

FAP24

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Republic of
Bangladesh

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RIVER SURVEY PROJECT

Special
Report
No.23

River Data Book
April 1995 - May 1996

Part B.5: Baruria

October 1996

Special Report 23

River Data Book
April 1995 - March 1996

Part B.5: Baruria

June 1996



Contents of entire Data Book**Part A: Text volume**

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Part B:**Routine gauging April 1995 - March 1996**

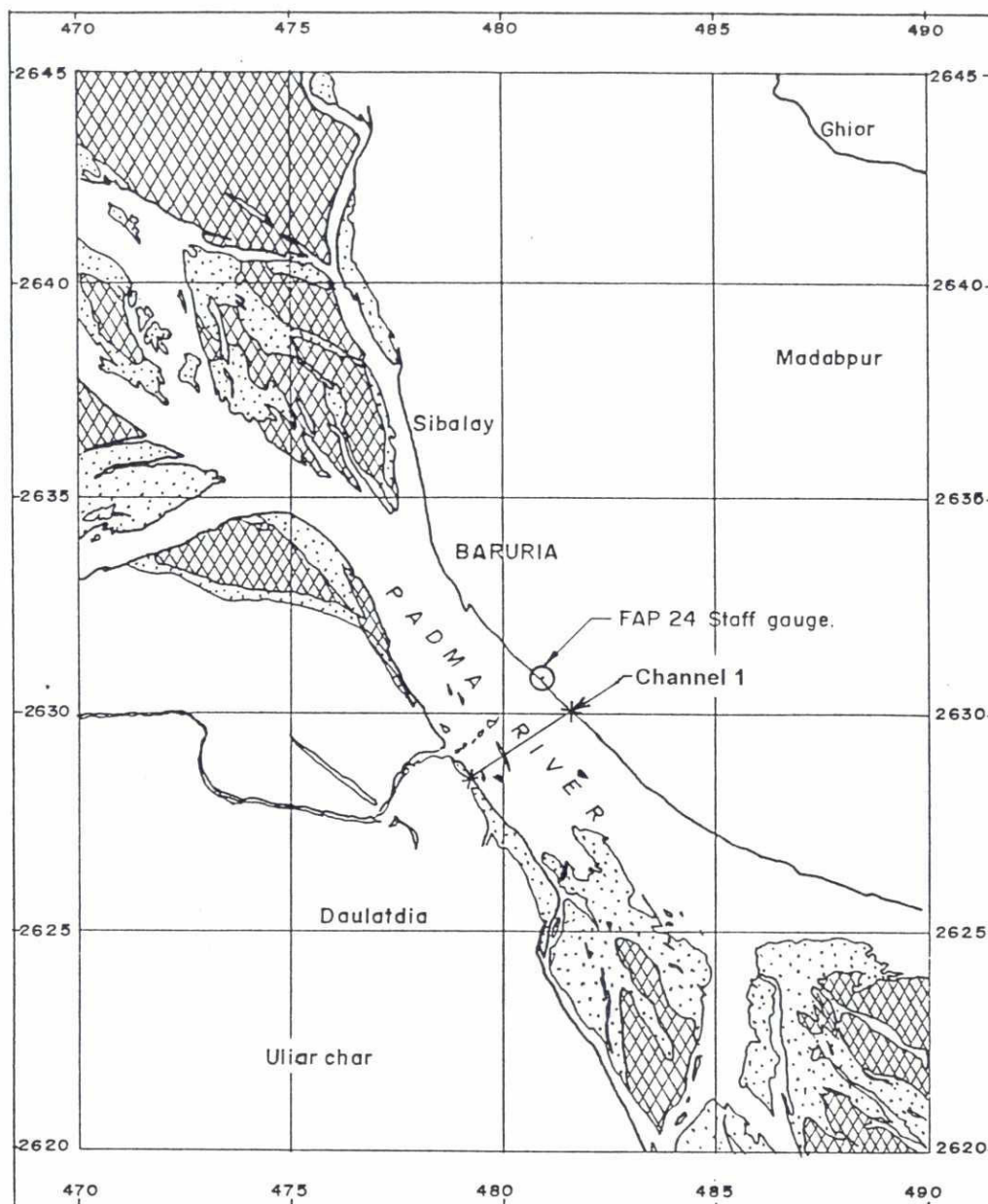
- B.1 Bahadurabad
- B.2 Sirajganj
- B.3 Aricha (Teota)
- B.4 Hardinge Bridge
- B.5 Baruria
- B.6 Mawa
- B.7 Mymensingh
- B.8 Tilly
- B.9 Gorai
- B.10 Arial Khan
- B.11 Bhairab Bazar

Part C:**Special surveys April 1995 - March 1996**

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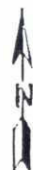
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Survey No.	Time
147	14/4 95
153	4/5 95
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233	28-29/11 95
247	14-15/1 96
253	27-28/1 96
255	9-10/2 96



