s]	[m]	[m/s]	[m]	[m/s]
1.99	1.45	0.96	1.78	2.57	1.64	2.55	1.54
4.01	1.56	1.84	1.81	5.25	1.52	5.19	1.54
5.99	1.59	3.79	1.81	7.80	1.33	7.79	1.36
8.11	1.44	5.65	1.64	10.39	1.20	10.51	1.25
9.92	1.07	7.49	1.64	12.35	0.94	11.89	1.07
		9.27	1.14				

Vertical 5		Vertical 6		Vertical 7		Vertical 9	
Total depth = 16.50 m		Total depth = 16.50 m		Total depth = 16.20 m		Total depth = 17.00 m	
Depth	Velocity	Depth	Velocity	Depth	Velocity	Depth	Velocity
[m]	[m/s]	[m]	[m/s]	[m]	[m/s]	[m]	[m/s]
3.31	2.00	0.50		0.50		0.50	
6.60	1.78	2.86	2.28	2.97	2.35	3.04	2.01
9.94	1.71	5.63	2.17	5.98	2.22	6.12	2.05
13.32	1.50	8.44	2.08	9.11	2.05	9.21	1.85
14.35	1.49	11.10	1.91	12.27	1.93	12.15	1.74
		14.48	1.50	15.69	1.21	16.75	1.21

Vertical 10		Vertical 11		Vertical 12		Vertical 13	
Total depth = 13.50 m		Total depth = 14.90 m		Total depth = 13.80 m		Total depth = 13.20 m	
Depth	Velocity	Depth	Velocity	Depth	Velocity	Depth	Velocity
[m]	[m/s]	[m]	[m/s]	[m]	[m/s]	[m]	[m/s]
0.50	1.84	0.50	1.45	0.50		0.50	0.80
2.75	1.95	2.98	1.70	2.79	1.16	2.58	1.00
5.29	1.99	5.97	1.42	5.53	1.04	5.16	0.87
8.29	1.73	8.96	1.27	8.30	0.98	7.76	0.95
10.59	1.85	11.91	1.12	11.04	0.85	10.34	0.76
12.24	1.65	14.87	1.03	13.62	0.69	12.20	0.59

Vertical 14		Vertical 15	
Total depth = 9.80 m		Total depth = 7.20 m	
Depth	Velocity	Depth	Velocity
[m]	[m/s]	[m]	[m/s]
0.50		0.50	
1.84	0.85	1.46	0.76
3.52	0.73	2.79	0.78
5.35	0.74	4.19	0.75
6.99	0.70	5.60	0.66
8.90	0.50	7.06	0.43

Qw = 34,161 (m³/s)

Table 3.2 SUMMARY of RESULTS (S4 Current)

8 River : Padma  
S4 Velocity

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Vertical 16	
Total depth = 6.20 m	
Depth	Velocity
[m]	[m/s]
1.22	0.81
2.49	0.77
3.74	0.73
5.01	0.55
6.08	0.45

Vertical 17	
Total depth = 6.60 m	
Depth	Velocity
[m]	[m/s]
0.5	0.76
1.29	0.68
2.65	0.74
3.78	0.74
5.09	0.65
6.46	0.48

Vertical 18	
Total depth = 6.80 m	
Depth	Velocity
[m]	[m/s]
1.16	1.32
2.3	1.11
3.53	1.01
4.61	0.88
5.92	0.71

Vertical 19	
Total depth = 6.00 m	
Depth	Velocity
[m]	[m/s]
0.5	1.26
1.23	1.18
2.44	1.24
3.58	1.27
4.81	1.12
5.93	0.95

Vertical 20	
Total depth = 5.70 m	
Depth	Velocity
[m]	[m/s]
1.22	1.42
2.32	1.27
3.51	1.37
4.58	1.23
5.67	1.02

Vertical 21	
Total depth = 6.00 m	
Depth	Velocity
[m]	[m/s]
0.50	1.36
1.12	1.23
2.22	1.47
3.32	1.39
4.43	1.31
5.57	1.08

Vertical 22	
Total depth = 5.40 m	
Depth	Velocity
[m]	[m/s]
1.12	1.26
2.23	1.38
3.26	1.24
4.29	1.15
5.22	1.08

Vertical 23	
Total depth = 5.20 m	
Depth	Velocity
[m]	[m/s]
1.05	1.14
2.09	1.40
3.14	1.54
4.15	1.31
4.99	1.07

Vertical 24	
Total depth = 5.30 m	
Depth	Velocity
[m]	[m/s]
1.03	1.71
2.13	1.62
3.09	1.46
4.19	1.37
5.12	1.02

Vertical 25	
Total depth = 5.10 m	
Depth	Velocity
[m]	[m/s]
1.02	1.31
2.04	1.47
3.05	1.42
4.08	1.25
4.61	1.21

Vertical 26	
Total depth = 4.80 m	
Depth	Velocity
[m]	[m/s]
1.00	0.96
1.93	0.99
2.88	1.32
3.82	1.28
4.35	1.21

Qw = 34,161 (m³/s)

Table 3.3 SUMMARY of RESULTS (S4 Current)



River : Padma  
Concentration

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Vertical 1		Vertical 2		Vertical 3		Vertical 4	
Total depth = 10.90 m		Total depth = 9.40 m		Total depth = 12.70 m		Total depth = 16.50 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	365.82	0.50	177.01	0.50	373.86	0.50	322.70
1.99	292.57	1.84	276.84	2.57	371.01	2.55	410.00
4.01	296.25	3.79	460.13	5.25	543.03	5.19	392.91
5.99	442.94	5.65	626.92	7.80	520.23	7.79	416.00
8.11	505.88	7.49	886.55	10.39	606.30	10.51	523.46
9.92	769.74	9.27	3396.43	12.35	716.67	11.89	528.14

Vertical 5		Vertical 6		Vertical 7		Vertical 9	
Total depth = 16.50 m		Total depth = 16.50 m		Total depth = 16.20 m		Total depth = 17.00 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	287.58	0.50	135.03	0.50	355.93	0.50	631.25
3.31	258.82	2.86	349.15	2.97	279.07	3.04	452.69
6.60	318.56	5.63	393.42	5.98	330.86	6.12	454.22
9.94	288.06	8.44	560.89	9.11	366.47	9.21	585.63
13.32	351.28	11.10	566.93	12.27	365.27	12.15	680.30
14.35	427.12	14.48	981.37	15.69	725.00	16.75	1272.94

Vertical 10		Vertical 11		Vertical 12		Vertical 13	
Total depth = 13.50 m		Total depth = 14.90 m		Total depth = 13.80 m		Total depth = 13.20 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	413.07	0.50	387.50	0.50	460.38	0.50	337.08
2.75	455.32	2.98	362.58	2.79	488.41	2.58	389.60
5.29	540.57	5.97	427.97	5.53	507.28	5.16	369.23
8.29	584.62	8.96	546.31	8.30	555.37	7.76	386.11
10.59	668.67	11.91	487.74	11.04	638.55	10.34	425.15
12.24	1632.43	14.87	673.53	13.62	838.79	12.20	494.27

Vertical 14		Vertical 15	
Total depth = 9.80 m		Total depth = 7.20 m	
Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]
0.50	410.84	0.50	394.12
1.84	510.13	1.46	430.34
3.52	532.08	2.79	465.71
5.35	585.19	4.19	536.23
6.99	628.99	5.60	550.00
8.90	915.29	7.06	582.66

Qs = 18,738 (Kg/s)

Table 3.4 SUMMARY of RESULTS (Suspended Sediment Concentration)

River : Padma  
Concentration

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Vertical 16		Vertical 17		Vertical 18		Vertical 19	
Total depth = 6.20 m		Total depth = 6.60 m		Total depth = 6.80 m		Total depth = 6.00 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	501.41	0.50	317.58	0.50	476.09	0.50	631.58
1.22	493.49	1.29	414.10	1.16	509.32	1.23	822.35
2.49	538.27	2.65	522.29	2.30	602.53	2.44	669.12
3.74	640.00	3.78	462.29	3.53	701.19	3.58	536.36
5.01	644.59	5.09	469.18	4.61	609.33	4.81	793.30
6.08	836.48	6.46	540.45	5.92	1013.84	5.93	849.69

Vertical 20		Vertical 21		Vertical 22		Vertical 23	
Total depth = 5.70 m		Total depth = 6.00 m		Total depth = 5.40 m		Total depth = 5.20 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	505.62	0.50	586.75	0.50	540.96	0.53	541.33
1.22	518.34	1.12	568.95	1.12	569.33	1.05	559.71
2.32	586.89	2.22	534.15	2.23	567.86	2.09	648.84
3.51	630.34	3.32	555.56	3.26	675.31	3.14	716.36
4.58	715.58	4.43	603.87	4.29	805.78	4.15	867.95
5.67	1560.24	5.57	617.65	5.22	1100.65	4.99	1409.84

Vertical 24		Vertical 25		Vertical 26	
Total depth = 5.30 m		Total depth = 5.10 m		Total depth = 4.80 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.50	520.31	0.50	597.81	0.50	524.18
1.03	571.95	1.02	620.00	1.00	565.35
2.13	684.47	2.04	642.68	1.93	630.00
3.09	803.85	3.05	771.88	2.88	681.69
4.19	922.50	4.08	1101.35	3.82	873.75
5.12	2051.85	4.61	1110.81	4.35	1189.22

Qs = 18,738 (Kg/s)

Table 3.5 SUMMARY of RESULTS (Suspended Sediment Concentration)

69

River : Padma

Bed load

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Helley-Smith samples		
Vertical No.	Bed load sb in Kg/ms	
	1	2
1	0.027522	0.012719
3	0.231689	0.143640
5	0.160855	0.125219
7	0.060526	0.010636
9	0.125548	0.239474
11	0.096491	0.001370
15	0.000520	0.000096
17	0.000080	0.000309
19	0.016316	0.002368
21	0.051162	0.002231
23	0.001749	0.046573
25	0.037856	0.024671
27	0.000148	0.000703

Table 3.6 SUMMARY of RESULTS (sediment transport, bed load)



64  
River : Padma

Grain size of bed material

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Sample No	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
DHA-1	19/10/93	10:40	0.066	0.078	0.089	0.125	1.343
DHA-2	19/10/93	12:27	0.136	0.159	0.179	0.245	1.307
DHA-3	19/10/93	14:43	0.135	0.156	0.174	0.236	1.291
DHA-4	19/10/93	16:10	0.098	0.138	0.159	0.229	1.494
DHA-1	20/10/93	10:24	0.135	0.158	0.179	0.249	1.325
DHA-2	20/10/93	13:03	0.101	0.135	0.159	0.229	1.470
DHA-3	20/10/93	14:55	0.127	0.150	0.170	0.239	1.337
DHA-1	21/10/93	09:39	0.087	0.133	0.155	0.229	1.588
DHA-2	21/10/93	10:55	0.094	0.136	0.157	0.228	1.523
DHA-3	21/10/93	12:30	0.078	0.106	0.132	0.220	1.619
DHC-4	21/10/93	14:00	0.081	0.113	0.140	0.223	1.607
DHC-3	21/10/93	13:16	0.065	0.077	0.088	0.141	1.364
DHC-2	21/10/93	12:00	0.066	0.081	0.095	0.189	1.562
DHC-1	21/10/93	09:30	0.056	0.071	0.082	0.123	1.439

Table 3.7 SUMMARY of RESULTS (grain size bed material)

92

River : Padma  
Grain size of Suspended Sediment

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A30	19/10/93	10:45	0.006	0.015	0.023	0.100	3.569
A28	19/10/93	15:10	0.048	0.069	0.081	0.122	1.547
A931	19/10/93	12:20	0.006	0.014	0.019	0.049	2.610
A935	19/10/93	11:35	0.007	0.020	0.032	0.175	4.458
A453	19/10/93	14:33	0.009	0.030	0.076	0.207	5.413
A24	19/10/93	13:24	0.014	0.065	0.084	0.196	4.000
A933	19/10/93	16:03	0.020	0.071	0.092	0.202	3.262
A936	19/10/93	17:00	0.057	0.126	0.151	0.242	2.073
A958	20/10/93	10:24	0.016	0.071	0.122	0.227	4.661
A851	20/10/93	13:00	0.008	0.019	0.030	0.127	3.558
A332	20/10/93	14:50	0.004	0.013	0.018	0.062	3.472
A729	21/10/93	09:35	0.004	0.011	0.018	0.085	3.889
A932	21/10/93	10:55	0.003	0.008	0.015	0.132	4.000
A926	21/10/93	12:30	0.013	0.042	0.077	0.203	4.124
A727	21/10/93	14:00	0.005	0.010	0.017	0.108	4.229
A934	21/10/93	13:15	0.010	0.039	0.072	0.133	4.406
A925	21/10/93	12:00	0.008	0.028	0.055	0.113	4.374
A855	21/10/93	09:30	0.007	0.016	0.023	0.078	2.795

Table 3.8 SUMMARY OF RESULTS (Grain size suspended sediment)

River : Padma

Grain size of bed load

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Sample No	Date	Time	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A123	19/10/93	10:40	3.000	0.092	0.105	1.382
A465	19/10/93	10:45	0.082	0.095	0.110	1.493
A124	19/10/93	12:12	0.159	0.178	0.200	1.301
A463	19/10/93	12:20	0.159	0.178	0.199	1.299
A48	19/10/93	14:33	0.154	0.173	0.196	1.314
A459	19/10/93	14:43	0.153	0.173	0.195	1.319
A740	19/10/93	16:03	0.152	0.177	0.206	1.420
A565	19/10/93	16:10	0.307	0.346	0.390	1.315
A46	20/10/93	10:05	0.160	0.183	0.209	1.345
A130	20/10/93	10:14	0.159	0.179	0.202	1.310
A745	20/10/93	12:55	0.154	0.175	0.199	1.337
A101	20/10/93	13:03	0.269	0.312	0.363	1.575
A708	21/10/93	09:31	0.222	0.277	0.332	1.631
A717	21/10/93	09:39	0.192	0.250	0.313	1.742
A127	21/10/93	10:50	0.168	0.270	0.257	1.718
A350	21/10/93	11:04	0.176	0.209	0.249	1.617
A466	21/10/93	12:21	0.107	0.134	0.164	1.643
A346	21/10/93	12:31	0.163	0.205	0.260	1.798
A461	21/10/93	13:50	0.115	0.142	0.170	1.630
A43	21/10/93	14:00	0.115	0.142	0.170	1.634
A353	21/10/93	13:05	0.300	0.340	0.385	1.327
A695	21/10/93	13:16	0.102	0.127	0.160	1.671
A690	21/10/93	11:50	0.120	0.146	0.176	1.651
A696	21/10/93	11:55	0.106	0.134	0.166	1.669
A349	21/10/93	09:30	0.225	0.284	0.339	1.797
A345	21/10/93	09:24	0.135	0.200	0.286	2.337

Table 3.9 SUMMARY of RESULTS (grain size bed load)



Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	08:29:51	09:01:40	U3AJ1T01*				T	T	T							
Transect	09:07:18	09:33:56	U3AJ1T02				T	T	T							
Transect	16:56:57	17:23:37	U3AJ1T03				T	T	T							
Transect	17:25:16	17:52:49	U3AJ1T04				T	T	T							
Profile	10:15:32	10:55:30	U3AJ1P01	1	481118	629871	P	P	P	P	P	6	1	2	-	1
Profile	14:48:12	15:25:00	U3AJ2P04	2	481045	629841		P		P		6	1	-	-	-
Profile	11:57:08	12:38:50	U3AJ1P02	3	480941	629753	P	P	P	P	P	6	1	2	-	1
Profile	11:03:58	11:43:48	U3AJ2P01	4	480870	629718		P		P		6	1	-	-	-
Profile	14:05:31	14:55:08	U3AJ1P03	5	480783	629650	P	P	P	P	P	6	1	2	-	1
Profile	12:58:36	13:42:43	U3AJ2P02	6	480701	629600		P		P		6	1	-	-	-
Profile	15:39:30	16:16:09	U3AJ1P04	7	480615	629534	P	P	P	P	P	6	1	2	-	1
Profile	16:17:06	16:32:04	U3AJ2P05	8	480589	629523		P		P		6	1	-	-	-

\* transect in FAP 24 data base

Date of Survey : 19 October 1993  
Location : Padma river at Baruria  
Station No. 5

Table 2.1 SURVEY PROGRAMME AS MADE

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Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	08:02:54	08:27:11	U3AK1T01				T	T	T							
Transect	08:30:12	08:57:48	U3AK1T02				T	T	T							
Transect	16:25:51	16:52:31	U3AK1T03				T	T	T							
Transect	16:54:52	17:21:11	U3AK1T04				T	T	T							
Profile	09:36:24	10:42:56	U3AK1P01	9	480450	629417	P	P	P	P	P	6	1	2	-	1
Profile	08:48:24	09:28:39	U3AK2P01	10	480364	629364		P		P		6	-	-	-	-
Profile	12:27:11	16:16:05	U3AK1P03	11	480268	629304	P	P	P	P	P	6	1	2	-	1
Profile	09:44:25	10:18:57	U3AK2P02	12	480177	629267		P		P		6	-	-	-	-
Profile	14:17:40	15:07:12	U3AK1P04	13	480113	629199	P	P	P	P	P	6	1	-	-	1
Profile	10:31:15	11:05:11	U3AK2P03	14	480034	629142		P		P		6	-	-	-	-
Profile	11:16:32	11:50:47	U3AK2P04	16	479865	629032		P		P		6	-	-	-	-
Profile	12:02:00	12:35:54	U3AK2P05	18	479711	628929		P		P		6	-	-	-	-
Profile	14:17:16	14:47:33	U3AK2P06	20	479529	628808		P		P		6	-	-	-	-
Profile	15:03:00	15:41:15	U3AK2P07	22	479364	628687		P		P		6	-	-	-	-
Profile	10:00:52	16:38:19	U3AK2P08	24	479210	628620		P		P		6	-	-	-	-

Date of Survey : 20 October 1993  
Location : Padma river at Baruria  
Station No. 5

Table 2.2 SURVEY PROGRAMME AS MADE



Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	07:39:41	08:04:34	U4AL1T01				T	T	T							
Transect	08:10:26	08:38:58	U4AL1T02				T	T	T							
Transect	17:24:16	17:48:23	U4AL1T03				T	T	T							
Profile	09:03:01	09:45:02	U3AL1P01	15	479944	629083	P	P	P	P	P	6	1	2	-	1
Profile	10:26:07	11:13:00	U3AL1P02	17	479793	628977	P	P	P	P	P	6	1	2	-	1
Profile	11:51:02	12:41:00	U3AL1P03	19	479615	628863	P	P	P	P	P	6	1	2	-	1
Profile	13:23:01	14:11:12	U3AL1P04	21	479448	628752	P	P	P	P	P	6	1	2	-	1
Profile	12:49:11	13:39:46	U3AL2P05	23	479290	628645		P		P		6	1	2	-	1
Profile	11:23:53	12:10:05	U3AL2P04	25	479120	628534		P		P		6	1	2	-	1
Profile	10:13:42	10:58:46	U3AL2P03	26	479037	628475		P		P		6	-	-	-	-
Profile	09:06:32	09:40:07	U3AL2P02	27	478943	628418		P		P		6	1	2	-	1
Profile	08:24:25	08:52:27	U3AL2P01	28	478869	628363		P		P		6	-	-	-	-

Date of Survey : 21 October 1993

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	09:32:52	09:58:52	U3AM1T01				T	T	T							
Transect	10:03:24	13:07:11	U3AM1T02				T	T	T							
Transect	16:07:46	16:32:40	U3AM1T03				T	T	T							

Date of Survey : 22 October 1993  
Location : Padma river at Baruria  
Station No. 5

Table 2.3 SURVEY PROGRAMME AS MADE



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Type Of Samples	Sample Nos.	Total Sample Nos.	Vertical No.
Point Integrated Samples	A1016,A1022,A983,A1003,A1021	6	1
	A451,A447,A431,A436,A427,A425	6	2
	A979,A998,A989,A1023,A993,A1002	6	3
	A384,A388,A400,A396,A446,A443	6	4
	A1000,A992,A976,A1001,A1020,A988	6	5
	A432,A391,A438,A392,A390,A426	6	6
	A1028,A1015,A1012,A982,A1014,A1024	6	7
	A430,A424,A433,A444,A429,A389	6	8
	A966,A971,A1042,A1059,A978	6	9
	A951,A991,A946,A958,A965,A947	6	10
	A1043,A1046,A1047,A1025,A10748,A968	6	11
	A952,A990,A948,A953,A954,A944	6	12
	A1040,A1038,A1039,A1054,A1041,A1053	6	13
	A949,A980,A941,A964,A961,A940	6	14
	A163,A196,A195,A161,A160,A200	6	15
	A957,A950,A955,A960,A962,A963	6	16
	A378,A206,A202,A159,A199,A382	6	17
	A975,A1035,A1037,A1033,A1031,A1036	6	18
	A203,A1030,A1029,A1034,A1032,A1050	6	19
	A385,A387,A399,A394,A398,A381	6	20
	A1055,A1058,A1057,A1045,A1049,A1052	6	21
	A393,A442,A428,A401,A386,A397	6	22
	A1010,A1007,A1009,A1019,A967,A938	6	23
	A395,A434,A380,A435,A439,A410	6	24
	A1005,A1008,A1006,A1011,A1004,A1018	6	25
	A970,A972,A942,A969,A945,A999	6	26
	A1017,A981,A984,A973,A974,A977	6	27
	A995,A997,A994,A985,A986,A987	6	28

Date of Survey : 19 - 22 October 1993  
Location : Padma river at Baruria  
Station No. 5

Table 2.4 List of Sediment Samples

Type Of Samples	Sample Nos.	Total Sample Nos.	Vertical No.
Andreasen Tube Samples	A30	1	1
	A28	1	2
	A931	1	3
	A935	1	4
	A453	1	5
	A24	1	6
	A933	1	7
	A936	1	8
	A858	1	9
	A851	1	11
	A332	1	13
	A729	1	15
	A932	1	17
	A926	1	19
	A727	1	21
	A934	1	23
	A925	1	25
	A855	1	27
Helley-Smith Samples	A123,A465	2	1
	A124,A463	2	3
	A48,A459	2	5
	A740,A565	2	7
	A46,A130	2	9
	A745,A101	2	11
	A706,A717	2	15
	A127,A350	2	17
	A466,A346	2	19
	A461,A43	2	21
	A353,A695	2	23
	A690,A696	2	25
	A349,A345	2	27
Vanveen Samples	DHA-1	1	1
	DHA-2	1	3
	DHA-3	1	5
	DHA-4	1	7
	DHA-1	1	9
	DHA-2	1	11
	DHA-3	1	13
	DHA-1	1	15
	DHA-2	1	17
	DHA-3	1	19
	DHA-4	1	21
	DHC-3	1	23
	DHC-2	1	25
	DHC-1	1	27

Date of Survey : 19 - 22 October 1993

Location : Padma river at Baruria

Station No. 5

Table 2.5 List of Sediment Samples

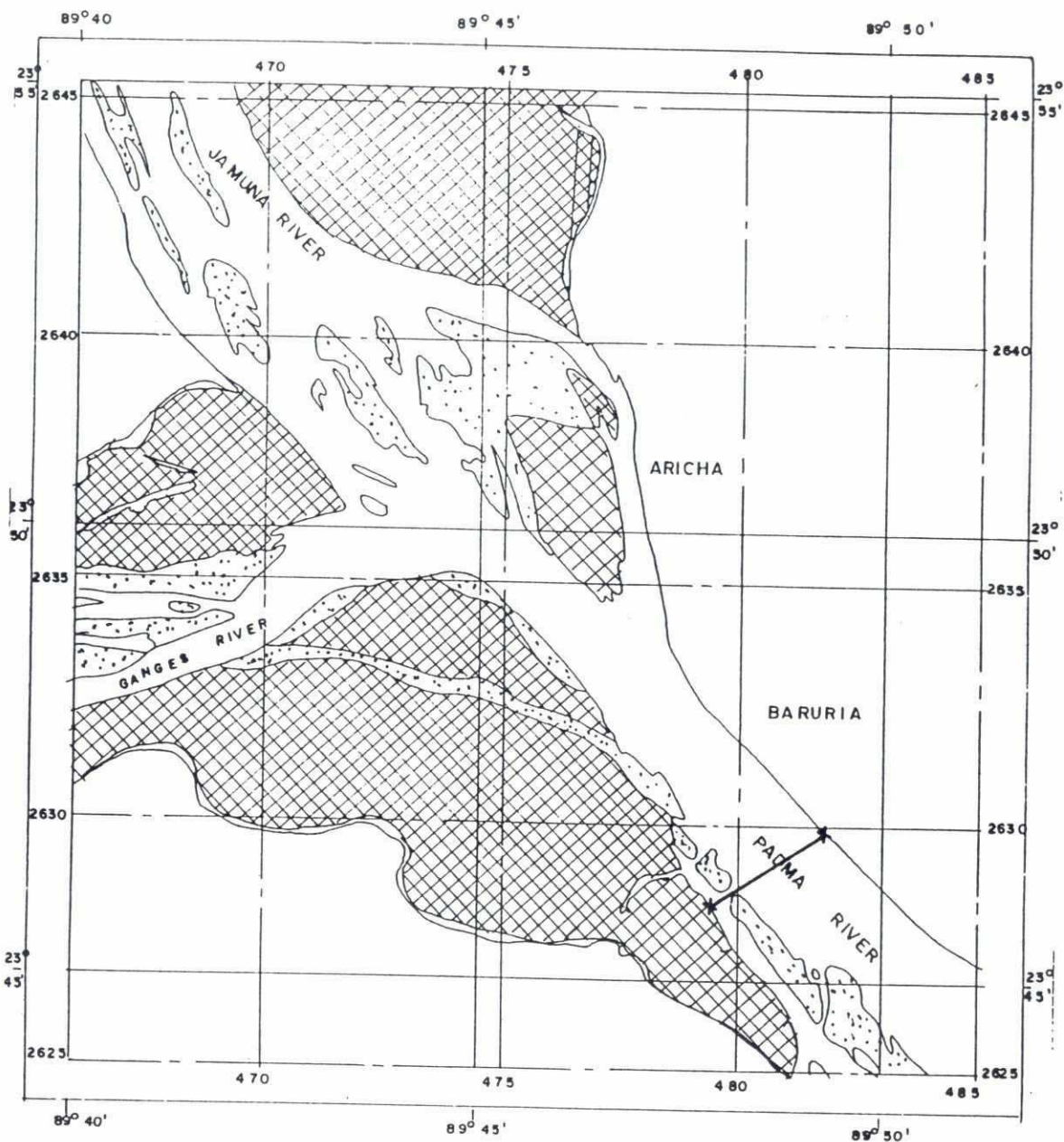


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Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U3AJ1T01 .ase
Echosounder	1	QUATTRO	U3AJ1T01 .ech
Sediment transport data	1	QUATTRO	U3AJ1T01 .sed
Bed load sediment analysis	1	QUATTRO	U3AJ1T01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U3AJ1T01 .ssc
Transect plot data	1	QUATTRO	U3AJ1T01 .trs
Iso-velocity plot data	1	MIKE 21	U3AJ1T01 .ct2 U3AJ1T01 .dt2
Table 5.1 PSD 24 Database file description			







**LEGEND:-**

- X—X Measurement Cross Section
- High land
- Unstable/Low land
- BWDB Embankment



5000m 2500m 0

Map is based on most recent  
Satellite image of March 1993



**RIVER SURVEY PROJECT**

Delft Hydraulics/Danish Hydraulic Institute  
in association with Osiris/Approtech/Hydroland

**Survey Bulletin No. 25 - Dec , 1993**

**Location No.5 : Padma River at Baruria**

**File:**

**Date:**

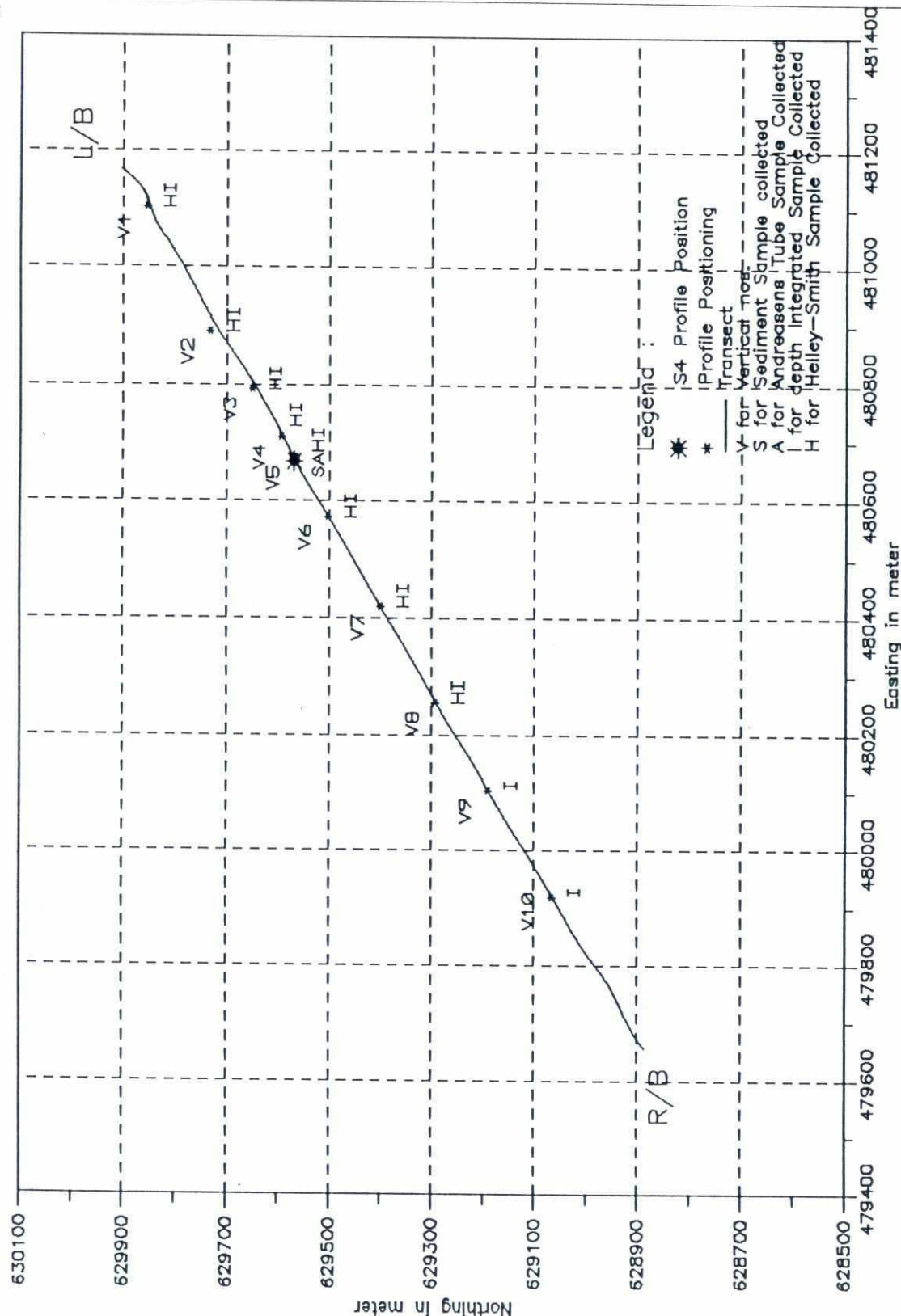
**Scale:**

**Init:**

**KEY PLAN**

**Fig.**

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**FAP 24**  
  
 DELFT - DHI

**RIVER SURVEY PROJECT**  
 Flood Plan Coordination Organization  
 Commission of the European Communities

**Survey Bulletin 25 : December 1993**

**Location 5 : Padma River, Baruria**

**Location of Measurments**

Date :

Init :

River : Padma  
ADCP/EMF Discharge

Date of Survey : 04 - 05 December 1993  
Location : Padma River at Baruria  
Station No. 5

Date	Transect	Bank		Level	Width	Area	Discharge	Sediment
		From	To	(m+PWD)	(m)	(sq.m)	(cumec)	Transport (Kg/s)
12-04-93	U3C41T05	Right	Left	3.61	2500	17238	10903	1072
12-05-93	U3C51T01	Left	Right	3.56	2742	17192	11352	1179
12-05-93	U3C51T02	Right	Left	3.56	2743	17287	11315	1160
12-05-93	U3C51T03	Right	Left	3.56	2628	16942	10969	1089
12-05-93	U3C51T04	Left	Right	3.56	2687	17074	11108	1217

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)





River : Padma  
S4 Velocity

Date of Survey : 04 - 05 December 1993  
Location : Padma River at Baruria  
Station No. 5

Vertical 5	
Total depth = 11.90 m	
Depth	Velocity
[m]	[m/s]
0.50	0.94
2.40	1.03
4.80	0.93
7.20	0.86
9.60	0.82
11.10	0.59

Table 3.2 SUMMARY OF RESULTS (S4 Current)

River : Padma  
Concentration

Date of Survey : 04 - 05 December 1993  
Location : Padma River at Baruria

Vertical 5	
Total depth = 11.90 m	
Depth	Conc.
[m]	[mg/l]
0.50	153.66
2.40	96.67
4.80	154.11
7.20	163.68
9.60	172.19
11.10	195.94

Table 3.3 SUMMARY OF RESULTS (Suspended Sediment Concentration)

River : Padma

Depth integrated concentration

Date of Survey : 04 - 05 December 1993

Location : Padma River at Baruria

Station No. 5

Sample No.	Vertical No.	Date	Time	Total Depth (m)	Concentration (mg/l)
A709	1	05/12/93	09:40	9.90	72.00
A712	2	05/12/93	10:22	10.80	81.14
A68	3	05/12/93	11:20	11.90	130.45
A69	4	05/12/93	11:40	12.20	116.40
A371	5	04/12/93	16:40	11.90	125.59
A692	5	05/12/93	12:33	11.40	125.59
A688	6	05/12/93	12:52	13.20	116.65
A691	7	05/12/93	14:05	14.00	99.37
A707	8	05/12/93	14:25	11.50	121.69
A76	9	05/12/93	14:52	7.90	86.13
A73	10	05/12/93	15:15	4.30	133.02

Table 3.4 SUMMARY OF RESULTS (depth integrated concentration)

River : Padma  
Bed load

Date of Survey : 04 - 05 December 1993

Location : Padma River at Baruria

Station No. 5

Helley-Smith samples		
Vertical no.	Bed load sb in Kg/ms	
	1	2
1	0.000013	0.000015
2	0.001526	0.000110
3	0.000113	0.000556
4	0.006446	-
5	0.001797	0.04734
5	0.001048	0.002949
6	0.000345	0.000440
7	0.000123	0.000370
8	0.000902	0.000384

Table 3.5 SUMMARY of RESULTS (sediment transport, bed load)

River : Padma

Grain size of Suspended sediment

Date of Survey : 04 - 05 December 1993

Location : Padma River at Baruria

Station No. 5

Sample No.	Date	Time	D16 (mm)	D35 (mm)	D50 (mm)	D90 (mm)	Standard Deviation
A11	04/12/93	16:54	0.007	0.014	0.019	0.065	2.462

Table 3.6 SUMMARY OF RESULTS (grain size of suspended sediment)



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River : Padma  
Grain size bed load

Date of Survey : 04 - 05 December 1993  
Location : Padma River at Baruria  
Station No. 5

Sample No	Date	Time	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A704	05/12/93	09:35	0.176	0.234	0.301	1.889
A116	05/12/93	09:40	0.195	0.257	0.318	1.758
A96	05/12/93	10:02	0.194	0.238	0.297	1.627
A100	05/12/93	10:30	0.223	0.280	0.334	1.705
A99	05/12/93	11:03	0.192	0.236	0.297	1.643
A102	05/12/93	11:10	0.221	0.275	0.330	1.621
A693	05/12/93	12:20	0.226	0.279	0.333	1.607
A706	04/12/93	16:31	0.274	0.315	0.362	1.508
A705	04/12/93	16:38	0.282	0.323	0.369	1.449
A570	05/12/93	12:30	0.205	0.256	0.314	1.624
A566	05/12/93	12:35	0.256	0.299	0.349	1.575
A569	05/12/93	12:52	0.216	0.270	0.325	1.623
A571	05/12/93	13:00	0.232	0.284	0.337	1.609
A568	05/12/93	13:50	0.237	0.287	0.340	1.612
A567	05/12/93	13:55	0.260	0.303	0.353	1.567
A372	05/12/93	14:22	0.244	0.291	0.342	1.589
A75	05/12/93	14:27	0.239	0.288	0.340	1.597

Table 3.7 SUMMARY of RESULTS (grain size bed load)

28

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples

Transect	17:40:15	17:54:05	U3C41T05*					T	T	T							
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Profile	15:34:19	17:14:22	U3C41P01	5	480672	629571		P	P	P	P		6	1	2	1	-
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\* transect in FAP 24 data base

Date of Survey : 04 December 1993  
Location : Padma River at Baruria

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples

Transect	08:18:07	08:32:10	B3C51T01					T	T	T							
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Transect	08:34:42	08:49:21	B3C51T02					T	T	T							
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Transect	15:33:47	15:47:15	B3C51T03					T	T	T							
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Transect	15:51:08	16:05:18	B3C51T04					T	T	T							
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Profile	09:35:00	09:45:45	B3C51P01	1	481101	629855		P	P	P			-	-	2	1	-
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Profile	10:09:40	10:31:08	B3C51P02	2	480890	629732		P	P	P			-	-	2	1	-
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Profile	11:03:04	11:26:50	B3C51P03	3	480792	629650		P	P	P			-	-	2	1	-
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Profile	11:33:42	11:40:20	B3C51P04	4	480703	629593		P	P	P			-	-	1	1	-
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Profile	12:30:11	12:40:45	B3C51P05	5	480673	629566		P	P	P			-	-	2	1	-
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Profile	12:52:23	13:06:03	B3C51P06	6	480573	629503		P	P	P			-	-	2	1	-
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Profile	13:50:45	14:08:48	B3C51P07	7	480419	629400		P	P	P			-	-	2	1	-
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Profile	14:22:15	14:35:38	B3C51P08	8	480255	629293		P	P	P			-	-	2	1	-
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Profile	14:50:22	15:01:09	B3C51P09	9	480109	629190		P	P	P			-	-	-	1	-
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Profile	15:15:17	15:21:16	B3C51P10	10	479919	629066		P	P	P			-	-	-	1	-
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Date of Survey : 05 December 1993  
Location : Padma River at Baruria  
Station No. 5

Table 2.1 SURVEY PROGRAMME AS MADE

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Type Of Samples	Sample Nos.	Total Sample Nos.	Vertical No.
Point Integrated samples	A754,A781,A790,A782,A787,A798	6	5
Depth Integrated samples	A709	1	1
	A712	1	2
	A68	1	3
	A69	1	4
	A371,A692	2	5
	A688	1	6
	A691	1	7
	A707	1	8
	A76	1	9
	A73	1	10
Andreasen Tube Samples	A11	1	5
Helley-Smith Samples	A704,A116	2	1
	A96,A100	2	2
	A99,A102	2	3
	A693	1	4
	A706,A705,A570,A566	4	5
	A569,A571	2	6
	A568,A567	2	7
	A372,A75	2	8

Date of Survey : 04 - 05 December 1993

Location : Padma River at Baruria

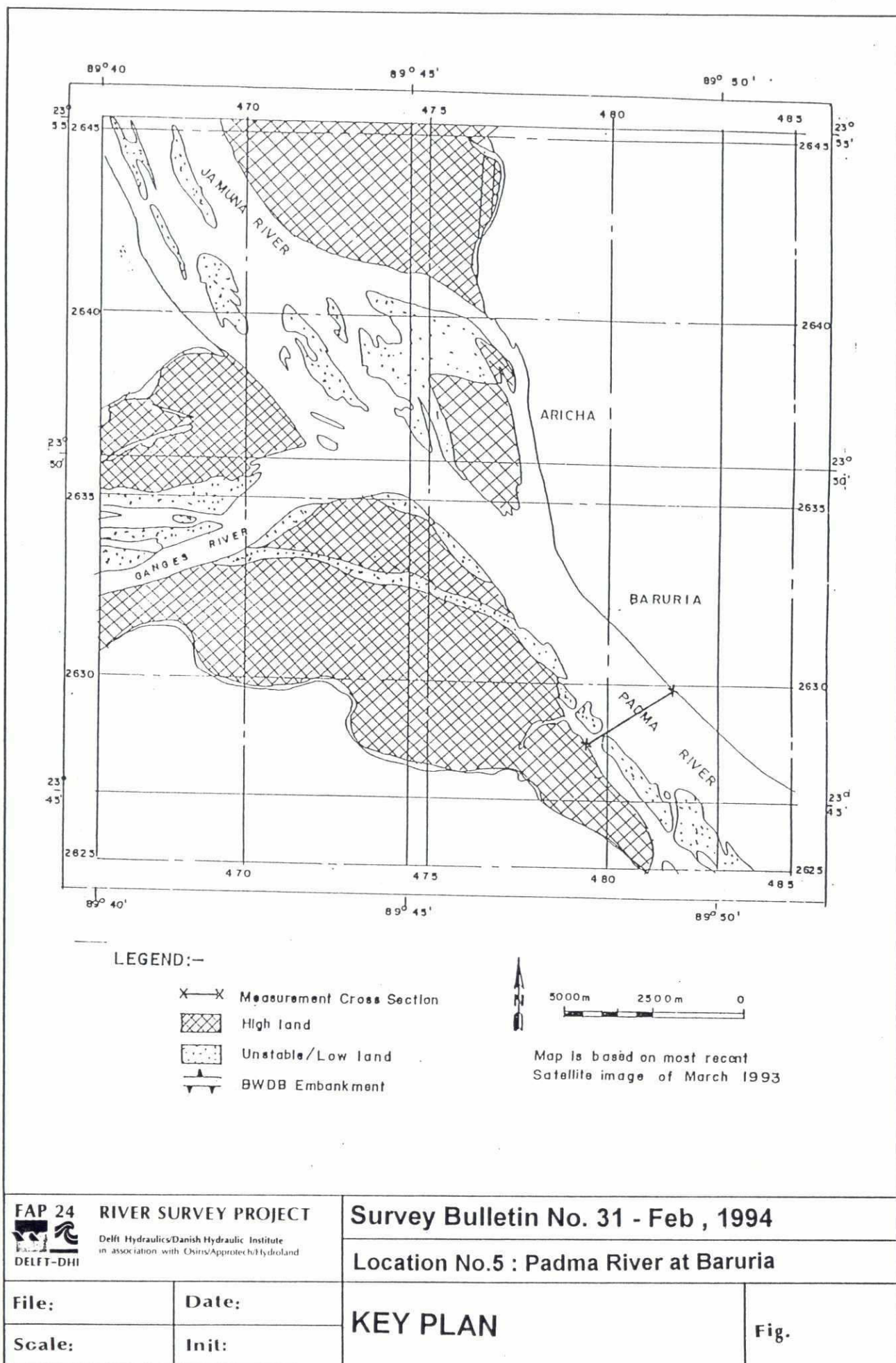
Station No. 5

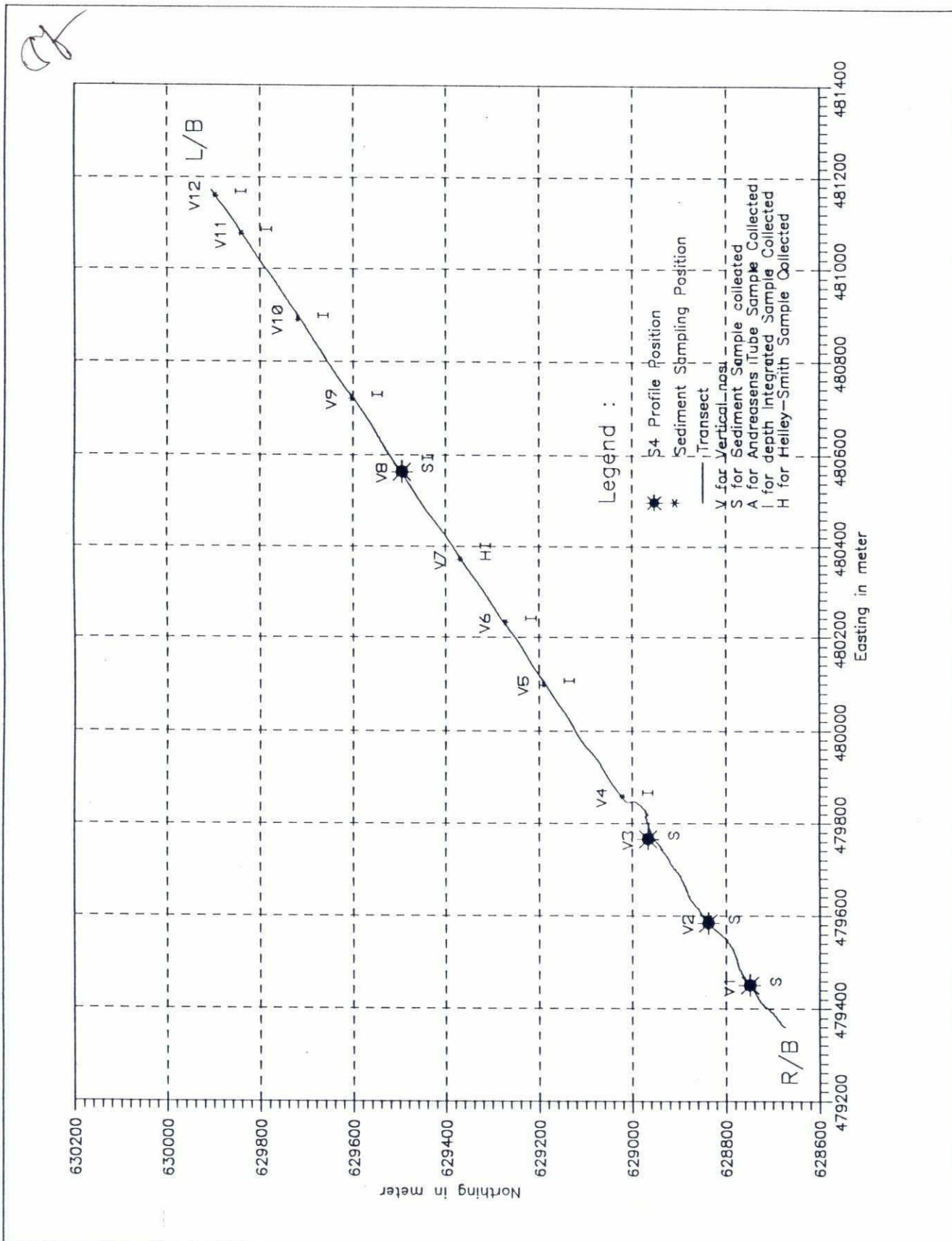
Table 2.2 List of Sediment Samples





Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U3C41T05 .ase
Echosounder	1	QUATTRO	U3C41T05 .ech
Sediment transport data	1	QUATTRO	U3C41T05 .sed
Bed load sediment analysis	1	QUATTRO	U3C41T05 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U3C41T05 .ssc
Transect plot data	1	QUATTRO	U3C41T05 .trs
Iso-velocity plot data	1	MIKE 21	U3C41T05 .ct2 U3C41T05 .dt2
Table 5.1 PSD 24 Database file description			