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

 DELFT - DHI

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

Survey Bulletin 147 : 14 April, 1995

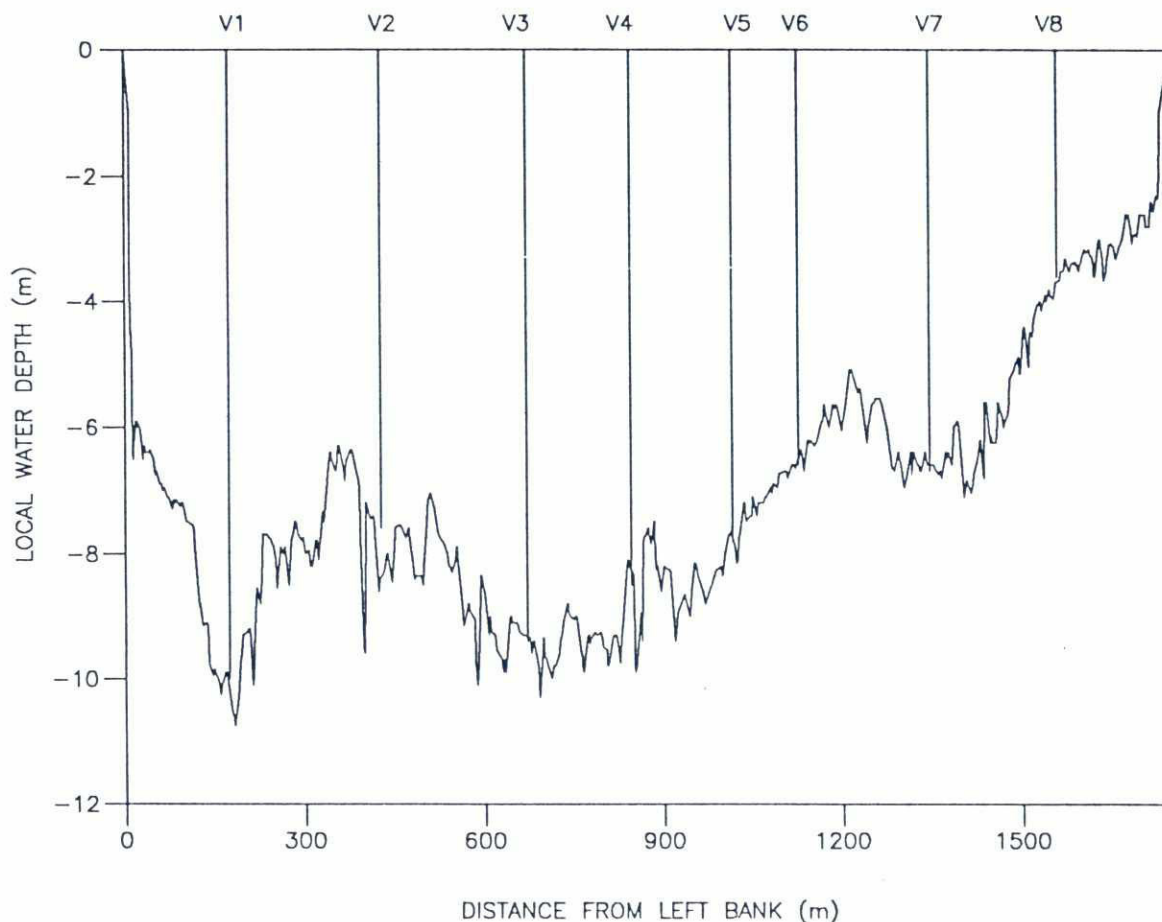
Location 5 : Padma River, Baruria

Date : 21 Sep 1995


Init : mzh/sjr

Location map

page
1.1




Water-level : 2.41 m + PWD measured at the station indicated on Page 1.1

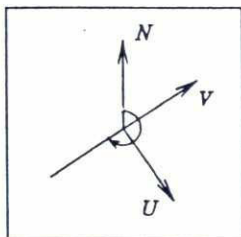
FAP 24  DELFT - DHI		Survey Bulletin 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
File : U54E1T01	Date : 21 Sept 1995	Cross-sections and measured verticals Channel 1	page
	Init : mzh/sjr		1.2

Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	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	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 ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1748	12307	2.41	5840	0.08	394.14
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	14 Apr 95	2.41	FAP 24
Table 2.3: Water-levels				

<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 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
File : U54E1T01	Date : 21 Sept 1995	Survey programme as made and key figures	page
	Init : mzh/sjr		2.1

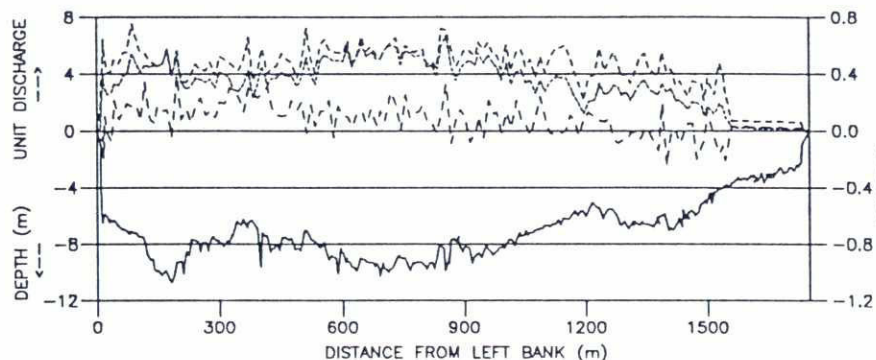


TRANSECT AZIMUTH = 236°

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)