<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 31 : February 1994</b>	
<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organisation Commission of the European Communities</small>		<b>Location 5 : Padma River, Baruria</b>	
Date : Init :		<b>Location of Measurments</b>	



92

River : Padma  
ADCP/EMF Discharge

Date of Survey : 05 - 06 February 1994  
Location : Padma River at Baruria  
Location No : 5

Date	Transect	Bank		Level	Width	Area	Discharge	Sediment
		From	To	(m+PWD)	(m)	(sq.m)	(cumec)	Transport (Kg/s)
05-02-94	U4251T01	Left	Right	2.27	2509	16191	6154	471
05-02-94	U4251T02	Right	Left	2.27	2499	16147	6242	439
05-02-94	U4251T03	Right	Left	2.26	2489	16124	6530	460
05-02-94	U4251T04	Left	Right	2.26	2498	16096	6377	479

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)

yD

River : Padma  
S4 Velocity

Date of Survey : 05 - 06 February 1994  
Location : Padma River at Baruria  
Location No : 5

Vertical 1		Vertical 2		Vertical 3		Vertical 8	
Total depth = 1.30 m		Total depth = 1.80 m		Total depth = 2.00 m		Total depth = 11.60 m	
Depth	Velocity	Depth	Velocity	Depth	Velocity	Depth	Velocity
[m]	[m/s]	[m]	[m/s]	[m]	[m/s]	[m]	[m/s]
0.70	0.10	0.20	0.14	0.30	0.17	0.20	0.58
		1.00	0.16	1.00	0.19	2.30	0.43
		1.30	0.13	1.50	0.17	4.60	0.49
						6.90	0.46
						9.20	0.40
						11.00	0.19

Table 3.2 SUMMARY OF RESULTS (S4 Current)

### Concentration

Date of Survey : 05 - 06 February 1994  
Location : Padma River at Baruria

Vertical 1		Vertical 2		Vertical 3		Vertical 8	
Total depth = 1.30 m		Total depth = 1.80 m		Total depth = 2.00 m		Total depth = 11.60 m	
Depth	Conc.	Depth	Conc.	Depth	Conc.	Depth	Conc.
[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]	[m]	[mg/l]
0.70	14.36	0.20	-	0.30	28.40	0.20	30.48
		1.00	32.67	1.00	30.61	2.30	41.47
		1.30	36.18	1.50	32.25	4.60	44.39
						6.90	44.13
						9.20	53.69
						11.00	55.73

Table 3.3 SUMMARY OF RESULTS (Suspended Sediment Concentration)

40

River : Padma

Depth integrated concentration

Date of Survey : 05 - 06 February 1994

Location : Padma River at Baruria

Location No : 5

Sample No.	Vertical No.	Date	Time	Total Depth (m)	Concentration (mg/l)
A1140	4	05/02/94	14:55	1.70	32.96
A466	5	05/02/94	14:30	6.10	17.11
A1164	6	05/02/94	14:15	10.20	325.82*
A336	7	05/02/94	13:50	10.90	41.32
A905	8	05/02/94	12:45	11.60	58.09
A36	9	05/02/94	12:00	10.60	31.47
A47	10	05/02/94	11:40	9.40	34.21
A900	11	05/02/94	11:20	8.90	39.04
A366	12	05/02/94	10:55	6.20	191.9*

\* : Data invalid

Table 3.4 SUMMARY OF RESULTS (depth integrated concentration)



32  
River : Padma  
Bed load

Date of Survey : 05 February 1994  
Location : Padma River at Baruria  
Location No : 5

Helley-Smith samples		
Vertical no.	Bed load sb in Kg/ms	
	1	2
7	0.001762	0.000703

Table 3.5 SUMMARY OF RESULTS (sediment transport, bed load)

River : Padma  
Grain size of bed load

Date of Survey : 05 February 1994  
Location : Padma River at Baruria  
Location No : 5

Sample No	Date	Time	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A461	05/02/94	13:47	0.260	0.302	0.352	1.560
A718	05/02/94	13:52	0.212	0.265	0.321	1.621

Table 3.6 SUMMARY OF RESULTS (grain size bed load)

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING					
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples	
Transect	08:08:21	08:22:07	U4251T01*				T	T	T								
Transect	08:26:03	08:39:42	U4251T02				T	T	T								
Transect	15:05:01	15:19:08	U4251T03				T	T	T								
Transect	15:23:23	15:35:56	U4251T04				T	T	T								
Profile	10:55:00	11:01:00	U4251P01	12	481159	629896	P	P	P				-	-	-	1	-
Profile	11:16:00	11:22:00	U4251P03	11	481076	629841	P	P	P				-	-	-	1	-
Profile	11:34:00	11:45:00	U4251P04	10	480891	629719	P	P	P				-	-	-	1	-
Profile	11:54:00	12:02:00	U4251P05	9	480719	629603	P	P	P				-	-	-	1	-
Profile	12:16:00	13:02:00	U4251P06	8	480564	629494	P	P	P	P			6	-	-	1	-
Profile	13:47:00	13:55:00	U4251P07	7	480371	629369	P	P	P				-	-	-	1	-
Profile	14:15:00	14:18:00	U4251P09	6	480232	629272	P	P	P				-	-	-	1	-
Profile	14:27:00	14:38:00	U4251P10	5	480099	629190	P	P	P				-	-	-	1	-
Profile	14:51:00	15:00:00	U4251P11	4	479858	629022	P	P	P				-	-	-	1	-

\* transect in PSD 24 data base

Date of Survey : 05 February 1994  
Location : Padma River at Baruria  
Location No : 5

Table 2.1 SURVEY PROGRAMME AS MADE

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Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING					
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples	
Transect	08:02:35	08:10:57	U4262T01														
Profile	09:05:00	09:31:00	U4262P01	3	479766	628966			P	P	P		3	-	-	-	
Profile	09:41:00	09:43:00	U4262P02	2	479766	628966			P	P	P		3	-	-	-	
Profile	10:09:00	10:15:00	U4262P03	1	479451	628749			P	P	P		1	-	-	-	

Date of Survey : 06 February 1994  
 Location : Padma River at Baruria  
 Location No : 5

Table 2.2 SURVEY PROGRAMME AS MADE



CC

Type Of Samples	Sample Nos.	Total Sample Nos.	Vertical No.
Point Integrated Samples	A1191	1	1
	A1212,A1178,A1193	3	2
	A1195,A1197,A1192	3	3
	A1200,A1209,A1175,A1213,A1171,A121	6	8
Depth Integrated Samples	A1140	1	4
	A466	1	5
	A1164	1	6
	A336	1	7
	A905	1	8
	A36	1	9
	A47	1	10
	A900	1	11
	A366	1	12
Helley Smith samples	A461,A716	2	7

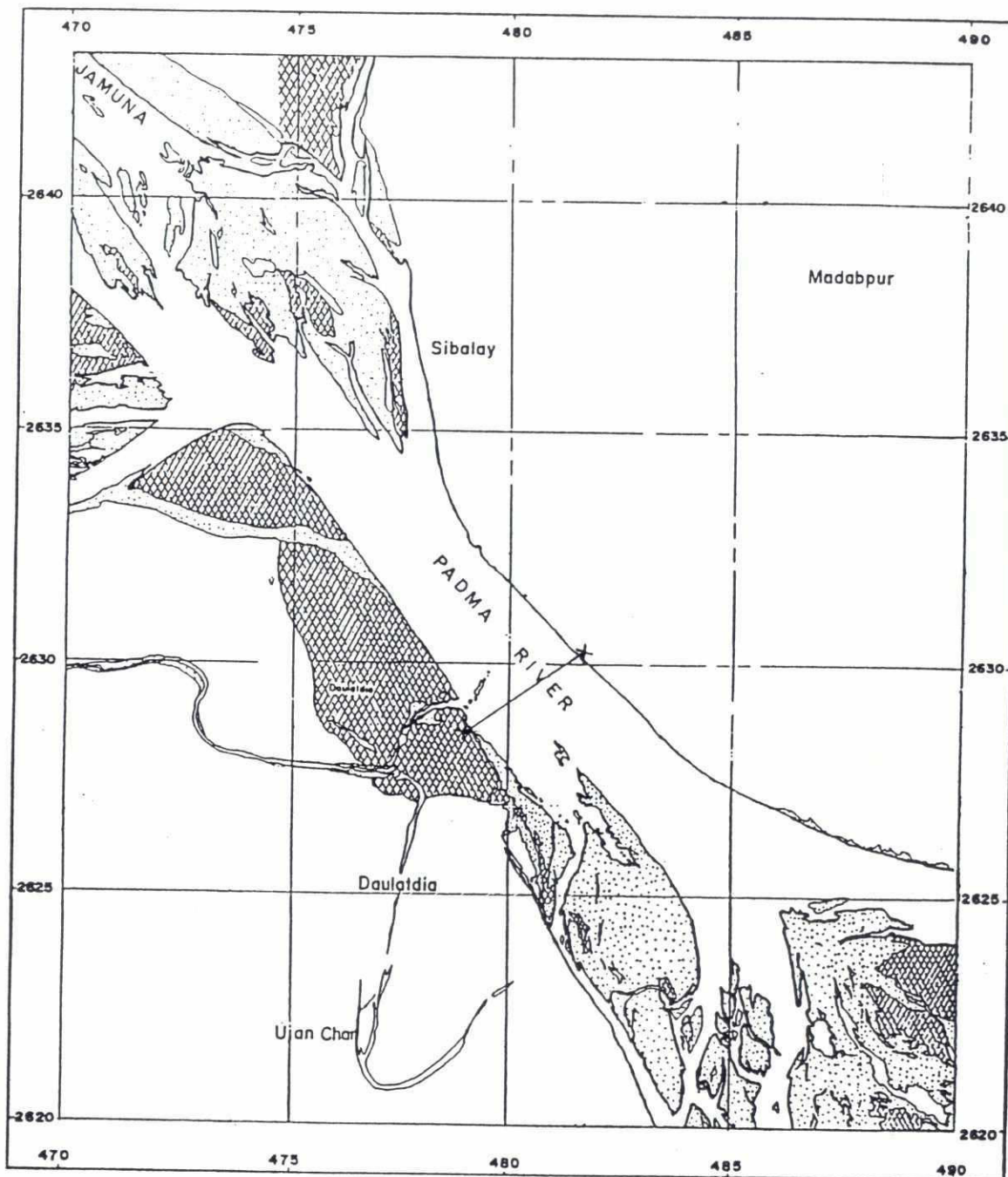
Date of Survey : 05 - 06 February 1994  
Location : Padma River at Baruria  
Location No : 5

Table 2.3 List of Sediment Samples

y

Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U4251T01 .ase
Echosounder	1	QUATTRO	U4251T01 .ech
Sediment transport data	1	QUATTRO	U4251T01 .sed
Bed load sediment analysis	1	QUATTRO	U4251T01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U4251T01 .ssc
Transect plot data	1	QUATTRO	U4251T01 .trs
Iso-velocity plot data	1	MIKE 21	U4251T01 .ct2 U4251T01 .dt2

Table 5.1 PSD 24 Database file description



**LEGEND:-**

- X—X Measurement cross section
- High land
- Unstable / low char
- BWDB Embankment



5000m 2500m 0

Map is based on satellite  
images of March 1994



**RIVER SURVEY PROJECT**

Delft Hydraulics/Danish Hydraulic Institute  
in association with Osiris/Approtech/Hydroland

**Survey Bulletin No. 43 - Mar. 1994**

**Location No.5 : Padma River at Baruria**

File:

Date:

Scale:

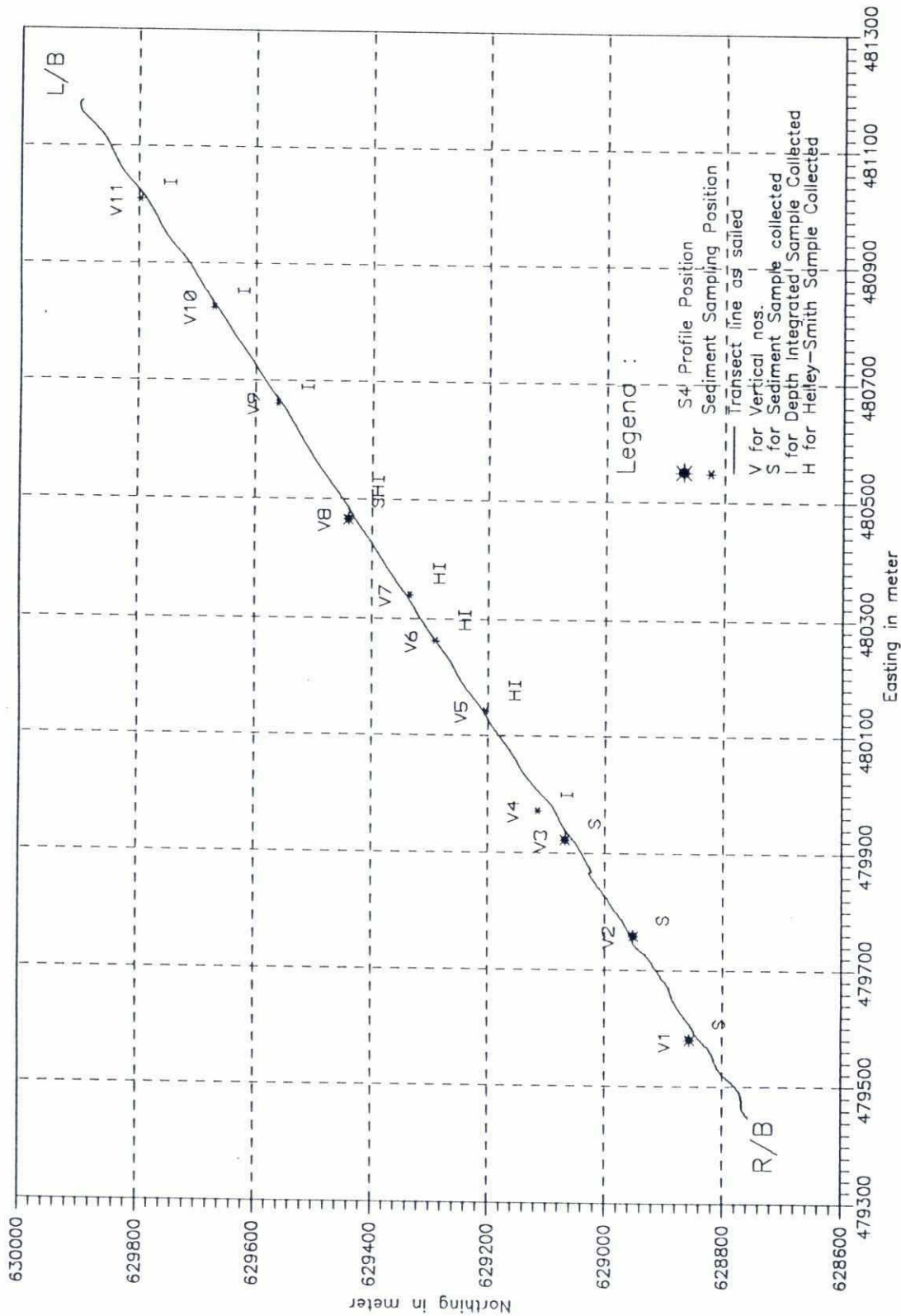
Init:

**KEY PLAN**

Fig.



4X



FAP 24



RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 43 : March 1994

Location 5 : Padma River, Baruria

Location of Measurements

Date

Init

LD

River : Padma  
ADCP/EMF Discharge

Date of Survey : 21 March 1994  
Location : Padma River, Baruara (Main Channel)  
Station No. 5

Date	Transect	Bank		Level (m+PWD)	Width (m)	Area (sq m)	Discharge (cumec)	Sediment Transport (Kg/s)
		From	To					
21-03-94	U43L1T01	Left	Right	2.06	1588	13912	4978	325
21-03-94	U43L1T02	Right	Left	2.06	1564	13884	4670	269
21-03-94	U43L1T03	Left	Right	2.06	1582	13712	4883	302
21-03-94	U43L1T04	Right	Left	2.06	1576	13888	4703	122
21-03-94	U43L1T05	Left	Right	2.06	1642	14018	5161	355
21-03-94	U43L1T06	Right	Left	2.06	1558	13776	4893	374
21-03-94	U43L1T07	Left	Right	2.06	1587	13906	5117	293
21-03-94	U43L1T08	Right	Left	2.06	1567	13815	4937	160
21-03-94	U43L1T10	Left	Right	2.06	1584	13834	5129	253
21-03-94	U43L1T12	Right	Left	2.06	1560	13801	5031	241
21-03-94	U43L1T13	Left	Right	2.06	1585	13800	5201	338
21-03-94	U43L1T14	Right	Left	2.06	1561	13705	5092	297
21-03-94	U43L1T15	Left	Right	2.06	1580	13767	5203	350
21-03-94	U43L1T16	Right	Left	2.06	1555	13721	4909	289
21-03-94	U43L1T17	Right	Left	2.06	1604	13827	4811	193
21-03-94	U43L1T18	Left	Right	2.06	1583	13778	4930	253
21-03-94	U43L1T19	Right	Left	2.06	1560	13706	4708	229
21-03-94	U43L1T20	Left	Right	2.06	1579	13784	4705	213
21-03-94	U43L1T21	Right	Left	2.06	1555	13710	4646	116
21-03-94	U43L1T22	Left	Right	2.06	1568	13751	4868	302
21-03-94	U43L1T24	Right	Left	2.06	1460	13420	4660	116
21-03-94	U43L1T25	Left	Right	2.06	1547	13712	4757	264

Table 3.1 SUMMARY OF RESULTS (ADCP/EMF-discharge)

90  
River : Padma  
S4 Discharge

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Shallow Channel)

Station No. 5

Date	Profile	Transect	Bank		Level (m+PWD)	Width (m)	Area (sq.m)	Discharge (cumec)	Sediment Transport (Kg/s)
			From	To					
21-03-94	U43L2P02	U43L2B01	Right	Left	2.06	1077	2140	142	2.94
21-03-94	U43L2P03	U43L2B02	Left	Right	2.06	1118	2603	198	4.20
21-03-94	U43L2P04				2.06				

Table 3.2 SUMMARY OF RESULTS (S4-discharge)



River : Padma  
S4 Velocity

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Main Channel)

Station No. 5

Vertical 8	
Total depth = 11.90 m	
Depth	Velocity
[m]	[m/s]
0.50	-
2.40	0.49
4.80	0.51
7.10	0.50
9.50	0.48
11.40	0.36

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Shallow Channel)

Station No. 5

Vertical 1	
Total depth = 1.60 m	
Depth	Velocity
[m]	[m/s]
0.30	0.12
1.00	0.09
1.30	0.11

Vertical 2	
Total depth = 1.80 m	
Depth	Velocity
[m]	[m/s]
0.40	0.11
1.10	0.06
1.40	0.05

Vertical 3	
Total depth = 2.60 m	
Depth	Velocity
[m]	[m/s]
0.50	0.13
1.60	0.13
2.10	0.10

Table 3.3 SUMMARY OF RESULTS (S4 Current)

72 ✓  
River : Padma  
Concentration

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Main Channel)

Station No. 5

Vertical 8	
Total depth = 11.90 m	
Depth	Conc.
[m]	[mg/l]
0.50	21.60
2.40	36.56
4.80	41.02
7.10	36.85
9.50	50.66
11.40	50.96

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Shallow Channel)

Station No. 5

Vertical 1	
Total depth = 1.60 m	
Depth	Conc.
[m]	[mg/l]
0.30	10.95
1.00	13.65
1.30	21.34

Vertical 2	
Total depth = 1.80 m	
Depth	Conc.
[m]	[mg/l]
0.40	7.12
1.10	7.84
1.40	15.09

Vertical 3	
Total depth = 2.60 m	
Depth	Conc.
[m]	[mg/l]
0.50	16.09
1.60	27.14
2.10	27.89

Table 3.4 SUMMARY OF RESULTS (Suspended Sediment Concentration)

76

River : Padma  
Depth integrated concentration

Date of Survey : 21 March 1994  
Location : Padma River, Baruara (Main Channel)  
Station No. 5

Sample No.	Vertical No.	Date	Time	Total Depth (m)	Concentration (mg/l)
A460	4	21/03/94	15:57	3.00	615.64*
A337	5	21/03/94	18:12	9.10	35.02
A1134	6	21/03/94	16:55	9.80	33.74
A688	7	21/03/94	15:55	11.00	46.96
A42	8	21/03/94	14:50	11.70	43.64
A689	9	21/03/94	12:52	9.90	46.97
A130	10	21/03/94	11:13	10.10	40.43
A739	11	21/03/94	10:10	7.10	36.49

\* : Data invalid

Table 3.5 SUMMARY OF RESULTS (depth integrated concentration)



98

Helley-Smith samples		
Vertical no.	Bed load sb in Kg/ms	
	1	2
5	0.000034	0.000023
6	0.000051	0.000017
7	0.000045	0.000029
8	0.000077	0.000051

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Main Channel)

Station No. 5

Table 3.6 SUMMARY OF RESULTS (sediment transport, bed load)

90

River : Padma

Grain size of bed load

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Main Channel)

Station No. 5

Sample No.	Date	Time	D35 (mm)	D50 (mm)	D65 (mm)	Standard Deviation
A348	21/03/94	18:07	0.160	0.181	0.206	1.334
A691	21/03/94	18:15	0.166	0.191	0.221	1.488
A346	21/03/94	16:55	0.171	0.198	0.230	1.543
A1363	21/03/94	17:02	0.176	0.207	0.243	1.576
A33	21/03/94	15:55	0.198	0.245	0.305	1.626
A1385	21/03/94	15:57	0.191	0.234	0.291	1.626
A921	21/03/94	14:46	0.155	0.182	0.213	1.500
A358	21/03/94	14:52	0.378	0.460	0.575	1.629

Table 3.7 SUMMARY OF RESULTS (grain size bed load)

20

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To					ADCP	HYDRO	EMF	S4	MEX	Suspended Sediment Samples	Andreasen Tube Samples	Helley Smith Samples	Integrated Sediment Samples	Bottom Samples
Transect	07:00:14	07:14:13	U43L1T01*				T	T	T							
Transect	07:23:03	07:36:21	U43L1T02				T	T	T							
Transect	08:09:40	08:22:41	U43L1T03				T	T	T							
Transect	08:31:15	08:44:30	U43L1T04				T	T	T							
Transect	09:24:52	09:38:01	U43L1T05				T	T	T							
Transect	09:42:39	09:54:55	U43L1T06				T	T	T							
Transect	10:28:36	10:40:47	U43L1T07				T	T	T							
Transect	10:43:53	10:55:50	U43L1T08				T	T	T							
Transect	11:58:43	12:10:37	U43L1T10				T	T	T							
Transect	12:25:23	12:36:47	U43L1T12				T	T	T							
Transect	13:56:41	14:10:08	U43L1T13				T	T	T							
Transect	14:13:13	14:26:39	U43L1T14				T	T	T							
Transect	15:10:08	15:24:15	U43L1T15				T	T	T							
Transect	15:26:41	15:38:48	U43L1T16				T	T	T							
Transect	16:10:14	16:21:27	U43L1T17				T	T	T							
Transect	16:25:06	16:38:10	U43L1T18				T	T	T							
Transect	17:13:10	17:25:18	U43L1T19				T	T	T							
Transect	17:27:23	17:41:16	U43L1T20				T	T	T							
Transect	18:25:20	18:36:40	U43L1T21				T	T	T							
Transect	18:38:46	18:50:45	U43L1T22				T	T	T							
Transect	19:31:05	19:42:30	U43L1T24				T	T	T							
Transect	19:44:35	19:56:35	U43L1T25				T	T	T							
Profile	10:00:00	10:19:00	U43L1P01	11	481010	629797	P	P	P			-	-	-	1	-
Profile	11:13:00	11:23:00	U43L1P02	10	480824	629671	P	P	P			-	-	-	1	-
Profile	21:48:00	21:58:00	U43L1P03	9	480661	629561	P	P	P			-	-	-	1	-
Profile	10:59:00	11:25:00	U43L2P01	8	480466	629440	P	P	P	P		6	-	2	1	-
Profile	15:50:00	16:01:00	U43L1P05	7	480340	629335	P	P	P			-	-	2	1	-
Profile	16:55:00	17:06:00	U43L1P06	6	480262	629291	P	P	P			-	-	2	1	-
Profile	18:07:00	18:07:00	U43L1P07	5	480141	629205	P	P	P			-	-	2	1	-
Profile	18:59:00	19:17:00	U43L1P08	4	479971	629115	P	P	P			-	-	-	1	-

\* transect in PSD 24 data base

Date of Survey : 21 March 1994  
Location : Padma River, Baruara (Main Channel)  
Station No. 5

Table 2.1 (SURVEY PROGRAMME AS MADE)

Type	Time		File Name	Ver. No.	Easting (meter)	Northing (meter)	DISCHARGE GAUGING					SEDIMENT TRANSPORT GAUGING				
	From	To														
Transect	09:22:27	09:28:26	U43L2B01*													
Transect	09:29:36	09:37:12	U43L2B02													
Profile	11:59:00	12:07:00	U43L2P02	1	479579	628856										
Profile	12:26:00	12:41:00	U43L2P03	2	479758	628952										
Profile	12:55:00	13:07:00	U43L2P04	3	479922	629068										

\* transect in PSD 24 data base

Date of Survey : 21 March 1994  
Location : Padma River, Baruara (Shallow Channel)  
Station No. 5

Table 2.2 (SURVEY PROGRAMME AS MADE)





98

Type Of Samples	Sample	Total	Vertical
Point Integrated Samples	Nos.	Sample Nos.	No.
	A1481,A1390,A1392,A1393,A1394,A1403	6	8
Depth Integrated Samples	A460	1	4
	A337	1	5
	A1134	1	6
	A688	1	7
	A42	1	8
	A689	1	9
	A130	1	10
	A739	1	11
Helley Smith samples	A348,A691	2	5
	A346,A1363	2	6
	A33,A1385	2	7
	A921,A358	2	8

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Main Channel)

Station No. 5

Type Of Samples	Sample	Total	Vertical
	Nos.	Sample Nos.	No.
Point Integrated Samples	A1474,A1396,A1471	3	1
	A1467,A1461,A1468	3	2
	A1458,A1395,A1463	3	3

Date of Survey : 21 March 1994

Location : Padma River, Baruara (Shallow Channel)

Station No. 5

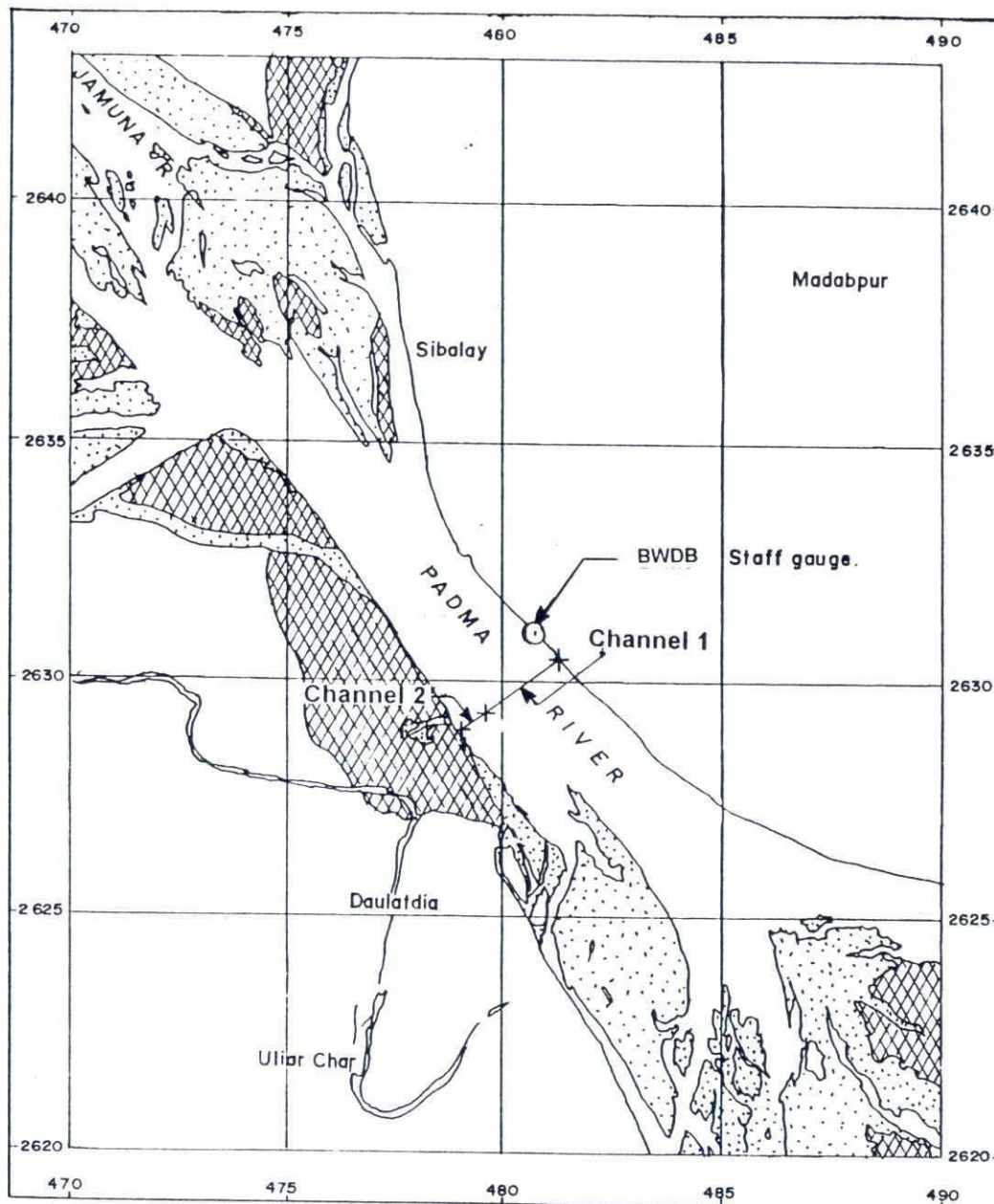
Table 2.3 List of Sediment Samples



92

Types of Data	Channel	Format	Filename
ADCP/S4/EMF	1	QUATTRO	U43L1T01 .ase
ADCP/S4/EMF	2	QUATTRO	U43L2B01 .ase
Echosounder	1	QUATTRO	U43L1T01 .ech
Echosounder	2	QUATTRO	U43L2B01 .ech
Sediment transport data	1	QUATTRO	U43L1T01 .sed
Sediment transport data	2	QUATTRO	U43L2B01 .sed
Bed load sediment analysis	1	QUATTRO	U43L1T01 .bdl
Bed load sediment analysis	2	QUATTRO	U43L2B01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U43L1T01 .ssc
Suspended sed. conc. analysis	2	QUATTRO	U43L2B01 .ssc
Transect plot data	1	QUATTRO	U43L1T01 .trs
Transect plot data	2	QUATTRO	U43L2B01 .trs
Iso-velocity plot data	1	MIKE 21	U43L1T01 .ct2
Iso-velocity plot data	1	MIKE 21	U43L1T01 .dt2
Iso-velocity plot data	2	MIKE 21	U43L2B01 .ct2
Iso-velocity plot data	2	MIKE 21	U43L2B01 .dt2

Table 5.1 PSD 24 Database file description



**LEGEND:-**

- X-X Cross section
- High land
- Unstable/low char
- ⊙ BWDB Staff gauge



5000m 2500m 0

Map is based on satellite images of March 1994

**FAP 24**



DELFT - DHI

**RIVER SURVEY PROJECT**  
Flood Plan Coordination Organization  
Commission of the European Communities

**Survey Bulletin 51 : 09 - 10 April, 1994**

**Location 5 : Padma River, Baruria**

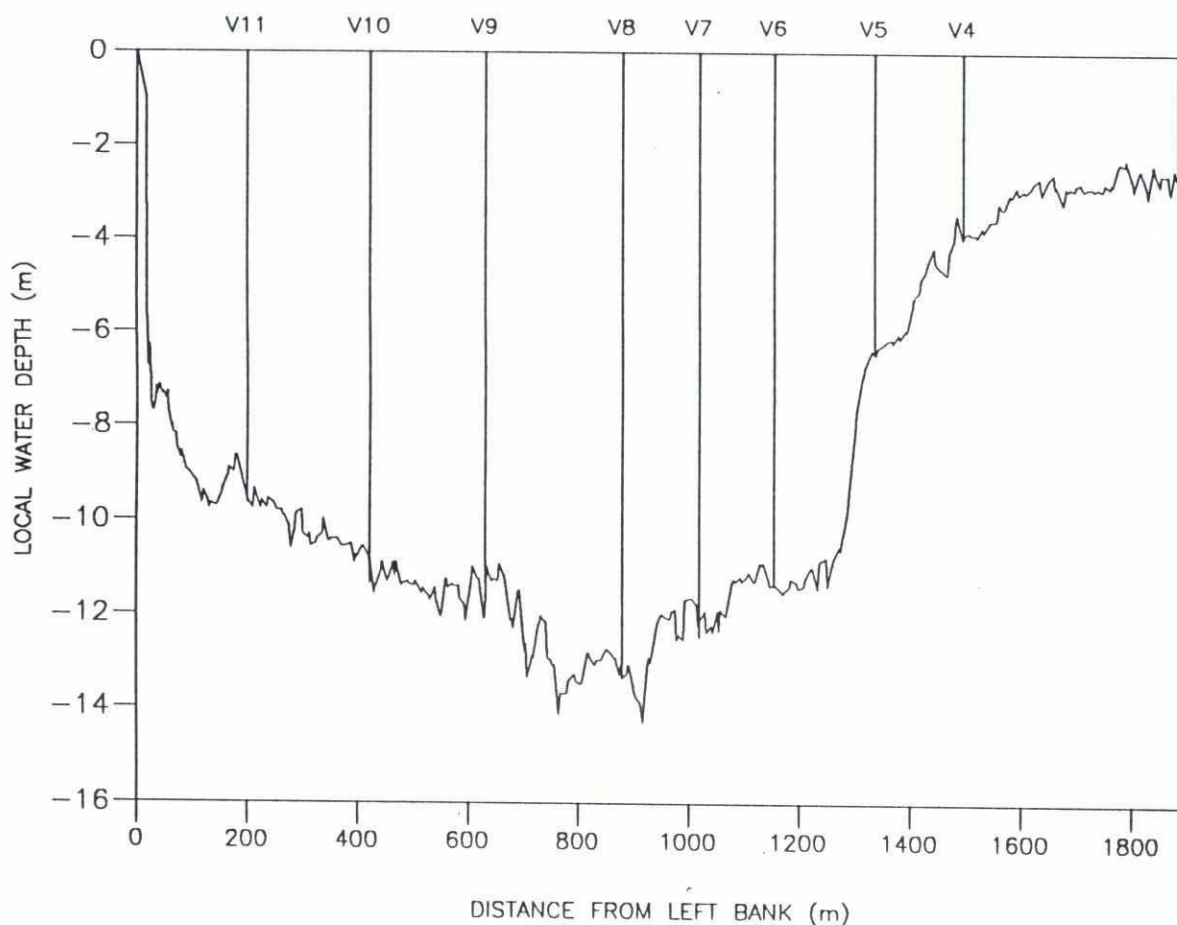
Date : 16 Aug 1994

Init : mua


**Location map**

page

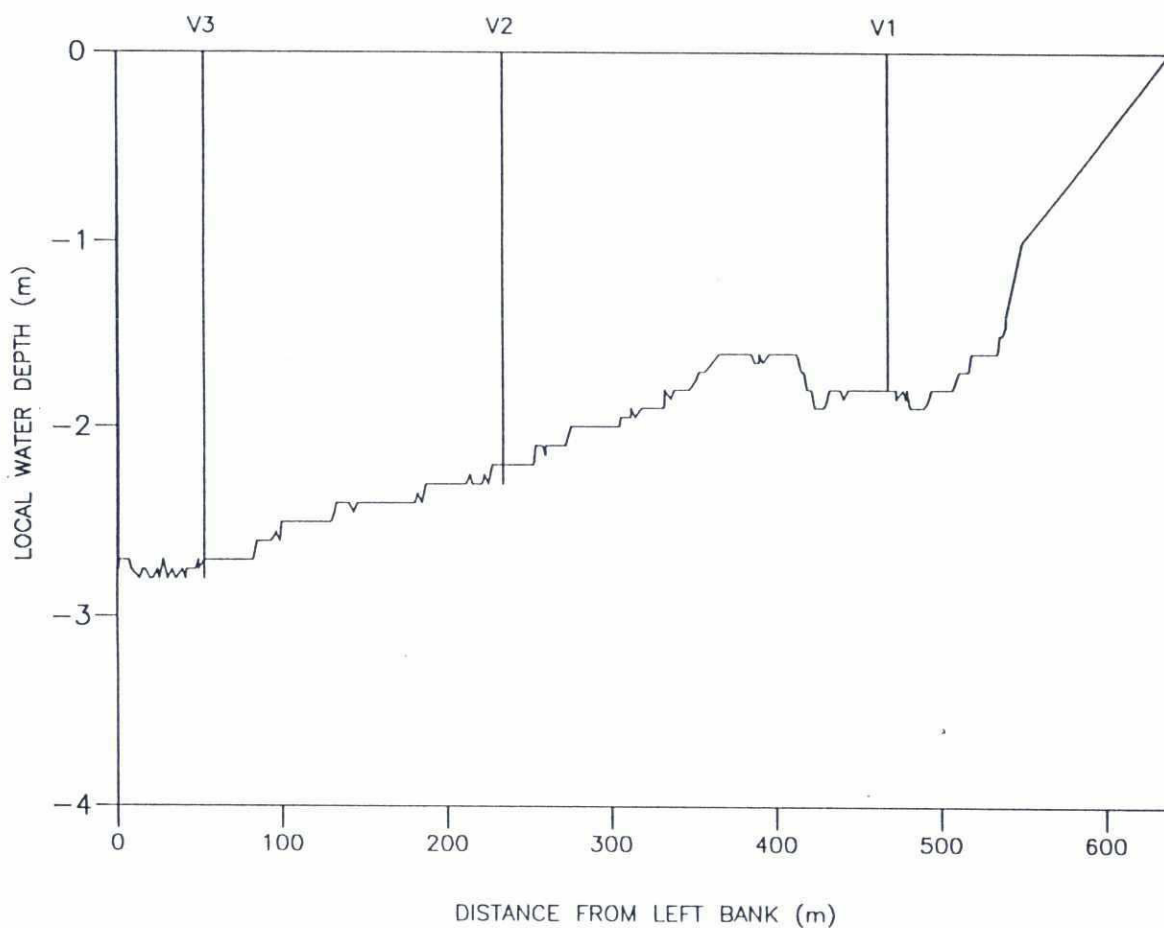
1.1



Water level : 3.30 m + PWD measured at the station indicated on page 1.1

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 51 : 09-10 April, 1994</b>	
<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Location 5 : Padma River, Baruria</b>	
File : U4491T01	Date : 16 Aug 1994  Init : mk	<b>Cross-sections and measured verticals</b> <b>Channel 1</b>	page 1.2





Water level : 3.35 m + PWD measured at the station indicated on page 1.1

Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	4	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	3	-	-
Vertical current profile	No. of verticals in channel	8	3	-	-
	ADCP	8	-	-	-
	S4 current meter	1	3	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	9	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	6	-	-	-
	Integrated bottle sampling	8	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	12	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

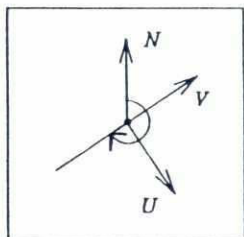
	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1884	16526	3.30	10482	1	2256
Channel 2	640	1204	3.35	1.2	0	0.37

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	09 Apr 94	3.30	BWDB
	Channel 2	10 Apr 94	3.35	

Table 2.3: Water-levels

<b>FAP 24</b>  DELFT - DHI		<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Survey Bulletin 51 : 09-10 April , 1994</b>	
				<b>Location 5 : Padma River, Baruria</b>	
File :	15 Aug 1994	<b>Survey programme as made and key figures</b>			page 2.1
U4491T01					
U44A2B03	Init : mua/mk				

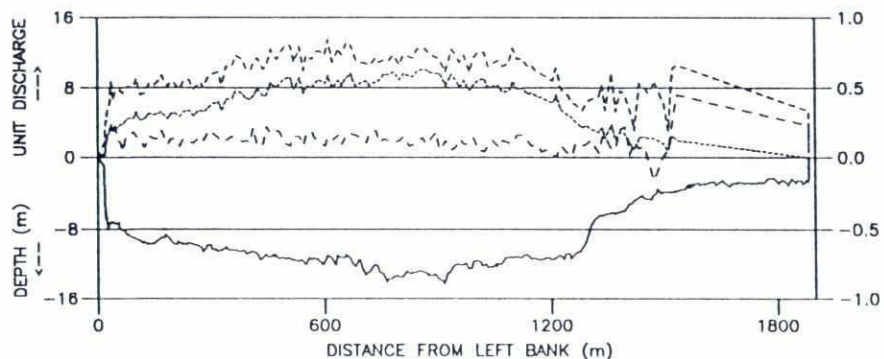


TRANSECT AZIMUTH =  $236^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

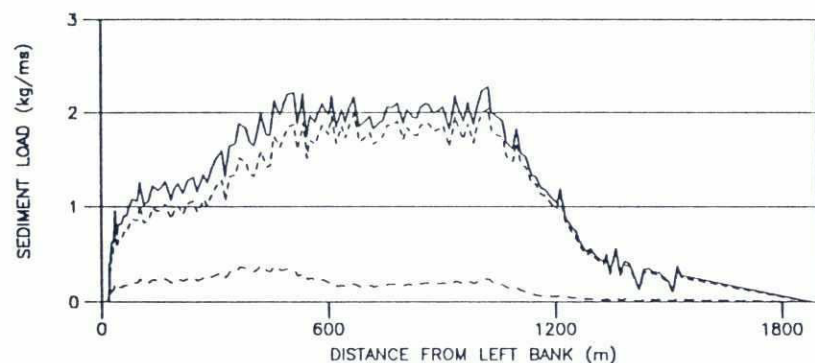
LEGEND :

— WATER DEPTH (m below STAGE)  
 ..... UNIT DISCHARGE ( $\text{m}^3/\text{s.m}$ )  
 --- U - (m/s)  
 -.- V - (m/s)

STAGE = 3.30 (m+PWD)

A = 16526 ( $\text{m}^2$ )

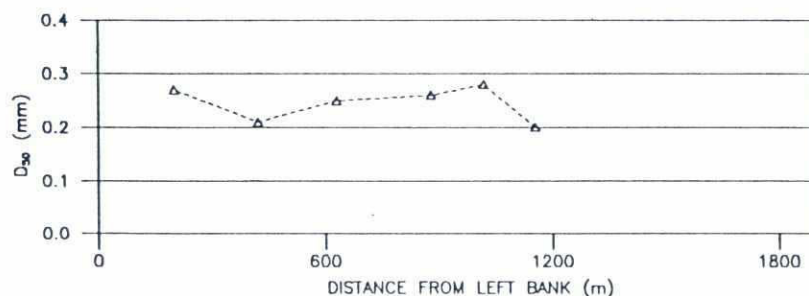
Q = 10482 ( $\text{m}^3/\text{s}$ )



SEDIMENT TRANSPORT

LEGEND :

—  $S_{TOTAL}$  2257 (kg/s)  
 ---  $S_{WASH LOAD}$  1978 (kg/s)  
 -.-  $S_{SUSP. BED}$  280 (kg/s)  
 .....  $S_{BED LOAD}$  1 (kg/s)



GRAIN SIZE

LEGEND :

♦♦♦♦♦  $D_{50 SUSP.}$  (mm)  
 ▲▲▲▲▲  $D_{50 BED LOAD}$  (mm)  
 □□□□□  $D_{50 BED MAT.}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
 Flood Plan Coordination Organization  
 Commission of the European Communities

Survey Bulletin 51 : 09-10 April, 1994

Location 5 : Padma River, Baruria

File : U4491T01

Date : 16 Aug 1994

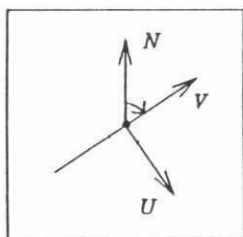
Init : mk

Horizontal distribution of flow and sediments

Channel 1

page

3.1

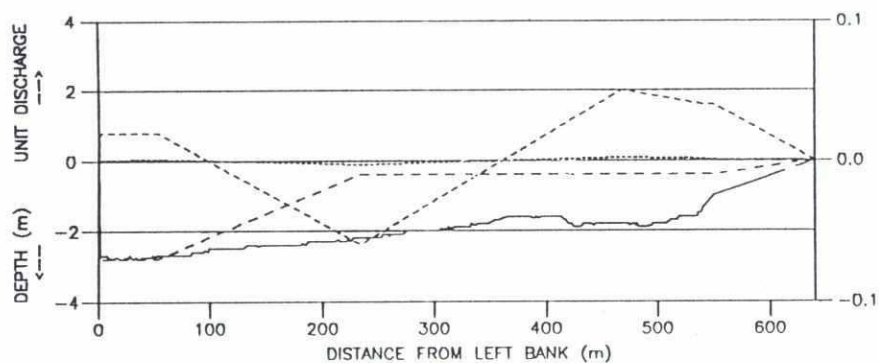


TRANSECT AZIMUTH =  $56^\circ$

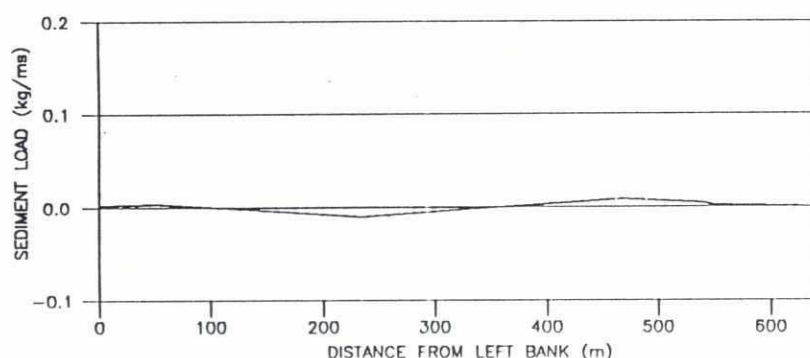
U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

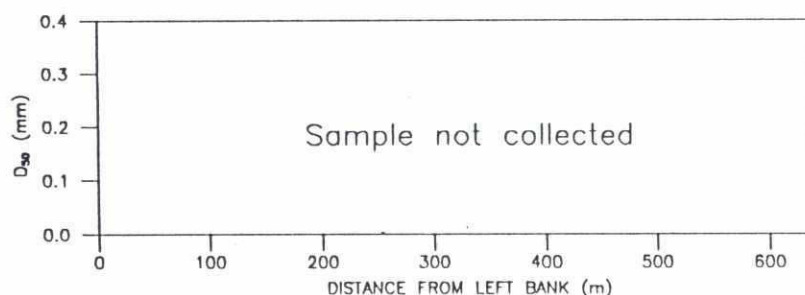
N - MAGNETIC NORTH



FLOW



SEDIMENT TRANSPORT



GRAIN SIZE

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 51 : 09-10 April, 1994

Location 5 : Padma River, Baruria

File : U44A2B03

Date : 16 Aug 1994

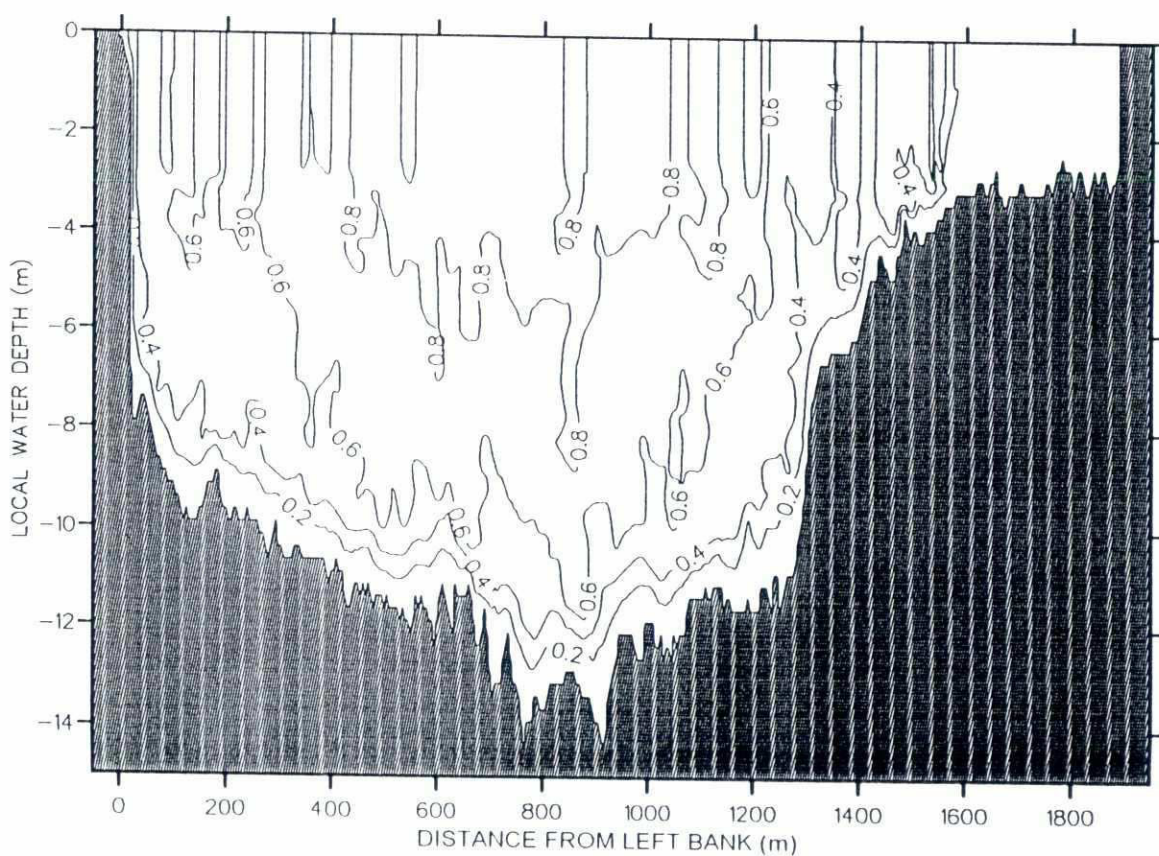
Init : mk

Horizontal distribution of flow and sediments  
Channel 2

page

3.2





Iso-velocity contours (m/s)

Water level : 3.30 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 51 : 09-10 April, 1994

Location 5 : Padma River, Baruria

File : U4491T01

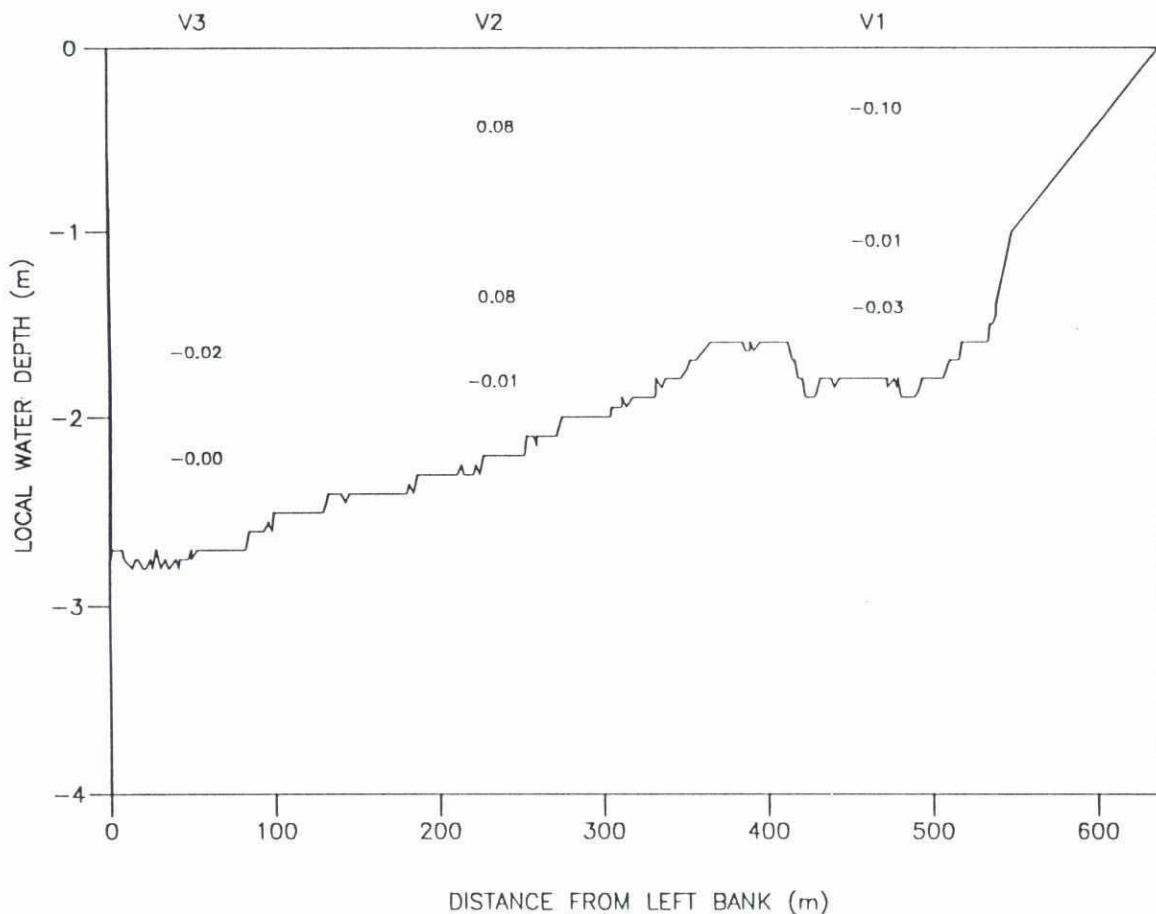
Date : 16 Aug 1994

Init : mk

Cross-sectional distribution of flow velocity  
Channel 1

page

4.1




Water level : 3.35 m + PWD measured at the station indicated on page 1.1

<div><div><div><div><div><div><span></span></div><div><span></span></div></div></div><div><div><div><span></span></div><div><span></span></div></div></div><div><div><div><span></span></div><div><span></span></div></div></div><div><div><div><span></span></div><div><span></span></div></div></div></div></div><div><div>FAP 24</div><div>DELFT - DHI</div></div></div> <div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div>		Survey Bulletin 51 : 09-10 April, 1994	
		Location 5 : Padma River, Baruria	
File : U44A2B03	Date : 16 Aug 1994	Cross-sectional distribution of flow velocity Channel 2	page 4.2
	Init : mk		

8/8

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	6	940491450	11.4	1.374	98.626	0.158	0.185	0.216
	6	940491455	11.4	0.930	99.070	0.176	0.206	0.242
	7	940491425	12.5	2.727	97.273	0.220	0.276	0.330
	7	940491430	12.5	0.416	99.584	0.226	0.279	0.332
	8	940491236	13.4	1.666	98.334	0.239	0.289	0.342
	8	940491246	13.4	2.055	97.945	0.187	0.230	0.288
	9	940491145	11.3	1.885	98.115	0.194	0.241	0.301
	9	940491150	11.3	0.547	99.453	0.209	0.262	0.318
	10	940491105	11.4	2.716	97.284	0.173	0.205	0.241
	10	940491110	11.4	5.048	94.952	0.173	0.209	0.254
	11	940491042	9.70	2.074	97.926	0.189	0.232	0.291
	11	940491048	9.70	1.604	98.396	0.267	0.310	0.360

Table 5.3 : Grain sizes of bed load

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 51 : 09 - 10 April , 1994	
		Location 5 : Padma River , Baruria	
	Date : 16 Aug 1994	Grain size distributions	page
	Init : mua/mk		5.2

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9404090813-0827 9404090831-0846 9404091607-1621 9404091624-1638	U4491T01 * U4491T02 U4491T03 U4491T04
Echo sounding	2	94040100759-0802 94040100805-0811 94040100815-0820	U44A2B01 U44A2B02 U44A2B03 *


Table 6.1: ADCP & EMF transects \* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	4	9404091549-1557	479946	629086	3.90	U4491P09*
		5	9404091520-1531	480080	629172	6.40	U4491P07*
		6	9404091445-1456	480230	629272	11.4	U4491P06*
		7	9404091420-1435	480344	629346	12.5	U4491P05*
		8	9404091227-1334	480459	629425	13.4	U4491P04
		9	9404091141-1152	480666	629563	11.3	U4491P03*
		10	9404091100-1118	480840	629678	11.4	U4491P02*
		11	9404091027-1046	481025	629800	9.70	U4491P01*
	2	1	9404100847-0906	479232	628610	1.80	U44A2P01**
		2	9404100924-0941	479430	628735	2.30	U44A2P02**
		3	9404100956-1013	479581	628833	2.80	U44A2P03**

Table 6.2: Vertical profiles \* S4 & MEX not available      \*\* ADCP & MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	8	6	9404091027-1046	481025	629800	13.4
	2	1	3	9404100847-0906	479232	628610	1.80
		2	3	9404100924-0941	479430	628735	2.30
		3	3	9404100956-1013	479581	628833	2.80

Table 6.3: Suspended sediment - point sampled

 <b>FAP 24</b> DELFT - DHI		<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Survey Bulletin 51 : 09-10 April , 1994</b>	
				<b>Location 5 : Padma River , Baruria</b>	
		Date : 16 Aug 1994 Init : mk/mua		<b>Collected data and their storage (1)</b>	
				page 6.1	




Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments 20	1	4	1	9404091549-1557	479946	629086	3.90
		5	1	9404091520-1531	480080	629172	6.40
		6	1	9404091445-1456	480230	629272	11.4
		7	1	9404091420-1435	480344	629346	12.5
		8	1	9404091227-1334	480459	629425	13.4
		9	1	9404091141-1152	480666	629563	11.3
		10	1	9404091100-1118	480840	629678	11.4
		11	1	9404091027-1046	481025	629800	9.70
	2	1	1	9404100847-0906	479232	628610	1.80
		2	1	9404100924-0941	479430	628735	2.30
		3	1	9404100956-1013	479581	628833	2.80

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	6	9404091445-1456	480230	629272	11.4	A747
		6	9404091445-1456	480230	629272	11.4	A127
		7	9404091420-1435	480344	629346	12.5	A711
		7	9404091420-1435	480344	629346	12.5	A902
		8	9404091227-1334	480459	629425	13.4	A904
		8	9404091227-1334	480459	629425	13.4	A366
		9	9404091141-1152	480666	629563	11.3	A462
		9	9404091141-1152	480666	629563	11.3	A695
		10	9404091100-1118	480840	629678	11.4	A350
		10	9404091100-1118	480840	629678	11.4	A359
		11	9404091027-1046	481025	629800	9.70	A51
		11	9404091027-1046	481025	629800	9.70	A32

Table 6.5: Bed load


<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 51 : 09-10 April , 1994	
		Location 5 : Padma River , Baruria	
	Date : 16 Aug 1994	Collected data and their storage (2)	page 6.2
	Init : mua/mk		

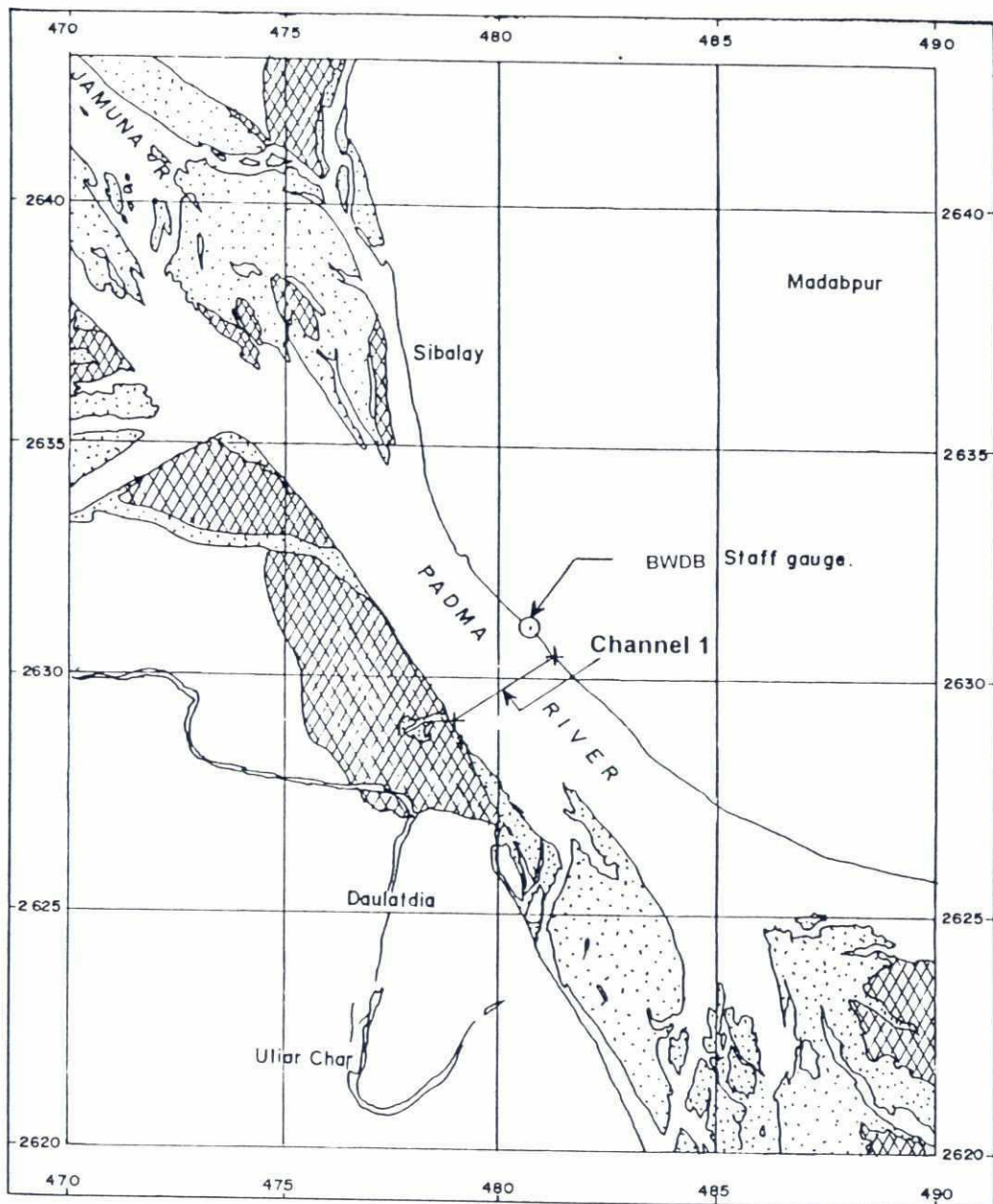
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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4491T01 .ase
ADCP/S4/EMF data	2	QUATTRO	U44A2B03 .ase
Echosounder data	1	QUATTRO	U4491T01 .ech
Echosounder data	2	QUATTRO	U44A2B03 .ech
Sediment transport data	1	QUATTRO	U4491T01 .sed
Sediment transport data	2	QUATTRO	U44A2B03 .sed
Bed load sediment analysis	1	QUATTRO	U4491T01 .bdl
Susp. sed. conc. analysis	1	QUATTRO	U4491T01 .ssc
Susp. sed. conc. analysis	2	QUATTRO	U44A2B03 .ssc
Transect plot data	1	QUATTRO	U4491T01 .trs
Transect plot data	2	QUATTRO	U44A2B03 .trs
Iso-velocity plot data	1	MIKE 21	U4491T01 .ct2 U4491T01 .dt2

Table 7.1 PSD 24 Database file description



<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 51 : 09-10 April, 1994	
		Location 5 : Padma River, Baruria	
	Date : 16 Aug 1994	PSD 24 Database file description	page
	Init : mua		7.1



LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ BWDB Staff gauge



5000m 2500m 0

Map is based on satellite images of March 1994

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 56 : 03 - 05 May, 1994

Location 5 : Padma River, Baruria

Date : 16 Aug 1994

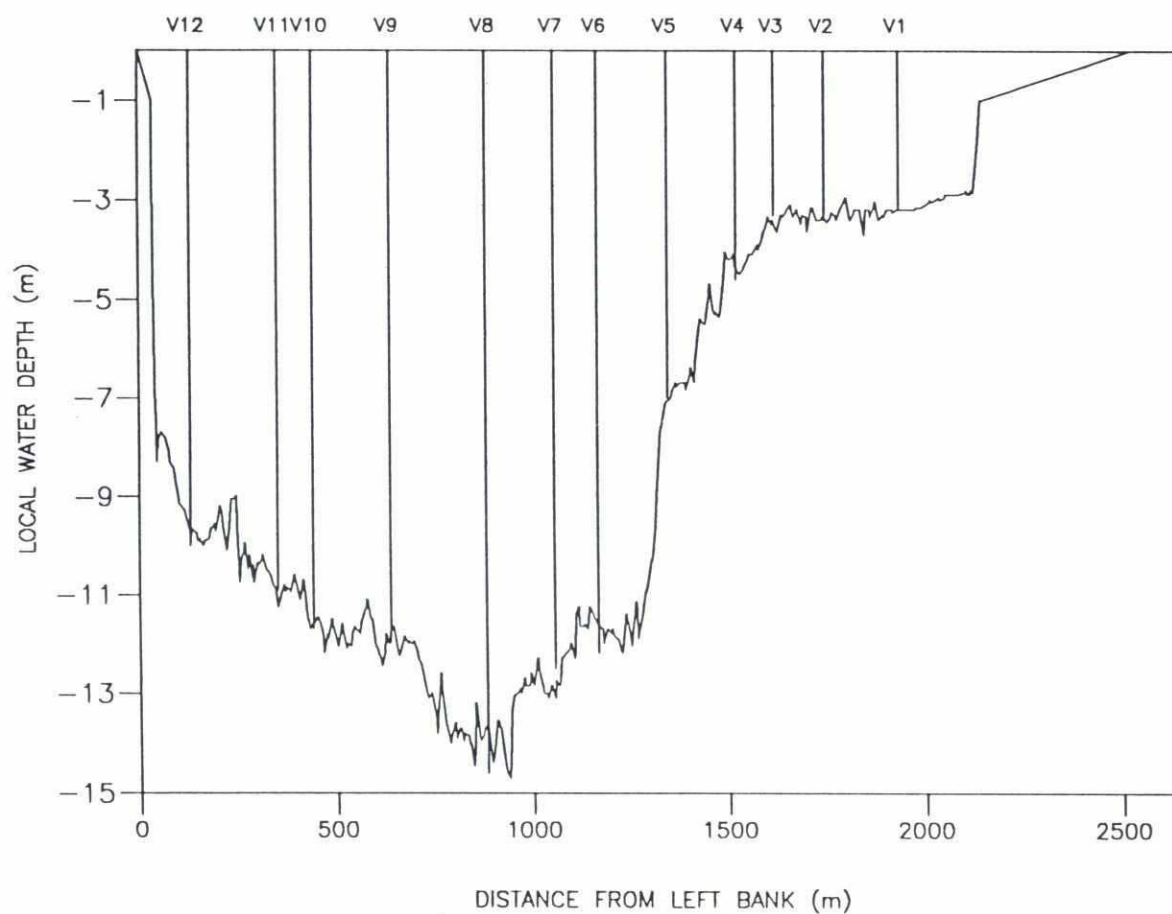
Init mk

Location map


page

1.1

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Water-level : 3.71 m + PWD measured at the station indicated on page 1.1

<b>FAP 24</b>  DELFT - DHI		Survey Bulletin 56 : 03 - 05 May, 1994	
		Location 5 : Padma River, Baruria	
File : U4531T01	Date : 16 Aug 1994	Cross-sections and measured verticals Channel 1	page
	Init : mk		1.2




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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	34	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	4	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	6	-	-	-
	Integrated bottle sampling	12	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	14	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2527	18332	3.71	13016	0.6	4046.5
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	03 May 94	3.71	BWDB
		04 May 94	3.86	
		05 May 94	3.91	


Table 2.3: Water-levels

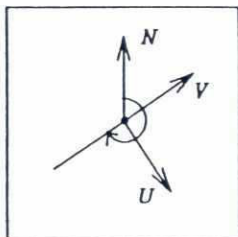
<div><div><div><div>FAP 24</div><div>DELFT - DHI</div></div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 56 : 03 - 05 May , 1994	
		Location 05 : Padma River, Baruria	
File : U4531T01	Date : 16 Aug 1994	Survey programme as made and key figures	page  2.1
	mk		

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Channel	Width	Area	Stage	Discharge
File Names	(m)	(m <sup>2</sup> )	h (m+PWD)	Q (m <sup>3</sup> /s)
u4551T01	2511	18404	3.91	12970
u4551T02	2505	18309	3.91	12895
u4551T03	2421	18129	3.91	12590
u4551T04	2502	18297	3.91	12978
u4551T05	2505	18290	3.91	12728
u4551T06	2511	18403	3.91	13016
u4551T07	2510	18339	3.91	12572
u4551T08	2512	18428	3.91	13124
u4551T09	2502	18333	3.91	12681
u4551T11	2502	18335	3.91	13188
u4551T12	2507	18419	3.91	13155
u4551T13	2500	18316	3.91	12606
u4551T14	2508	18442	3.91	13340
u4551T15	2499	18356	3.91	12850
u4551T16	2509	18394	3.91	13061
u4551T17	2500	18314	3.91	13205
u4551T18	2505	18367	3.91	13452
u4551T19	2501	18318	3.91	12966
u4551T20	2503	18368	3.91	13184
u4551T21	2505	18309	3.91	12853
u4551T22	2505	18363	3.91	13190
u4551T23	2502	18279	3.91	12924
u4551T24	2507	18348	3.91	13165
u4551T26	2502	18338	3.91	12773
u4551T27	2501	18284	3.91	12349
u4551T28	2498	18330	3.91	13246

Table 2.4: Key figures of transects (tida!)

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 56 : 03 - 05 May , 1994	
		Location 05 : Padma River, Baruria	
	Date : 16 Aug 1994	Survey programme as made and key figures	page
	mik		2.2

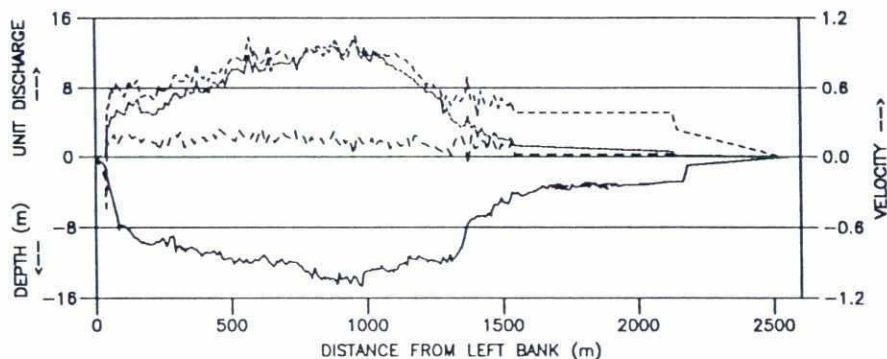


TRANSECT AZIMUTH = 236°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

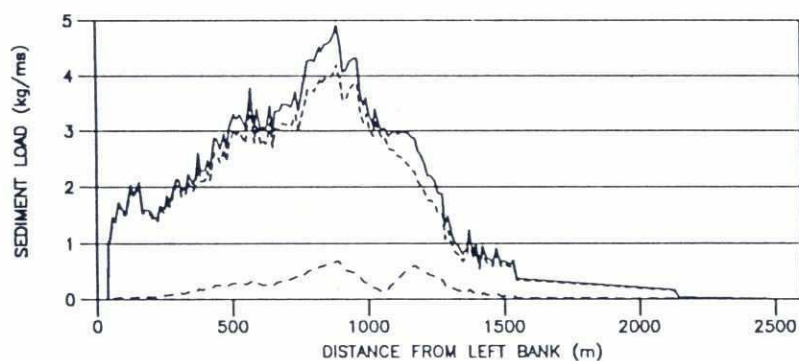
LEGEND :

— WATER DEPTH (m below STAGE)  
 --- UNIT DISCHARGE (m³/s.m)  
 ... U - (m/s)  
 ... V - (m/s)

STAGE = 3.71 (m+PWD)

A = 18332 (m³)

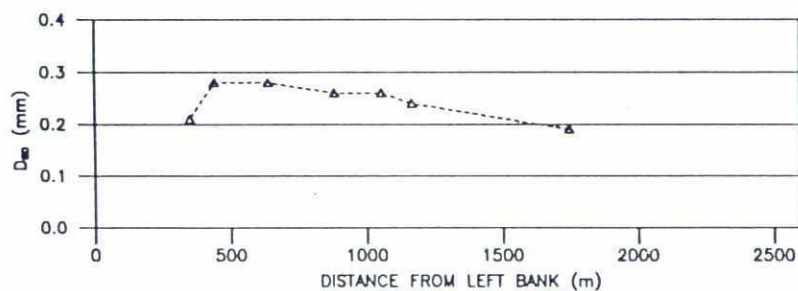
Q = 13018 (m³/s)



SEDIMENT TRANSPORT

LEGEND :

— S<sub>TOTAL</sub> 4047.1 (kg/s)  
 --- S<sub>WASH LOAD</sub> 3629.5 (kg/s)  
 ... S<sub>SUSP. BED</sub> 417.0 (kg/s)  
 -.- S<sub>BED LOAD</sub> 0.6 (kg/s)



GRAIN SIZE

LEGEND :

♦♦♦♦♦ D<sub>50</sub> SUSP. (mm)  
 ▲▲▲▲▲ D<sub>50</sub> BED LOAD (mm)  
 □□□□□ D<sub>50</sub> BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 56 : 03 - 05 May, 1994

Location 05 : Padma River, Baruria

File : U4531T01

Date : 16 Aug 1994

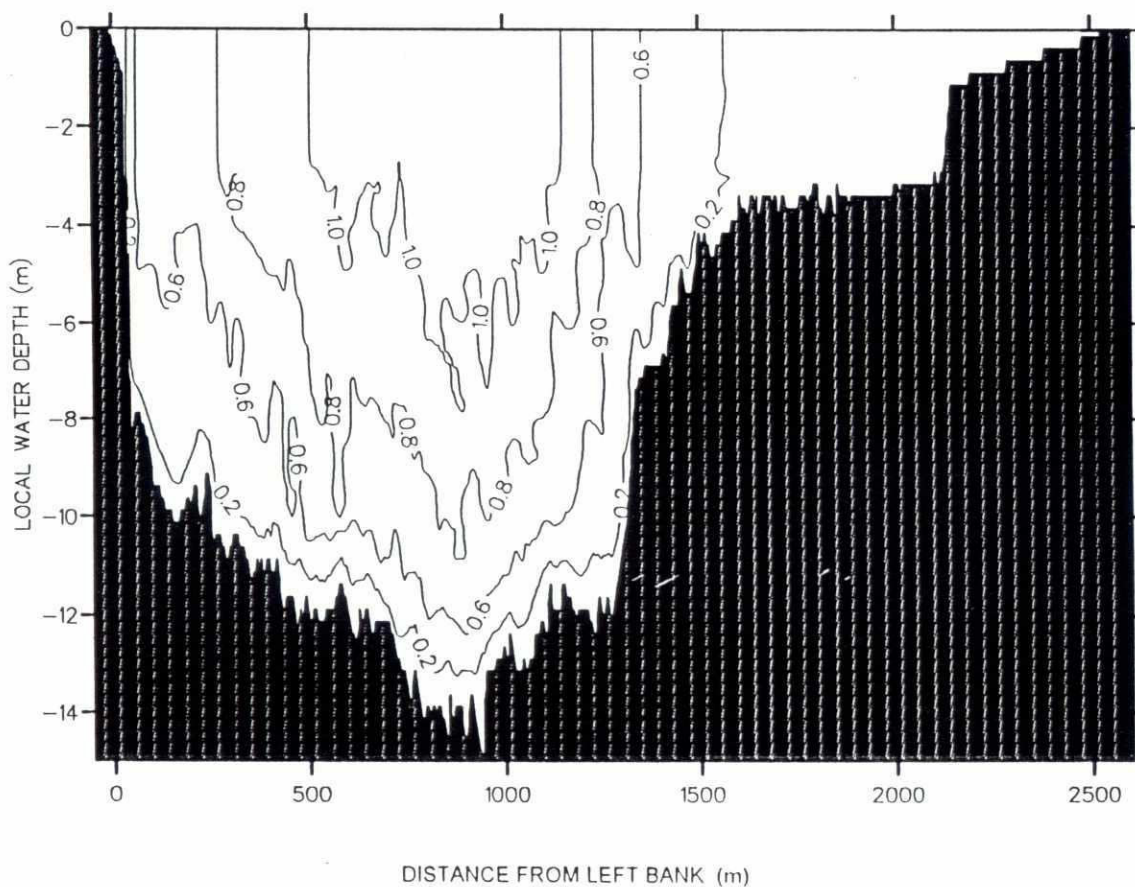
Init : mk

Horizontal distribution of flow and sediments

Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 3.71 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 56 : 03 - 05 May, 1994

Location 5 : Padma River, Baruria

File : U4531T01

Date : 16 Aug, 1994

Init : mk

Cross-sectional distribution of flow velocity  
Channel 1

page

4.1




25

Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	2	199405031510	3.4	22.015	77.985	0.14	0.189	0.254
	2	199405031520	3.4	17.131	82.869	0.140	0.183	0.241
	6	199405041035	12.2	1.968	98.032	0.192	0.236	0.294
	6	199405041040	12.2	1.803	98.197	0.197	0.245	0.304
	7	199405041119	12.5	1.266	98.734	0.232	0.284	0.338
	7	199405041126	12.5	4.205	95.795	0.190	0.239	0.300
	8	199405041158	14.6	0.864	99.136	0.226	0.279	0.332
	8	199405041210	14.6	2.734	97.266	0.199	0.249	0.309
	9	199405041356	12.0	2.755	97.245	0.225	0.28	0.334
	9	199405041405	12.0	2.466	97.534	0.218	0.274	0.329
	10	199405041428	11.7	1.386	98.614	0.226	0.279	0.333
	10	199405041436	11.7	1.876	98.124	0.227	0.28	0.334
	11	199405041522	10.9	8.061	91.939	0.164	0.197	0.238
	11	199405041530	10.9	3.995	96.005	0.179	0.216	0.267
Table 5.3 : Grain sizes of bed load								


 <p><b>FAP 24</b> DELFT - DHI</p>		<p><b>Survey Bulletin 56 : 03 - 05 May , 1994</b></p>	
<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>		<p><b>Location 05 : Padma River , Baruria</b></p>	
	Date : 16 Aug 1994	<p><b>Grain size distributions</b></p>	page
	Init : mk		5.1

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	199405031124-1144 199405031142-1157 199405031618-1636 199405031639-1653 199405040830-0844 199405040848-0902 199405041615-1628 199405041631-1645 199405050504-0518 199405050522-0535 199405050559-0613 199405050616-0630 199405050658-0712 199405050716-0730 199405050800-0813 199405050815-0829 199405050902-0915 199405050959-1013 199405051016-1031 199405051101-1116 199405051119-1133 199405051200-1214 199405051217-1232 199405051330-1313 199405051318-1332 199405051359-1414 199405051416-1431 199405051458-1512 199405051514-1528 199405051557-1611 199405051612-1625 199405051703-1716 199405051752-1806 199405051808-1821	U4531T01 * U4531T02 U4531T03 U4531T04 U4541T01 U4541T02 U4541T03 U4541T04 U4551T01 U4551T02 U4551T03 U4551T04 U4551T05 U4551T06 U4551T07 U4551T08 U4551T09 U4551T11 U4551T12 U4551T13 U4551T14 U4551T15 U4551T16 U4551T17 U4551T18 U4551T19 U4551T20 U4551T21 U4551T22 U4551T23 U4551T24 U4551T26 U4551T28 U4551T29

Table 6.1: ADCP & EMF transects \* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11 12	199405031423-1454 199405031507-1534 199405031548-1604 199405040921-0934 199405040955-1000 199405041032-1036 199405041119-1126 199405041158-1306 199405041356-1406 199405041428-1436 199405041522-1528 199405041557-1603	479596 479752 479858 479941 480088 480239 480333 480470 480676 480837 480912 481094	628847 628954 629028 629078 629173 629272 629330 629436 629567 629681 629733 629857	3.20 3.40 3.30 4.60 7.00 12.2 12.5 14.6 12.0 11.7 10.9 10.0	U4531P01 * U4531P02 * U4531P03 * U4541P01 ** U4541P02 ** U4541P03 ** U4541P04 ** U4541P05 U4541P06 ** U4541P07 ** U4541P08 ** U4541P09 **

Table 6.2: Vertical profiles \* MEX not available \*\* S4 and MEX not available

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Survey Bulletin 56 : 03 - 05 May , 1994</b>	
				<b>Location 05 : Padma River, Baruria</b>	
		Date : 16 Aug 1994 Init : mk		<b>Collected data and their storage (1)</b>	
				page 6.1	

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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	8	6	199405041158-1306	480470	629436	14.60


Table 6.3: Suspended sediment - point sampled

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	1	1	199405031423-1454	479596	628847	3.20
		2	1	199405031507-1534	479752	628954	3.40
		3	1	199405031548-1604	479858	629028	3.30
		4	1	199405040921-0934	479941	629078	4.60
		5	1	199405040955-1000	480088	629173	7.00
		6	1	199405041032-1036	480239	629272	12.2
		7	1	199405041119-1126	480333	629330	12.5
		8	1	199405041158-1306	480470	629436	14.6
		9	1	199405041356-1406	480676	629567	12.0
		10	1	199405041428-1436	480837	629681	11.7
		11	1	199405041522-1528	480912	629733	10.9
		12	1	199405041557-1603	481094	629857	10.0

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	2	199405031510	479752	628954	3.4	A356
		2	199405031520	479752	628954	3.4	A921
		6	199405041035	480239	629272	12.2	A1619
		6	199405041040	480239	629272	12.2	A1608
		7	199405041119	480333	629330	12.5	A1626
		7	199405041126	480333	629330	12.5	A1627
		8	199405041158	480470	629436	14.6	A1656
		8	199405041210	480470	629436	14.6	A1637
		9	199405041356	480676	629567	12.0	A1612
		9	199405041405	480676	629567	12.0	A1665
		10	199405041428	480837	629681	11.7	A1622
		10	199405041436	480837	629681	11.7	A1624
		11	199405041522	480912	629733	10.9	A1616
		11	199405041530	480912	629733	10.9	A1640

Table 6.5: Bed load


<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 56 : 03 - 05 May , 1994	
		Location 05 : Padma River, Baruria	
	Date : 16 Aug 1994	Collected data and their storage (2)	page  6.2
	Init : mk		



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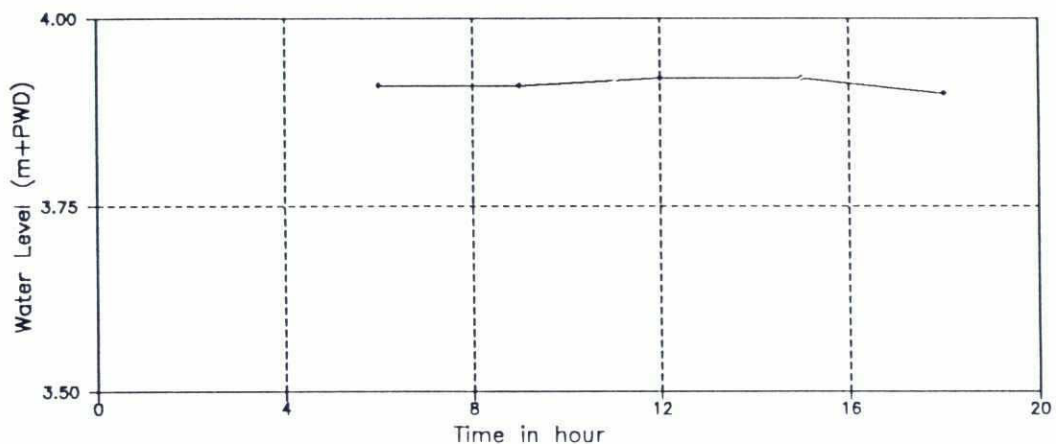
Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4531T01 .ase
Echosounder data	1	QUATTRO	U4531T01 .ech
Sediment transport data	1	QUATTRO	U4531T01 .sed
Bed load sediment analysis	1	QUATTRO	U4531T01 .bdl
Suspended sediment conc.	1	QUATTRO	U4531T01 .ssc
Transect plot data	1	QUATTRO	U4531T01 .trs
Iso-velocity plot data	1	MIKE 21	U4531T01 .ct2 U4531T01 .dt2

Table 7.1 PSD 24 Database file description

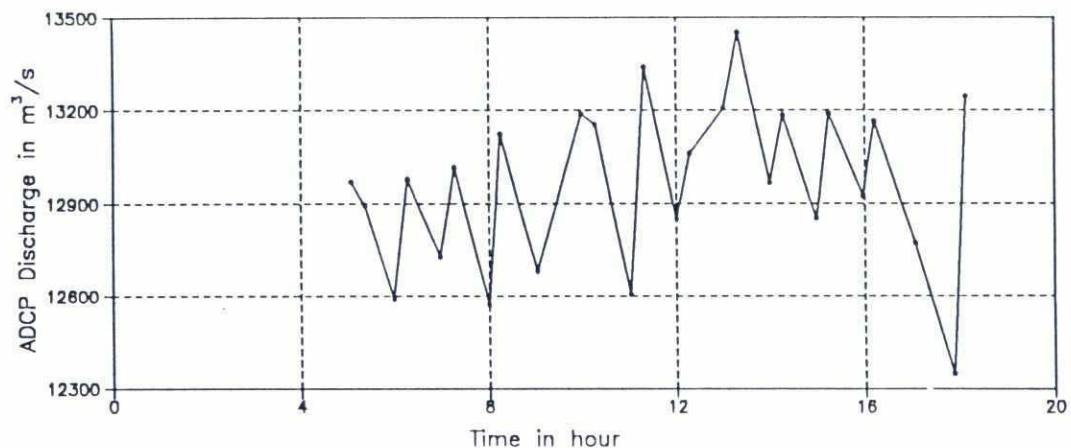
 <b>FAP 24</b> DELFT - DHI	<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 56 : 03 - 05 May, 1994
	Location 05 : Padma River, Baruria		
	Date : 16 Aug 1994	PSD 24 Database file description	page 7.1
	Init : mk		



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05/05/'94



05/05/'94

FAP 24



RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 56 : 03 - 05 May, 1994

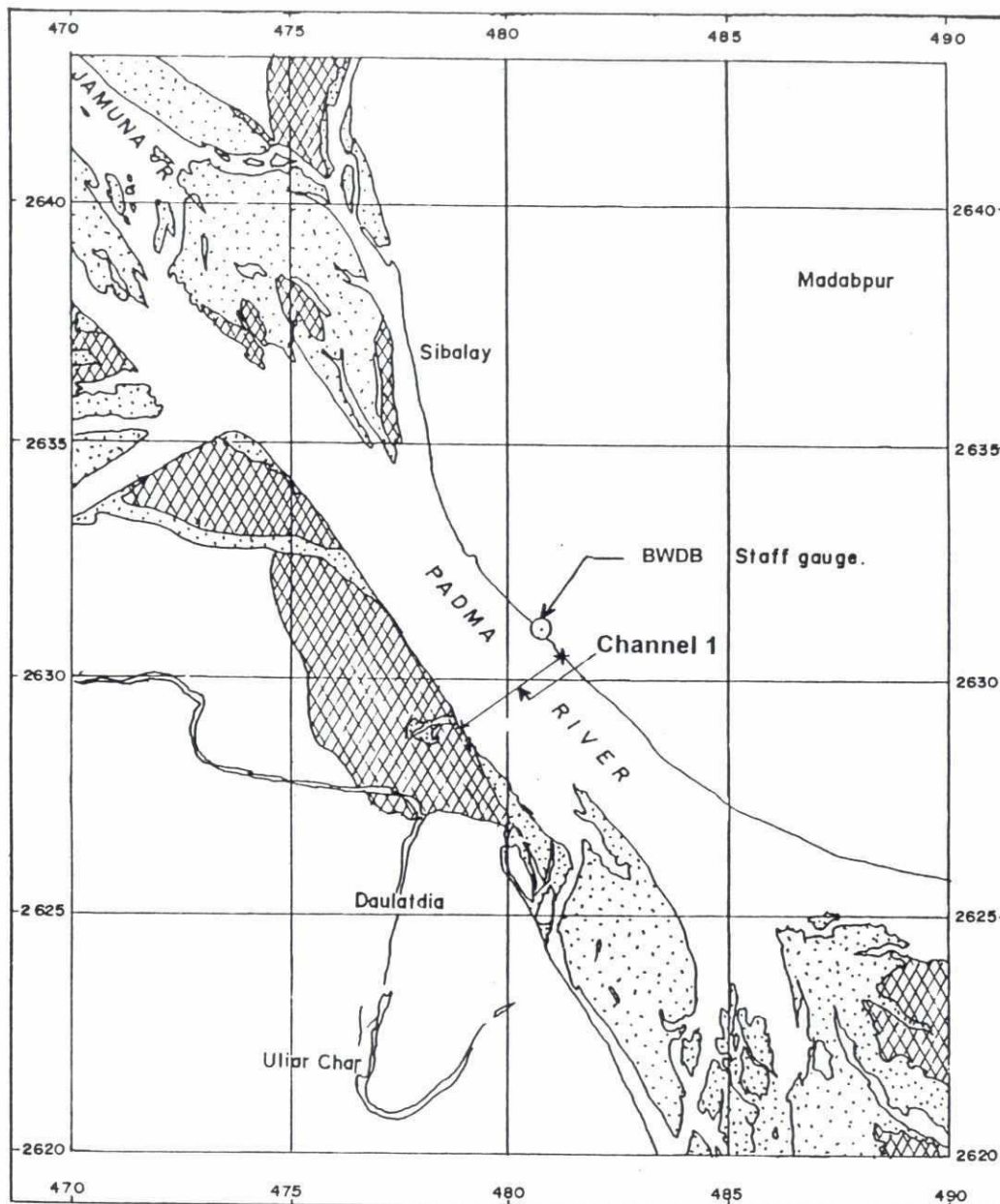
Location 05 : Padma River, Baruria

Date : 16 Aug 1994

Init : mk

Water level and discharge time series  
Channel 1

page  
8.1



**LEGEND:-**

- ×—× Cross section
- High land
- Unstable/low char
- ⊙ BWDB Staff gauge



5000m 2500m 0

Map is based on satellite images of March 1994

**FAP 24**



DELFT - DHI

**RIVER SURVEY PROJECT**  
Flood Plan Coordination Organization

Commission of the European Communities

**Survey Bulletin 63 : 14 - 15 June, 1994**

**Location 5 : Padma River, Baruria**

Date : 01 Sep 1994

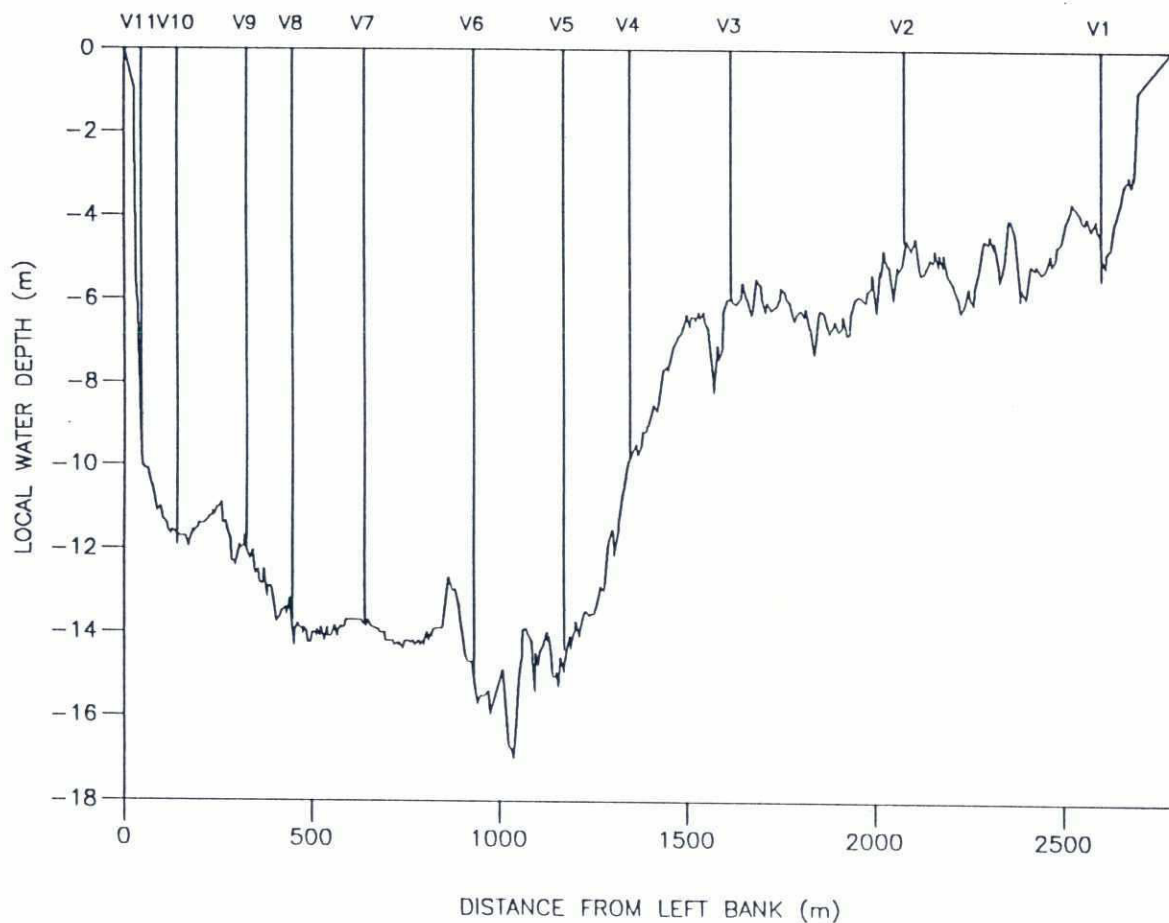
Init : mk

**Location map**


page

1.1

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Water level : 6.11 m + PWD measured at the station indicated on page 1.1