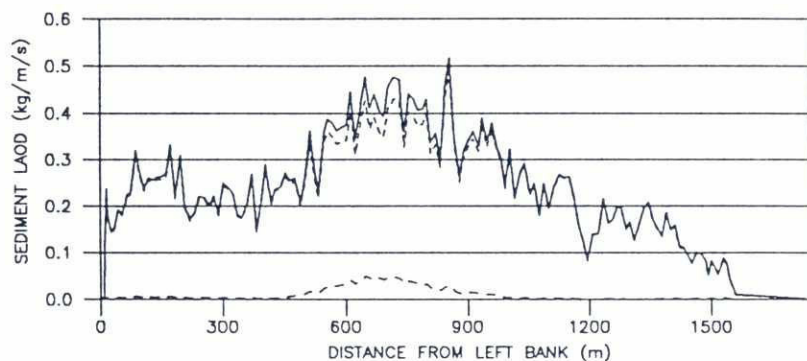
... U (m/s)

- . - V (m/s)

STAGE = 2.41 (m+PWD)

A = 12307 (m²)

Q = 5840 (m³/s)



SEDIMENT TRANSPORT

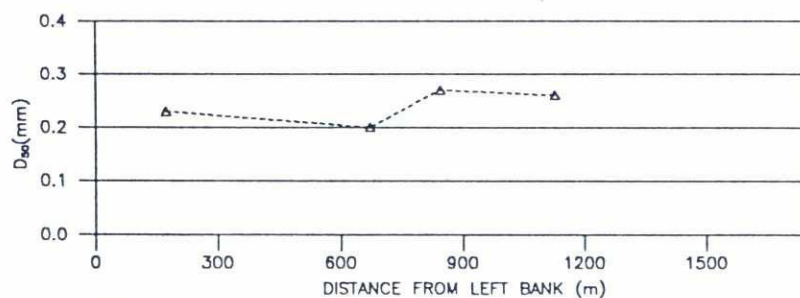
LEGEND :

— S_{TOTAL} 394.22 (kg/s)

- - - S_{WASH LOAD} 376.95 (kg/s)

... S_{SUSP. BED} 17.19 (kg/s)

- . - S_{BED LOAD} 0.08 (kg/s)



GRAIN SIZE

LEGEND :

◇◇◇◇ D₅₀ SUSP. (mm)

△△△△ D₅₀ BED LOAD (mm)

□□□□ D₅₀ BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 147 : 14 April, 1995

Location 5 : Padma River, Baruria

File : U54E1T01

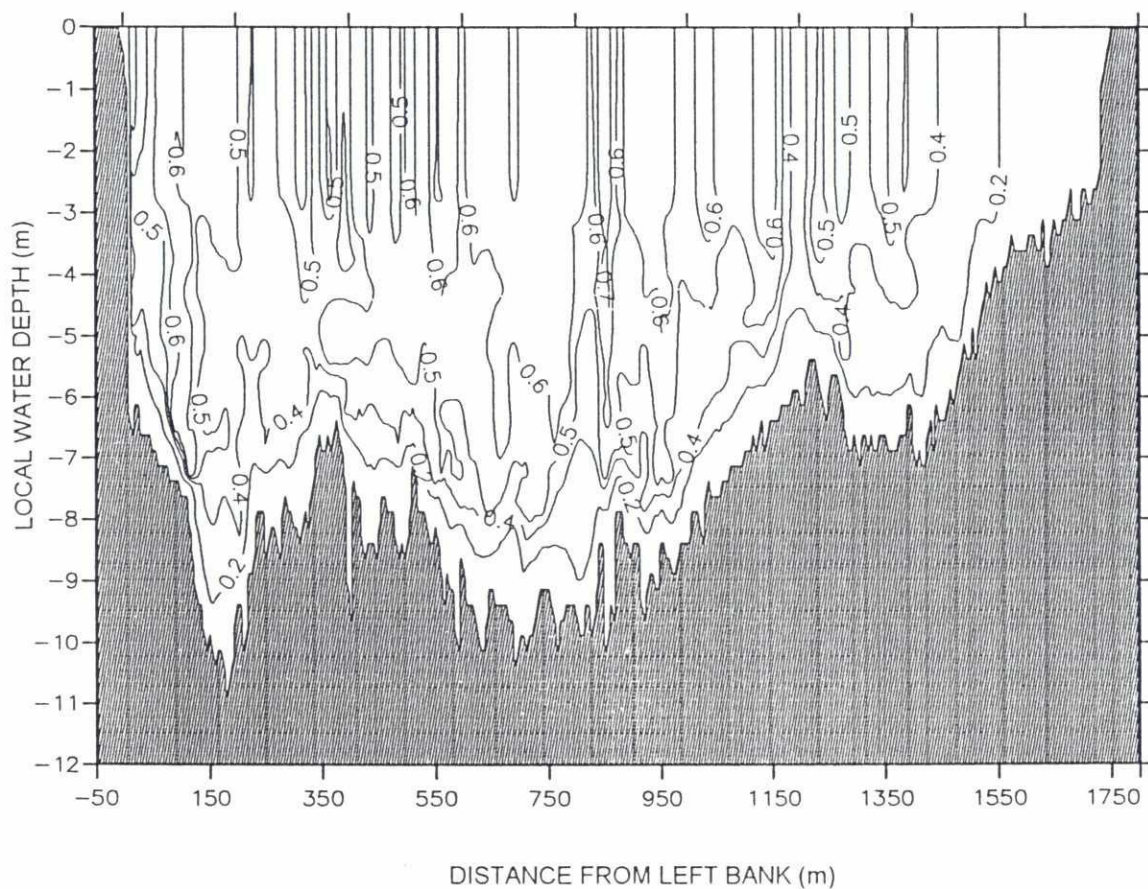
Date : 21 Sept 1995

Init : mzh/sjr

Horizontal distribution of flow and sediments
Channel 1

page

3.1




Iso-velocity contours (m/s)