<b>FAP 24</b>  DELFT - DHI		Survey Bulletin 63 : 14 - 15 June, 1994	
RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Location 5 : Padma River, Baruria	
File : U46E1T03	Date : 01 Sep 1994	Cross-sections and measured verticals Channel 1	page 1.2
	Init : mk		

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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	8	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	11	-	-	-
	ADCP	11	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	12	-	-	-
	Integrated bottle sampling	11	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	22	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2782	25333	6.11	30393	25	15113

Table 2.2: Key figures

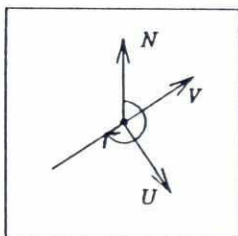
Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	14 Jun 94	6.11	BWDB
		15 Jun 94	6.08	

Table 2.3: Water-levels

<b>FAP 24</b>  DELFT - DHI		<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Survey Bulletin 63 : 14 - 15 June, 1994</b>	
				<b>Location 5 : Padma River, Baruria</b>	
File :	Date : 07 Sep 1994	<b>Survey programme as made and key figures</b>			page 2.1
U46E1T03	init : mk				



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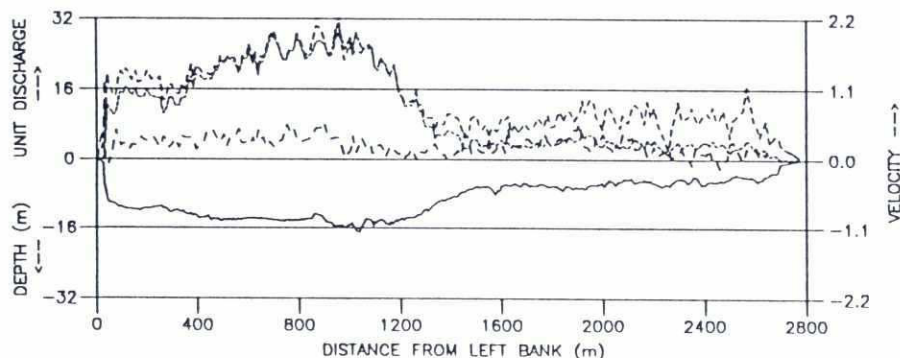


TRANSECT AZIMUTH =  $236^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

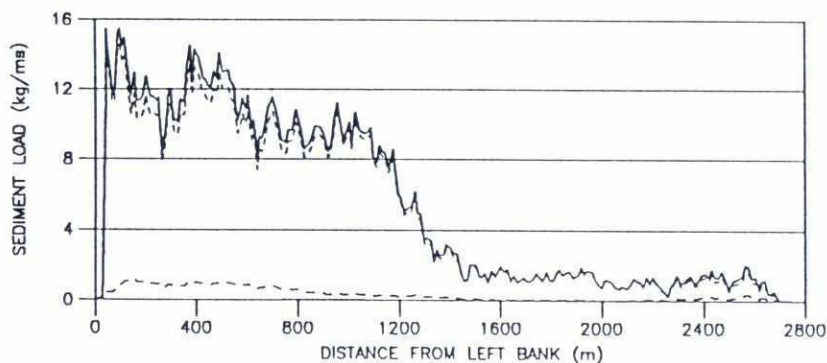
LEGEND :

- WATER DEPTH (m below STAGE)
- ..... UNIT DISCHARGE ( $\text{m}^3/\text{s.m}$ )
- U - (m/s)
- .- V - (m/s)

STAGE = 6.11 (m+PWD)

A = 25333 ( $\text{m}^2$ )

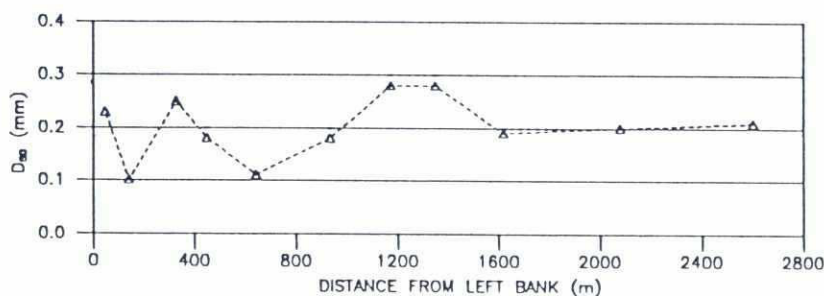
Q = 30393 ( $\text{m}^3/\text{s}$ )



SEDIMENT TRANSPORT

LEGEND :

- $S_{\text{TOTAL}}$  16138 (kg/s)
- $S_{\text{WASH LOAD}}$  14159 (kg/s)
- .-  $S_{\text{SUSP. BED}}$  954 (kg/s)
- .....  $S_{\text{BED LOAD}}$  25 (kg/s)



GRAIN SIZE

LEGEND :

- ◇◇◇◇◇  $D_{50 \text{ SUSP.}}$  (mm)
- △△△△△  $D_{50 \text{ BED LOAD}}$  (mm)
- $D_{50 \text{ BED MAT.}}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 63 : 14 - 15 June, 1994

Location 5 : Padma River, Baruria

File : U46E1T03

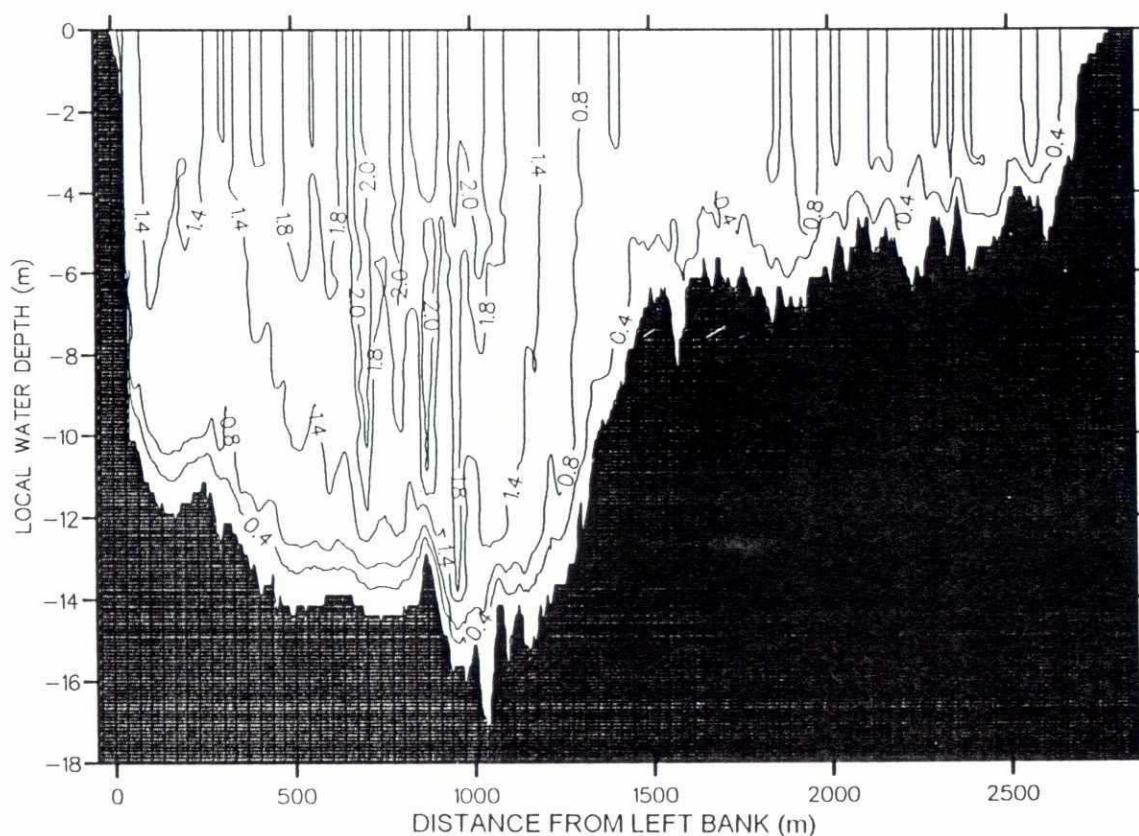
Date : 01 Sep 1994

Init : mk

Horizontal distribution of flow and sediments  
Channel 1


page

3.1



Iso-velocity contours (m/s)

Water-level : 6.11 m + pwd measured at the station indicated on page 1.1


<b>FAP 24</b>  <b>DELFT - DHI</b>		Survey Bulletin 63 : 14 - 15 June, 1994	
		Location 5 : Padma River, Baruria	
File : U46E1T03	Date : 01 Sep 1994	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : mk		

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Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9406150945-1004	5.50	0.8350	99.165	0.199	0.251	0.309
	1	9406150945-1004	5.50	1.5920	98.408	0.149	0.169	0.190
	2	9406151057-1107	4.60	4.0020	95.998	0.171	0.216	0.277
	2	9406151057-1107	4.60	3.4800	96.520	0.147	0.185	0.232
	3	9406151150-1200	6.00	9.6800	90.320	0.131	0.173	0.227
	3	9406151150-1200	6.00	4.5950	95.405	0.160	0.202	0.256
	4	9406151325-1331	9.80	4.2400	95.760	0.197	0.260	0.318
	4	9406151325-1331	9.80	1.8820	98.118	0.259	0.301	0.351
	5	9406151238-1248	14.4	0.5650	99.435	0.274	0.315	0.362
	5	9406151238-1248	14.4	1.5530	98.447	0.197	0.247	0.307
	6	9406141554-1643	15.0	1.9500	98.050	0.160	0.184	0.212
	6	9406141554-1643	15.0	1.9180	98.082	0.155	0.180	0.208
	7	9406141255-1305	13.8	15.050	84.950	0.083	0.102	0.127
	7	9406141255-1305	13.8	11.550	88.450	0.094	0.122	0.164
	8	9406141225-1237	13.7	1.0580	98.942	0.160	0.179	0.201
	8	9406141225-1237	13.7	1.1820	98.818	0.160	0.180	0.203
	9	9406141126-1146	12.0	0.3810	99.619	0.295	0.334	0.378
	9	9406141126-1146	12.0	3.4000	96.600	0.154	0.174	0.197
	10	9406141053-1105	11.9	18.469	81.531	0.079	0.098	0.121
	10	9406141053-1105	11.9	11.267	88.733	0.084	0.102	0.122
	11	9406141017-1032	9.80	1.5160	98.484	0.157	0.176	0.197
	11	9406141017-1032	9.80	5.0270	94.973	0.217	0.277	0.333
Table 5.3 : Grain sizes of bed load								

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small>	<b>Survey Bulletin 63 : 14 - 15 June, 1994</b>
			<b>Location 5 : Padma River, Baruria</b>
	Date 07 Sep 199	<b>Grain size distributions</b>	page  5.1
	init mk		



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9406140740-0800 9406140809-0832 9406141717-1739 9406141742-1801 9406150803-0822 9406150824-0846 9406151446-1509 9406151512-1532	U46E1T03 * U46E1T04 U46E1T05 U46E1T06 U46F1T01 U46F1T02 U46F1T03 U46F1T04

Table 6.1: ADCP & EMF transects \* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11	9406150945-1004 9406151057-1107 9406151150-1200 9406151325-1331 9406151238-1248 9406141554-1643 9406141255-1305 9406141225-1237 9406141126-1146 9406141053-1105 9406141017-1032	479047 479471 479849 480084 480230 480429 480676 480832 480934 481085 481166	628476 628781 629043 629177 629275 629409 629564 629678 629742 629850 629902	5.50 4.60 6.00 9.80 14.4 15.0 13.8 13.7 12.0 11.9 9.80	U46F1P01 * U46F1P02 * U46F1P03 * U46F1P05 * U46F1P04 * U46E1P06 U46E1P05 * U46E1P04 * U46E1P03 * U46E1P02 * U46E1P01 *


Table 6.2: Vertical profiles \* S4 and MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	6	6	9406141554-1643	480429	629409	15.00

Table 6.3: Suspended sediment - point sampled

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	1 2 3 4 5 6 7 8 9 10 11	1 1 1 1 1 1 1 1 1 1 1	9406150945-1004 9406151057-1107 9406151150-1200 9406151325-1331 9406151238-1248 9406141554-1643 9406141255-1305 9406141225-1237 9406141126-1146 9406141053-1105 9406141017-1032	479047 479471 479849 480084 480230 480429 480676 480832 480934 481085 481166	628476 628781 629043 629177 629275 629409 629564 629678 629742 629850 629902	5.50 4.60 6.00 9.80 14.4 15.0 13.8 13.7 12.0 11.9 9.80

Table 6.4: Suspended sediment - depth integrated


 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 63 : 14 - 15 June, 1994	
		Location 5 : Padma River, Baruria	
	Date : 07 Sep 1994	Collected data and their storage (1)	page 61
	init mk		



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Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9406150945-1004	479047	628476	5.50	A350
		1	9406150945-1004	479047	628476	5.50	A1157
		2	9406151057-1107	479471	628781	4.60	A1144
		2	9406151057-1107	479471	628781	4.60	A334
		3	9406151150-1200	479849	629043	6.00	A696
		3	9406151150-1200	479849	629043	6.00	A1364
		4	9406151325-1331	480084	629177	9.80	A904
		4	9406151325-1331	480084	629177	9.80	A917
		5	9406151238-1248	480230	629275	14.4	A1164
		5	9406151238-1248	480230	629275	14.4	A46
		6	9406141554-1643	480429	629409	15.0	A694
		6	9406141554-1643	480429	629409	15.0	A466
		7	9406141255-1305	480676	629564	13.8	A1151
		7	9406141255-1305	480676	629564	13.8	A1603
		8	9406141225-1237	480832	629678	13.7	A870
		8	9406141225-1237	480832	629678	13.7	A1594
		9	9406141126-1146	480934	629742	12.0	A744
		9	9406141126-1146	480934	629742	12.0	A111
		10	9406141053-1105	481085	629850	11.9	A1380
		10	9406141053-1105	481085	629850	11.9	A912
		11	9406141017-1032	481166	629902	9.80	A1139
		11	9406141017-1032	481166	629902	9.80	A740


Table 6.5: Bed load

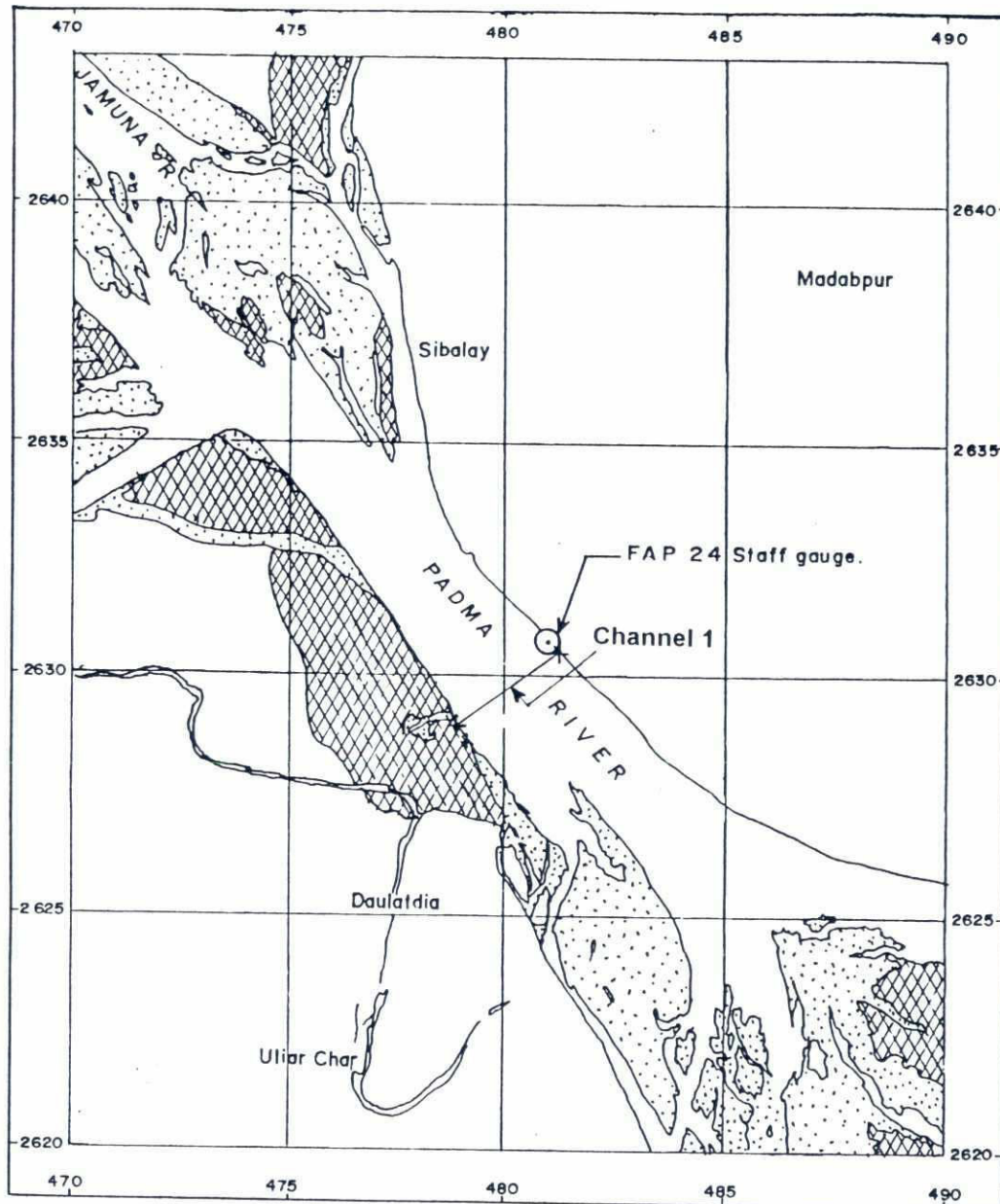
 <p><b>FAP 24</b> DELFT - DHI</p>	<p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 63 : 14 - 15 June, 1994	
		Location 5 : Padma River, Baruria	
	Date 07 Sep 1994	Collected data and their storage (2)	page 6.2
	init : mk		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U46E1T03 .ase
Echosounder data	1	QUATTRO	U46E1T03 .ech
Sediment transport data	1	QUATTRO	U46E1T03 .sed
Bed load sediment analysis	1	QUATTRO	U46E1T03 .bdl
Susp. sed. conc. analysis	1	QUATTRO	U46E1T03 .ssc
Transect plot data	1	QUATTRO	U46E1T03 .trs
Iso-velocity plot data	1	MIKE 21	U46E1T03 .ct2 U46E1T03 .dt2

Table 7.1 PSD 24 Database file description

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 63 : 14 - 15 June, 1994</b>	
<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small>		<b>Location 5 : Padma River, Baruria</b>	
	Date : 07 Sep 1994	<b>PSD 24 Database file description</b>	page 7.1
	Init : mk		



LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite images of March 1994

**FAP 24**  
  
 DELFT - DHI

**RIVER SURVEY PROJECT**  
 Flood Plan Coordination Organization  
 Commission of the European Communities

**Survey Bulletin 77 : 09 - 10 July, 1994**

**Location 5 : Padma River, Baruria**

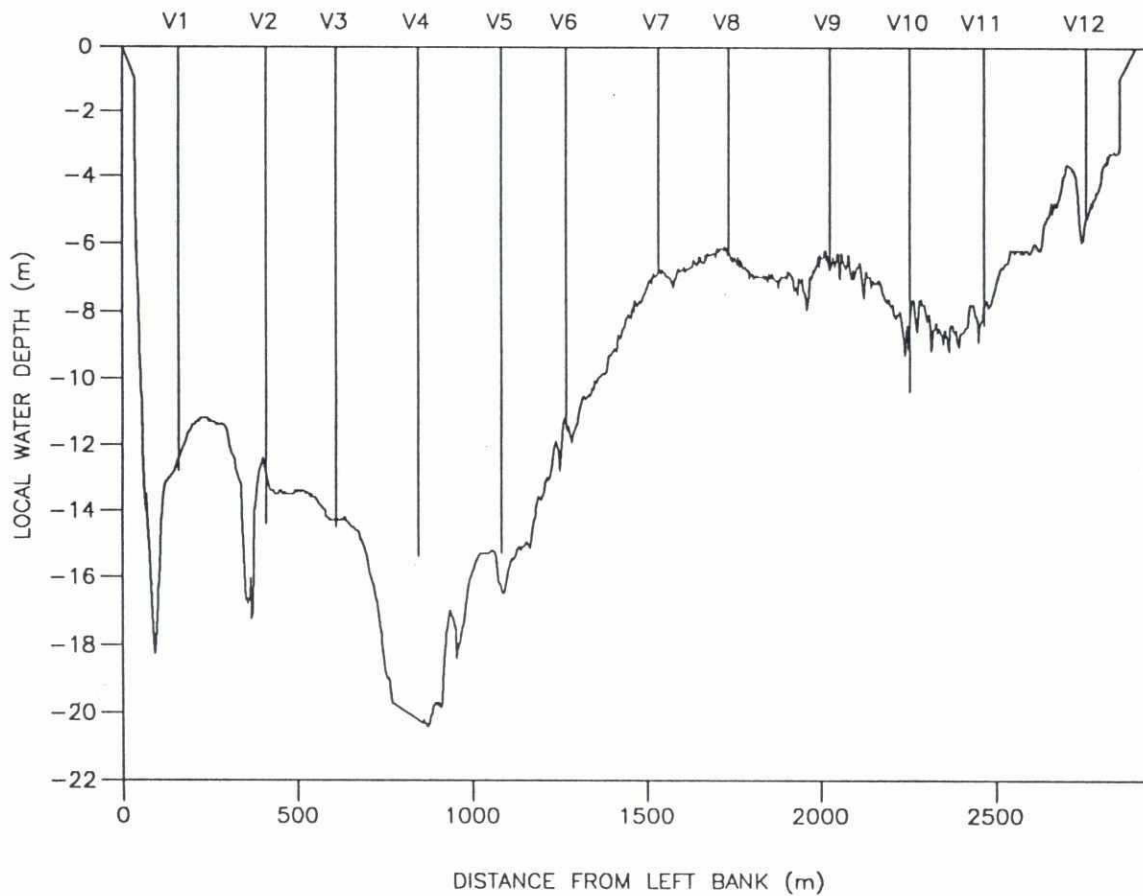
Date : 10 Oct 1994

Init : mua/mk


**Location map**

page

1.1



Water-level : 6.92 m + PWD measured at the station indicated on page 1.1

<b>FAP 24</b>  <b>DELFT - DHI</b>		Survey Bulletin 77 : 09-10 July, 1994	
		Location 5 : Padma River, Baruria	
File : U4791T01	Date : 10 Oct 1994	Cross-sections and measured verticals Channel 1	page 1.2
	Init : mua/mk		




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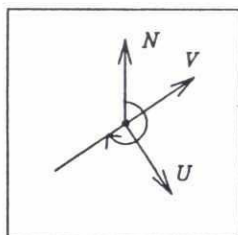
Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	8	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	5	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	12	-	-	-
	Integrated bottle sampling	12	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	24	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

Channel	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2906	29697	6.92	43585	42	21768
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	09 Jul 94 10 Jul 94	6.92 6.90	FAP 24

Table 2.3: Water-levels

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	<div>Survey Bulletin 77 : 09-10 July , 1994</div>	
		<div>Location 5 : Padma River, Baruria</div>		
<div>File : U4791T01</div>	<div>Date : 10 Oct 1994</div>	<div>Survey programme as made and key figures</div>	<div>page 2.1</div>	
	<div>Init : mua/mk</div>			

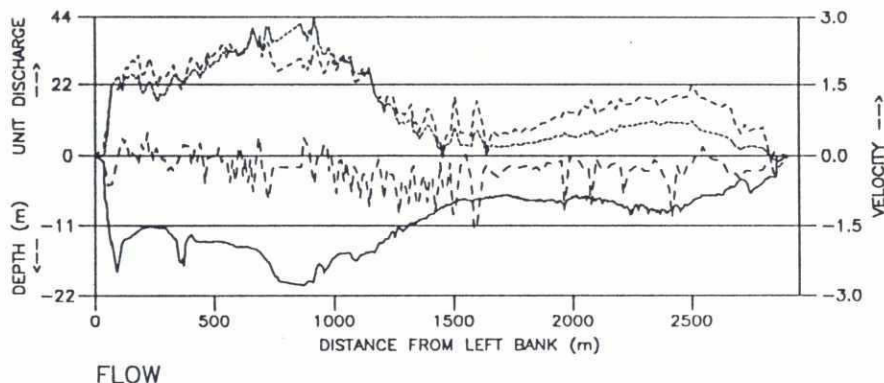


TRANSECT AZIMUTH = 236°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



LEGEND :

— WATER DEPTH (m below STAGE)

..... UNIT DISCHARGE (m³/s.m)

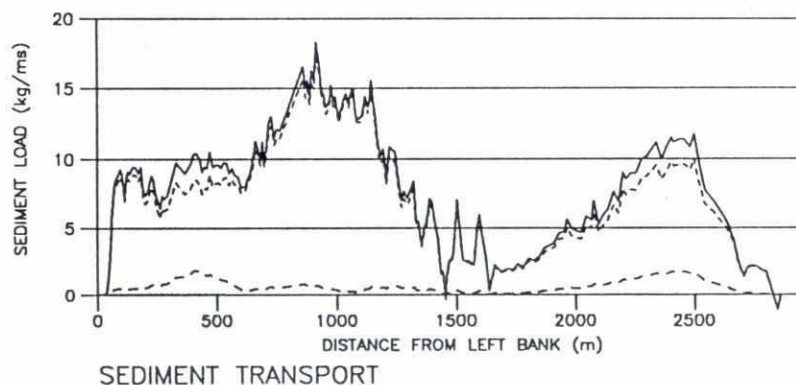
--- U - (m/s)

-.- V - (m/s)

STAGE = 6.92 (m+PWD)

A = 29697 (m²)

Q = 43585 (m³/s)



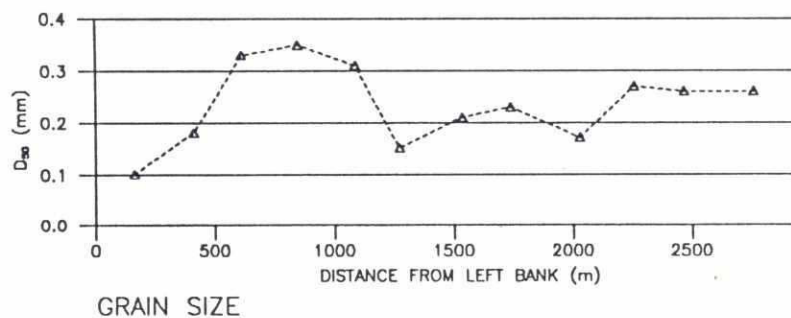
LEGEND :

— S<sub>TOTAL</sub> 21810 (kg/s)

--- S<sub>WASH LOAD</sub> 19934 (kg/s)

-.- S<sub>SUSP. BED</sub> 1834 (kg/s)

..... S<sub>BED LOAD</sub> 42 (kg/s)



LEGEND :

♦♦♦♦♦ D<sub>50</sub> SUSP. (mm)

△△△△△ D<sub>50</sub> BED LOAD (mm)

□□□□□ D<sub>50</sub> BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 77 : 09-10 July, 1994

Location 5 : Padma River, Baruria

File : U4791T01

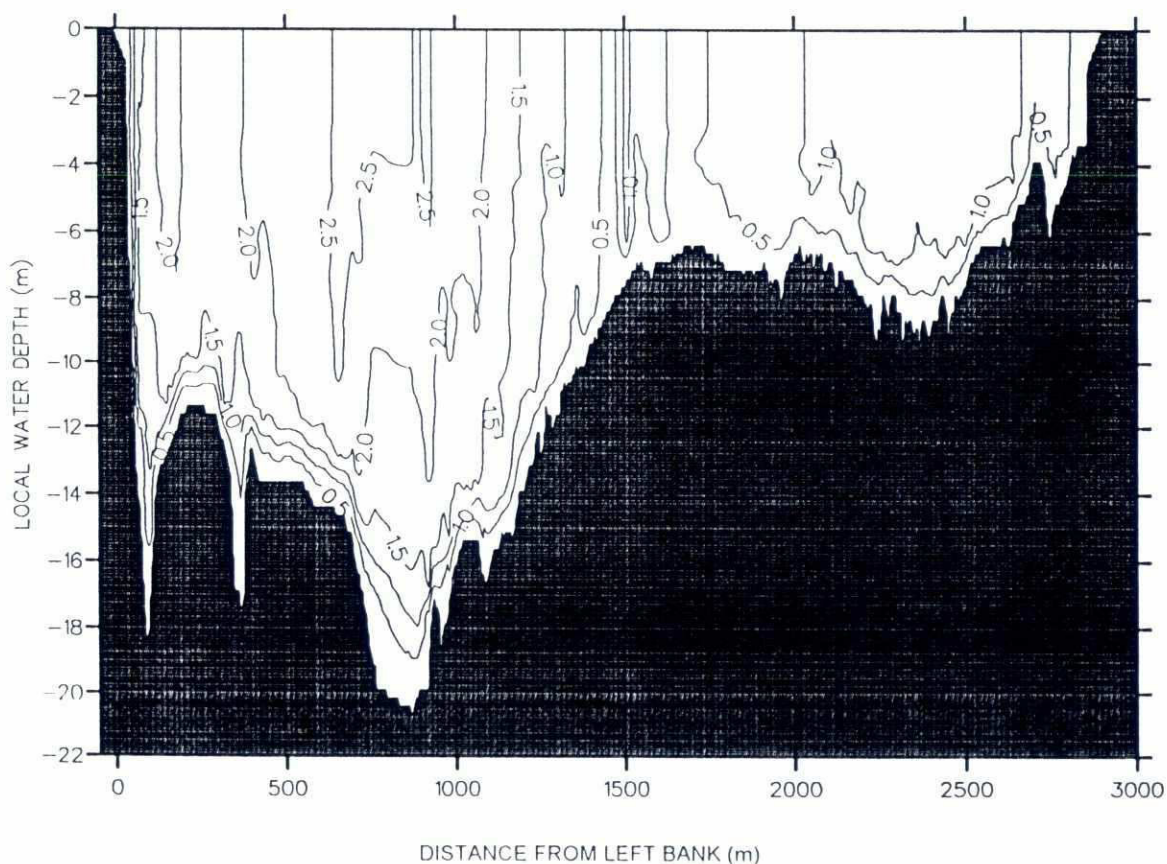
Date : 10 Oct 1994

Init : mua/mk

Horizontal distribution of flow and sediments  
Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 6.92 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 77 : 09-10 July, 1994

Location 5 : Padma River, Baruria

File : U4791T01

Date : 10 Oct 1994

Init : mua/mk

Cross-sectional distribution of flow velocity

Channel 1

page

4.1




029

Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9407091211-1230	12.80	7.717	92.283	0.085	0.101	0.119
	1	9407091211-1230	12.80	9.592	90.408	0.085	0.101	0.120
	2	9407091255-1309	14.40	4.400	95.600	0.154	0.176	0.201
	2	9407091255-1309	14.40	3.212	96.788	0.164	0.192	0.224
	3	9407091351-1405	14.50	2.961	97.039	0.278	0.319	0.367
	3	9407091351-1405	14.50	0.337	99.663	0.301	0.342	0.388
	4	9407091428-1611	15.40	0.130	99.870	0.315	0.353	0.395
	4	9407091428-1611	15.40	0.189	99.811	0.313	0.353	0.399
	5	9407100916-0935	15.30	2.552	97.448	0.273	0.317	0.368
	5	9407100916-0935	15.30	4.848	95.152	0.267	0.311	0.362
	6	9407101142-1159	11.50	0.577	99.423	0.120	0.145	0.173
	6	9407101142-1159	11.50	0.747	99.253	0.135	0.159	0.188
	7	9407101045-1053	6.80	13.087	86.913	0.157	0.212	0.282
	7	9407101045-1053	6.80	5.491	94.509	0.165	0.210	0.272
	8	9407101010-1021	6.30	6.935	93.065	0.177	0.227	0.292
	8	9407101010-1021	6.30	7.359	92.641	0.181	0.237	0.302
	9	9407101225-1236	6.60	0.474	99.526	0.151	0.173	0.197
	9	9407101225-1236	6.60	0.470	99.530	0.153	0.174	0.199
	10	9407101426-1434	10.40	0.846	99.154	0.225	0.280	0.335
	10	9407101426-1434	10.40	0.349	99.651	0.213	0.267	0.325
	11	9407101451-1503	8.40	1.932	98.068	0.222	0.282	0.339
	11	9407101451-1503	8.40	5.258	94.742	0.182	0.239	0.302
	12	9407101521-1531	5.20	2.398	97.602	0.195	0.252	0.312
	12	9407101521-1531	5.20	1.873	98.127	0.203	0.261	0.319
Table 5.3 : Grain sizes of bed load								

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 77 : 09 - 10 July , 1994	
		Location 5 : Padma River , Baruria	
	Date : 10 Oct 1994	Grain size distributions	page  5.1
	Init : mua/mk		



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9407090758-0823 9407090827-0854 9407091638-1701 9407091719-1746 9407100753-0819 9407100916-0935 9407101605-1638 9407101641-1711	U4791T01 * U4791T02 U4791T03 U4791T05 U47A1T01 U47A1T03 U47A1T04 U47A1T05

Table 6.1: ADCP & EMF transects

\* : transect in PSD 24 data base and presented in Sections 3 and 4


Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11 12	9407091211-1230 9407091255-1309 9407091351-1405 9407091428-1611 9407100916-0935 9407101142-1159 9407101045-1053 9407101010-1021 9407101225-1236 9407101426-1434 9407101451-1503 9407101521-1531	481085 480883 480715 480515 480314 480162 479945 479772 479532 479342 479172 478923	629845 629698 629588 629465 629334 629229 629077 628971 628809 628683 628557 628402	12.8 14.4 14.5 15.4 15.3 11.5 6.80 6.30 6.60 10.4 8.40 5.20	U4791P01 * U4791P02 * U4791P03 * U4791P04 U47A1P01 * U47A1P04 * U47A1P03 * U47A1P02 * U47A1P05 * U47A1P07 * U47A1P08 * U47A1P09 *

Table 6.2: Vertical profiles

\* S4 & MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	4	5	9407091428-1611	480515	629465	15.40

Table 6.3: Suspended sediment - point sampled

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 77 : 09-10 July , 1994	
		Location 5 : Padma River , Baruria	
	Date : 10 Oct 1994	Collected data and their storage (1)	page 6.1
	Init : mua/mk		


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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9407091211-1230	481085	629845	12.8
		2	1	9407091255-1309	480883	629698	14.4
		3	1	9407091351-1405	480715	629588	14.5
		4	1	9407091428-1611	480515	629465	15.4
		5	1	9407100916-0935	480314	629334	15.3
		6	1	9407101142-1159	480162	629229	11.5
		7	1	9407101045-1053	479945	629077	6.80
		8	1	9407101010-1021	479772	628971	6.30
		9	1	9407101225-1236	479532	628809	6.60
		10	1	9407101426-1434	479342	628683	10.4
		11	1	9407101451-1503	479172	628557	8.40
		12	1	9407101521-1531	478923	628402	5.20

Table 6.4: Suspended sediment - depth integrated


Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No
Helley-Smith Sample	1	1	9407091211-1230	481085	629845	12.8	A51
		1	9407091211-1230	481085	629845	12.8	A63
		2	9407091255-1309	480883	629698	14.4	A46
		2	9407091255-1309	480883	629698	14.4	A47
		3	9407091351-1405	480715	629588	14.5	A31
		3	9407091351-1405	480715	629588	14.5	A62
		4	9407091428-1611	480515	629465	15.4	A695
		4	9407091428-1611	480515	629465	15.4	A122
		5	9407100916-0935	480314	629334	15.3	A905
		5	9407100916-0935	480314	629334	15.3	A696
		6	9407101142-1159	480162	629229	11.5	A908
		6	9407101142-1159	480162	629229	11.5	A1661
		7	9407101045-1053	479945	629077	6.80	A1636
		7	9407101045-1053	479945	629077	6.80	A1688
		8	9407101010-1021	479772	628971	6.30	A903
		8	9407101010-1021	479772	628971	6.30	A460
		9	9407101225-1236	479532	628809	6.60	A95
		9	9407101225-1236	479532	628809	6.60	A92
		10	9407101426-1434	479342	628683	10.4	A913
		10	9407101426-1434	479342	628683	10.4	A105
		11	9407101451-1503	479172	628557	8.40	A1646
		11	9407101451-1503	479172	628557	8.40	A108
		12	9407101521-1531	478923	628402	5.20	A77
		12	9407101521-1531	478923	628402	5.20	A1139

Table 6.5: Bed load

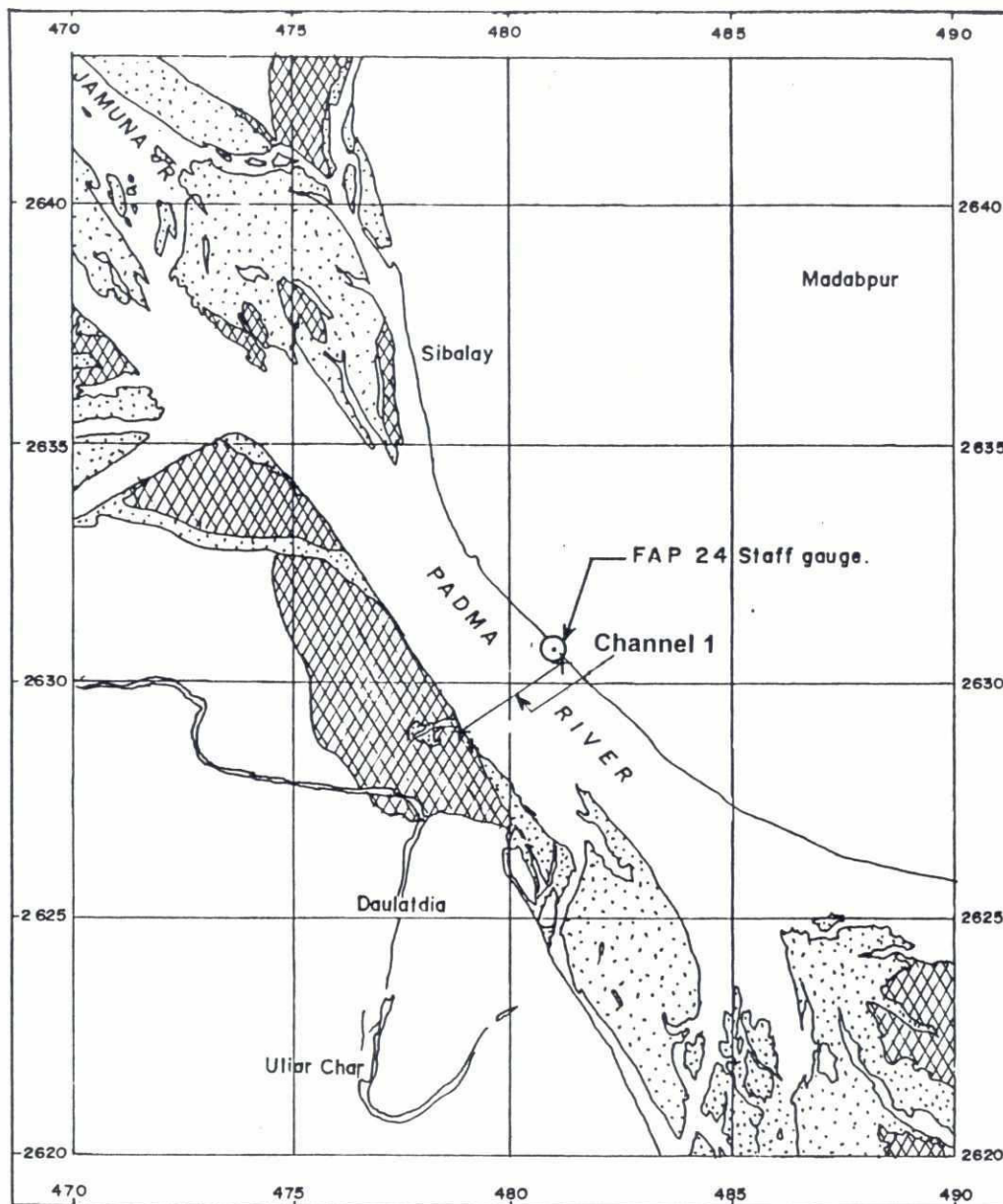
<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 77 : 09-10 July , 1994	
		Location 5 : Padma River , Baruria	
	Date : 10 Oct 1994	Collected data and their storage (2)	page
	Init : mua/mk		6.2

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4791T01 .ase
Echosounder data	1	QUATTRO	U4791T01 .ech
Sediment transport data	1	QUATTRO	U4791T01 .sed
Susp. sed. conc. analysis	1	QUATTRO	U4791T01 .ssc
Bed load sediment analysis	1	QUATTRO	U4791T01 .bdl
Transect plot data	1	QUATTRO	U4791T01 .trs
Iso-velocity plot data	1	MIKE 21	U4791T01 .ct2 U4791T01 .dt2
Table 7.1 PSD 24 Database file description			

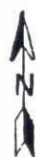
<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 77 : 09 - 10 July , 1994</b>	
<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small>		<b>Location 5 : Padma River, Baruria</b>	
	Date : 10 Oct 1994	<b>PSD 24 Database file description</b>	page 7.1
	Init : mua/mk		





LEGEND:-

- ✕✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
images of March 1994

**FAP 24**  
  
DELFT - DHI

**RIVER SURVEY PROJECT**  
Flood Plan Coordination Organization  
Commission of the European Communities

**Survey Bulletin 86 : 29 - 30 July, 1994**

**Location 5 : Padma River, Baruria**

Date : 16 Oct 1994

Init : sjr

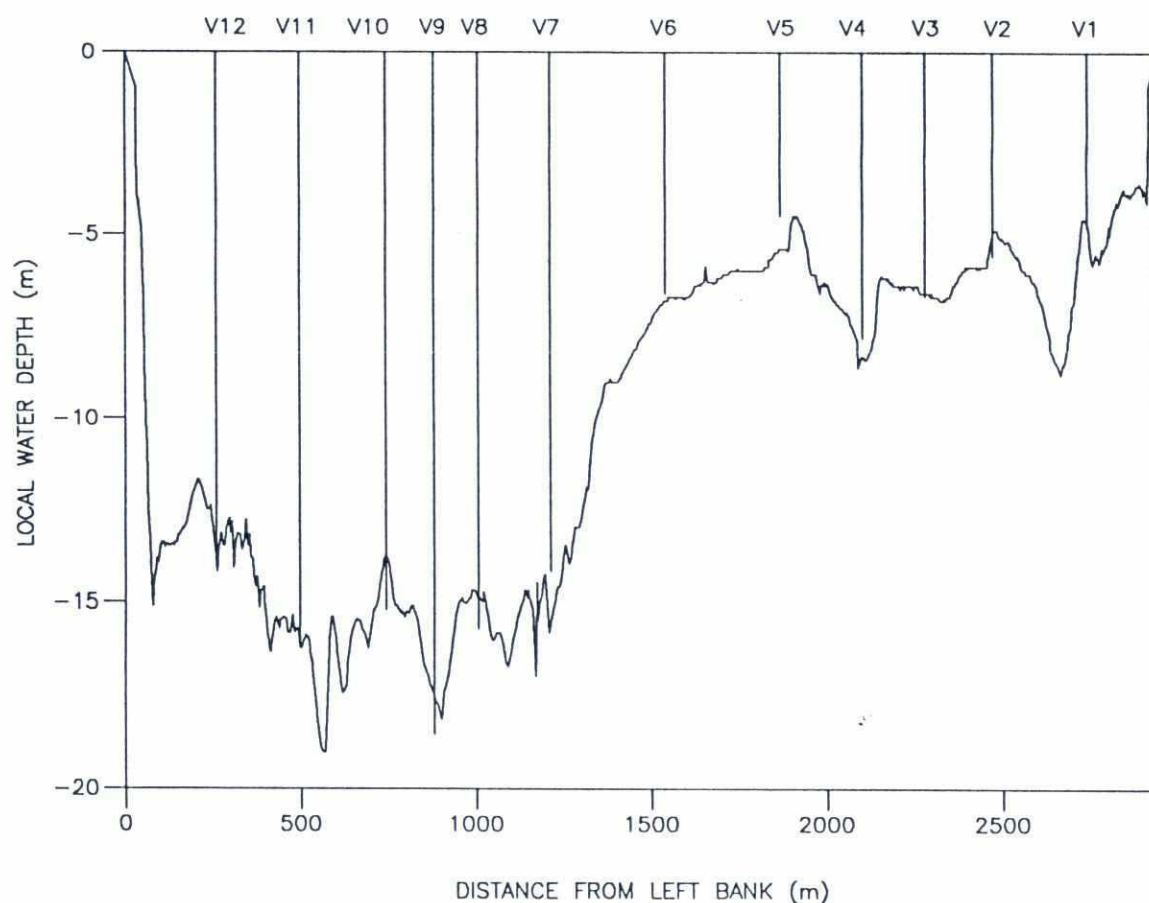
**Location map**

page


1.1



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Water level : 7.45 m + PWD measured to the station indicated on page 1.1

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 86 : 29 - 30 July, 1994	
		Location 5 : Padma River , Baruria	
File : U47T1T02	Date : 16 Oct 1994	Cross-sections and measured verticals Channel 1	page
	Init : sjr		1.2


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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	9	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	12	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	24	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

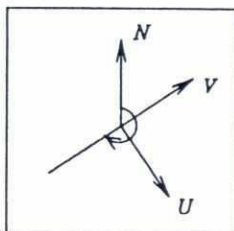
	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2940	29327	7.45	52769	240	60786
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	29 Jul 94 30 Jul 94	7.45 7.48	FAP 24

Table 2.3: Water-levels

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 86 : 29 - 30 July, 1994	
		Location 5 : Padma ,River , Baruria	
File : U47T1T02	Date : 16 Oct 1994	Survey programme as made and key figures	page  2.1
	Init : sjr		

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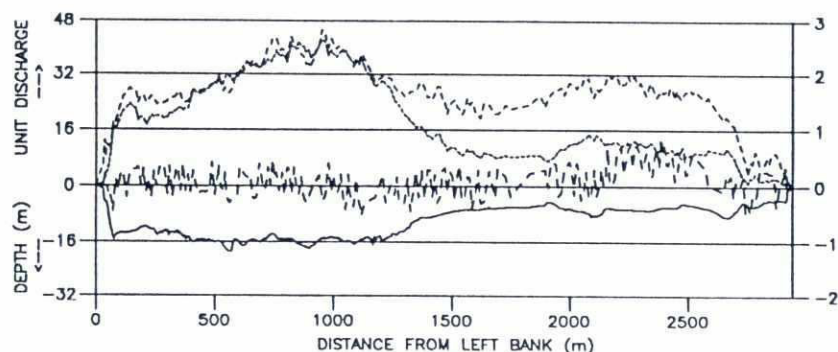


TRANSECT AZIMUTH = 236°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



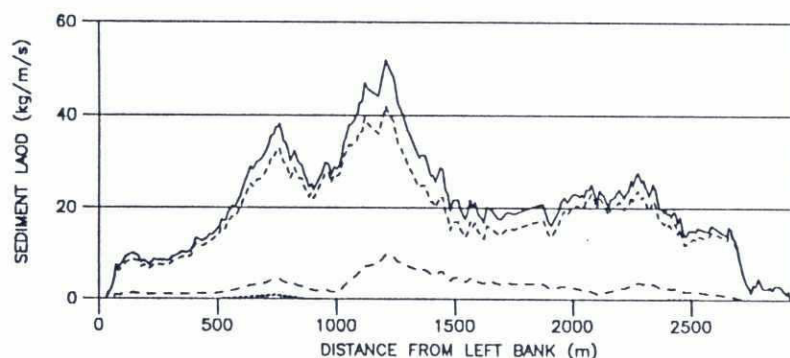
LEGEND :

— WATER DEPTH (m below STAGE)  
 --- UNIT DISCHARGE (m³/s.m)  
 ... U (m/s)  
 ... V (m/s)

STAGE = 7.45 (m+PWD)

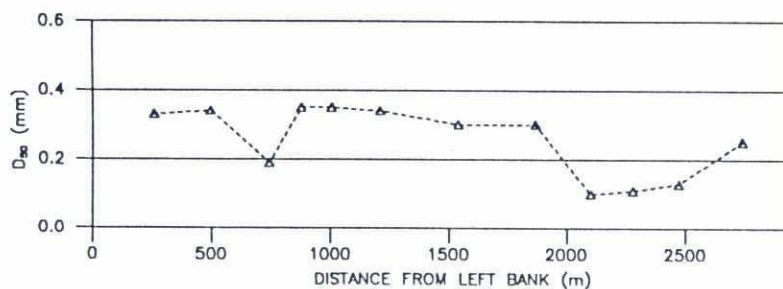
A = 29327 (m³)

Q = 52769 (m³/s)



LEGEND :

— S<sub>TOTAL</sub> 61026 (kg/s)  
 --- S<sub>WASH LOAD</sub> 52443 (kg/s)  
 ... S<sub>SUSP. BED</sub> 8343 (kg/s)  
 -.- S<sub>BED LOAD</sub> 240 (kg/s)



LEGEND :

◆◆◆◆ D<sub>50</sub> SUSP. (m.m)  
 ▲▲▲▲ D<sub>50</sub> BED LOAD (m.m)  
 ■■■■ D<sub>50</sub> BED MAT. (m.m)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 86 : 29 - 30 July, 1994

Location 5 : Padma River , Baruria

File : U47T1T02

Date : 16 Oct 1994

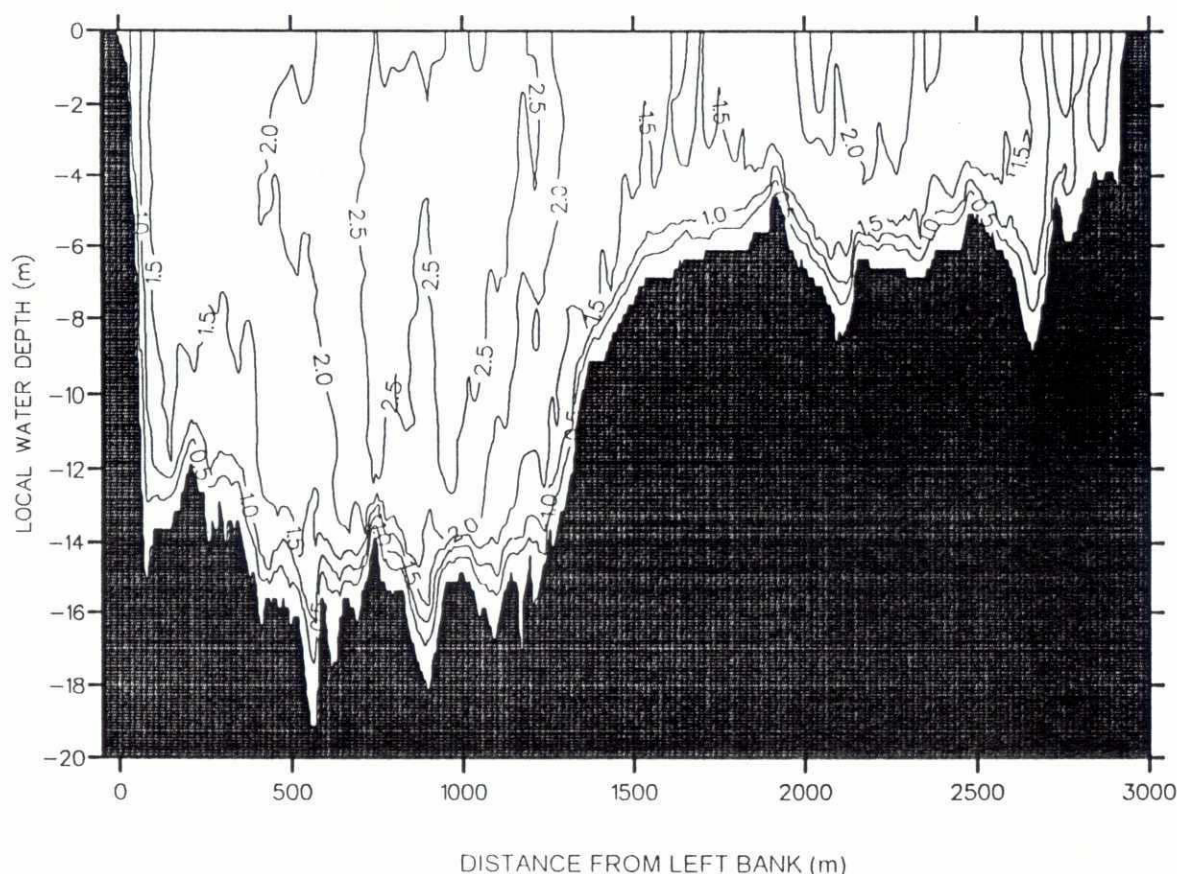
Init : sjr

Horizontal distribution of flow and sediments  
 Channel 1



page

3.1

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Iso-velocity contours (m/s)  
Water level : 7.45 m + PWD measured at the station indicated on page 1.1

<div><div><div><div><div><div></div><div><b>FAP 24</b></div></div></div><div><div></div><div>DELFT - DHI</div></div></div><div><div><div><b>RIVER SURVEY PROJECT</b></div><div>Flood Plan Coordination Organization</div></div><div>Commission of the European Communities</div></div></div></div>		Survey Bulletin 86 : 29 - 30 July, 1994	
		Location 5 : Padma River , Baruria	
File : U47T1T02	Date : 16 Oct 1994	Cross-sectional distribution of flow velocity Channel 1	page
	Init sjr		4.1




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Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley - Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	1	9407300937-0939	4.80	1.392	98.608	0.218	0.274	0.329
	2	9407300959-1001	5.60	2.469	97.531	0.108	0.136	0.164
	3	9407301028-1030	6.80	5.241	94.759	0.096	0.118	0.150
	4	9407301054-1056	7.80	13.005	86.995	0.085	0.105	0.133
	5	9407301115-1117	4.50	3.054	96.946	0.228	0.285	0.340
	6	9407301209-1211	6.60	1.544	98.456	0.260	0.305	0.357
	7	9407301140-1142	14.20	0.168	99.832	0.301	0.340	0.384
	8	9407301256-1258	15.70	0.306	99.694	0.312	0.350	0.392
	9	9407291500-1502	18.50	0.153	99.847	0.311	0.348	0.389
	10	9407291424-1426	15.20	0.267	99.733	0.168	0.192	0.219
	11	9407291350-1352	16.00	0.505	99.495	0.282	0.323	0.369
	12	9407291258-1300	13.80	1.986	98.014	0.272	0.315	0.365
	1	9407300940-0942	4.80	5.238	94.762	0.175	0.228	0.293
	2	9407301002-1004	5.60	3.466	96.534	0.098	0.120	0.150
	3	9407301031-1033	6.80	8.594	91.406	0.088	0.106	0.129
	4	9407301057-1059	7.80	12.982	87.018	0.085	0.105	0.132
	5	9407301118-1120	4.50	1.062	98.938	0.274	0.317	0.367
	6	9407301212-1214	6.60	2.266	97.734	0.248	0.295	0.349
	7	9407301143-1145	14.20	0.283	99.717	0.310	0.348	0.390
	8	9407301259-1301	15.70	0.165	99.835	0.308	0.345	0.386
	9	9407291503-1505	18.50	0.251	99.749	0.310	0.348	0.389
	10	9407291427-1429	15.20	0.328	99.672	0.164	0.185	0.210
	11	9407291353-1355	16.00	0.217	99.783	0.310	0.347	0.389
	12	9407291301-1303	13.80	0.237	99.763	0.293	0.334	0.380

Table 5.3 : Grain sizes of bed load

<div><div><p><b>FAP 24</b> DELFT - DHI</p></div><div><p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p></div></div>		<p><b>Survey Bulletin 86 : 29 - 30 July, 1994</b></p>	
		<p><b>Location 5 : Padma River , Baruria</b></p>	
	<p>Date : 16 Oct 1994</p>	<p><b>Grain size distributions</b></p>	<p>page 5.1</p>
	<p>Init : sjr</p>		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9407290822-0848 9407291034-1100 9407291110-1138 9407291638-1702 9407291705-1729 9407300802-0826 9407300836-0902 9407301410-1433 9407301435-1459	U47T1T01 U47T1T02 * U47T1T03 U47T1T04 U47T1T05 U47U1T01 U47U1T02 U47U1T04 U47U1T05

Table 6.1: ADCP &amp; EMF transects

\* : transect in Engineering data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11 12	9407300942-0950 9407301004-1021 9407301033-1045 9407301059-1107 9407301120-1127 9407301214-1228 9407301145-1158 9407301301-1311 9407291505-1616 9407291429-1449 9407291355-1410 9407291303-1315	478939 479163 479326 479478 479668 479940 480216 480393 480496 480608 480809 481005	628421 628567 628671 628765 628901 629082 629261 629366 629442 629521 629662 629796	4.80 5.60 6.80 7.80 4.50 6.60 14.20 15.70 18.50 15.20 16.00 13.80	U47U1P01 * U47U1P02 * U47U1P03 * U47U1P04 * U47U1P05 * U47U1P07 * U47U1P06 * U47U1P08 * U47T1P04 ** U47T1P03 * U47T1P02 * U47T1P01 *


Table 6.2: Vertical profiles

\*\* MEX not available

\* S4 &amp; MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	9	6	9407291505-1616	480496	629442	18.50

Table 6.3: Suspended sediment - point sampled


<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div> <div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div>		Survey Bulletin 86 : 29 - 30 July, 1994	
		Location 5 : Padma River , Baruria	
	Date : 16 Oct 1994	Collected data and their storage (1)	page 6.1
	Init : sjr		



Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9407300942-0950	478939	628421	4.80
		2	1	9407301004-1021	479163	628567	5.60
		3	1	9407301033-1045	479326	628671	6.80
		4	1	9407301059-1107	479478	628765	7.80
		5	1	9407301120-1127	479668	628901	4.50
		6	1	9407301214-1228	479940	629082	6.60
		7	1	9407301145-1158	480216	629261	14.20
		8	1	9407301301-1311	480393	629366	15.70
		9	1	9407291505-1616	480496	629442	18.50
		10	1	9407291429-1449	480608	629521	15.20
		11	1	9407291355-1410	480809	629662	16.00
		12	1	9407291303-1315	481005	629796	13.80

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9407300937-0939	478939	628421	4.80	A1943
		2	9407300959-1001	479163	628567	5.60	A1821
		3	9407301028-1030	479326	628671	6.80	A1864
		4	9407301054-1056	479478	628765	7.80	A1807
		5	9407301115-1117	479668	628901	4.50	A2185
		6	9407301209-1211	479940	629082	6.60	A1805
		7	9407301140-1142	480216	629261	14.20	A1909
		8	9407301256-1258	480393	629366	15.70	A2149
		9	9407291500-1502	480496	629442	18.50	A2023
		10	9407291424-1426	480608	629521	15.20	A2191
		11	9407291350-1352	480809	629662	16.00	A894
		12	9407291258-1300	481005	629796	13.80	A1370
		1	9407300940-0942	478939	628421	4.80	A1936
		2	9407301002-1004	479163	628567	5.60	A1893
		3	9407301031-1033	479326	628671	6.80	A2151
		4	9407301057-1059	479478	628765	7.80	A1825
		5	9407301118-1120	479668	628901	4.50	A1928
		6	9407301212-1214	479940	629082	6.60	A1905
		7	9407301143-1145	480216	629261	14.20	A2160
		8	9407301259-1301	480393	629366	15.70	A2154
		9	9407291503-1505	480496	629442	18.50	A1939
		10	9407291427-1429	480608	629521	15.20	A2017
		11	9407291353-1355	480809	629662	16.00	A80
		12	9407291301-1303	481005	629796	13.80	A1644
Table 6.5: Bed load							


<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 86 : 29 - 30 July, 1994	
		Location 5 : Padma River , Baruria	
	Date : 16 Oct 1994	Collected data and their storage (2)	page 6.2
	Init : sjr		

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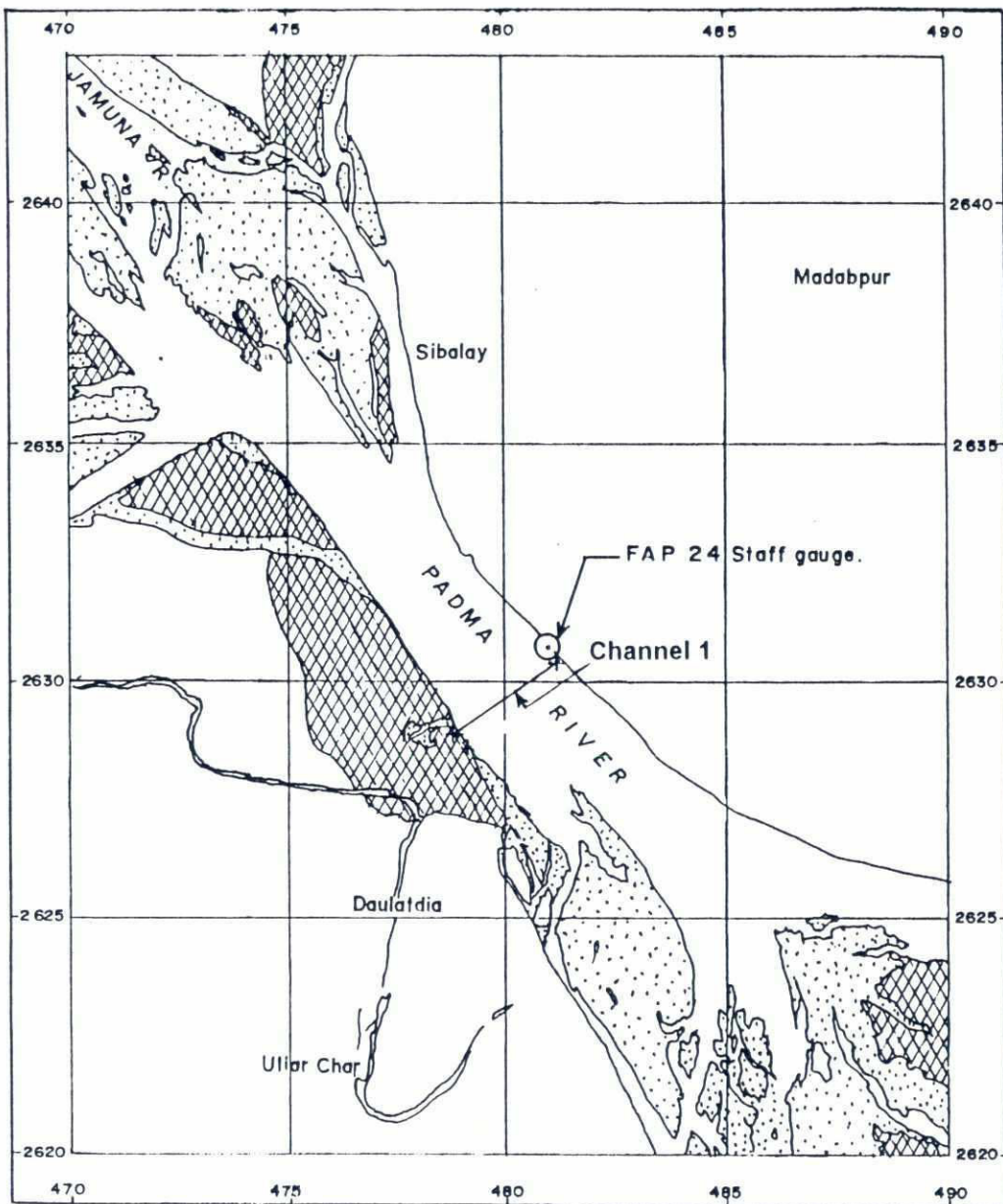
Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U47T1T02.ase
Echosounder data	1	QUATTRO	U47T1T02.ech
Sediment transport data	1	QUATTRO	U47T1T02.sed
Bed load sediment analysis	1	QUATTRO	U47T1T02.bdl
Susp. sed.conc.analysis "	1	QUATTRO	U47T1T02.ssc
Transect plot data	1	QUATTRO	U47T1T02.trs
Iso-velocity plot data	1	MIKE 21	U47T1T02.dt2 U47T1T02.ct2

Table 7.1 PSD 24 Database file description



<b>FAP 24</b>  DELFT - DHI		<b>Survey Bulletin 86 : 29 - 30 July, 1994</b>	
<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Location 5 : Padma River , Baruria</b>	
	Date : 16 Oct 1994	<b>PSD 24 Database file description</b>	page 7.1
	Init : sjr		





LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
Images of March 1994

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordinating Organization  
Commission of the European Communities

Survey Bulletin 92 : 21 - 23 August, 1994

Location 5 : Padma River, Baruria

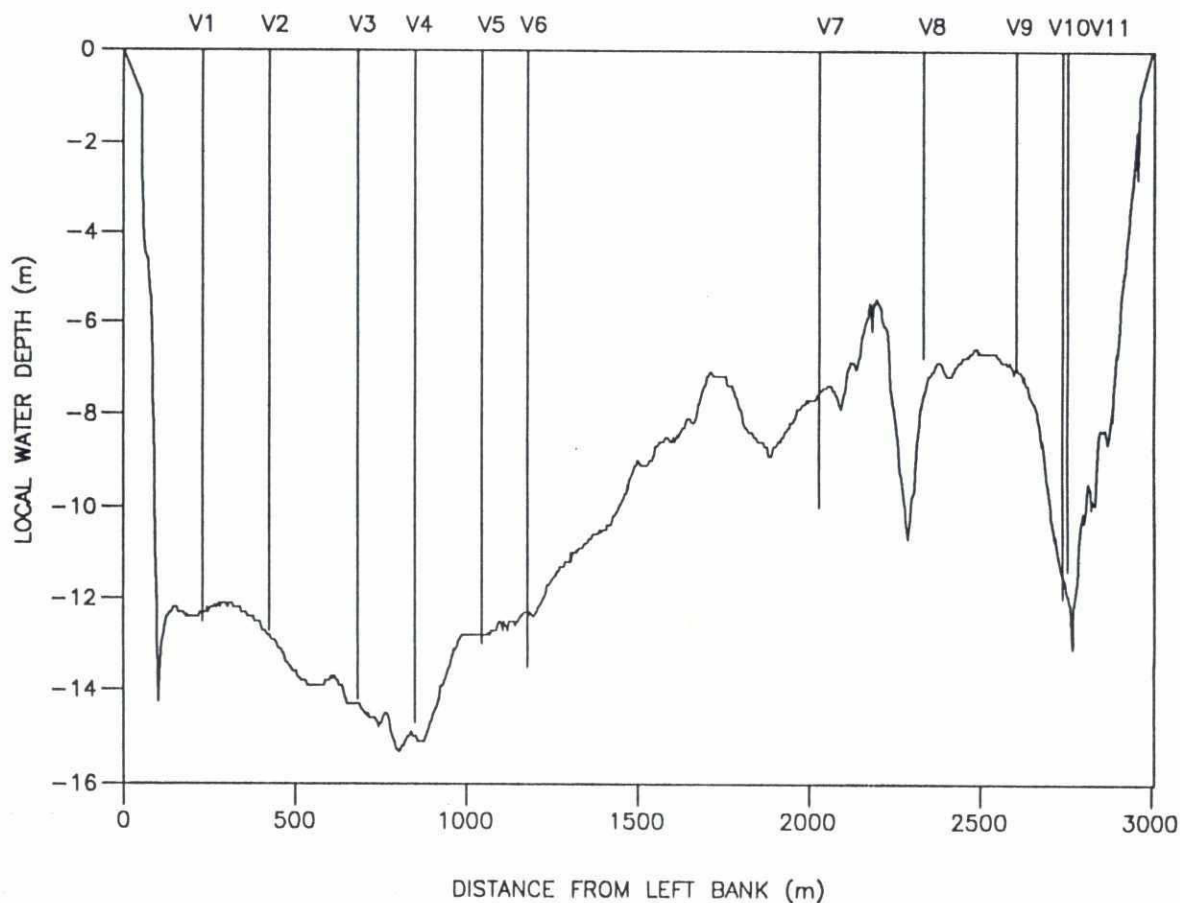
Date : 24 Nov 1994

Init : sjr

Location map

page

1.1



Water level : 8.03 m + PWD measured at the station Indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 92 : 21-23 August , 1994

Location 5 : Padma River, Baruria

File : U48L1T07

Date : 24 Nov 1994

Init : sjr

Cross-sections and measured verticals  
Channel 1

page

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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	12	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	11	-	-	-
	ADCP	11	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	3	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	11	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	22	-	-	-
	Delft Bottle	18	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3007	29748	8.03	76553	523	140289

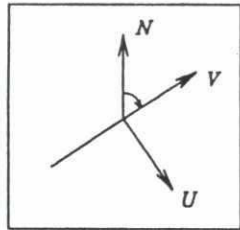
Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	21 Aug 94	8.03	FAP 24
		22 Aug 94	8.01	
		23 Aug 94	7.98	

Table 2.3: Water-levels

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	<div>Survey Bulletin 92 : 21-23 August , 1994</div>	
<div>Location 5 : Padma River, Barurla</div>				
<div>File :</div> <div>U48L1T07</div>	<div>Date : 24 Nov 1994</div> <div>Init : sjr</div>	<div>Survey programme as made and key figures</div>		<div>page</div> <div>2.1</div>

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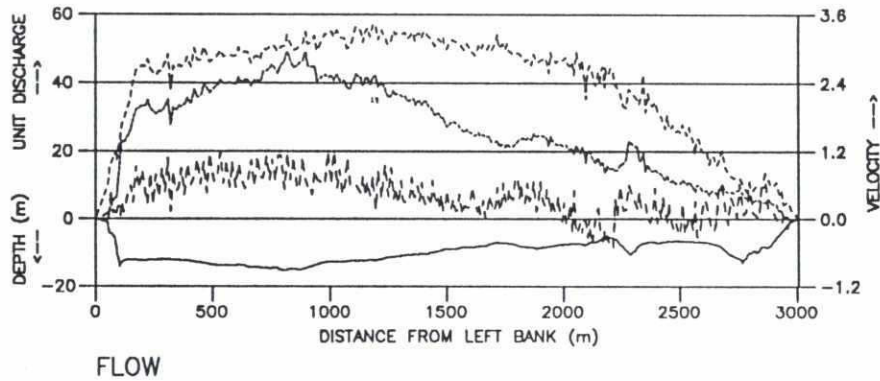


TRANSECT AZIMUTH =  $56^\circ$

U - VELOCITY NORMAL TO TRANSECT ( $m/s$ )

V - VELOCITY PARALLEL TO TRANSECT ( $m/s$ )

N - MAGNETIC NORTH



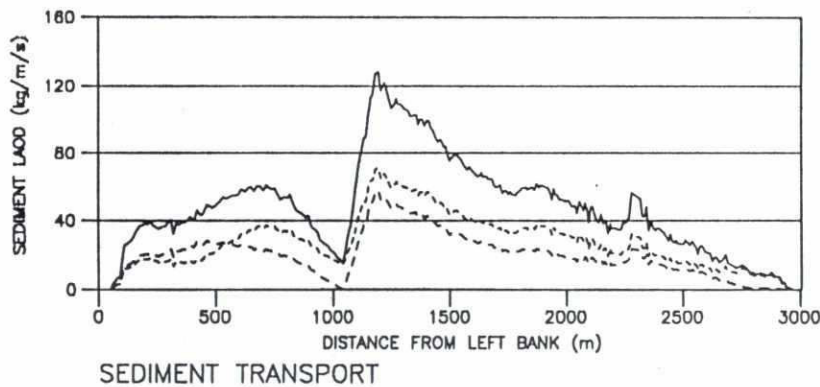
LEGEND :

— WATER DEPTH (m below STAGE)  
 --- UNIT DISCHARGE ( $m^3/s.m$ )  
 - - - U ( $m/s$ )  
 - - - V ( $m/s$ )

STAGE = 8.03 (m+PWD)

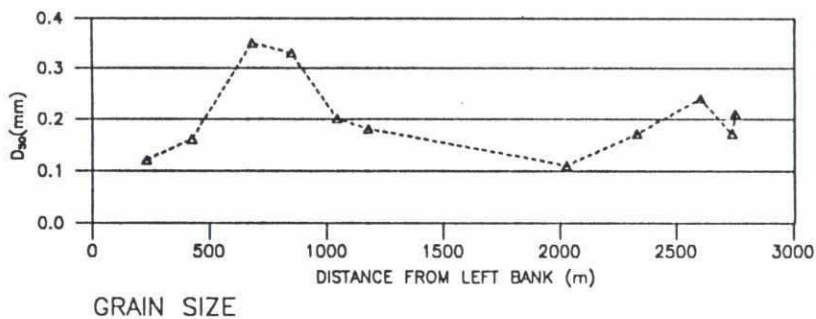
A = 29748 ( $m^3$ )

Q = 76553 ( $m^3/s$ )



LEGEND :

—  $S_{TOTAL}$  140812 ( $kg/s$ )  
 - - -  $S_{WASH\ LOAD}$  81168 ( $kg/s$ )  
 - - -  $S_{SUSP.\ BED}$  59121 ( $kg/s$ )  
 - - -  $S_{BED\ LOAD}$  523 ( $kg/s$ )



LEGEND :

◆◆◆◆  $D_{50\ SUSP.}$  (mm)  
 ▲▲▲▲  $D_{50\ BED\ LOAD}$  (mm)  
 ■■■■  $D_{50\ BED\ MAT.}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
 Flood Plan Coordination Organization

Commission of the European Communities

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Location 5 : Padma River, Baruria

File : U48L1T07

Date : 24 Nov 1994

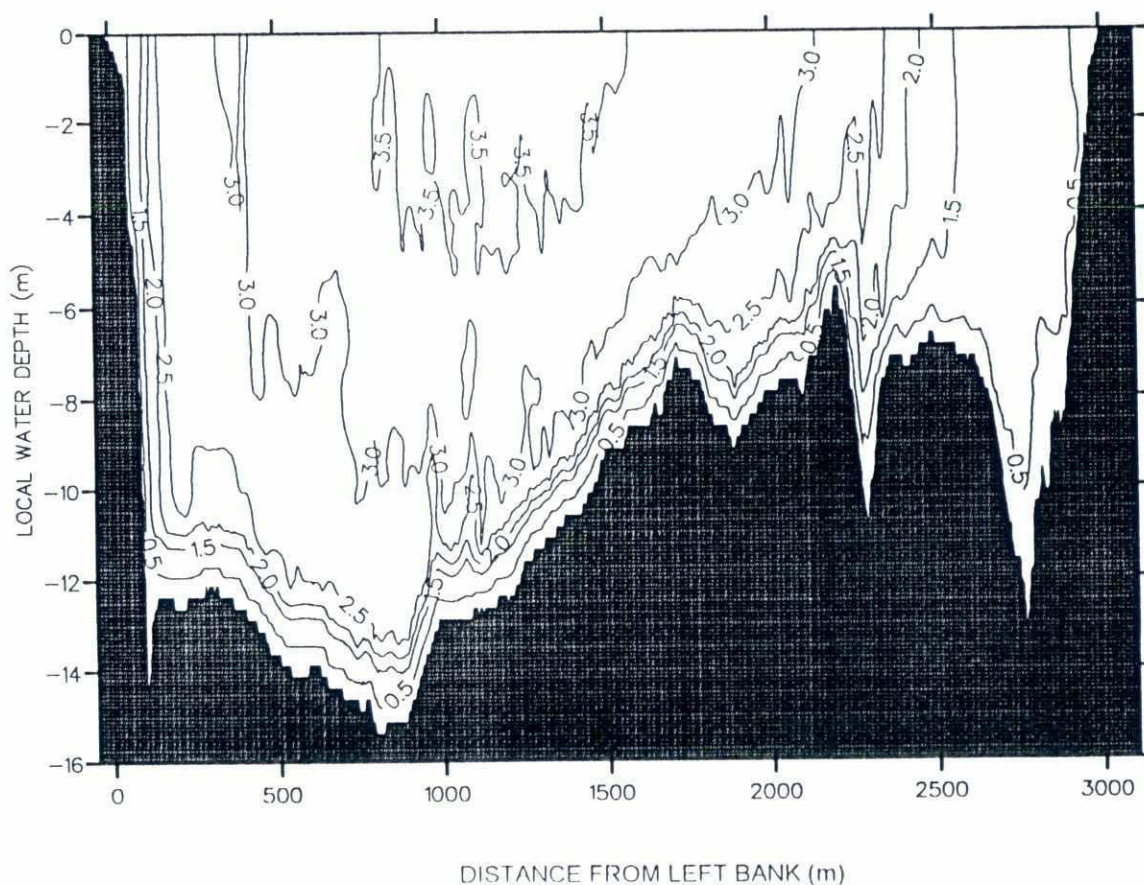
Init : sjr

Horizontal distribution of flow and sediments  
 Channel 1

page

3.1





Iso-velocity contours (m/s)

Water level : 8.03 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 92 : 21-23 August , 1994

Location 5 : Padma River, Baruria

File : U48L1T07

Date : 24 Nov 1994

Init : sjr

Cross-sectional distribution of flow velocity  
Channel 1

page


4.1

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Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							


US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley - Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9408211149-1228	12.50	3.820	96.180	0.100	0.125	0.163
	2	9408211358-1427	12.70	1.570	98.430	0.131	0.154	0.180
	3	9408211525-1552	14.20	0.156	99.844	0.313	0.353	0.398
	4	9408221142-1310	14.70	1.156	98.844	0.301	0.340	0.384
	5	9408221424-1654	13.00	0.735	99.265	0.166	0.190	0.219
	6	9408230926-0939	13.50	1.153	98.847	0.159	0.180	0.204
	7	9408231025-1039	10.00	10.107	89.893	0.089	0.110	0.141
	8	9408231156-1208	6.80	4.309	95.691	0.149	0.174	0.202
	9	9408231236-1252	7.00	6.071	93.929	0.177	0.236	0.300
	10	9408231403-1418	12.00	24.990	75.010	0.102	0.157	0.217
	11	9408231520-1527	11.40	17.178	82.822	0.151	0.207	0.278
	1	9408211149-1228	12.50	4.214	95.786	0.095	0.117	0.149
	2	9408211358-1427	12.70	0.780	99.220	0.146	0.169	0.195
	3	9408211525-1552	14.20	0.175	99.825	0.315	0.356	0.402
	4	9408221142-1310	14.70	4.424	95.576	0.277	0.319	0.368
	5	9408221424-1654	13.00	0.430	99.570	0.173	0.202	0.234
	6	9408230926-0939	13.50	1.046	98.954	0.161	0.182	0.205
	7	9408231025-1039	10.00	7.592	92.408	0.089	0.108	0.134
	8	9408231156-1208	6.80	6.202	93.798	0.140	0.167	0.200
	9	9408231236-1252	7.00	4.708	95.292	0.193	0.254	0.313
	10	9408231403-1418	12.00	23.938	76.062	0.135	0.190	0.265
	11	9408231520-1527	11.40	14.650	85.350	0.162	0.218	0.286
Table 5.3 : Grain sizes of bed load								

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	<div>Survey Bulletin 92 : 21-23 August , 1994</div>	
			<div>Location 5 : Padma River, Baruria</div>	
		<div>Date : 24 Nov 1994</div>	<div>Grain size distributions</div>	
		<div>Init : sjr</div>		
			<div>page</div> <div>5.1</div>	

Delft - Bottle								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	1	9408211149-1228	12.50	3.643	96.357	0.092	0.110	0.136
	2	9408211358-1427	12.70	0.905	99.095	0.134	0.156	0.181
	3	9408211525-1552	14.20	1.238	98.762	0.130	0.152	0.177
	4	9408221142-1310	14.70	0.903	99.097	0.161	0.186	0.215
	7	9408231025-1039	10.00	6.021	93.979	0.088	0.104	0.123
	8	9408231156-1208	6.80	2.522	97.478	0.151	0.176	0.206
	9	9408231236-1252	7.00	44.820	55.180	-	0.068	0.084
	10	9408231403-1418	12.00	61.182	38.818	-	-	0.069
	11	9408231520-1527	11.40	72.226	27.774	-	-	-
	1	9408211149-1228	12.50	6.578	93.422	0.083	0.096	0.111
	2	9408211358-1427	12.70	2.509	97.491	0.105	0.132	0.161
	3	9408211525-1552	14.20	2.588	97.412	0.110	0.138	0.166
	4	9408221142-1310	14.70	2.464	97.536	0.147	0.171	0.200
	7	9408231025-1039	10.00	13.189	86.811	0.077	0.089	0.103
	8	9408231156-1208	6.80	14.715	85.285	0.091	0.119	0.151
	9	9408231236-1252	7.00	51.616	48.384	-	-	0.078
	10	9408231403-1418	12.00	76.093	23.907	-	-	-
	11	9408231520-1527	11.40	70.315	29.685	-	-	-

Table 5.4 : Grain sizes of bed load

 <p><b>FAP 24</b> DELFT - DHI</p>		Survey Bulletin 92 : 21-23 August , 1994	
		Location 5 : Padma River, Baruria	
	Date : 24 Nov 1994	Grain size distributions	page 5.2
	Init : sjr		



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9408210810-0837 9408210854-0924 9408211638-1706 9408211711-1738 9408220834-0900 9408220939-1004 9408221612-1639 9408221641-1705 9408230804-0829 9408230838-0905 9408231553-1617 9408231620-1644	U48L1T01 U48L1T02 U48L1T06 U48L1T07 * U48M1T01 U48M1T02 U48M1T03 U48M1T04 U48N1T01 U48N1T02 U48N1T03 U48N1T04


Table 6.1: ADCP & EMF transects \* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11	9408211149-1228 9408211358-1427 9408211525-1552 9408221142-1310 9408221424-1654 9408230926-0939 9408231025-1039 9408231156-1208 9408231236-1252 9408231403-1418 9408231520-1527	481063 480905 480687 480519 480406 480270 479569 479314 479091 478969 478960	629833 629721 629585 629537 629354 629316 628833 628668 628515 628455 628442	12.50 12.70 14.20 14.70 13.00 13.50 10.00 6.80 7.00 12.00 11.40	U48L1P01 * U48L1P02 * U48L1P03 * U48M1P01 ** U48M1P02 * U48N1P01 * U48N1P02 * U48N1P03 * U48N1P04 * U48N1P05 * U48N1P06 *

Table 6.2: Vertical profiles \*\* MEX not available      \* S4 & MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	4	3	9408221142-1310	480519	629537	14.70

Table 6.3: Suspended sediment - point sampled

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 92 : 21-23 August , 1994	
		Location 5 : Padma River, Barurla	
	<div>Date : 24 Nov 1994</div> <div>Init : sjr</div>	Collected data and their storage (1)	<div>page</div> <div>6.1</div>




Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9408211149-1228	481063	629833	12.50
		2	1	9408211358-1427	480905	629721	12.70
		3	1	9408211525-1552	480687	629585	14.20
		4	1	9408221142-1310	480519	629537	14.70
		5	1	9408221424-1654	480406	629354	13.00
		6	1	9408230926-0939	480270	629316	13.50
		7	1	9408231025-1039	479569	628833	10.00
		8	1	9408231156-1208	479314	628668	6.80
		9	1	9408231236-1252	479091	628515	7.00
		10	1	9408231403-1418	478969	628455	12.00
		11	1	9408231520-1527	478960	628442	11.40

Table 6.4: Suspended sediment - depth integrated


Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No
Helley-Smith Sample	1	1	9408211149-1228	481063	629833	12.50	A1889
		2	9408211358-1427	480905	629721	12.70	A2180
		3	9408211525-1552	480687	629585	14.20	A1837
		4	9408221142-1310	480519	629537	14.70	A1900
		5	9408221424-1654	480406	629354	13.00	A2166
		6	9408230926-0939	480270	629316	13.50	A2190
		7	9408231025-1039	479569	628833	10.00	A1634
		8	9408231156-1208	479314	628668	6.80	A1802
		9	9408231236-1252	479091	628515	7.00	A1872
		10	9408231403-1418	478969	628455	12.00	A2147
		11	9408231520-1527	478960	628442	11.40	A1619
		1	9408211149-1228	481063	629833	12.50	A1946
		2	9408211358-1427	480905	629721	12.70	A1818
		3	9408211525-1552	480687	629585	14.20	A79
		4	9408221142-1310	480519	629537	14.70	A1896
		5	9408221424-1654	480406	629354	13.00	A1359
		6	9408230926-0939	480270	629316	13.50	A1841
		7	9408231025-1039	479569	628833	10.00	A1162
		8	9408231156-1208	479314	628668	6.80	A1891
		9	9408231236-1252	479091	628515	7.00	A2155
		10	9408231403-1418	478969	628455	12.00	A2141
		11	9408231520-1527	478960	628442	11.40	A2145

Table 6.5: Bed load


 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 92 : 21-23 August , 1994	
		Location 5 : Padma River, Baruria	
	Date : 24 Nov 1994	Collected data and their storage (2)	page 6.2
	Init : sjr		

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No	
Delft - Bottle Sample	1	1	9408211149-1228	481063	629833	12.50	A760	
		2	9408211358-1427	480905	629721	12.70	A995	
		3	9408211525-1552	480687	629585	14.20	A770	
		4	9408221142-1310	480519	629537	14.70	A750	
		7	9408231025-1039	479569	628833	10.00	A968	
		8	9408231156-1208	479314	628668	6.80	A780	
		9	9408231236-1252	479091	628515	7.00	A767	
		10	9408231403-1418	478969	628455	12.00	A766	
		11	9408231520-1527	478960	628442	11.40	A1021	
		11	1	9408211149-1228	481063	629833	12.50	A764
			2	9408211358-1427	480905	629721	12.70	A769
	3		9408211525-1552	480687	629585	14.20	A1033	
	4		9408221142-1310	480519	629537	14.70	A768	
	7		9408231025-1039	479569	628833	10.00	A775	
	8		9408231156-1208	479314	628668	6.80	A762	
	9		9408231236-1252	479091	628515	7.00	A765	
	10		9408231403-1418	478969	628455	12.00	A1008	
	11		9408231520-1527	478960	628442	11.40	A1015	

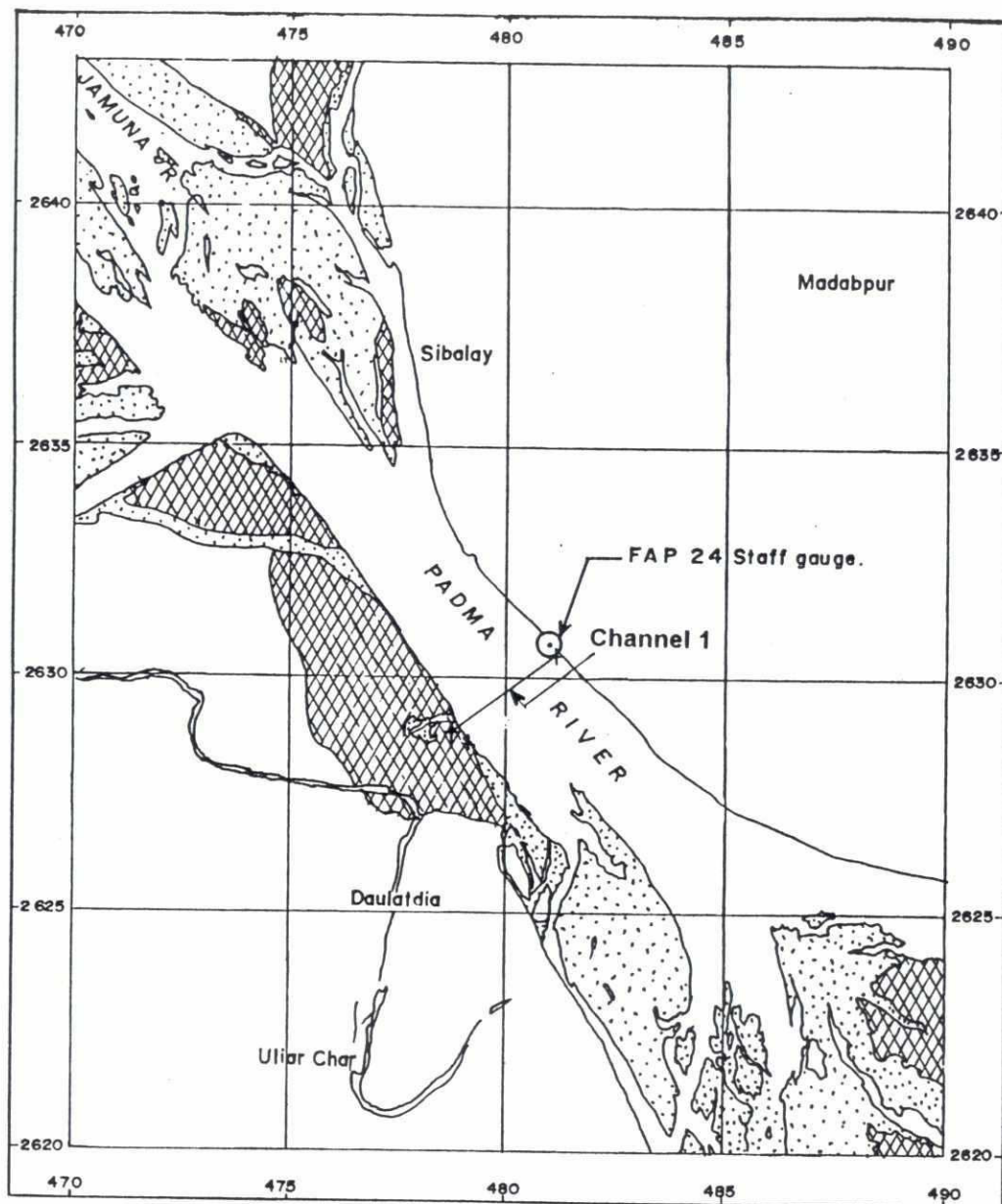
Table 6.6: Bed load

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 92 : 21-23 August , 1994	
		Location 5 : Padma River, Baruria	
	Date : 24 Nov 1994	Collected data and their storage (3)	page  6.3
	Init : sjr		

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U48L1T07 .ase
Echosounder data	1	QUATTRO	U48L1T07 .ech
Sediment transport data	1	QUATTRO	U48L1T07 .sed
Bed load sediment analysis	1	QUATTRO	U48L1T07 .bdl
Susp. sed. conc. analysis	1	QUATTRO	U48L1T07 .ssc
Transect plot data	1	QUATTRO	U48L1T07 .trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U48L1T07 .ct2 U48L1T07 .dt2
Table 7.1 PSD 24 Database file description			

<div><div><div><div>FAP 24</div><div>DELFT - DHI</div></div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 92 : 21-23 August , 1994	
		Location 5 : Padma River, Baruria	
	Date : 24 Nov 1994	PSD 24 Database file description	page  7.1
	Init : sjr		





**LEGEND:-**

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
images of March 1994

**FAP 24**  
  
DELFT - DHI

**RIVER SURVEY PROJECT**  
Flood Plan Coordination Organization  
Commission of the European Communities

**Survey Bulletin 96 : 09 - 10 September, 1994**

**Location 5 : Padma River, Baruria**

Date : 01 Jan 1995

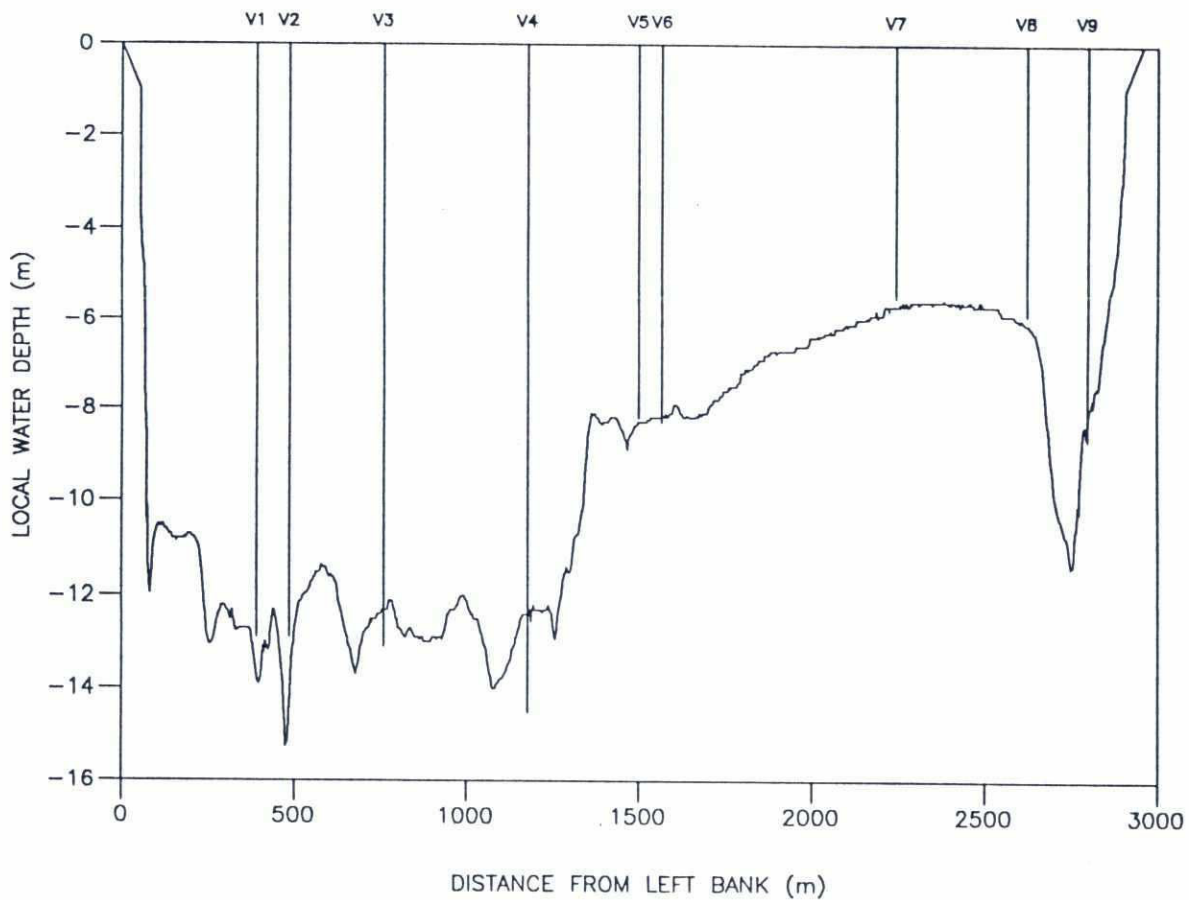
Init : mk

**Location map**

page

1.1





Water-level : 7.18 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 96 : 09 - 10 September, 1994