Water-level : 2.41 m + PWD measured at the station indicated on Page 1.1

<div data-bbox="226 1740 368 1865"> FAP 24 DELFT - DHI </div> <div data-bbox="438 1783 708 1865"> RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities </div>		Survey Bulletin 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
File : U54E1T01	Date : 21 Sept 1995	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : mzh/sjr		

Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	1	9504141451-1504	10.00	0.41	99.59	0.19	0.23	0.29
	3	9504141023-1129	9.40	1.06	98.94	0.18	0.22	0.26
	4	9504141139-1152	8.50	0.30	99.70	0.20	0.25	0.31
	6	9504141224-1231	6.60	0.15	99.86	0.21	0.26	0.32
	1	9504141451-1504	10.00	0.66	99.34	0.19	0.23	0.29
	3	9504141023-1129	9.40	1.66	98.34	0.16	0.19	0.22
	4	9504141139-1152	8.50	0.23	99.77	0.24	0.29	0.34
	6	9504141224-1231	6.60	0.30	99.70	0.20	0.25	0.31

Table 5.1 : 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 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
	Date : 21 Sept 1995	Grain size distributions	page 5.1
	Init : mzh/sjr		

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9504140806-0821 9504140824-0837 9504141516-1531 9504141532-1545	U54E1T01 * U54E1T02 U54E1T07 U54E1T08


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	9504141451-1504	481428	629466	10.00	U54E1P08 *
		2	9504141433-1438	481204	629327	7.60	U54E1P07 *
		3	9504141023-1129	481007	629187	9.40	U54E1P01 **
		4	9504141139-1152	480860	629094	8.50	U54E1P02 *
		5	9504141204-1223	480717	629003	7.80	U54E1P03 *
		6	9504141224-1231	480631	628940	6.60	U54E1P04 *
		7	9504141325-1333	480440	628823	6.70	U54E1P05 *
		8	9504141345-1355	480265	628702	3.60	U54E1P06 *

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	9504141023-1129	481007	629187	9.40

Table 6.3: Suspended sediment - point sampled



 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
	Date : 21 Sept 1995	Collected data and their storage (1)	page 6.1
	Init : mzh/sjr		

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9504141451-1504	481428	629466	10.00
		2	1	9504141433-1438	481204	629327	7.60
		3	1	9504141023-1129	481007	629187	9.40
		4	1	9504141139-1152	480860	629094	8.50
		5	1	9504141204-1223	480717	629003	7.80
		6	1	9504141224-1231	480631	628940	6.60
		7	1	9504141325-1333	480440	628823	6.70
		8	1	9504141345-1355	480265	628702	3.60


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	9504141451-1504	481428	629466	10.00	A1864
		3	9504141023-1129	481007	629187	9.40	A1818
		4	9504141139-1152	480860	629094	8.50	A1973
		6	9504141224-1231	480631	628940	6.60	A875
		1	9504141451-1504	481428	629466	10.00	A2317
		3	9504141023-1129	481007	629187	9.40	A2007
		4	9504141139-1152	480860	629094	8.50	A1801
		6	9504141224-1231	480631	628940	6.60	A2344