Location 5 : Padma River, Baruria

File : U4991T04

Date : 01 Jan 1995

Init : mk

Cross-sections and measured verticals  
Channel 1

page

1.2


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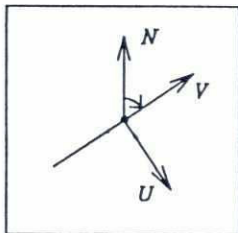
Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	5	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	9	-	-	-
	ADCP	9	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	13	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	9	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	-	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2965	26761	7.18	54603	-	60393
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	09 Sep 94 10 Sep 94	7.18 7.10	FAP 24

Table 2.3: Water-levels

 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 96 : 09 - 10 September, 1994	
		Location 5 : Padma River, Baruria	
File : U4991T04	Date : 01 Jan 1995	Survey programme as made and key figures	page
	Init : mk		2.1

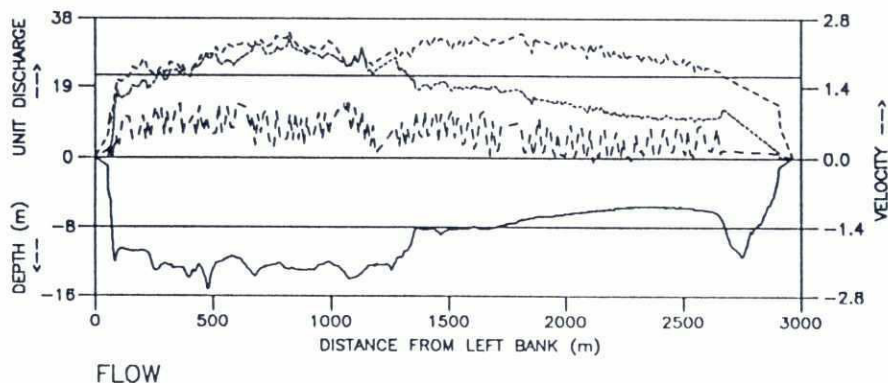


TRANSECT AZIMUTH =  $56^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



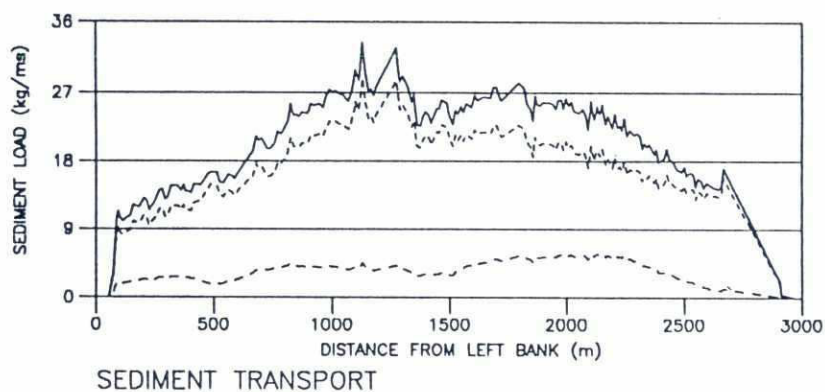
LEGEND :

— WATER DEPTH (m below STAGE)  
 ..... UNIT DISCHARGE ( $\text{m}^3/\text{s.m}$ )  
 --- U - (m/s)  
 -.- V - (m/s)

STAGE = 7.18 (m+PWD)

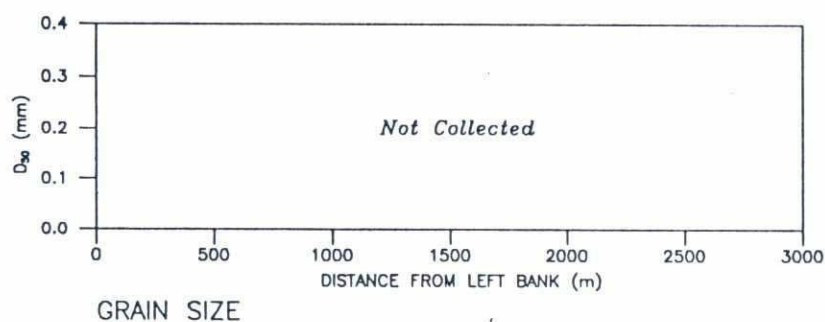
A = 26761 ( $\text{m}^2$ )

Q = 54603 ( $\text{m}^3/\text{s}$ )



LEGEND :

—  $S_{\text{TOTAL}}$  60393 (kg/s)  
 ---  $S_{\text{WASH LOAD}}$  50694 (kg/s)  
 -.-  $S_{\text{SUSP. BED}}$  9699 (kg/s)  
 .....  $S_{\text{BED LOAD}}$  - (kg/s)



LEGEND :

◇◇◇◇◇  $D_{50 \text{ SUSP.}}$  (mm)  
 △△△△△  $D_{50 \text{ BED LOAD}}$  (mm)  
 □□□□□  $D_{50 \text{ BED MAT.}}$  (mm)

FAP 24  
  
 DELFT - DHI

RIVER SURVEY PROJECT  
 Flood Plan Coordination Organization  
 Commission of the European Communities

Survey Bulletin 96 : 09 - 10 September, 1994

Location 5 : Padma River, Baruria

File : U4991T04

Date : 01 Jan 1995

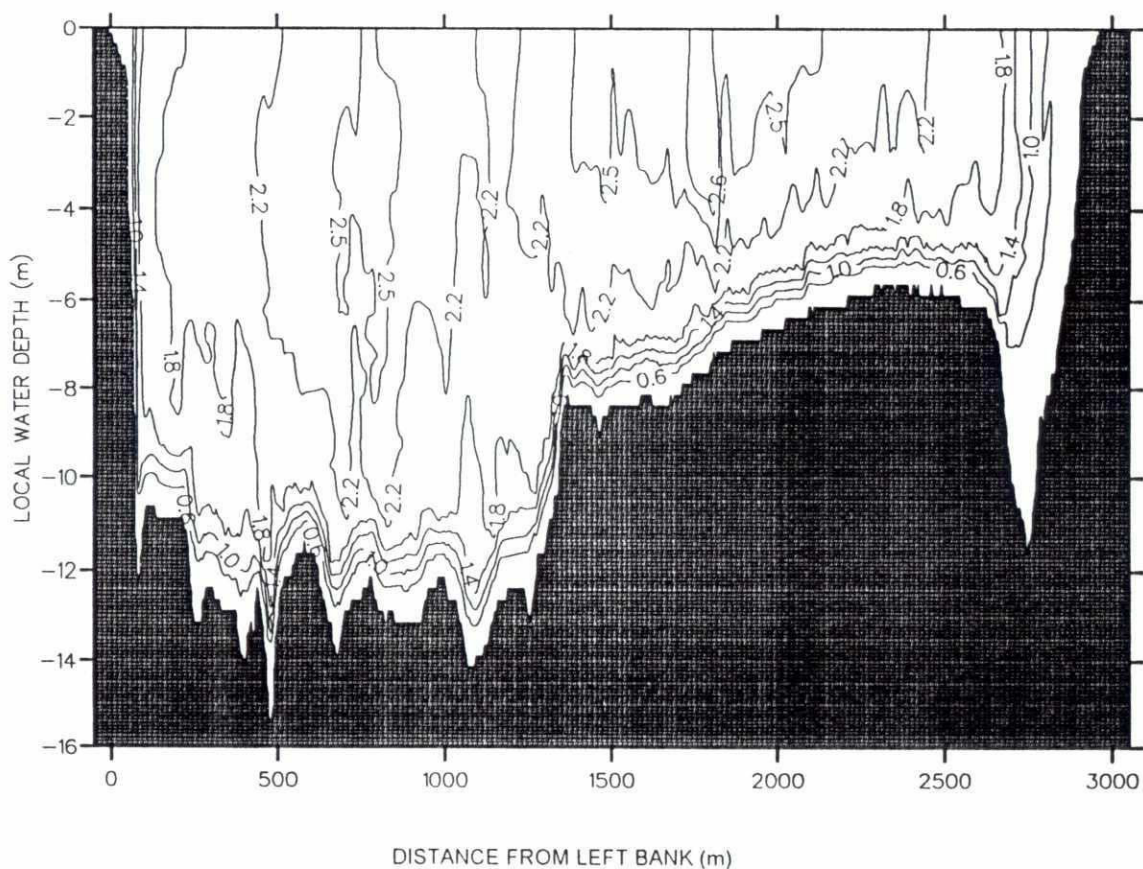
Init : mk

Horizontal distribution of flow and sediments  
 Channel 1

page

3.1

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Iso-velocity contours (m/s)

Water-level : 7.18 m + PWD measured at the station indicated on page 1.1



RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 96 : 09 - 10 September, 1994

Location 5 : Padma River, Baruria

File : U4991T04

Date : 01 Jan 1995

Init : mk

Cross-sectional distribution of flow velocity  
Channel 1

page

4.1



967

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9409091222-1247 9409091555-1617 9409100810-0831 9409101648-1710 9409101712-1733	U4991T01 U4991T04 * U49A1T01 U49A1T05 U49A1T06

Table 6.1: ADCP &amp; EMF transect

\* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1	9409101748-1755	480913	629735	12.9	U49A1P14 *
		2	9409101546-1604	480838	629683	12.9	U49A1P12 **
		3	9409101410-1421	480614	629534	13.1	U49A1P07 *
		4	9409101256-1305	480260	629293	14.5	U49A1P06 *
		5	9409101154-1202	479992	629115	8.20	U49A1P05 *
		6	9409101120-1130	479944	629082	8.30	U49A1P04 *
		7	9409101034-1041	479380	628705	5.50	U49A1P03 *
		8	9409100956-1005	479063	628493	5.90	U49A1P02 *
		9	9409100915-0925	478919	628405	8.70	U49A1P01 *

Table 6.2: Vertical profiles

\* S4 and MEX not available


\*\* MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	1	1	9409101748-1755	480913	629735	12.9
		2	6	9409101546-1604	480838	629683	12.9
		3	1	9409101410-1421	480614	629534	13.1
		4	1	9409101256-1305	480260	629293	14.5
		5	1	9409101154-1202	479992	629115	8.20
		6	1	9409101120-1130	479944	629082	8.30
		7	1	9409101034-1041	479380	628705	5.50
		8	1	9409100956-1005	479063	628493	5.90

Table 6.3: Suspended sediment - point sampled

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	1	1	9409101748-1755	480913	629735	12.9
		2	1	9409101546-1604	480838	629683	12.9
		3	1	9409101410-1421	480614	629534	13.1
		4	1	9409101256-1305	480260	629293	14.5
		5	1	9409101154-1202	479992	629115	8.20
		6	1	9409101120-1130	479944	629082	8.30
		7	1	9409101034-1041	479380	628705	5.50
		8	1	9409100956-1005	479063	628493	5.90
		9	1	9409100915-0925	478919	628405	8.70


Table 6.4: Suspended sediment - depth integrated

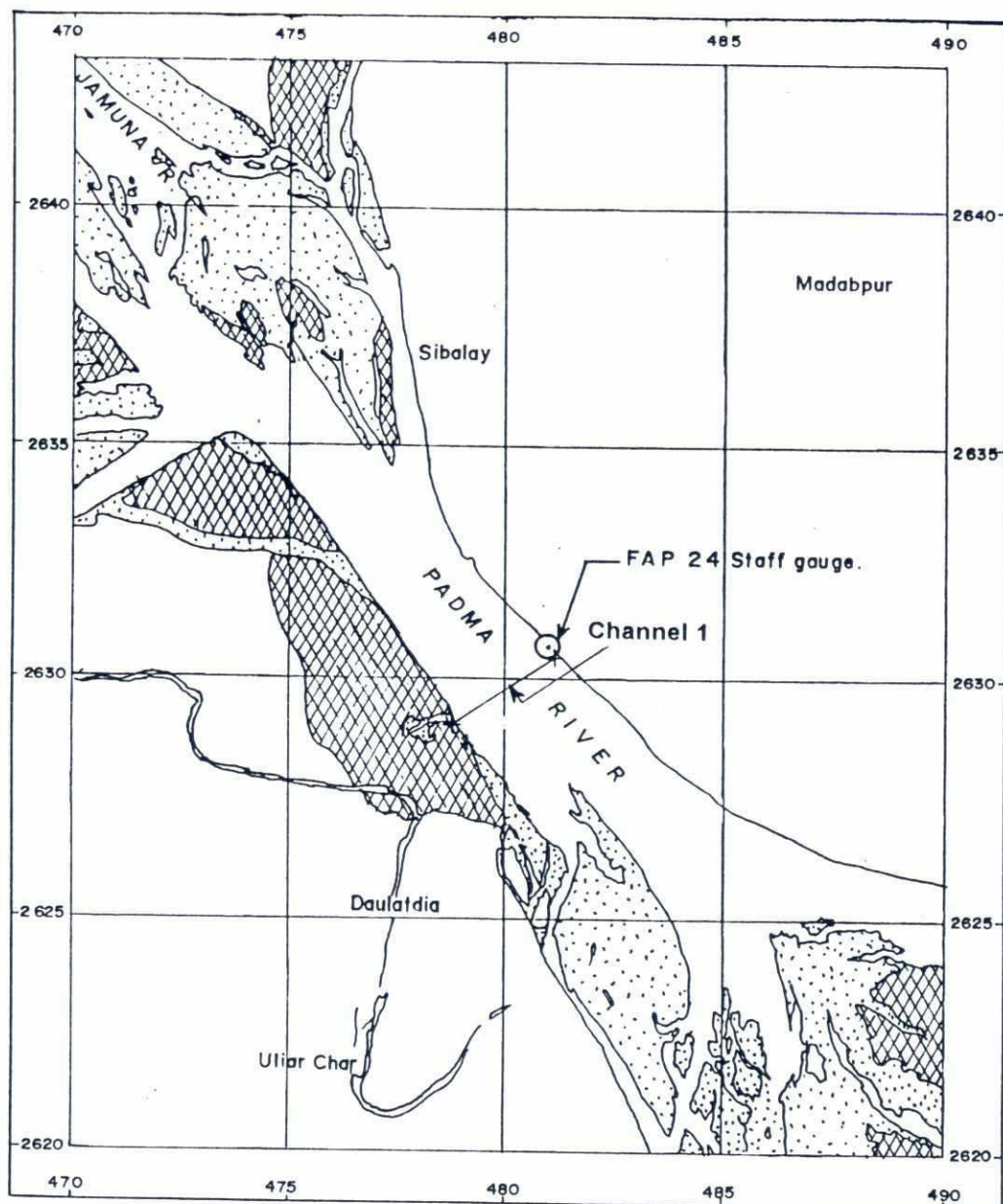
<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organization Commission of the European Communities</small>		<b>Survey Bulletin 96 : 09 - 10 September, 1994</b>	
		<b>Location 5 : Padma River, Baruria</b>			
		Date 01 Jan 1995 init : mk		<b>Collected data and their storage (1)</b>	
				page 6.1	

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4991T04 .ase
Echosounder data	1	QUATTRO	U4991T04 .ech
Sediment transport data	1	QUATTRO	U4991T04 .sed
Sus. sed. conc. analysis	1	QUATTRO	U4991T04 .ssc
Transect plot data	1	QUATTRO	U4991T04 .trs
Iso-velocity plot data	1	MIKE 21	U4991T04 .ct2 U4991T04 .dt2

Table 7.1 PSD 24 Database file description

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 96 : 09 - 10 September, 1994	
		Location 5 : Padma River, Baruria	
	Date : 01 Jan 1995	PSD 24 Database file description	page 7.1
	Init : mk		



LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
images of March 1994

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 102 : 08 - 10 October, 1994

Location 5 : Padma River, Baruria

Date : 24 Jan 1995

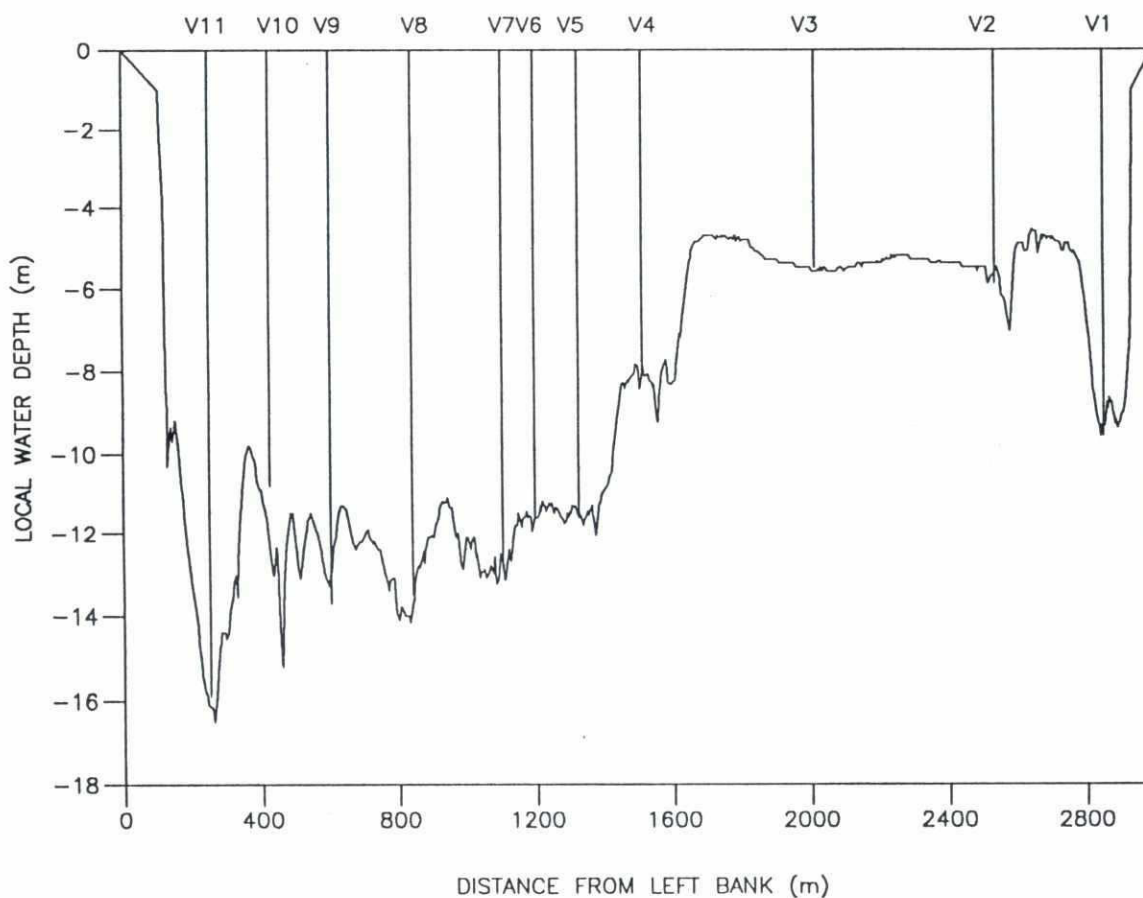
Init : mzl/sjr

Location map


page

1.1

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Water level : 6.26 m + PWD measured at the station indicated on Page 1.1

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 102 : 08 -10 October , 1994	
		Location 5 : Padma River, Baruria	
File : U4A81T08	Date : 24 Jan 1994	Cross-sections and measured verticals  Channel 1	page
	Init : mzh/sjr		1.2



Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	9	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	11	-	-	-
	ADCP	11	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	11	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	20	-	-	-
	Delft Bottle	22	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

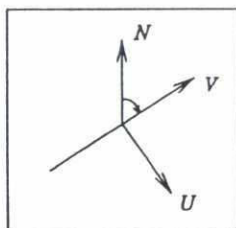
	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sedimen transport Ss total (kg/s)
Channel 1	3001	25156	6.26	31135	110	13743

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	08 Oct 94	6.26	FAP 24
		09 Oct 94	6.18	
		10 Oct 94	6.21	

Table 2.3: Water-levels

 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 102 : 08 -10 October , 1994	
		Location 5 : Padma River, Baruria	
File : U4A81T08	Date : 24 Jan 1994	Survey programme as made and key figures	page 2.1
	Init : mzh/sjr		

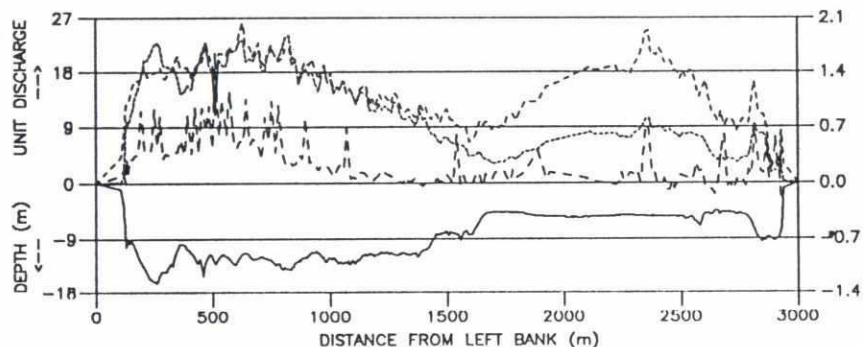


TRANSECT AZIMUTH =  $56^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

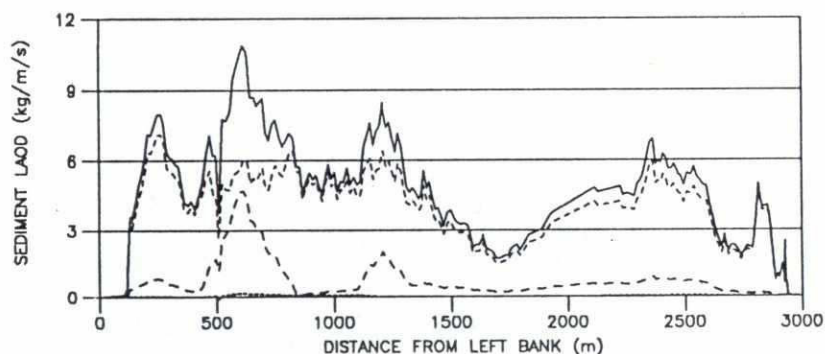
N - MAGNETIC NORTH



FLOW

LEGEND :

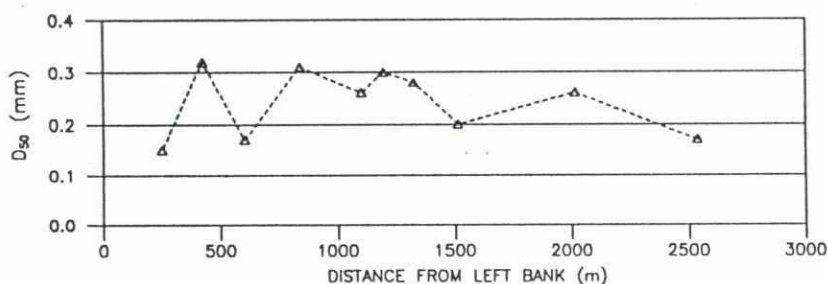
- WATER DEPTH (m below STAGE)
- - - UNIT DISCHARGE (m<sup>3</sup>/s.m)
- ... U (m/s)
- . - V (m/s)
- STAGE = 6.26 (m+PWD)
- A = 25156 (m<sup>3</sup>)
- Q = 31135 (m<sup>3</sup>/s)



SEDIMENT TRANSPORT

LEGEND :

- S<sub>TOTAL</sub> 13853 (kg/s)
- - - S<sub>WASH LOAD</sub> 11578 (kg/s)
- ... S<sub>SUSP. BED</sub> 2165 (kg/s)
- . - S<sub>BED LOAD</sub> 110 (kg/s)



GRAIN SIZE

LEGEND :

- ◇◇◇◇◇ D<sub>50</sub> SUSP. (mm)
- △△△△△ D<sub>50</sub> BED LOAD (mm)
- D<sub>50</sub> BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 102 : 08 -10 October , 1994

Location 5 : Padma River, Baruria

File : U4A81T08

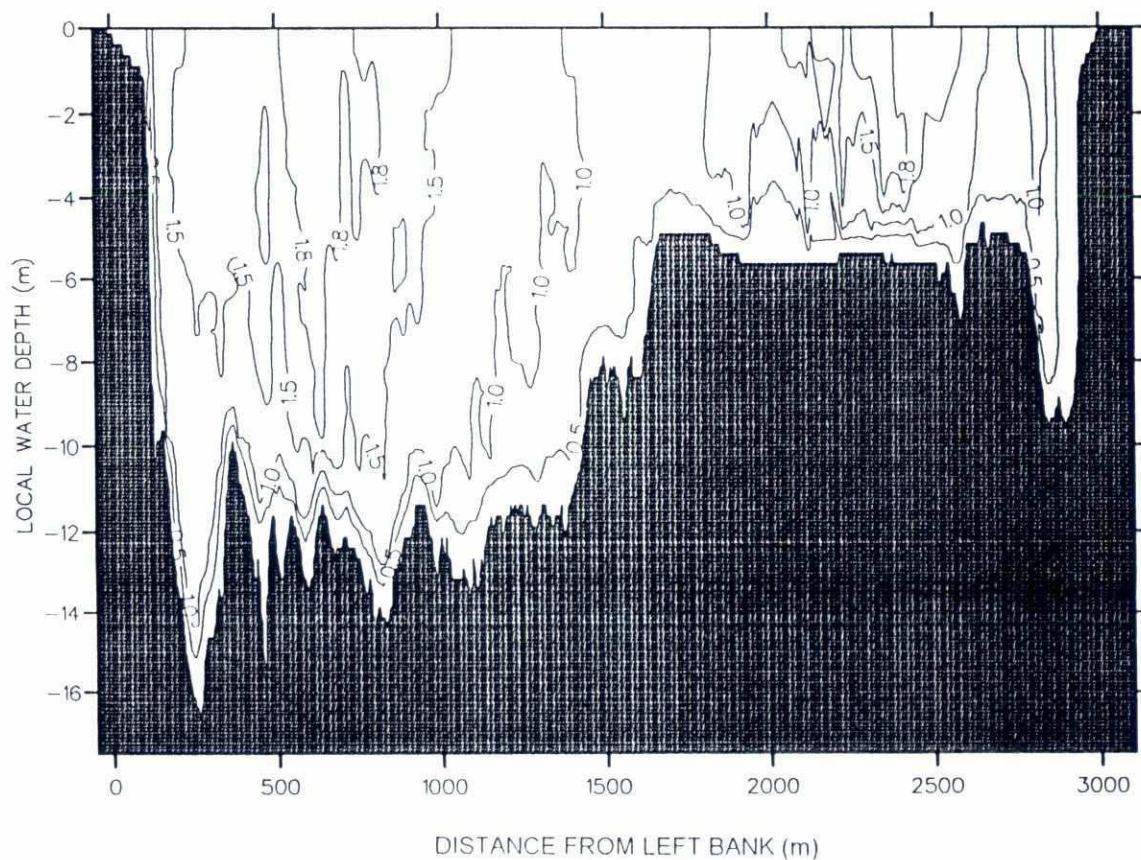
Date : 24 Jan 1994

Init : mzh/sjr

Horizontal distribution of flow and sediments  
Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 6.26 m + PWD measured at the station indicated on Page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plans Coordination Organization

Commission of the European Communities

Survey Bulletin 102 : 08 -10 October , 1994

Location 5 : Padma River, Baruria

File : U4A81T08

Date : 24 Jan 1994

Init : mzh/sjr

Cross-sectional distribution of flow velocity  
Channel 1

page

4.1




Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							

Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							

Table 5.2 : Grain size of bed material

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	2	9410101203-1229	5.90	1.568	98.432	0.145	0.166	0.192
	3	9410101122-1142	5.50	0.973	99.027	0.210	0.268	0.326
	4	9410101029-1059	8.10	7.461	92.539	0.167	0.201	0.241
	5	9410091519-1533	11.50	4.146	95.854	0.192	0.242	0.303
	6	9410091433-1453	11.60	0.706	99.294	0.245	0.292	0.346
	7	9410091240-1249	12.90	0.113	99.887	0.175	0.202	0.234
	8	9410091121-1145	13.50	0.223	99.777	0.277	0.323	0.375
	9	9410091033-1056	13.70	0.644	99.356	0.155	0.175	0.197
	10	9410090935-1015	10.80	0.505	99.495	0.273	0.316	0.366
	11	9410081452-1631	15.90	2.001	97.999	0.140	0.174	0.217
	2	9410101203-1229	5.90	1.917	98.083	0.144	0.168	0.195
	3	9410101122-1142	5.50	1.617	98.383	0.202	0.259	0.318
	4	9410101029-1059	8.10	7.064	92.936	0.164	0.197	0.235
	5	9410091519-1533	11.50	0.331	99.669	0.285	0.325	0.371
	6	9410091433-1453	11.60	0.290	99.710	0.275	0.316	0.364
	7	9410091240-1249	12.90	0.184	99.816	0.276	0.317	0.365
	8	9410091121-1145	13.50	0.123	99.877	0.245	0.292	0.345
	9	9410091033-1056	13.70	0.733	99.267	0.153	0.173	0.195
	10	9410090935-1015	10.80	0.573	99.427	0.274	0.316	0.365
	11	9410081452-1631	15.90	3.534	96.466	0.104	0.132	0.170
Table 5.3 : Grain sizes of bed load								


<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 102 : 08 -10 October , 1994	
		Location 5 : Padma River, Baruria	
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Delft-Bottle								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9410101325-1358	9.60	11.043	88.957	0.090	0.112	0.143
	2	9410101203-1229	5.90	0.846	99.154	0.141	0.161	0.184
	3	9410101122-1142	5.50	1.691	98.309	0.127	0.149	0.175
	4	9410101029-1059	8.10	15.750	84.250	0.084	0.106	0.134
	5	9410091519-1533	11.50	1.784	98.216	0.148	0.171	0.196
	6	9410091433-1453	11.60	0.238	99.762	0.172	0.199	0.231
	7	9410091240-1249	12.90	2.547	97.453	0.149	0.171	0.196
	8	9410091121-1145	13.50	0.078	99.922	0.190	0.228	0.285
	9	9410091033-1056	13.70	2.878	97.122	0.136	0.158	0.184
	10	9410090935-1015	10.80	0.540	99.460	0.149	0.169	0.193
	11	9410081452-1631	15.90	6.667	93.333	0.086	0.101	0.119
	1	9410101325-1358	9.60	21.102	78.898	0.072	0.084	0.098
	2	9410101203-1229	5.90	5.972	94.028	0.090	0.107	0.131
	3	9410101122-1142	5.50	7.005	92.995	0.087	0.103	0.123
	4	9410101029-1059	8.10	6.331	93.669	0.105	0.134	0.162
	5	9410091519-1533	11.50	11.211	88.789	0.087	0.106	0.132
	6	9410091433-1453	11.60	2.459	97.541	0.139	0.161	0.187
	7	9410091240-1249	12.90	2.359	97.641	0.145	0.167	0.193
	8	9410091121-1145	13.50	1.834	98.166	0.146	0.167	0.192
	9	9410091033-1056	13.70	1.123	98.877	0.138	0.160	0.185
	10	9410090935-1015	10.80	2.012	97.988	0.107	0.134	0.163
	11	9410081452-1631	15.90	9.059	90.941	0.081	0.094	0.110

Table 5.4 : Grain sizes of bed load

<div><div><div><div><div></div><div>FAP 24</div></div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div></div>		Survey Bulletin 102 : 08 -10 October , 1994	
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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9410081044-1109 9410081135-1157 9410081704-1726 9410081729-1748 9410090828-0850 9410090858-0920 9410091603-1626 9410091628-1650 9410110844-0907	U4A81T01 U4A81T03 U4A81T07 U4A81T08 * U4A91T01 U4A91T03 U4A91T05 U4A91T06 U4AA1T01


Table 6.1: ADCP & EMF transects " \* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8 9 10 11	9410101325-1358 9410101203-1229 9410101122-1142 9410101029-1059 9410091519-1533 9410091433-1453 9410091240-1249 9410091121-1145 9410091033-1056 9410090935-1015 9410081452-1631	478872 479172 479611 480028 480181 480281 480370 480585 480785 480926 481078	628431 628562 628850 629133 629235 629312 629366 629507 629645 629739 629836	9.60 5.90 5.50 8.10 11.50 11.60 12.90 13.50 13.70 10.80 15.90	U4AA1P04 * U4AA1P03 * U4AA1P02 * U4AA1P01 * U4A91P09 * U4A91P08 * U4A91P07 * U4A91P05 * U4A91P02 * U4A91P01 * U4A81P01 **

Table 6.2: Vertical profiles \* S4 & MEX not available \*\* MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	11	6	9410081452-1631	481078	629836	15.90

Table 6.3: Suspended sediment - point sampled

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 102 : 08 -10 October , 1994	
		Location 5 : Padma River, Baruria	
<div><div>Date : 24 Jan 1994</div><div>Init : mzh/sjr</div></div>		Collected data and their storage (1)	<div>page</div> <div>6.1</div>


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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9410101325-1358	478872	628431	9.60
		2	1	9410101203-1229	479172	628562	5.90
		3	1	9410101122-1142	479611	628850	5.50
		4	1	9410101029-1059	480028	629133	8.10
		5	1	9410091519-1533	480181	629235	11.50
		6	1	9410091433-1453	480281	629312	11.60
		7	1	9410091240-1249	480370	629366	12.90
		8	1	9410091121-1145	480585	629507	13.50
		9	1	9410091033-1056	480785	629645	13.70
		10	1	9410090935-1015	480926	629739	10.80
		11	1	9410081452-1631	481078	629836	15.90

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Dept (m)	Sample No.
Helley-Smith Sample	1	2	9410101203-1229	479172	628562	5.90	A2350
		3	9410101122-1142	479611	628850	5.50	A3030
		4	9410101029-1059	480028	629133	8.10	A2320
		5	9410091519-1533	480181	629235	11.50	A2135
		6	9410091433-1453	480281	629312	11.60	A120
		7	9410091240-1249	480370	629366	12.90	A897
		8	9410091121-1145	480585	629507	13.50	A1978
		9	9410091033-1056	480785	629645	13.70	A2351
		10	9410090935-1015	480926	629739	10.80	A2336
		11	9410081452-1631	481078	629836	15.90	A2250
		2	9410101203-1229	479172	628562	5.90	A3034
		3	9410101122-1142	479611	628850	5.50	A3032
		4	9410101029-1059	480028	629133	8.10	A3028
		5	9410091519-1533	480181	629235	11.50	A1824
		6	9410091433-1453	480281	629312	11.60	A2316
		7	9410091240-1249	480370	629366	12.90	A1984
		8	9410091121-1145	480585	629507	13.50	A1838
		9	9410091033-1056	480785	629645	13.70	A2235
		10	9410090935-1015	480926	629739	10.80	A880
		11	9410081452-1631	481078	629836	15.90	A2027

Table 6.5: Bed load


<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 102 : 08 -10 October , 1994	
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Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Dept (m)	Sample No.
Delft Bottle Sample	1	1	9410101325-1358	478872	628431	9.60	A946
		2	9410101203-1229	479172	628562	5.90	A967
		3	9410101122-1142	479611	628850	5.50	A1052
		4	9410101029-1059	480028	629133	8.10	A938
		5	9410091519-1533	480181	629235	11.50	A137
		6	9410091433-1453	480281	629312	11.60	A1012
		7	9410091240-1249	480370	629366	12.90	A143
		8	9410091121-1145	480585	629507	13.50	A945
		9	9410091033-1056	480785	629645	13.70	A753
		10	9410090935-1015	480926	629739	10.80	A1006
		11	9410081452-1631	481078	629836	15.90	A1029
		1	9410101325-1358	478872	628431	9.60	A1005
		2	9410101203-1229	479172	628562	5.90	A788
		3	9410101122-1142	479611	628850	5.50	A1019
		4	9410101029-1059	480028	629133	8.10	A1037
		5	9410091519-1533	480181	629235	11.50	A1039
		6	9410091433-1453	480281	629312	11.60	A773
		7	9410091240-1249	480370	629366	12.90	A1044
		8	9410091121-1145	480585	629507	13.50	A1058
		9	9410091033-1056	480785	629645	13.70	A981
		10	9410090935-1015	480926	629739	10.80	A958
		11	9410081452-1631	481078	629836	15.90	A144

Table 6.6: Bed load


 <p><b>FAP 24</b> DELFT - DHI</p>	<p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 102 : 08 -10 October , 1994	
		Location 5 : Padma River, Baruria	
	Date : 24 Jan 1994	Collected data and their storage (3)	page 6.3
	Init : mzh/sjr		

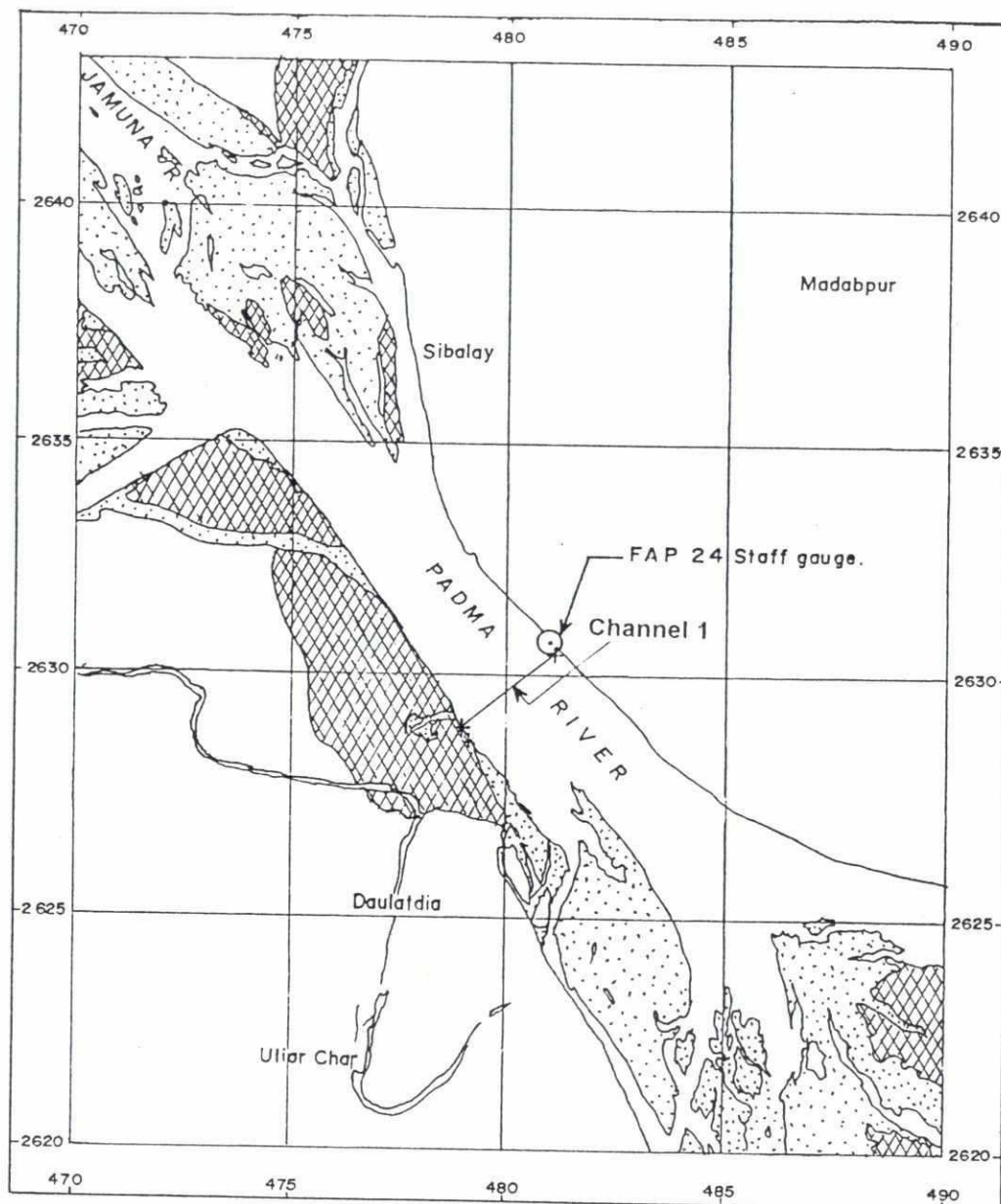


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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4A81T08 .ase
Echosounder data	1	QUATTRO	U4A81T08 .ech
Sediment transport data	1	QUATTRO	U4A81T08 .sed
Bed load sed. analysis	1	QUATTRO	U4A81T08 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U4A81T08 .ssc
Transect plot data	1	QUATTRO	U4A81T08 .trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U4A81T08 .ct2 U4A81T08 .dt2

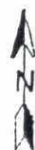
Table 7.1 PSD 24 Database file description

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 102 : 08 -10 October , 1994</b>	
<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities		<b>Location 5 : Padma River, Baruria</b>	
	Date : 24 Jan 1994	<b>PSD 24 Database file description</b>	page
	Init : mzh/sjr		7.1



LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite images of March 1994

FAP 24



RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 114 : 28 - 29 October, 1994

Location 5 : Padma River, Baruria

Date : 26 Jan 1995

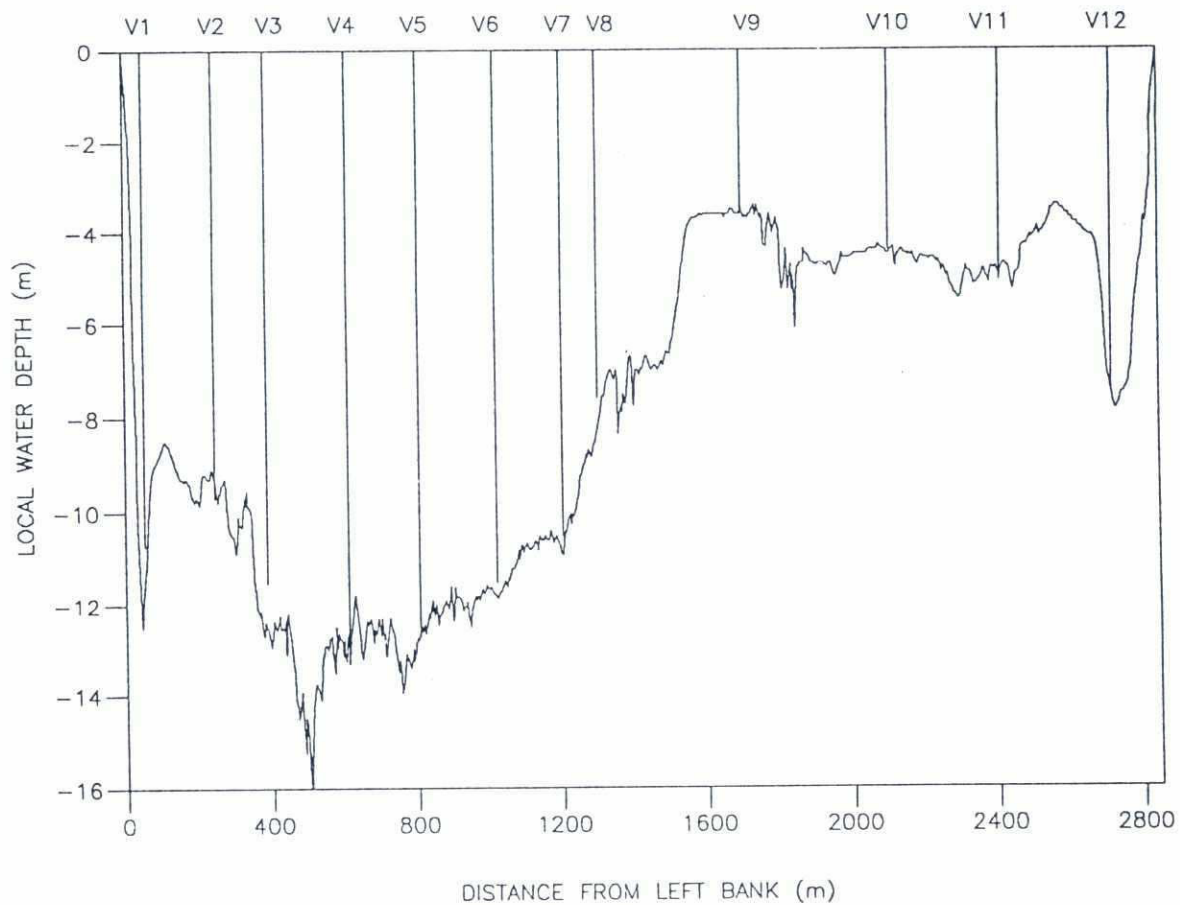
Init : mzh/sjr

Location map


page

1.1

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Water-level : 5.01 m + PWD measured at the station indicated on Page 1.1

<p><b>FAP 24</b></p>  <p>DELFT - DHI</p> <p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>		Survey Bulletin 114 : 28 - 29 October, 1994	
<p>Date : 26 Jan 1994</p> <p>File : U4AS3T02</p> <p>Init : mzh/sjr</p>		Location 5 : Padma River, Baruria	
		Cross-sections and measured verticals Channel 1	
			page 1.2

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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	7	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	12	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	23	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2847	22127	5.01	19443	21	5251

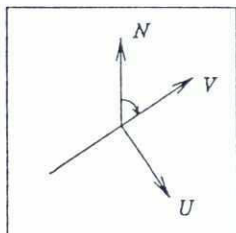
Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	28 Oct 94	5.01	FAP 24
		29 Oct 94	4.89	

Table 2.3: Water-levels

 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 114 : 28 - 29 October, 1994	
		Location 5 : Padma River, Baruria	
File : U4AS3T02	Date : 26 Jan 1994	Survey programme as made and key figures	page 2.1
	Init : mzh/sjr		



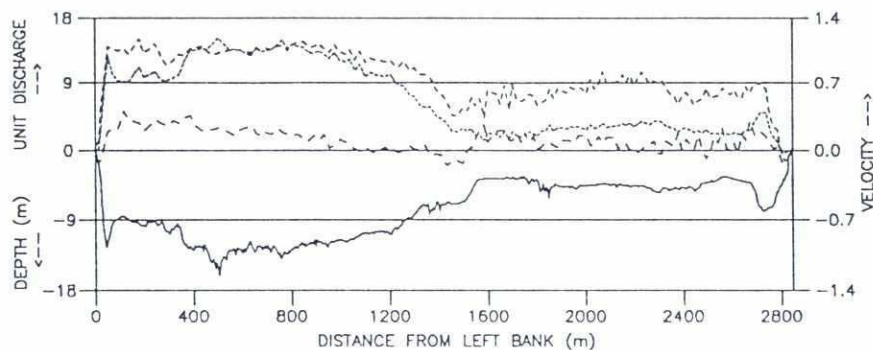


TRANSECT AZIMUTH =  $56^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

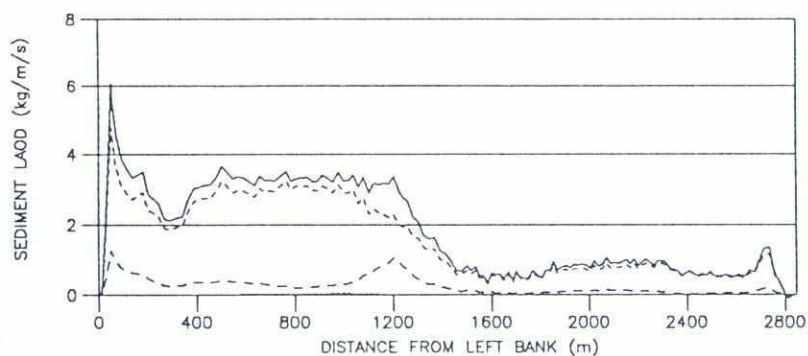
V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