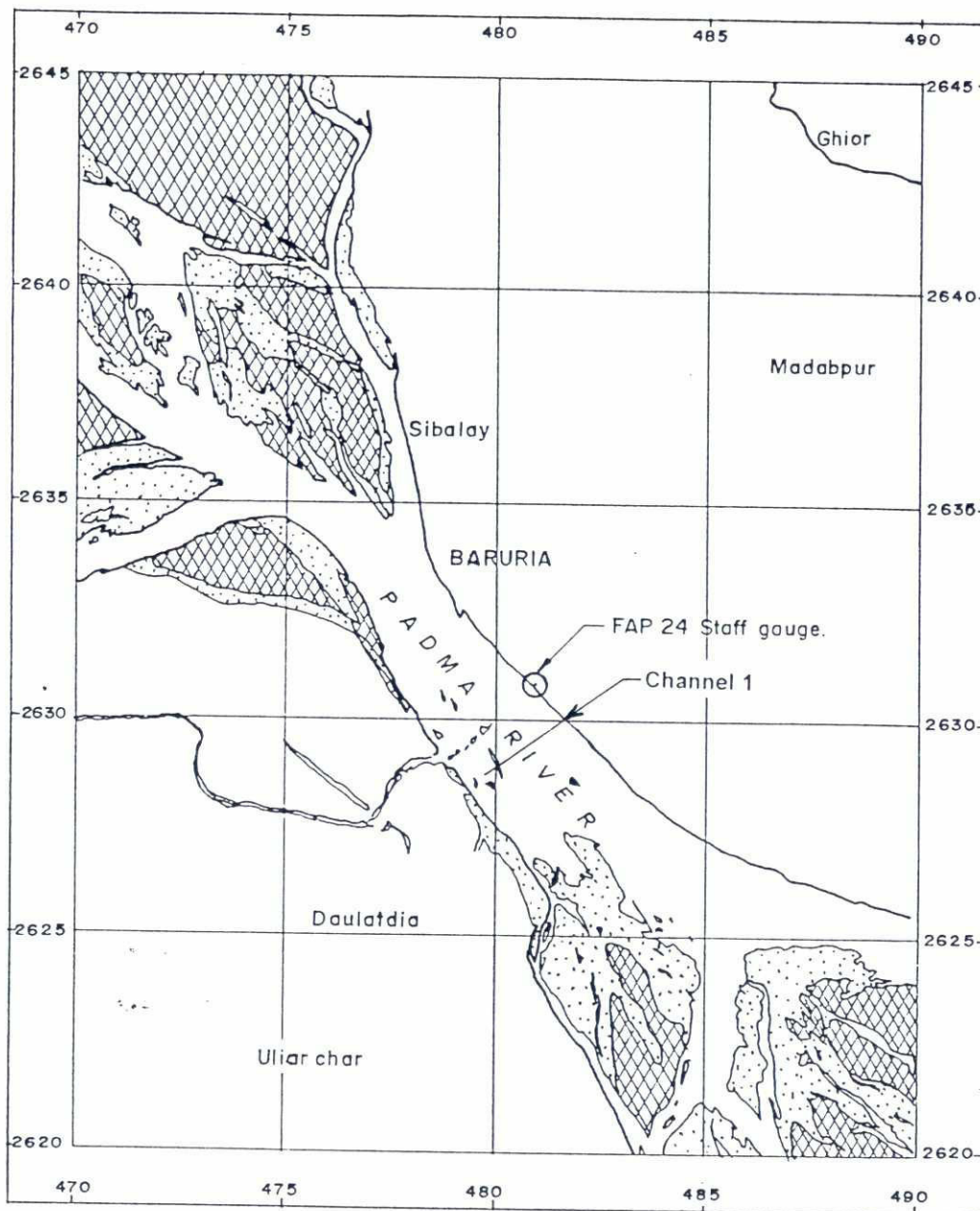
Table 6.5: Bed load

 FAP 24  RIVER SURVEY PROJECT <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small>		Survey Bulletin 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
	Date : 26 Jan 1994	Collected data and their storage (2)	page 6.2
	Init : mzh/sjr		

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U54E1T01 .ase
Echosounder data	1	QUATTRO	U54E1T01 .ech
Sediment transport data	1	QUATTRO	U54E1T01 .sed
Bed load sed. analysis	1	QUATTRO	U54E1T01 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U54E1T01 .ssc
Transect plot data	1	QUATTRO	U54E1T01 .trs
Iso-velocity plot data	1	MIKE 21	U54E1T01 .ct2 U54E1T01 .dt2
Table 7.1 PSD 24 Database file description			

 FAP 24 DELFT - DHI RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 147 : 14 April, 1995	
		Location 5 : Padma River, Baruria	
	Date : 26 Jan 1994	PSD 24 Database file description	page
	Init : mzh/sjr		7.1

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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



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 153 : 4 May, 1995

Location 5 : Padma River, Baruria

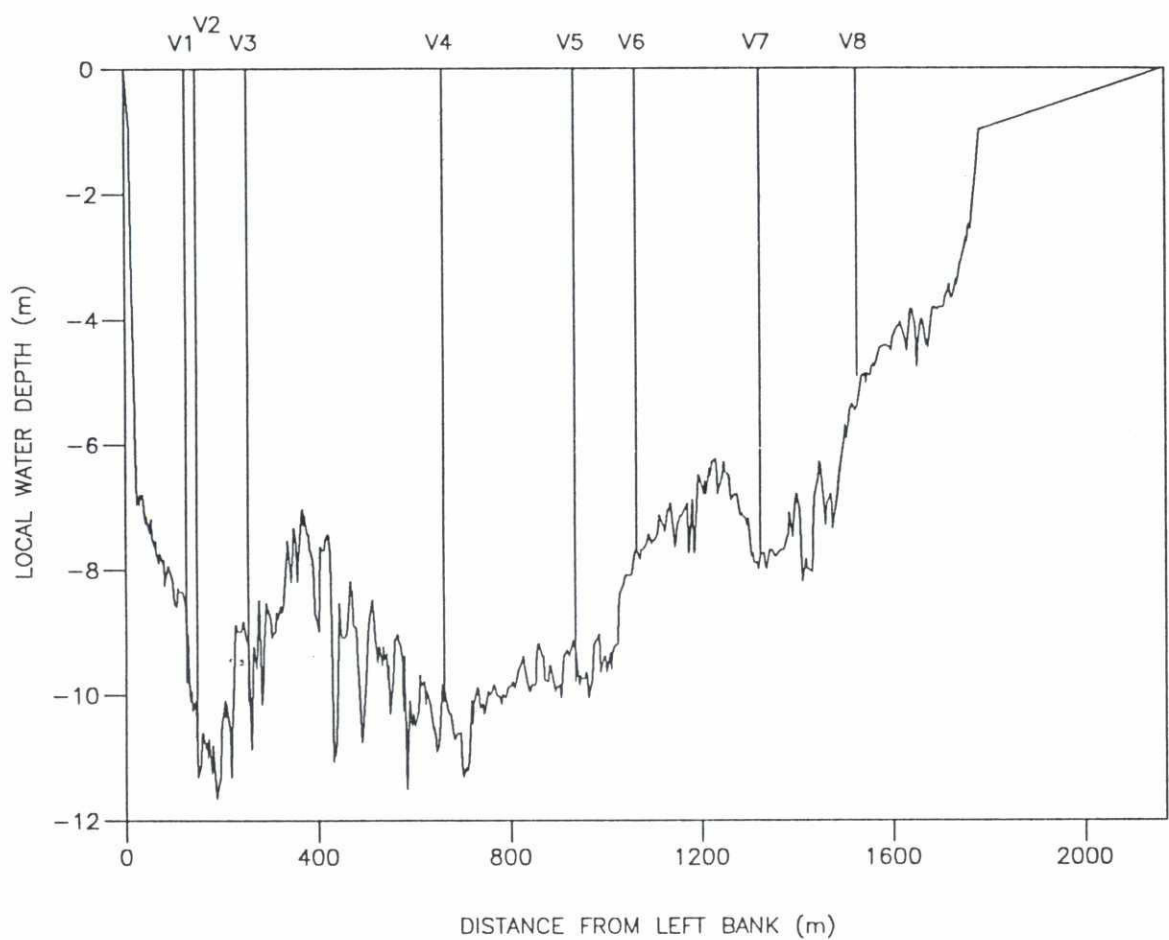
Date : 25 Sep 1995

Init : mk

Location map

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1.1

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Water-level : 3.27 m + PWD measured at the station indicated on page 1.1


<div data-bbox="223 1724 383 1870"> FAP 24 DELFT - DHI </div> <div data-bbox="430 1769 702 1859"> RIVER SURVEY PROJECT <small>Flood Plan Coordination Organization</small> <small>Commission of the European Communities</small> </div>		Survey Bulletin 153 : 04 May, 1995	
		Location 05 : Padma River, Baruria	
File : U5541T01	Date : 25 Sep 1995	Cross-sections and measured verticals Channel 1	page 1.2
	Init : mk		

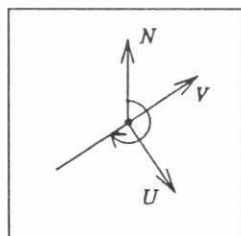
24

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	16	-	-	-
	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 ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2161	14277	3.27	9633	5	2625
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	04 May 95	3.27	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 153 : 04 May, 1995	
		Location 05 : Padma River, Baruria	
File : U5541T01	Date : 25 Sep 1995	Survey programme as made and key figures	page
	Init : mk		2.1