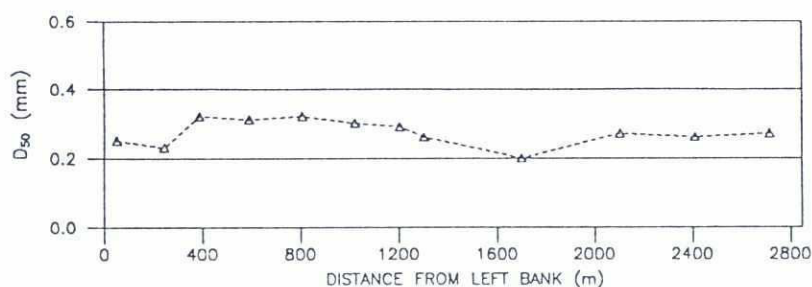
LEGEND :

— WATER DEPTH (m below STAGE)  
 - - - UNIT DISCHARGE (m³/s.m)  
 - - - U (m/s)  
 - - - V (m/s)  
 STAGE = 5.01 (m+PWD)  
 A = 22127 (m²)  
 Q = 19443 (m³/s)



LEGEND :

—  $S_{TOTAL}$  5272 (kg/s)  
 - - -  $S_{WASH\ LOAD}$  4516 (kg/s)  
 - - -  $S_{SUSP.\ BED}$  735 (kg/s)  
 - - -  $S_{BED\ LOAD}$  21 (kg/s)



LEGEND :

◇◇◇◇◇  $D_{50\ SUSP.}$  (mm)  
 △△△△△  $D_{50\ BED\ LOAD}$  (mm)  
 □□□□□  $D_{50\ BED\ MAT.}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 114 : 28 - 29 October, 1994

Location 5 : Padma River, Baruria

File : U4AS3T02

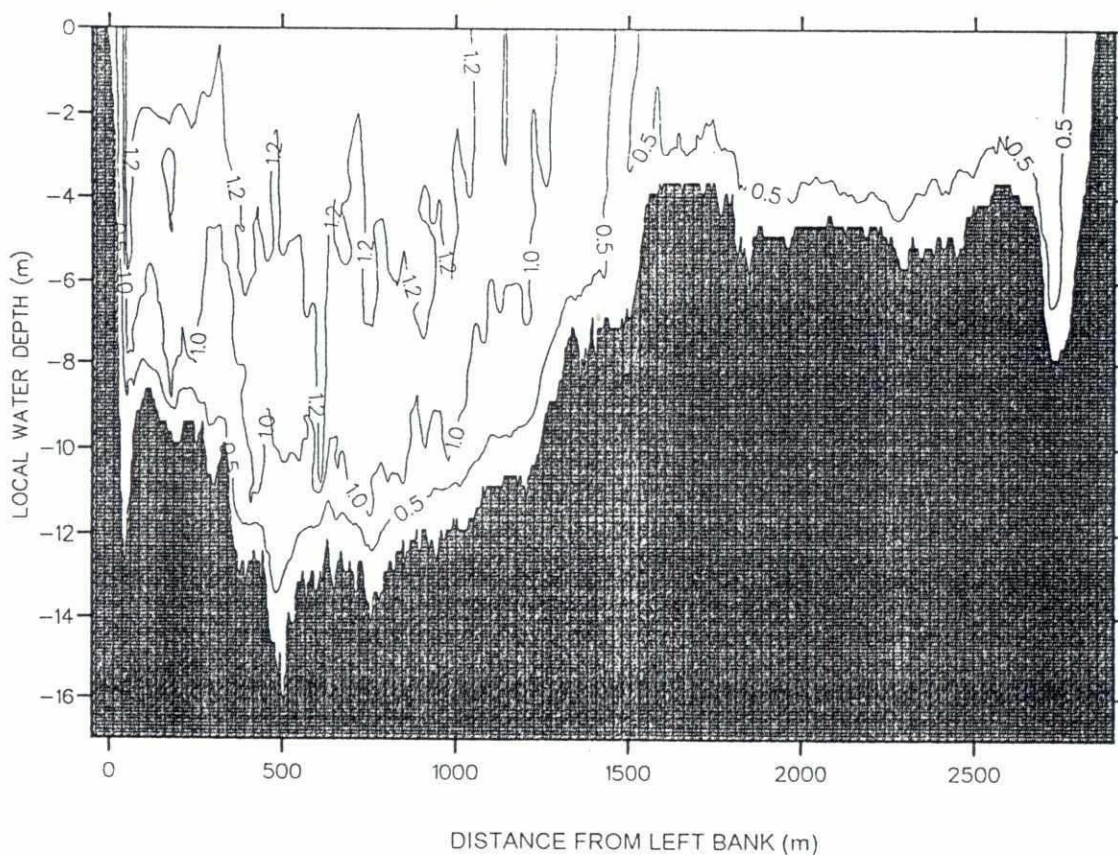
Date : 26 Jan 1994

Init : mzh/sjr

Horizontal distribution of flow and sediments  
 Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 5.01 m + PWD measured at the station indicated on Page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 114 : 28 - 29 October, 1994

Location 5 : Padma River, Baruria

File : U4AS3T02

Date : 26 Jan 1994

Init : mzh/sjr

Cross-sectional distribution of flow velocity  
Channel 1

page  
4.1



Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							

Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							

Table 5.2 : Grain size of bed material						
--	--	--	--	--	--	--

Helley - Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9410281219-1225	10.70	1.705	98.295	0.143	0.212	0.290
	2	9410291211-1215	9.70	0.073	99.927	0.232	0.283	0.337
	3	9410281427-1518	11.50	0.136	99.864	0.292	0.333	0.378
	4	9410291200-1206	13.30	0.043	99.957	0.260	0.303	0.353
	5	9410291150-1158	12.70	0.049	99.951	0.289	0.329	0.374
	6	9410291139-1145	11.50	0.068	99.932	0.251	0.294	0.346
	7	9410291129-1135	10.50	0.083	99.917	0.233	0.284	0.337
	8	9410291100-1125	7.60	0.187	99.813	0.193	0.234	0.292
	9	9410291013-1042	3.60	11.500	88.500	0.145	0.190	0.248
	11	9410281601-1607	5.10	0.723	99.277	0.226	0.280	0.335
	12	9410291300-1308	7.40	2.217	97.783	0.233	0.290	0.349
	1	9410281219-1225	10.70	1.672	98.328	0.214	0.279	0.336
	2	9410291211-1215	9.70	0.103	99.897	0.157	0.176	0.197
	3	9410281427-1518	11.50	0.221	99.779	0.271	0.314	0.363
	4	9410291200-1206	13.30	0.081	99.919	0.284	0.324	0.370
	5	9410291150-1158	12.70	0.061	99.939	0.271	0.314	0.363
	6	9410291139-1145	11.50	0.076	99.924	0.256	0.299	0.350
	7	9410291129-1135	10.50	0.198	99.802	0.245	0.292	0.345
	8	9410291100-1125	7.60	0.145	99.855	0.233	0.284	0.337
	9	9410291013-1042	3.60	7.116	92.884	0.162	0.210	0.273
	10	9410281622-1637	4.40	1.717	98.283	0.198	0.266	0.325
	11	9410281601-1607	5.10	1.634	98.366	0.193	0.243	0.305
	12	9410291300-1308	7.40	1.688	98.312	0.193	0.251	0.313
Table 5.3 : Grain sizes of bed load								

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 114 : 28 - 29 October, 1994	
		Location 5 : Padma River, Baruria		
	Date : 26 Jan 1995	Grain size distributions		page
	Init : mzh/sjr			5.1



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9410281005-1026 9410281037-1057 9410281706-1728 9410290901-0922 9410290930-0951 9410291328-1251 9410291317-1337	U4AS3T01 U4AS3T02 * U4AS3T06 U4AT3T01 U4AT3T03 U4AT3T04 U4AT3T05


Table 6.1: ADCP & EMF transects \*: transect in PSD24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1	9410281219-1225	481157	629883	10.70	U4AT3P08 *
		2	9410291211-1215	480987	629771	9.70	U4AT3P07 *
		3	9410281427-1518	480868	629718	12.70	U4AS2P01 **
		3	9410281427-1518	481000	629500	11.50	U4AS3P01 *
		4	9410291200-1206	480692	629580	13.30	U4AT3P06 *
		5	9410291150-1158	480525	629470	12.70	U4AT3P05 *
		6	9410291139-1145	480343	629343	11.50	U4AT3P04 *
		7	9410291129-1135	480190	629243	10.50	U4AT3P03 *
		8	9410291100-1125	480105	629189	7.60	U4AT3P02 *
		9	9410291013-1042	479791	628968	3.60	U4AT3P01 *
		10	9410281622-1637	479450	628752	4.40	U4AS3P03 *
		11	9410281601-1607	479199	628581	5.10	U4AS3P02 *
		12	9410291300-1308	478942	628409	7.40	U4AT3P09 *

Table 6.2: Vertical profiles \* S4 & MEX not available      \*\* MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	3	6	9410281622-1637	481000	629500	11.50

Table 6.3: Suspended sediment - point sampled

 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 114 : 28 - 29 October, 1994	
		Location 5 : Padma River, Baruria	
Date : 26 Jan 1995 Init : mzh/sjr		Collected data and their storage (1)	page 6.1




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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9410281219-1225	481157	629883	10.70
		2	1	9410291211-1215	480987	629771	9.70
		3	1	9410281427-1518	480868	629718	11.50
		4	1	9410291200-1206	480692	629580	13.30
		5	1	9410291150-1158	480525	629470	12.70
		6	1	9410291139-1145	480343	629343	11.50
		7	1	9410291129-1135	480190	629243	10.50
		8	1	9410291100-1125	480105	629189	7.60
		9	1	9410291013-1042	479791	628968	3.60
		10	1	9410281622-1637	479450	628752	4.40
		11	1	9410281601-1607	479199	628581	5.10
		12	1	9410291300-1308	478942	628409	7.40

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9410281219-1225	481157	629883	10.70	A1359
		2	9410291211-1215	480987	629771	9.70	A1957
		3	9410281427-1518	480868	629718	11.50	A744
		4	9410291200-1206	480692	629580	13.30	A1601
		5	9410291150-1158	480525	629470	12.70	A1963
		6	9410291139-1145	480343	629343	11.50	A2146
		7	9410291129-1135	480190	629243	10.50	A1148
		8	9410291100-1125	480105	629189	7.60	A2003
		9	9410291013-1042	479791	628968	3.60	A907
		11	9410281601-1607	479199	628581	5.10	A98
		12	9410291300-1308	478942	628409	7.40	A703
		1	9410281219-1225	481157	629883	10.70	A79
		2	9410291211-1215	480987	629771	9.70	A1630
		3	9410281427-1518	480868	629718	11.50	A1889
		4	9410291200-1206	480692	629580	13.30	A1852
		5	9410291150-1158	480525	629470	12.70	A2025
		6	9410291139-1145	480343	629343	11.50	A1690
		7	9410291129-1135	480190	629243	10.50	A882
		8	9410291100-1125	480105	629189	7.60	A1623
		9	9410291013-1042	479791	628968	3.60	A1953
		10	9410281622-1637	479450	628752	4.40	A2156
		11	9410281601-1607	479199	628581	5.10	A2189
		12	9410291300-1308	478942	628409	7.40	A42


Table 6.5: Bed load

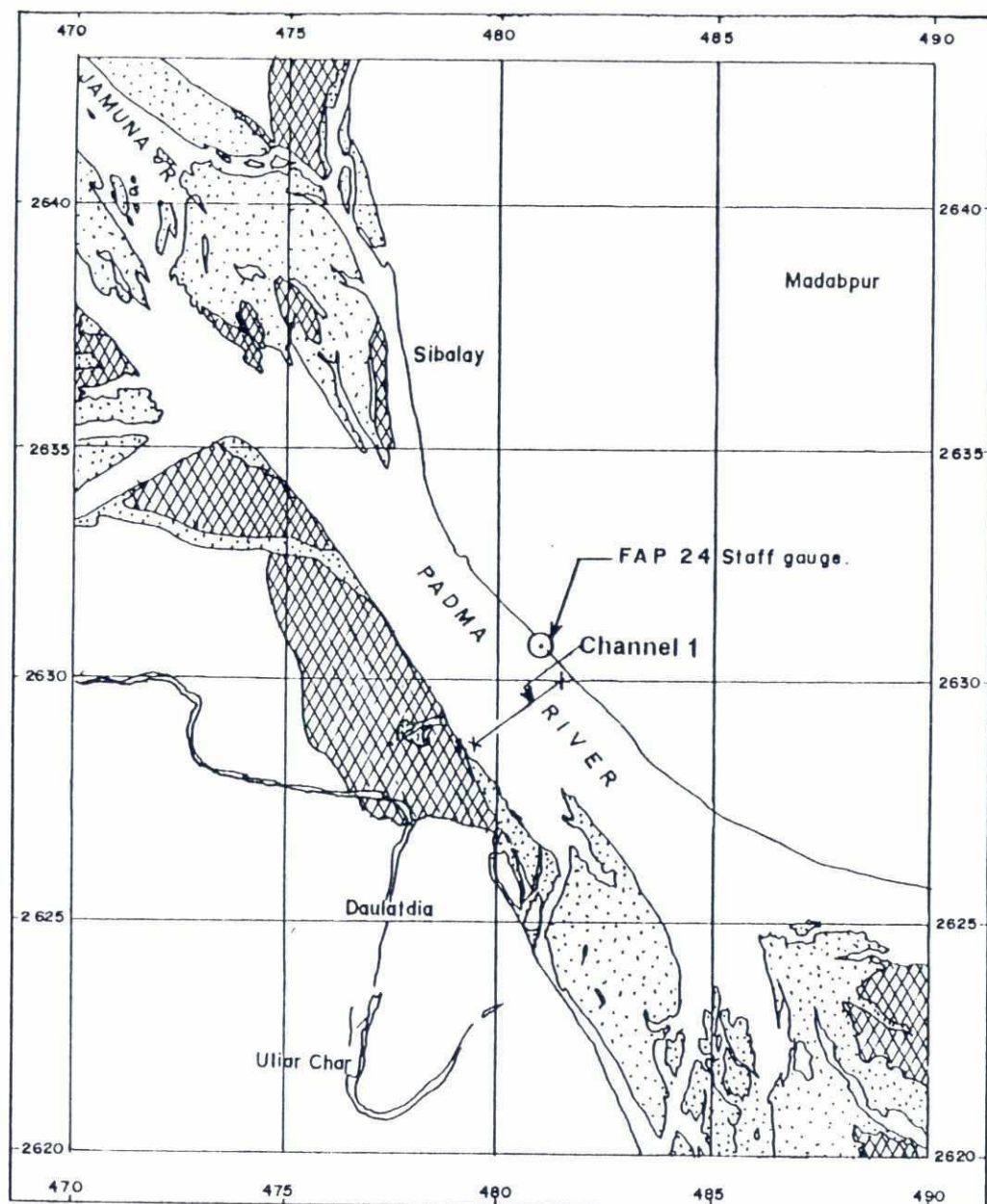
<div><div><p>FAP 24 DELFT - DHI</p></div><div><p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p></div></div>		Survey Bulletin 114 : 28 - 29 October, 1994	
		Location 5 : Padma River, Baruria	
	Date : 26 Jan 1994	Collected data and their storage (2)	page 6.2
	Init : mzh/sjr		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4AS3T02 .ase
Echosounder data	1	QUATTRO	U4AS3T02 .ech
Sediment transport data	1	QUATTRO	U4AS3T02 .sed
Bed load sed. analysis	1	QUATTRO	U4AS3T02 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U4AS3T02 .ssc
Transect plot data	1	QUATTRO	U4AS3T02 .trs
Iso-velocity plot data	1	MIKE 21	U4AS3T02 .ct2 U4AS3T02 .dt2
Table 7.1 PSD 24 Database file description			



 <p><b>FAP 24</b> DELFT - DHI</p>	<p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 114 : 28 - 29 October, 1994	
		Location 5 : Padma River, Baruria	
	Date : 26 Jan 1995	PSD 24 Database file description	page
	Init : mzh/sjr		7.1



LEGEND:-

- ✕—✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
Images of March 1994

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 119 : 14 - 15 November, 1994

Location 5 : Padma River, Baruria

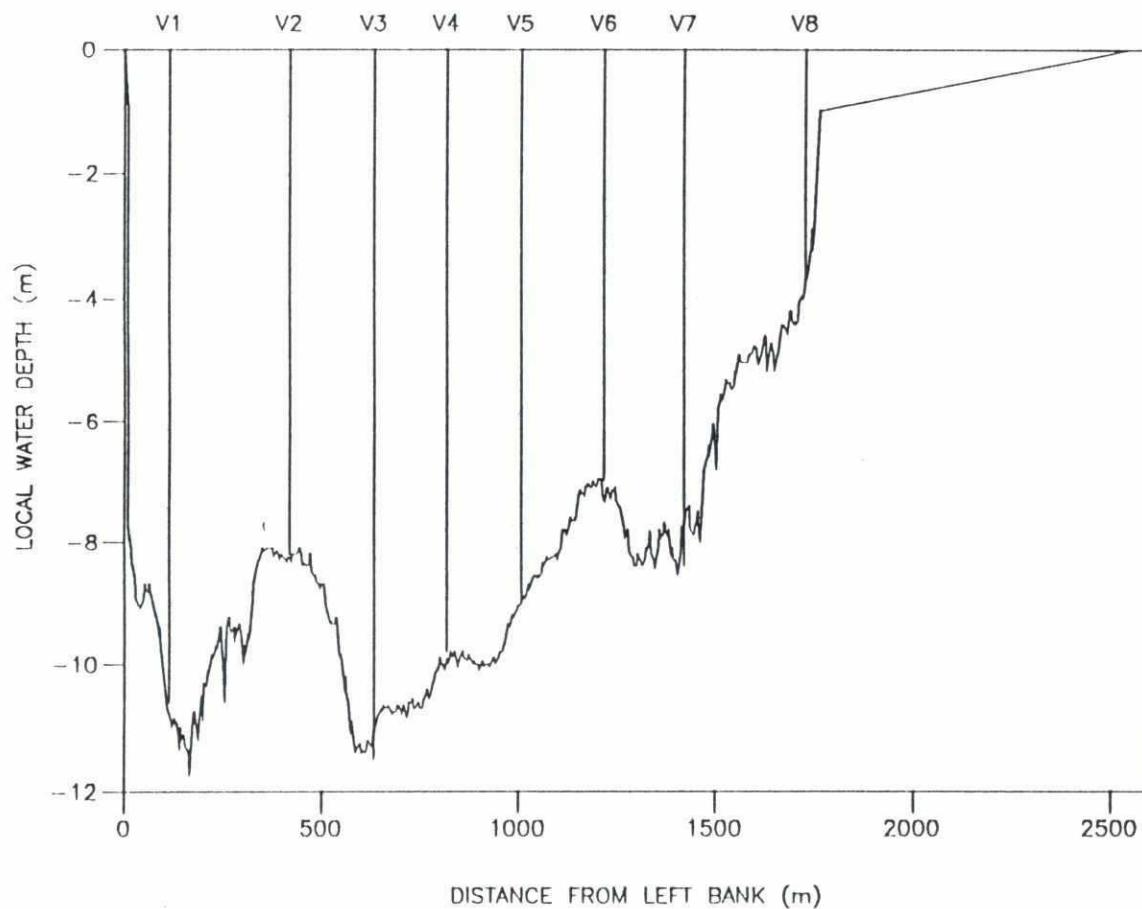
Date : 29 Jan 1995

Location map


Init : mk/tr

page

11



Water-level : 3.80 m + PWD measured at the station indicated on page 1.1

<div><div>FAP 24</div><div></div><div>DELFI - DIII</div></div>	<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 119 : 14 - 15 November, 1994	
		Location 5 : Padma River, Baruria	
File U4BE1T02	Date : 29 Jan 1995	Cross-sections and measured verticals	page
	Init : mk / tr		1.2



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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	8	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No of verticals in channel	8	-	-	-
	ADCP	8	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	8	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	14	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2 1: Survey programme as made

Channel	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2547	15211	3.8	11661	5	1897

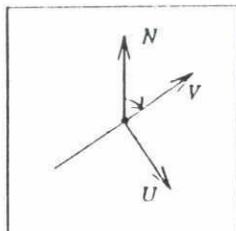
Table 2 2 Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	14 Nov 94	3.80	FAP 24
		15 Nov 94	3.74	

Table 2 3. Water-levels

 <p><b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>		<p><b>Survey Bulletin 119 : 14 - 15 November, 1994</b></p> <p><b>Location 5 : Padma River, Baruria</b></p>	
File : U4BE1102	<p>Date : 29 Jan 1995</p> <p>Init. link / to</p>	<p><b>Survey programme as made and key figures</b></p>	<p>page</p> <p>9.1</p>

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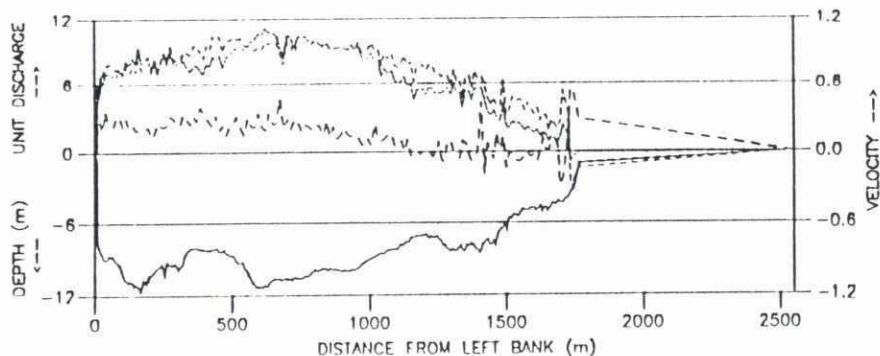


TRANSECT AZIMUTH =  $56^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

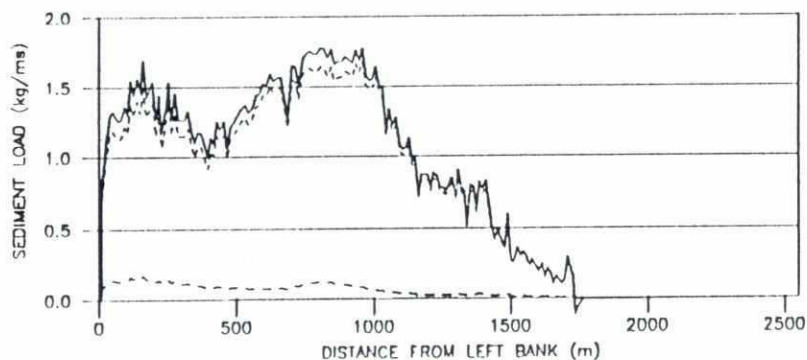
LEGEND :

- WATER DEPTH (m below STAGE)
- - - UNIT DISCHARGE ( $\text{m}^3/\text{s.m}$ )
- ... U - (m/s)
- ... V - (m/s)

STAGE = 3.80 (m + PWD)

A = 15211 ( $\text{m}^3$ )

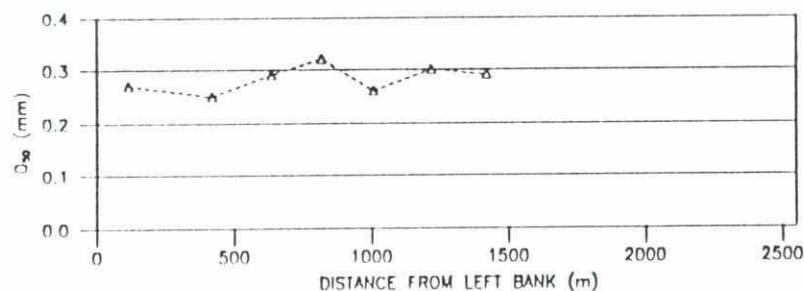
Q = 11661 ( $\text{m}^3/\text{s}$ )



SEDIMENT TRANSPORT

LEGEND :

- $S_{\text{TOTAL}}$  1902 (kg/s)
- - -  $S_{\text{WASH LOAD}}$  1773 (kg/s)
- ...  $S_{\text{SUSP. BED}}$  124 (kg/s)
- . -  $S_{\text{BED LOAD}}$  5 (kg/s)



GRAIN SIZE

LEGEND :

- ooooo  $D_{50 \text{ SUSP.}}$  (mm)
- aaaaa  $D_{50 \text{ BED LOAD}}$  (mm)
- ooooo  $D_{50 \text{ BED MAT.}}$  (mm)

FAP 24



DELETT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 119 : 14 - 15 November, 1994

Location 5 : Padma River, Baruria

File : U4BE1T02

Date : 29 Jan 1995

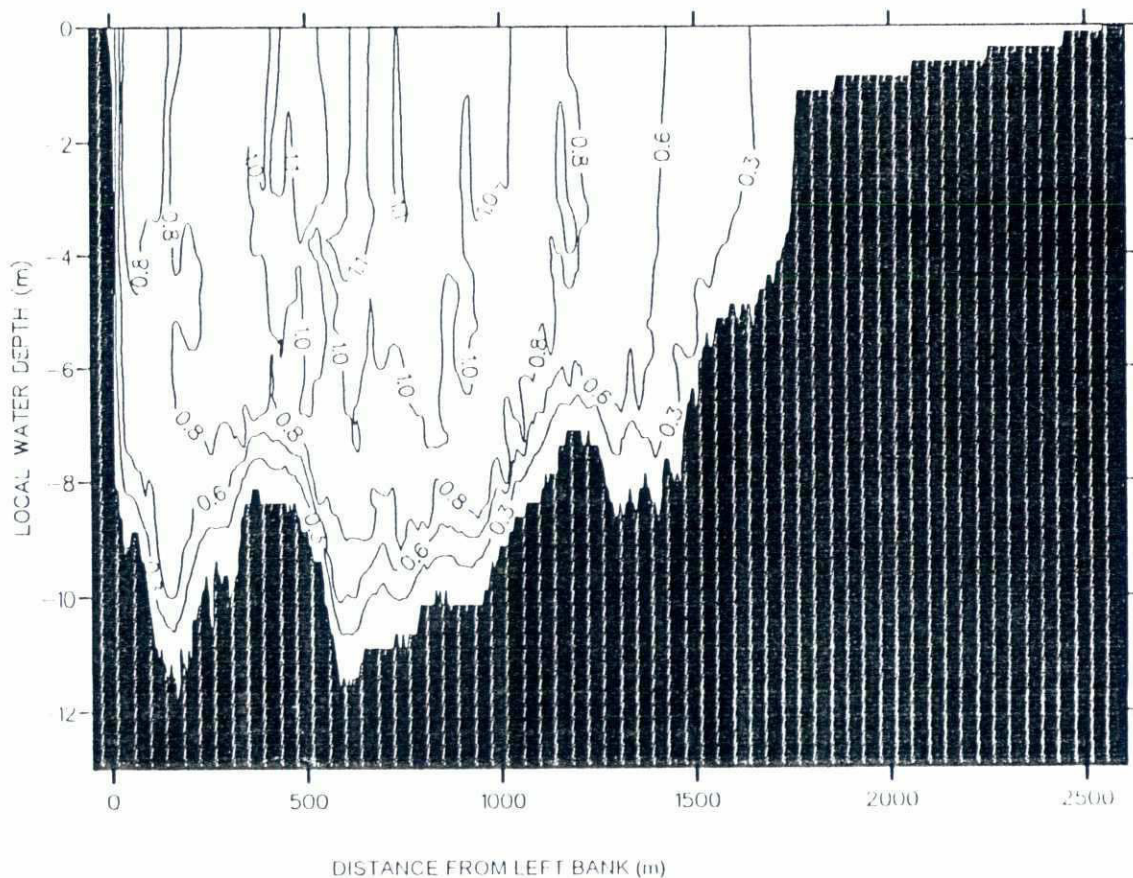
Init : mk / tr

Horizontal distribution of flow and sediments

Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 3.80 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Date 29 Jan 1995

Unit : m/s / ft

Survey Bulletin 119 : 14 - 15 November, 1994

Location 5 : Padma River, Baruria

Cross-sectional distribution of flow velocity

Channel 1

page

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File U4BE1102




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Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.1 Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1	9411150919-0926	10.60	0.165	99.835	0.236	0.287	0.340
	2	9411150943-0952	8.20	0.107	99.893	0.197	0.240	0.299
	3	9411141228-1332	11.50	0.074	99.926	0.254	0.297	0.349
	4	9411151017-1024	9.80	0.088	99.912	0.276	0.317	0.364
	5	9411141545-1558	9.00	0.112	99.888	0.199	0.243	0.302
	6	9411141522-1533	7.00	0.034	99.966	0.266	0.308	0.357
	7	9411141448-1505	8.40	0.257	99.743	0.253	0.297	0.348
	1	9411150919-0926	10.60	1.188	98.812	0.199	0.253	0.314
	2	9411150943-0952	8.20	0.312	99.688	0.204	0.252	0.310
	3	9411141228-1332	11.50	0.063	99.937	0.244	0.291	0.343
	4	9411151017-1024	9.80	0.057	99.943	0.291	0.331	0.377
	5	9411141545-1558	9.00	0.039	99.961	0.224	0.276	0.331
	6	9411141522-1533	7.00	0.044	99.956	0.234	0.284	0.337
	7	9411141448-1505	8.40	0.548	99.452	0.225	0.278	0.333
Table 5.3 Grain sizes of bed load								

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>	<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 119 : 14 - 15 November, 1994	
			Location 5 : Padma River, Baruria
	<div>Date : 29 Jan 1995</div> <div>Init : mk / tr</div>	Grain size distributions	<div>page</div> <div>5.1</div>



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9411141008-1021 9411141030-1043 9411141616-1628 9411141631-1643 9411150829-0842 9411150852-0904 9411151056-1106 9411151114-1123	U4BE1T02 * U4BE1T03 U4BE1T05 U4BE1T06 U4BF1T01 U4BF1T02 U4BF1T03 U4BF1T04

Table 6 1: ADCP & EMF transects

\* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1 2 3 4 5 6 7 8	9411150919-0926 9411150943-0952 9411141228-1332 9411151017-1024 9411141545-1558 9411141522-1533 9411141448-1505 9411141414-1426	481467 481221 481044 480880 480723 480550 480387 480128	629501 629334 629206 629111 629001 628887 628780 628606	10 60 8 20 11 50 9 80 9 00 7 00 8 40 3 80	U4BF1P02 * U4BF1P03 * U4BE1P01 ** U4BF1P05 * U4BE1P05 * U4BE1P04 * U4BE1P03 * U4BE1P02 *


Table 6 2: Vertical profiles

\*\* MEX not available

\* S4 and MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	3	6	9411141228-1332	481044	629206	11 50


Table 6 3: Suspended sediment - point sampled

 <b>FAP 24</b> DELFT - DHI RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 119 : 14 - 15 November, 1994		
	Location 5 : Padma River, Baruria		
Date : 29 Jan 1995	Collected data and their storage (1)		page
Init : mk / tr			61

Method	Channel	Vertical	No of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9411150919-0926	481467	629501	10 60
		2	1	9411150943-0952	481221	629334	8 20
		3	1	9411141228-1332	481044	629206	11 50
		4	1	9411151017-1024	480880	629111	9 80
		5	1	9411141545-1558	480723	629001	9 00
		6	1	9411141522-1533	480550	628887	7 00
		7	1	9411141448-1505	480387	628780	8 40
		8	1	9411141414-1426	480128	628606	3 80
Table 6.4: Suspended sediment - depth integrated							

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9411150919-0926	481467	629501	10 60	A2261
		2	9411150943-0952	481221	629334	8 20	A1805
		3	9411141228-1332	481044	629206	11.50	A1913
		4	9411151017-1024	480880	629111	9.80	A1976
		5	9411141545-1558	480723	629001	9 00	A82
		6	9411141522-1533	480550	628887	7 00	A372
		7	9411141448-1505	480387	628780	8 40	A1611
		1	9411150919-0926	481467	629501	10 60	A1659
		2	9411150943-0952	481221	629334	8 20	A1843
		3	9411141228-1332	481044	629206	11.50	A2192
		4	9411151017-1024	480880	629111	9.80	A1917
		5	9411141545-1558	480723	629001	9 00	A571
		6	9411141522-1533	480550	628887	7 00	A1599
		7	9411141448-1505	480387	628780	8 40	A2010



Table 6 5: Bed load

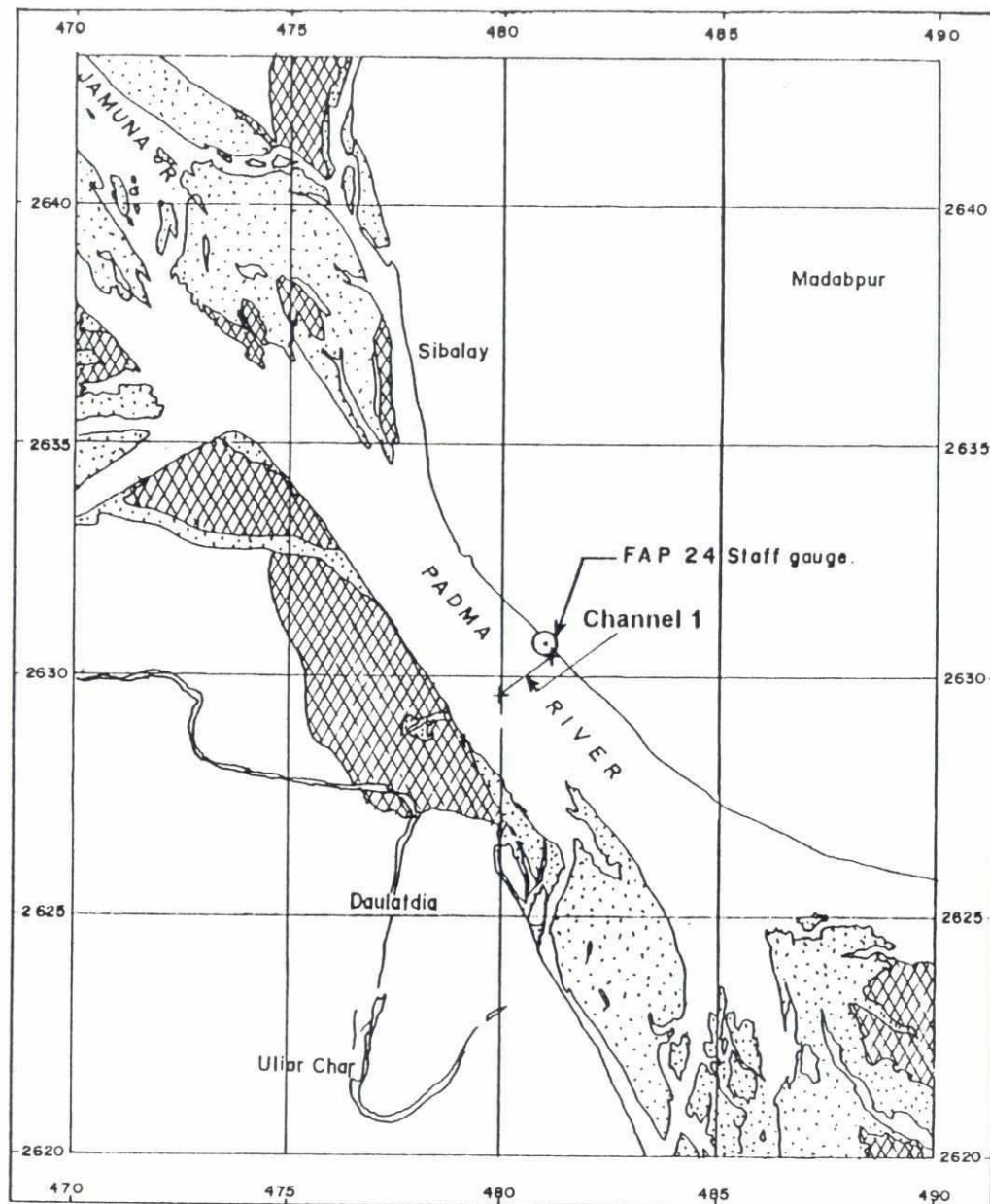
 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Constitution of the European Communities		Survey Bulletin 119 : 14 - 15 November, 1994	
		Location 5 : Padma River, Baruria	
	Date : 29 Jan 1995	Collected data and their storage (2)	page 62
	Unit : m <sup>3</sup> / hr		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4BE1T02 ase
Echosounder data	1	QUATTRO	U4BE1T02 ech
Sediment transport data	1	QUATTRO	U4BE1T02 sed
Bed load sed. analysis	1	QUATTRO	U4BE1T02 bdl
Sus. sed. conc. analysis	1	QUATTRO	U4BE1T02 ssc
Transect plot data	1	QUATTRO	U4BE1T02 trs
Iso-velocity plot data	1	MIKE 21	U4BE1T02 .ct2 U4BE1T02 dt2

Table 7.1 PSD 24 Database file description

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 119 : 14 - 15 November, 1994	
		Location 5 : Padma River, Baruria	
<div>Date : 29 Jan 1995</div> <div>Init : nik / tr</div>		PSD 24 Database file description	page 71



LEGEND:-

- ✕✕ Cross section
- ▨ High land
- ░ Unstable/low char
- ⊙ FAP 24 Staff gauge



5000m 2500m 0

Map is based on satellite  
Images of March 1994

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 128 : 18 December, 1994

Location 5 : Padma River, Baruria

Date : 01 Feb 1995

Init : mk/tr

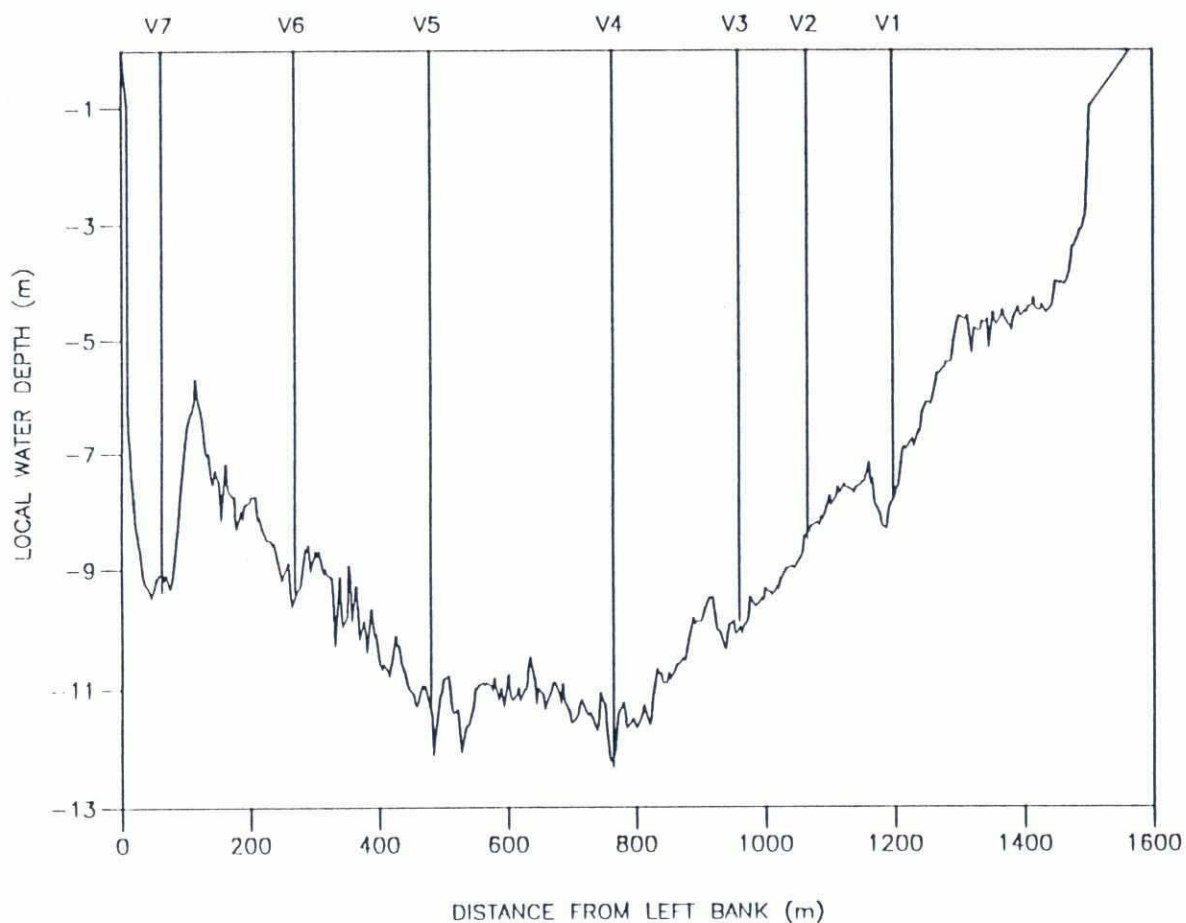
Location map

page

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Water-level : 2.66 m + PWD measured at the station indicated on page 1.1

FAP 24



RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 128 : 18 December, 1994

Location 05 : Padma River, Baruria

File : U4CI1T02

Date : 01 Feb 1995

Init : mk / tr

Cross-sections and measured verticals  
Channel 1

page


1.2

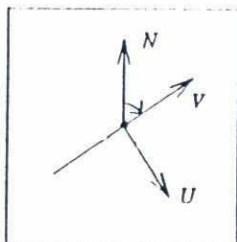
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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	4	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No of verticals in channel	7	-	-	-
	ADCP	6	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	7	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	14	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

Channel	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1566	13056	2.66	7477	1.30	759.60
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	18 Dec 94	2.66	FAP 24
Table 2.3: Water-levels				

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 128 : 18 December, 1994	
		Location 05 : Padma River, Baruria	
File : U4CI1T02	Date : 01 Feb 1995	Survey programme as made and key figures	page
	Init : mk / tr		21

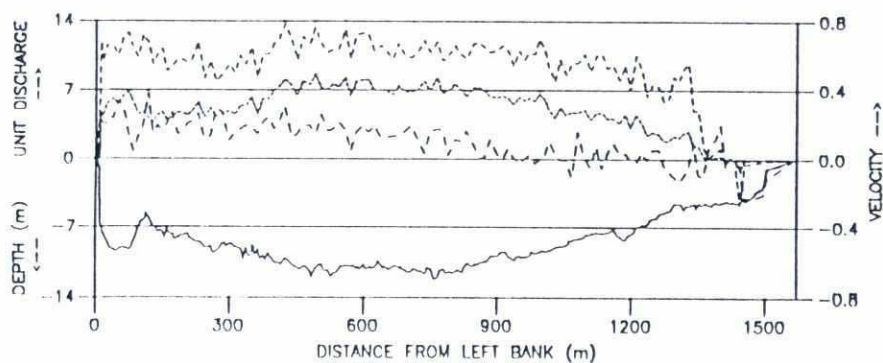


TRANSECT AZIMUTH =  $56^\circ$

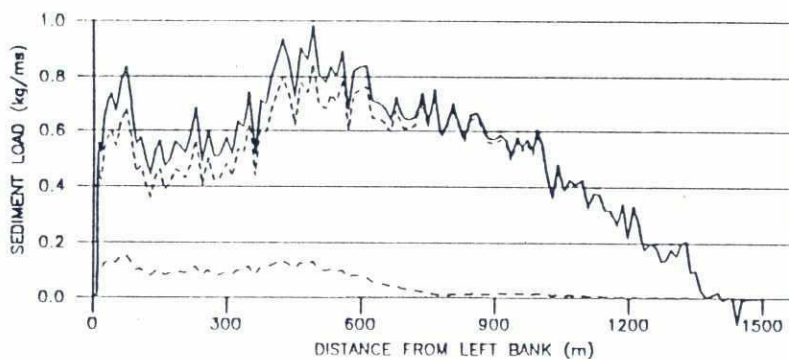
U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

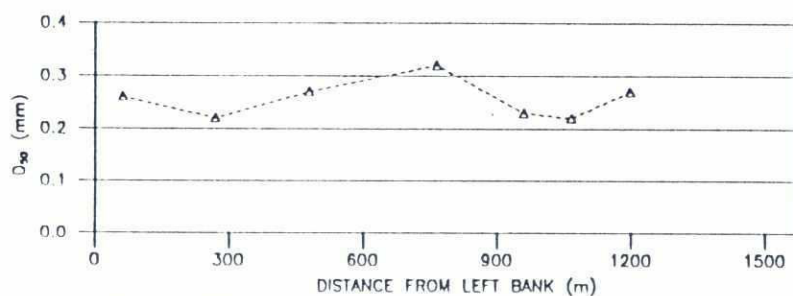
N - MAGNETIC NORTH



FLOW



SEDIMENT TRANSPORT



GRAIN SIZE

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 128 : 18 December, 1994

Location 05 : Padma River, Baruria

File : U4C11T02

Date : 01 Feb 1995

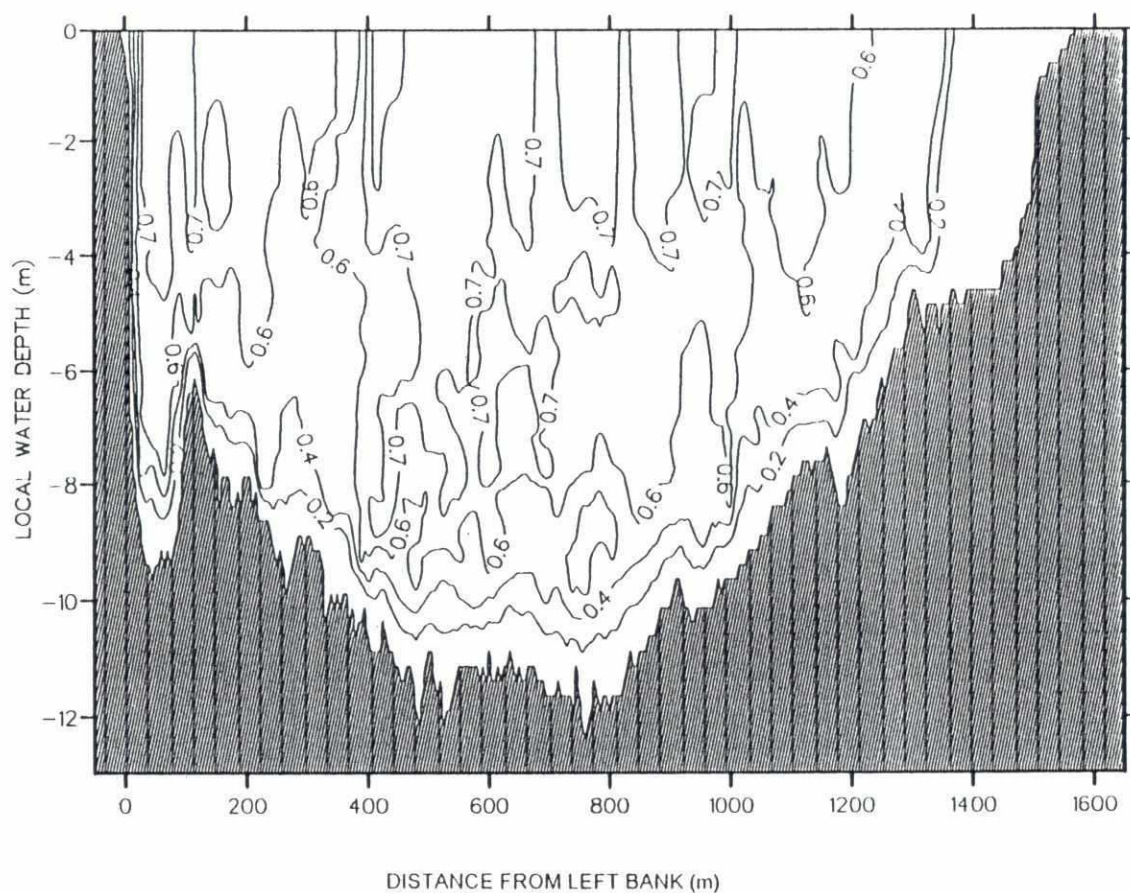
Init : mk / tr

Horizontal distribution of flow and sediments

Channel 1

page

3.1



Iso-velocity contours (m/s)

Water-level : 2.66 m + PWD measured at the station indicated on page 1.1

FAP 24  
  
 DELFT - DHI

RIVER SURVEY PROJECT  
 Flood Plan Coordination Organization  
 Commission of the European Communities

Survey Bulletin 128 : 18 December, 1994

Location 05 : Padma River, Baruria

File : U4C11T02

Date : 01 Feb 1995

Unit : m/s / tr

Cross-sectional distribution of flow velocity  
 Channel 1

page

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Andreasen settling tube		Time	Depth	Weight percent	D10	D50	D90
Channel	Vertical	(YYMMDDHHMM-HHMM)		< 0.06 mm > 0.06 mm	(mm)	(mm)	(mm)
Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth	Weight percent < 0.06 mm > 0.06 mm	D10 (mm)	D50 (mm)	D90 (mm)
Sample not collected							

Table 5.2 Grain size of bed material

Helley-Smith		Time	Depth	Weight percent		D35	D50	D65
Channel	Vertical	(YYMMDDHHMM)		< 0.06 mm	> 0.06 mm	(mm)	(mm)	(mm)
1	1	9412181453-1500	7.80	0.531	99.469	0.233	0.285	0.341
	2	9412181245-1256	8.50	0.044	99.956	0.187	0.223	0.273
	3	9412181223-1233	9.90	1.617	98.383	0.191	0.232	0.290
	4	9412181331-1429	12.30	0.039	99.961	0.251	0.296	0.349
	5	9412181151-1201	11.30	0.256	99.744	0.194	0.236	0.293
	6	9412181139-1148	9.40	0.093	99.907	0.185	0.219	0.266
	7	9412181058-1104	9.40	1.687	98.313	0.200	0.259	0.318
	1	9412181453-1500	7.80	0.256	99.744	0.201	0.248	0.306
	2	9412181245-1256	8.50	0.042	99.958	0.186	0.220	0.268
	3	9412181223-1233	9.90	0.657	99.343	0.193	0.234	0.293
	4	9412181331-1429	12.30	0.035	99.965	0.301	0.341	0.387
	5	9412181151-1201	11.30	0.189	99.811	0.256	0.304	0.361
	6	9412181139-1148	9.40	0.064	99.936	0.181	0.213	0.251
	7	9412181058-1104	9.40	1.427	98.573	0.200	0.259	0.320
Table 5.3 Grain sizes of bed load								

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 128 : 18 December, 1994	
		Location 05 : Padma River, Baruria	
	Date : 01 Feb 1995	Grain size distributions	page
	Init : mk / tr		5.1

766

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9412180843-0855 9412180858-0909 9412181526-1538 9412181541-1553	U4CI1T01 U4CI1T02 * U4CI1T06 U4CI1T07

Table 6.1: ADCP & EMF transects

\* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1	9412181453-1500	480172	629239	7.80	U4CI1P11 *
		2	9412181245-1256	480284	629310	8.50	U4CI1P07 *
		3	9412181223-1233	480376	629370	9.90	U4CI1P06 **
		4	9412181331-1429	480535	629477	12.30	U4CI1P08 *
		4	9412181356-1438	480535	629477	12.30	U4CI1P10 ***
		5	9412181151-1201	480767	629635	11.30	U4CI1P04 **
		6	9412181139-1148	480943	629752	9.40	U4CI1P02 *
		7	9412181058-1104	481116	629864	9.40	U4CI1P01 *

Table 6.2: Vertical profiles


\* S4 and MEX not available

\*\* ADCP, S4 and MEX not available

\*\*\* MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	4	6	9412181331-1429	480535	629477	12.30

Table 6.3: Suspended sediment - point sampled


<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div> <div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div>		Survey Bulletin 128 : 18 December, 1994	
		Location 05 : Padma River, Baruria	
<div>Date : 01 Feb 1995</div> <div>Init : mk / tr</div>		Collected data and their storage (1)	<div>page</div> <div>61</div>

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-IHHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments 208	1	1	1	9412181453-1500	480172	629239	7.80
		2	1	9412181245-1256	480284	629310	8.50
		3	1	9412181223-1233	480376	629370	9.90
		4	1	9412181331-1429	480535	629477	12.30
		5	1	9412181151-1201	480767	629635	11.30
		6	1	9412181139-1148	480943	629752	9.40
		7	1	9412181058-1104	481116	629864	9.40

Table 6.4 Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9412181453-1500	480172	629239	7.80	A1645
		2	9412181245-1256	480284	629310	8.50	A2180
		3	9412181223-1233	480376	629370	9.90	A3018
		4	9412181331-1429	480535	629477	12.30	A2014
		5	9412181151-1201	480767	629635	11.30	A90
		6	9412181139-1148	480943	629752	9.40	A2202
		7	9412181058-1104	481116	629864	9.40	A1896
		1	9412181453-1500	480172	629239	7.80	A1837
		2	9412181245-1256	480284	629310	8.50	A1841
		3	9412181223-1233	480376	629370	9.90	A118
		4	9412181331-1429	480535	629477	12.30	A2252
		5	9412181151-1201	480767	629635	11.30	A2000
		6	9412181139-1148	480943	629752	9.40	A1162
		7	9412181058-1104	481116	629864	9.40	A2149


Table 6.5 Bed load

<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>	<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 128 : 18 December, 1994		
		Location 05 : Padma River, Barurla		
	<div>Date : 01 Feb 1995</div> <div>Init. mk / tr</div>	Collected data and their storage (2)	page	6.2

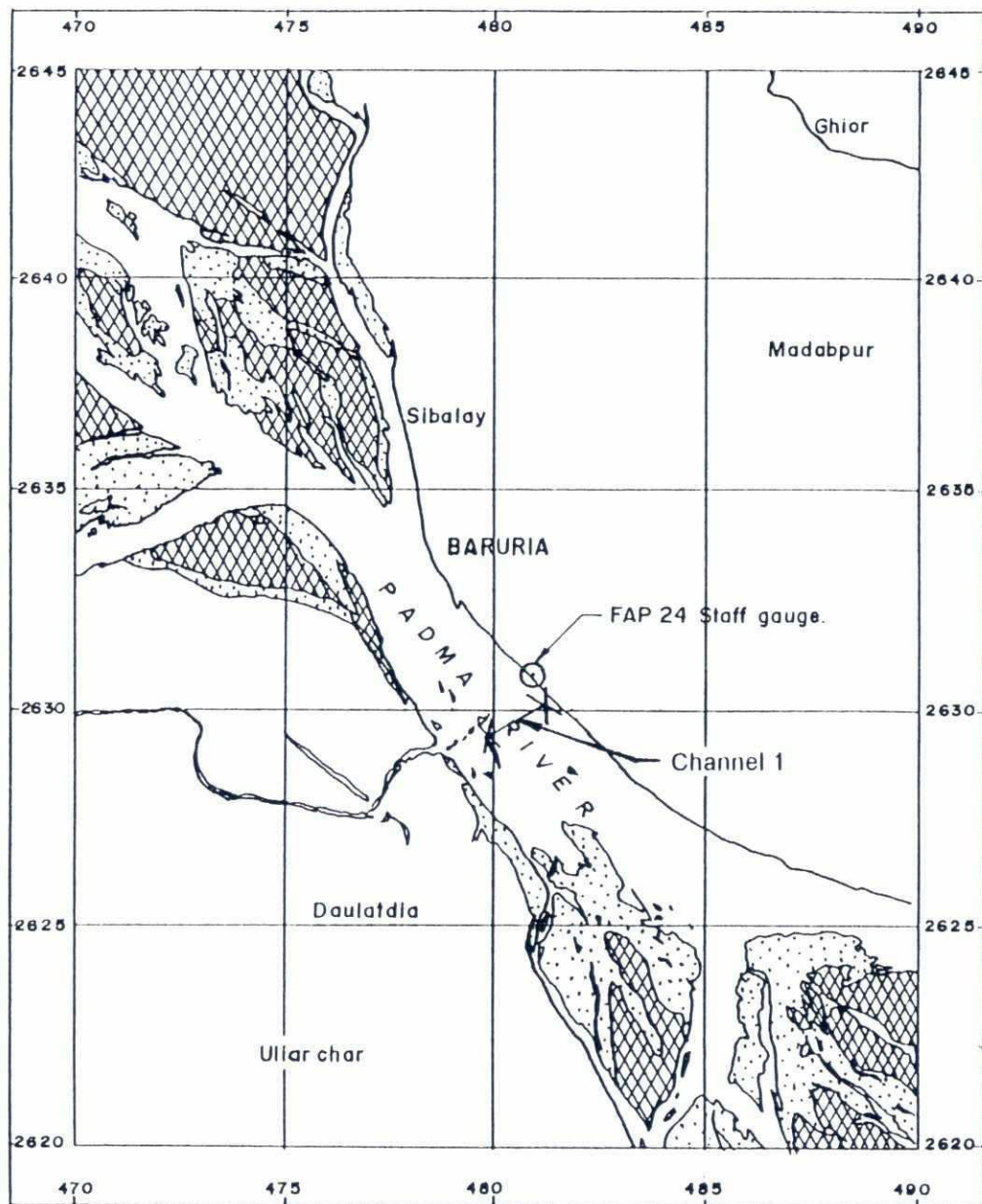
76

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U4CI1T02 .ase
Echosounder data	1	QUATTRO	U4CI1T02 .ech
Sediment transport data	1	QUATTRO	U4CI1T02 .sed
Bed load sed. analysis	1	QUATTRO	U4CI1T02 .bdl
Sus. sed. conc. analysis	1	QUATTRO	U4CI1T02 .ssc
Transect plot data	1	QUATTRO	U4CI1T02 .trs
Iso-velocity plot data	1	MIKE 21	U4CI1T02 .cl2 U4CI1T02 .dl2

Table 7.1 PSD 24 Database file description

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 128 : 18 December, 1994</b>	
<b>RIVER SURVEY PROJECT</b> <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small>		<b>Location 05 : Padma River, Baruria</b>	
	Date : 01 Feb 1995	<b>PSD 24 Database file description</b>	page 7.1
	Init : mk / tr		





LEGEND:

- \*—\* Cross section
- Highland
- Unstable/low char
- FAP 24 Staff gauge



5000 m 2500m 0

Map is based on satellite  
Images of March 1995

FAP 24  
  
DEIFT - DIII

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Date: 16 Aug 1995

Init mzh/ss

Survey Bulletin 137 : 25 February, 1995

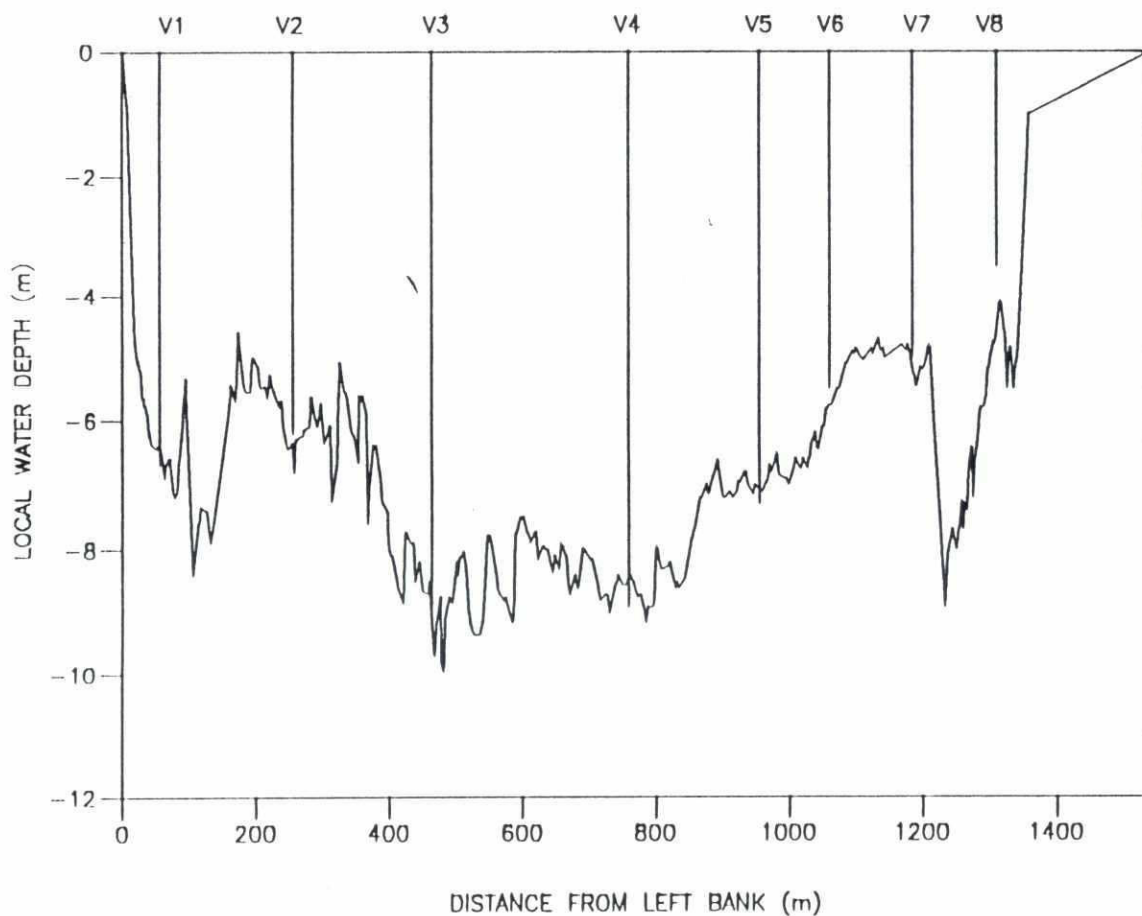
Location 5 : Padma River, Baruria

Location map


page

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Water level : 1.59 m + PWD measured at the station indicated on page 1.1

<b>FAP 24</b>  <b>DELFT - DHI</b>		<b>Survey Bulletin 137 : 25 February, 1995</b>	
		<b>Location 5 : Padma River, Baruria</b>	
File : U52P1T01	Date : 16 Aug 1995	<b>Cross-sections and measured verticals Channel 1</b>	page
	Init : mzh/ss		1.2

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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	4	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	8	-	-	-
	ADCP	8	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	8	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	2	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2 1: Survey programme as made

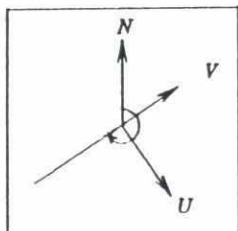
Channel	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1540	9449	1.59	4001	-	107.4

Table 2 2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	25 Feb 95	1.59	FAP 24

Table 2 3: Water-Levels

<b>FAP 24</b>  DELFT - DHI		<b>Survey Bulletin 137 : 25 February, 1995</b>	
<b>RIVER SURVEY PROJECT</b> Flood Plain Coordination Organization Commission of the European Communities		<b>Location 5 : Padma River, Baruria</b>	
File : U52P1T01	Date : 16 Aug 1995  Init : mzh/ss	<b>Survey programme as made and key figures</b>	page  21

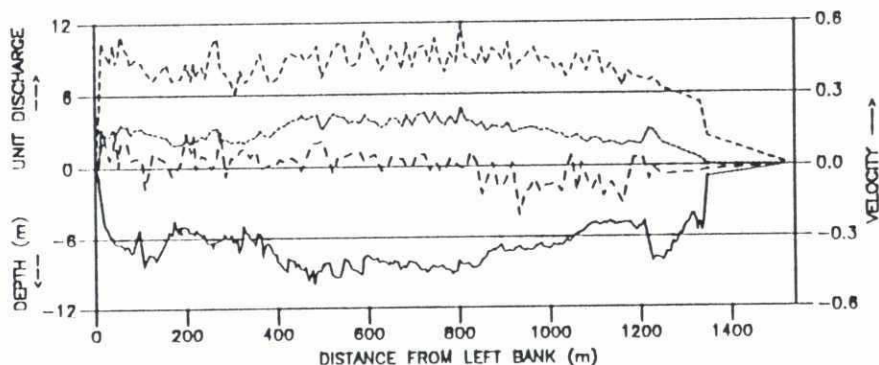


TRANSECT AZIMUTH =  $236^\circ$

U - VELOCITY NORMAL TO TRANSECT ( $m/s$ )

V - VELOCITY PARALLEL TO TRANSECT ( $m/s$ )

N - MAGNETIC NORTH



FLOW

LEGEND :

— WATER DEPTH (m below STACK)

--- UNIT DISCHARGE ( $m^3/s.m$ )

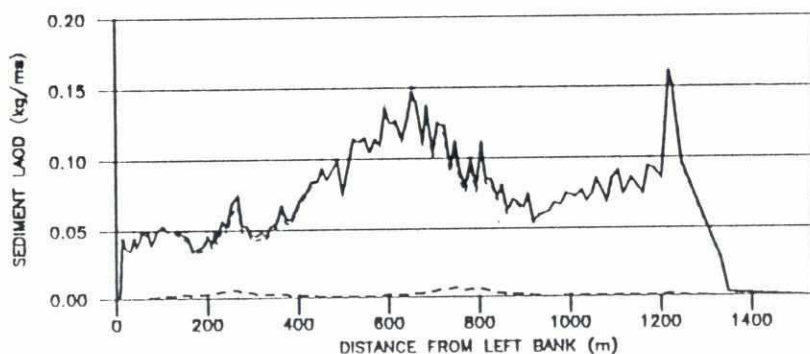
--- U - ( $m/s$ )

--- V - ( $m/s$ )

STACK = 1.69 (m+PWD)

A = 9449 ( $m^3$ )

Q = 4001 ( $m^3/s$ )



SEDIMENT TRANSPORT

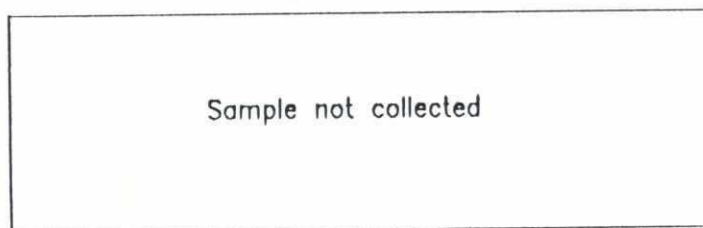
LEGEND :

—  $S_{TOTAL}$  107.4 ( $kg/s$ )

---  $S_{WASH LOAD}$  104.4 ( $kg/s$ )

---  $S_{SUSP. BED}$  3.0 ( $kg/s$ )

---  $S_{BED LOAD}$  0 ( $kg/s$ )



GRAIN SIZE

LEGEND :

♦♦♦♦♦  $D_{50 SUSP.}$  (mm)

▲▲▲▲▲  $D_{50 BED LOAD}$  (mm)

□□□□□  $D_{50 BED MAT.}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 137 : 25 February, 1995

Location 5 : Padma River, Baruria

File : U52P1T01

Date : 16 Aug 1995

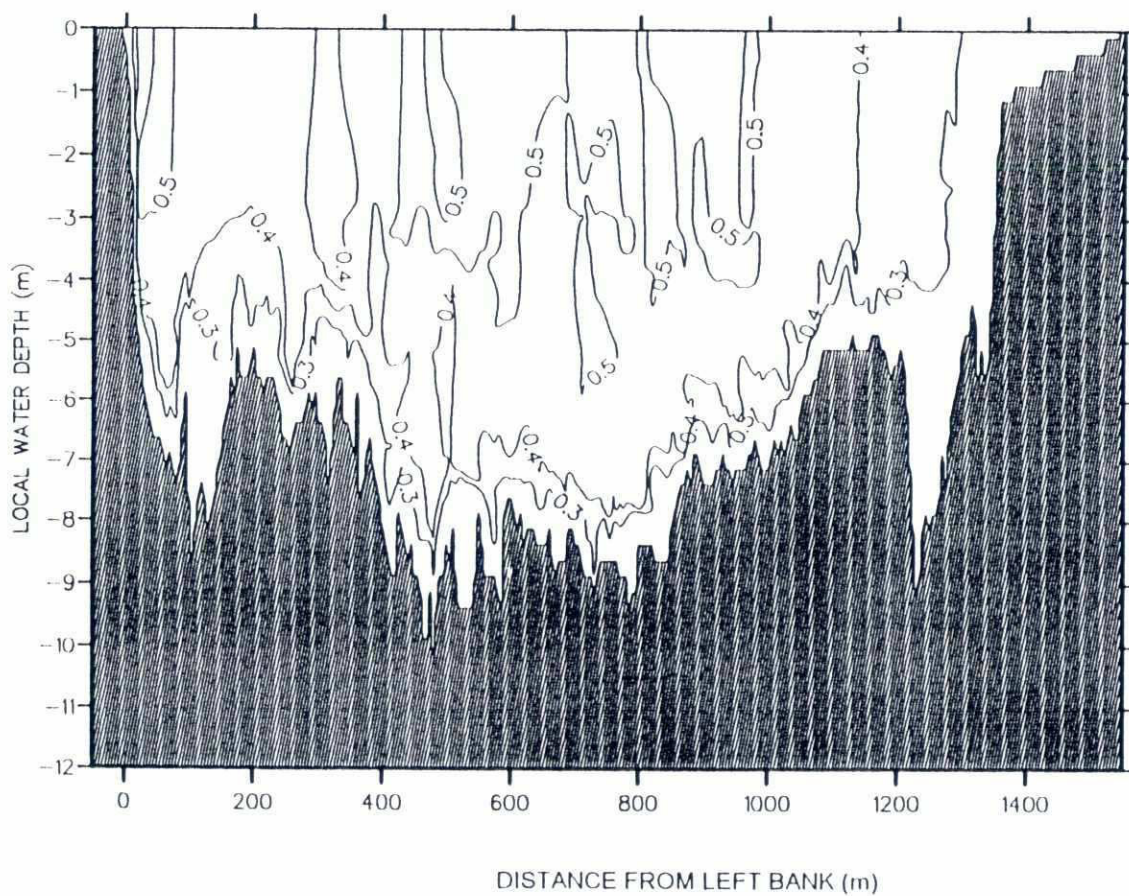
Init : mzh/ss

Horizontal distribution of flow and sediments  
Channel 1

page

3.1





Iso-velocity contours (m/s)

Water level : 1.59 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 137 : 25 February, 1995

Location 5 : Padma River, Baruria

File : U52P1T01

Date : 16 Aug 1995

Unit : m/s

Cross-sectional distribution of flow velocity  
Channel 1

page

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720

Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							


Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							

Table 5.2 : Grain size of bed material

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	2	9502251206-1211	6.20	0.053	99.047	0.191	0.229	0.285
	2	9502251206-1211	6.20	0.694	99.306	0.187	0.225	0.280

Table 5.3 : Grain sizes of bed load								
-------------------------------------	--	--	--	--	--	--	--	--

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div></div>	<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 137 : 25 February, 1995	
			Location 5 : Padma River, Baruria
	<div>Date : 16 Aug 1995</div>	Grain size distributions	page
	<div>Init : mzh/ss</div>		5.1

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9502250802-0813 9502250817-0829 9502251409-1421 9502251422-1435	U52P1T01 * U52P1T02 U52P1T08 U52P1T09

Table 6.1: ADCP & EMF transects

\* : transect in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1	9502251234-1240	481111	629864	6 70	U52P1P04 *
		2	9502251206-1211	480945	629758	6 20	U52P1P03 *
		3	9502251139-1146	480775	629633	8 90	U52P1P02 *
		4	9502251017-1126	480532	629480	8 90	U52P1P01 **
		5	9502251255-1304	480370	629369	7 30	U52P1P05 *
		6	9502251323-1328	480279	629309	5 50	U52P1P06 *
		7	9502251339-1349	480173	629244	5 00	U52P1P07 *
		8	9502251358-1406	480013	629132	3 50	U52P1P09 *


Table 6.2: Vertical profiles

\*\* MEX not available

\* S4 & MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	3	6	9502251139-1146	480775	629633	8 90

Table 6.3: Suspended sediment - point sampled

<b>FAP 24</b>  <b>DELFT - DHI</b>	<b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 137 : 25 February, 1995	
		Location 5 : Padma River, Baruria	
		Collected data and their storage (1)	Page 61

Date : 16 Aug 1995

Unit : mzh/ss




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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9502251234-1240	481111	629864	6.70
		2	1	9502251206-1211	480945	629758	6.20
		3	1	9502251139-1146	480775	629633	8.90
		4	1	9502251017-1126	480532	629480	8.90
		5	1	9502251255-1304	480370	629369	7.30
		6	1	9502251323-1328	480279	629309	5.50
		7	1	9502251339-1349	480173	629244	5.00
		8	1	9502251358-1406	480013	629132	3.50

Table 6.4 Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	2	9502251206-1211	480945	629758	6.20	A2242
		2	9502251206-1211	480945	629758	6.20	A2217

Table 6.5 Bed load


 <p><b>FAP 24</b> DELT - DHI</p>	<p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 137 : 25 February, 1995	
		Location 5 : Padma River, Baruria	
	Date: 16 Aug 1995	Collected data and their storage (2)	page 62
	Unit: m <sup>3</sup> /h/ss		



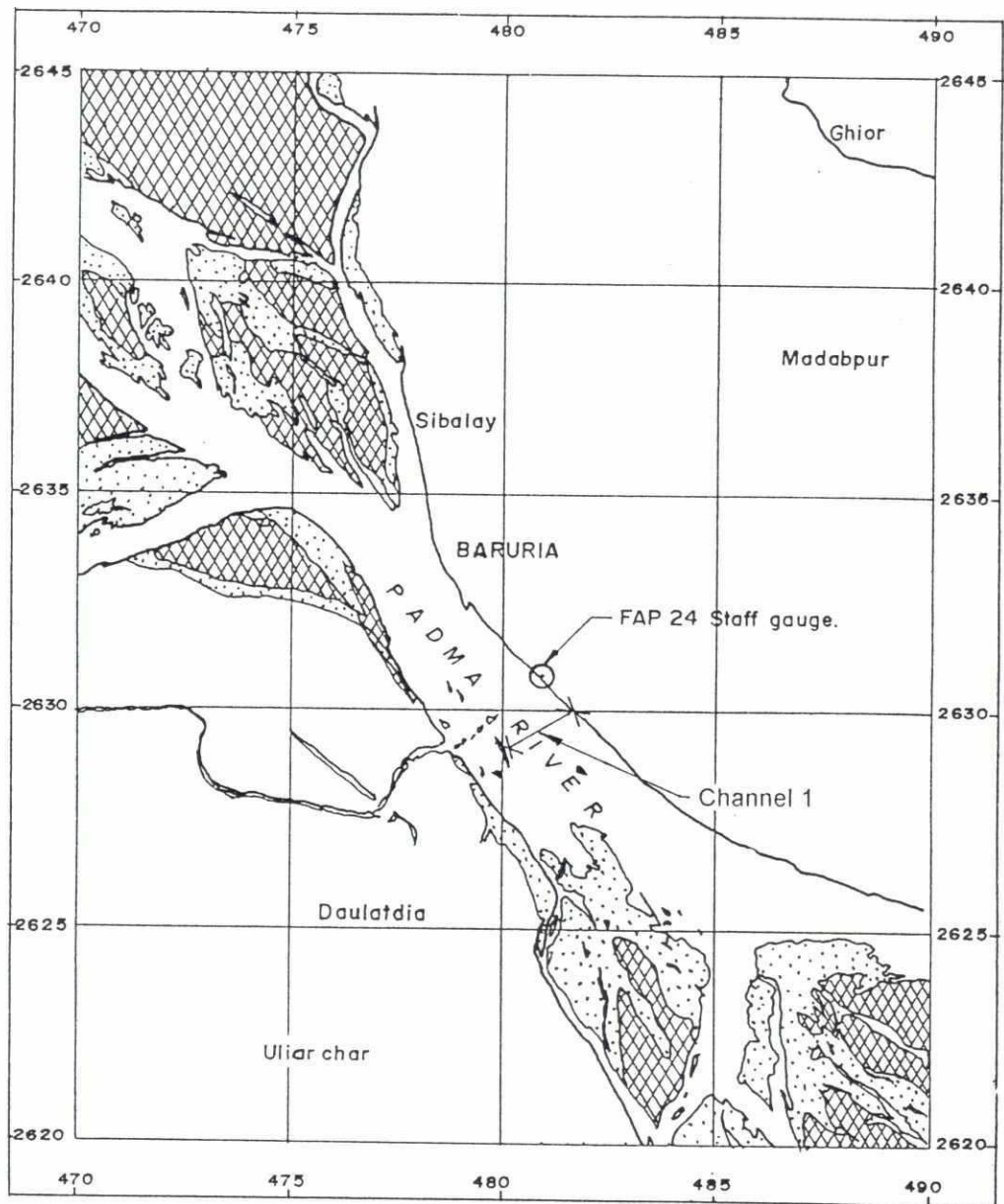
228

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U52P1T01 .ase
Echosounder data	1	QUATTRO	U52P1T01 .ech
Sediment transport data	1	QUATTRO	U52P1T01 .sed
Susp. sed. conc. analysis	1	QUATTRO	U52P1T01 .ssc
Transect plot data	1	QUATTRO	U52P1T01 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U52P1T01 .ct2 U52P1T01 .dt2

Table 7.1 PSD 24 Database file description

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 137 : 25 February, 1995	
		Location 5 : Padma River, Baruria	
	Date : 16 Aug 1995	PSD 24 Database file description	page  71
	Init : mzh/ss		

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LEGEND:

- \*- Cross section
- Highland
- Unstable/low char
- FAP 24 Staff gauge



Map is based on satellite images of March 1995

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 140 : 22 March, 1995

Location 5 : Padma River, Baruria

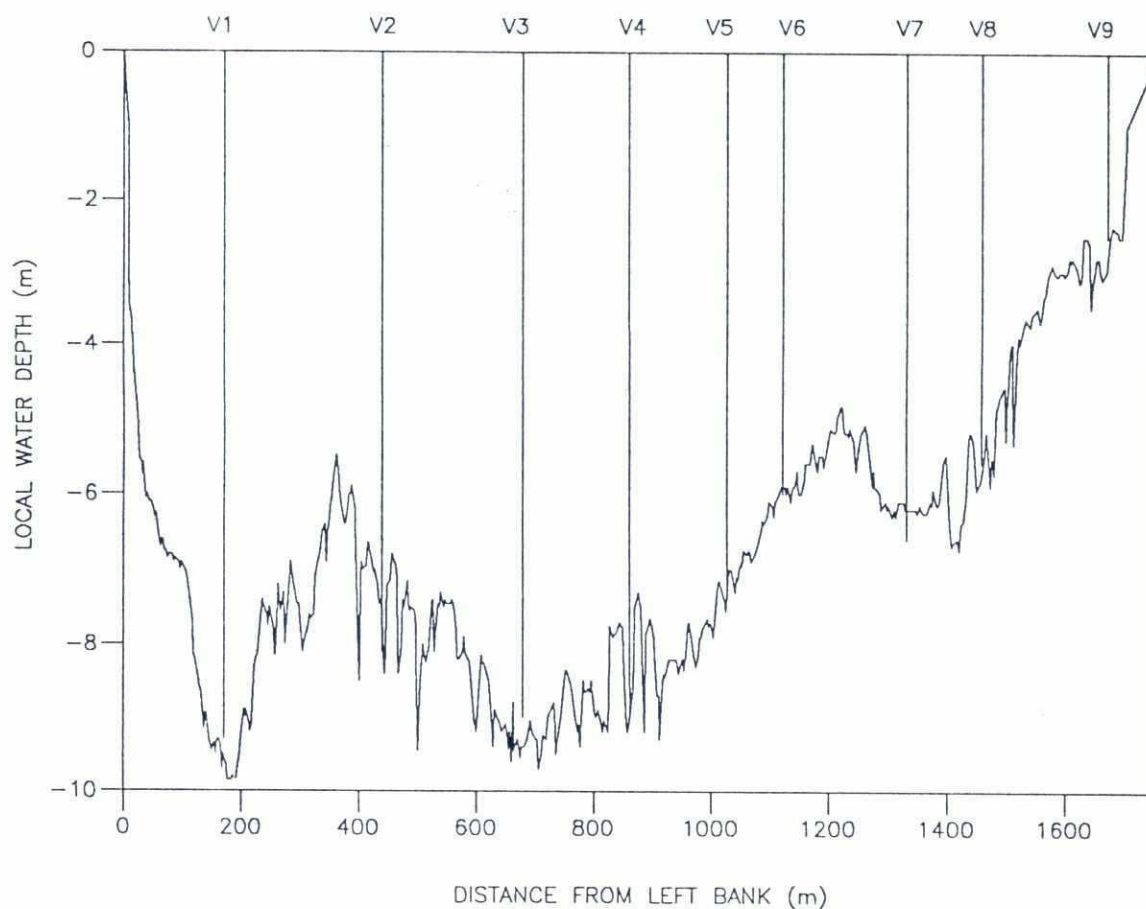
Date : 22 Aug 1995

Init : ss

Location map

page

1.1



Water level : 1.96 m + PWD measured at the station indicated on page 1.1

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT  
Flood Plan Coordination Organization  
Commission of the European Communities

Survey Bulletin 140 : 22 March, 1995

Location 5 : Padma River, Baruria

File : U53M1T05

Date : 22 Aug 1995

Init : ss

Cross-sections and measured verticals  
Channel 1

page


1.2

m7

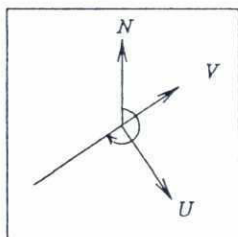
Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	4	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	9	-	-	-
	ADCP	9	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	9	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	8	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

Channel	Width (m)	Area (m <sup>2</sup> )	Stage h (m+PWD)	Discharge Q (m <sup>3</sup> /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1759	11574	1.96	4956	0.2	139.8
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	22 Mar 95	1.96	FAP 24
Table 2.3: Water-Levels				

<b>FAP 24</b>  <b>DELFT - DHI</b>		Survey Bulletin 140 : 22 March, 1995	
		Location 5 : Padma River, Baruria	
File : U53M1T05	Date : 22 Aug 1995	Survey programme as made and key figures	page
	Init : ss		2.1



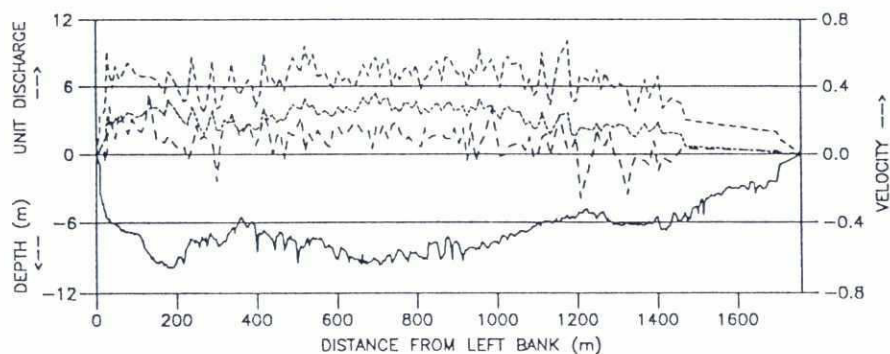


TRANSECT AZIMUTH =  $236^\circ$

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



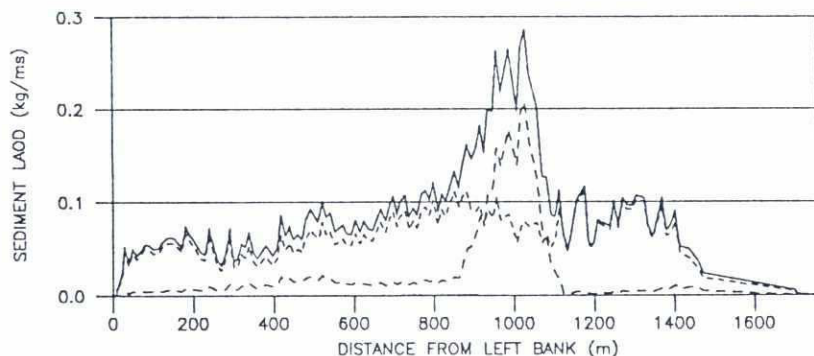
LEGEND :

— WATER DEPTH (m below STAGE)  
 --- UNIT DISCHARGE (m³/s.m)  
 --- U - (m/s)  
 --- V - (m/s)

STAGE = 1.96 (m+PWD)

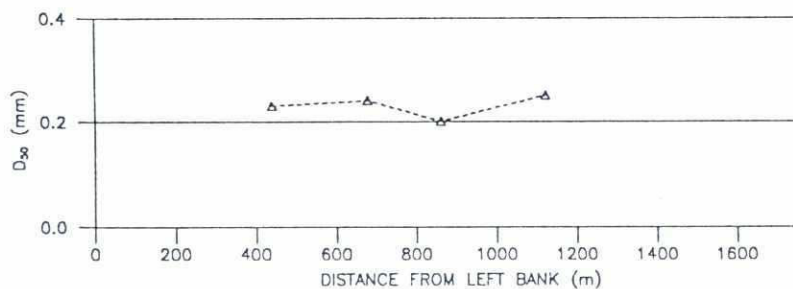
A = 11574 (m³)

Q = 4956 (m³/s)



LEGEND :

—  $S_{TOTAL}$  140 (kg/s)  
 ---  $S_{WASH LOAD}$  100.5 (kg/s)  
 ...  $S_{SUSP. BED}$  39.3 (kg/s)  
 -.-  $S_{BED LOAD}$  0.2 (kg/s)



LEGEND :

◇◇◇◇◇  $D_{50 SUSP.}$  (mm)  
 △△△△△  $D_{50 BED LOAD}$  (mm)  
 □□□□□  $D_{50 BED MAT.}$  (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 140 : 22 March, 1995

Location 5 : Padma River, Baruria

File : U53M1T05

Date : 22 Aug 1995

Init : ss

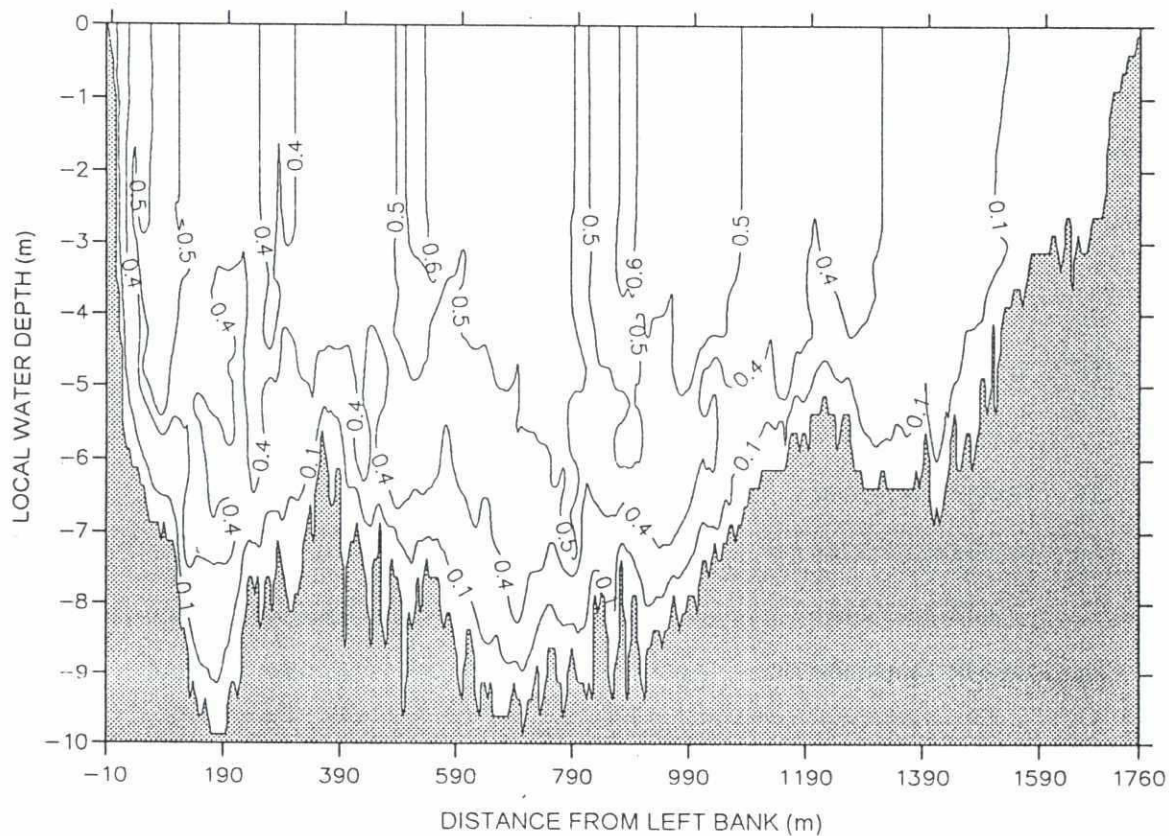
Horizontal distribution of flow and sediments

Channel 1

page


3.1

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Iso-velocity contours (m/s)


Water level : 1.96 m + PWD measured at the station indicated on page 1.1

<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 140 : 22 March, 1995	
		Location 5 : Padma River, Baruria	
File : U53M1T05	Date : 22 Aug 1995	Cross-sectional distribution of flow velocity Channel 1	page
	Init : ss		4.1

Andreasen settling tube							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
<div>200</div> Sample not collected							
Table 5.1: Grain size of near bed suspended sediment (0.3 m above river bed)							

US BM-54 bed samples							
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm	D35 (mm)	D50 (mm)	D65 (mm)
Sample not collected							
Table 5.2 : Grain size of bed material							

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	2	9503221152-1201	8.10	0.106	99.994	0.200	0.245	0.304
	2	9503221152-1201	8.10	0.438	99.562	0.177	0.207	0.242
	3	9503221305-1410	9.00	0.0023	99.997	0.196	0.238	0.295
	3	9503221305-1410	9.00	0.004	99.996	0.198	0.241	0.300
	4	9503221213-1224	9.00	0.0043	99.996	0.247	0.292	0.344
	4	9503221213-1224	9.00	0.615	99.385	0.074	0.090	0.109
	6	9503221448-1506	6.00	0.002	99.998	0.189	0.226	0.279
	6	9503221152-1201	6.00	0.000	100.000	0.217	0.269	0.325
Table 5.3 : Grain sizes of bed load								

 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 140 : 22 March, 1995	
	Location 5 : Padma River, Baruria		
	Date : 22 Aug 1995	Grain size distributions	page
	Init : ss		5.1



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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9503220932-0948 9503221003-1017 9503221600-1614 9503221617-1630	U53M1T01 U53M1T02 U53M1T04 U53M1T05 *

Table 6.1: ADCP & EMF transects

\* : transects in PSD 24 data base and presented in Sections 3 and 4

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	File name
Vertical current & turbidity profiles (ADCP/S4/MEX)	1	1	9503221127-1138	481430	629476	9.30	U53M1P01 *
		2	9503221152-1201	481206	629329	8.10	U53M1P02 *
		3	9503221305-1410	481004	629186	9.00	U53M1P04 **
		4	9503221213-1224	480857	629091	9.00	U53M1P03 *
		5	9503221421-1435	480718	629000	7.40	U53M1P05 *
		6	9503221448-1506	480637	628948	6.00	U53M1P06 *
		7	9503221518-1524	480457	628827	6.60	U53M1P07 *
		8	9503221536-1542	480356	628755	5.60	U53M1P08 *
		9	9503221550-1556	480173	628637	2.50	U53M1P09 *


Table 6.2: Vertical profiles

\*\* MEX not available

\* S4 & MEX not available

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments (pump bottle)	1	3	6	9503221305-1410	481004	629186	9.00

Table 6.3: Suspended sediment - point sampled

 <p><b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 140 : 22 March, 1995		
	Location 5 : Padma River, Baruria		
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	Init : ss		




Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments 202	1	1	1	9503221127-1138	481430	629476	9.30
		2	1	9503221152-1201	481206	629329	8.10
		3	1	9503221305-1410	481004	629186	9.00
		4	1	9503221213-1224	480857	629091	9.00
		5	1	9503221421-1435	480718	629000	7.40
		6	1	9503221448-1506	480637	628948	6.00
		7	1	9503221518-1524	480457	628827	6.60
		8	1	9503221536-1542	480356	628755	5.60
		9	1	9503221550-1556	480173	628637	2.50

Table 6.4: Suspended sediment - depth integrated

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	2	9503221152-1201	401104	660627	9.30	A1899
		3	9503221305-1410	401815	660691	9.00	A2313
		4	9503221213-1224	401964	660681	9.00	A2319
		6	9503221448-1506	402252	660668	6.00	A2185
		2	9503221152-1201	401104	660627	9.30	A2257
		3	9503221305-1410	401815	660691	9.00	A1851
		4	9503221213-1224	401964	660681	9.00	A2252
		6	9503221448-1506	402252	660668	6.00	A90


Table 6.5: Bed load

 <b>FAP 24</b> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 140 : 22 March, 1995	
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	Init : ss		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U53M1T05 .ase
Echosounder data	1	QUATTRO	U53M1T05 .ech
Sediment transport data	1	QUATTRO	U53M1T05 .sed
Bed load sed. analysis	1	QUATTRO	U53M1T05 .bdl
Susp. sed. conc. analysis	1	QUATTRO	U53M1T05 .ssc
Transect plot data	1	QUATTRO	U53M1T05 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U53M1T05 .ct2 U53M1T05 .dt2

Table 7.1 PSD 24 Database file description

 <p><b>FAP 24</b> DELFT - DHI</p>	<p><b>RIVER SURVEY PROJECT</b> Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 140 : 22 March, 1995	
		Location 5 : Padma River, Baruria	
	Date : 22 Aug 1995	PSD 24 Database file description	page
	Init : ss		7.1