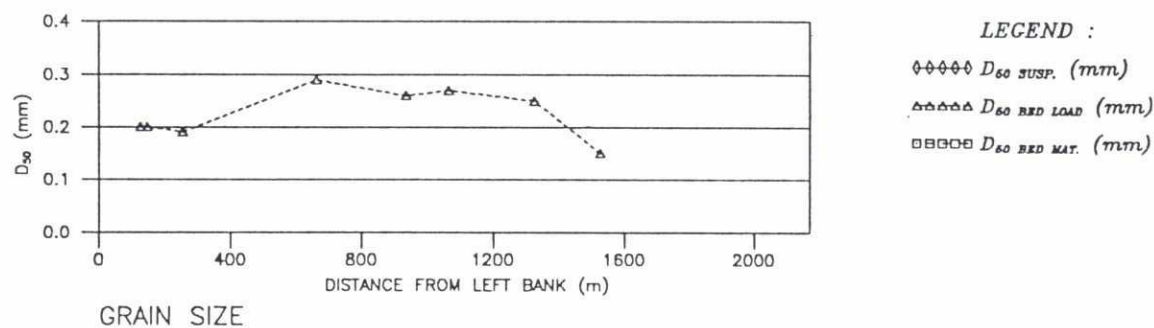
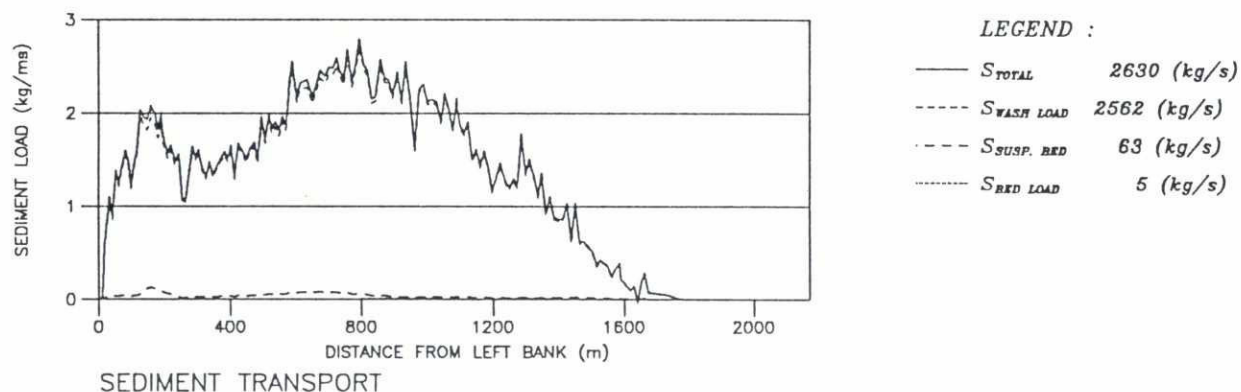
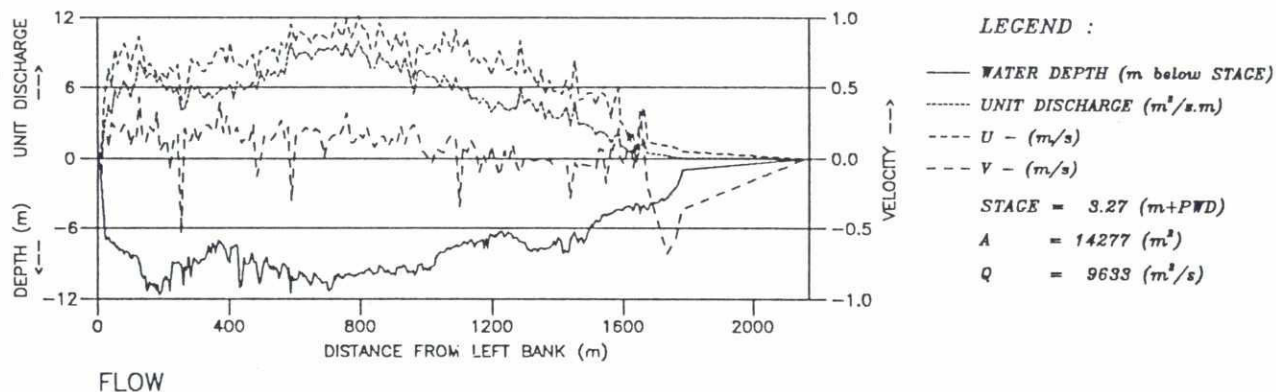


TRANSECT AZIMUTH = 236°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FAP 24



DELFT - DHI

RIVER SURVEY PROJECT
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 153 : 04 May, 1995

Location 05 : Padma River, Baruria

File : U5541T01

Date : 25 Sep 1995

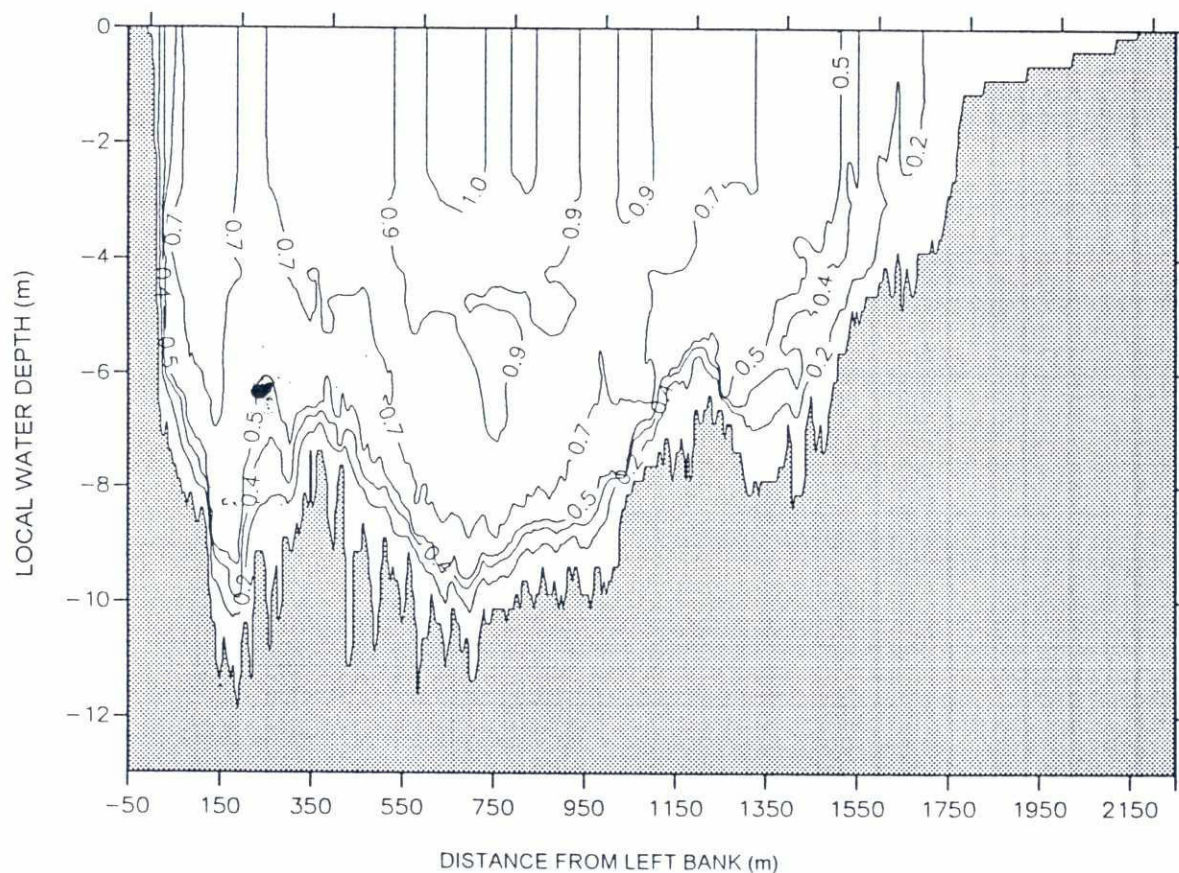
Init : mk

Horizontal distribution of flow and sediments
Channel 1

page

3.1

OK



Iso-velocity contours (m/s)

Water-level : 3.27 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 153 : 04 May, 1995

Location 05 : Padma River, Baruria

File : U5541T01

Date : 25 Sep 1995

Init : mk

Cross-sectional distribution of flow velocity
Channel 1

page


4.1

22

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	9505041055-1105	9.80	5.36	94.64	0.130	0.164	0.206
	1	9505041055-1105	9.80	1.56	98.44	0.181	0.233	0.298
	2	9505041001-1047	10.8	1.89	98.11	0.174	0.218	0.277
	2	9505041001-1047	10.8	6.41	93.59	0.153	0.190	0.235
	3	9505041415-1425	10.1	0.31	99.69	0.162	0.183	0.206
	3	9505041415-1425	10.1	0.14	99.86	0.170	0.195	0.223
	4	9505041349-1359	10.1	0.19	99.81	0.251	0.295	0.347
	4	9505041349-1359	10.1	1.37	98.63	0.228	0.281	0.335
	5	9505041242-1253	9.80	0.06	99.94	0.194	0.234	0.291
	5	9505041242-1253	9.80	0.09	99.91	0.223	0.275	0.330
	6	9505041218-1227	7.70	1.06	98.94	0.208	0.260	0.318
	6	9505041218-1227	7.70	0.08	99.92	0.235	0.285	0.338
	7	9505041146-1200	7.80	0.04	99.96	0.217	0.269	0.325
	7	9505041146-1200	7.80	0.10	99.90	0.188	0.225	0.278
	8	9505041121-1135	4.90	19.74	80.26	0.106	0.146	0.183
	8	9505041121-1135	4.90	31.57	68.43	0.087	0.155	0.206
Table 5.3 : Grain sizes of bed load								

 <p>FAP 24 DELFT - DHI</p>	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 153 : 04 May, 1995	
	Location 05 : Padma River, Baruria		
	Date : 25 Sep 1995	Grain size distributions	page 5.1
	Init : mk		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9505040740-0753 9505040759-0814 9505041440-1454 9505041457-1510	U5541T01 * U5541T02 U5541T06 U5541T07

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	9505041055-1105	481461	629496	9.80	U5541P02 *
		2	9505041001-1047	481447	629482	10.8	U5541P01 **
		3	9505041415-1425	481362	629428	10.1	U5541P08 *
		4	9505041349-1359	481022	629202	10.1	U5541P07 *
		5	9505041242-1253	480792	629044	9.80	U5541P06 *
		6	9505041218-1227	480689	628976	7.70	U5541P05 *
		7	9505041146-1200	480466	628833	7.80	U5541P04 *
		8	9505041121-1135	480298	628719	4.90	U5541P03 *


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	2	6	9505041001-1047	481447	629482	10.80

Table 6.3: Suspended sediment - point sampled

FAP 24  DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 153 : 04 May, 1995	
				Location 05 : Padma River, Baruria	
Date : 25 Sep 1995				Collected data and their storage (1)	
Init : mk					
				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	9505041055-1105	481461	629496	9.80
		2	1	9505041001-1047	481447	629482	10.8
		3	1	9505041415-1425	481362	629428	10.1
		4	1	9505041349-1359	481022	629202	10.1
		5	1	9505041242-1253	480792	629044	9.80
		6	1	9505041218-1227	480689	628976	7.70
		7	1	9505041146-1200	480466	628833	7.80
		8	1	9505041121-1135	480298	628719	4.90

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	9505041055-1105	481461	629496	9.80	A0865
		2	9505041001-1047	481447	629482	10.8	A1665
		3	9505041415-1425	481362	629428	10.1	A1824
		4	9505041349-1359	481022	629202	10.1	A1646
		5	9505041242-1253	480792	629044	9.80	A0888
		6	9505041218-1227	480689	628976	7.70	A2291
		7	9505041146-1200	480466	628833	7.80	A0885
		8	9505041121-1135	480298	628719	4.90	A0081
		1	9505041055-1105	481461	629496	9.80	A1835
		2	9505041001-1047	481447	629482	10.8	A0567
		3	9505041415-1425	481362	629428	10.1	A1978
		4	9505041349-1359	481022	629202	10.1	A2180
		5	9505041242-1253	480792	629044	9.80	A0105
		6	9505041218-1227	480689	628976	7.70	A2297
		7	9505041146-1200	480466	628833	7.80	A2026
		8	9505041121-1135	480298	628719	4.90	A2171

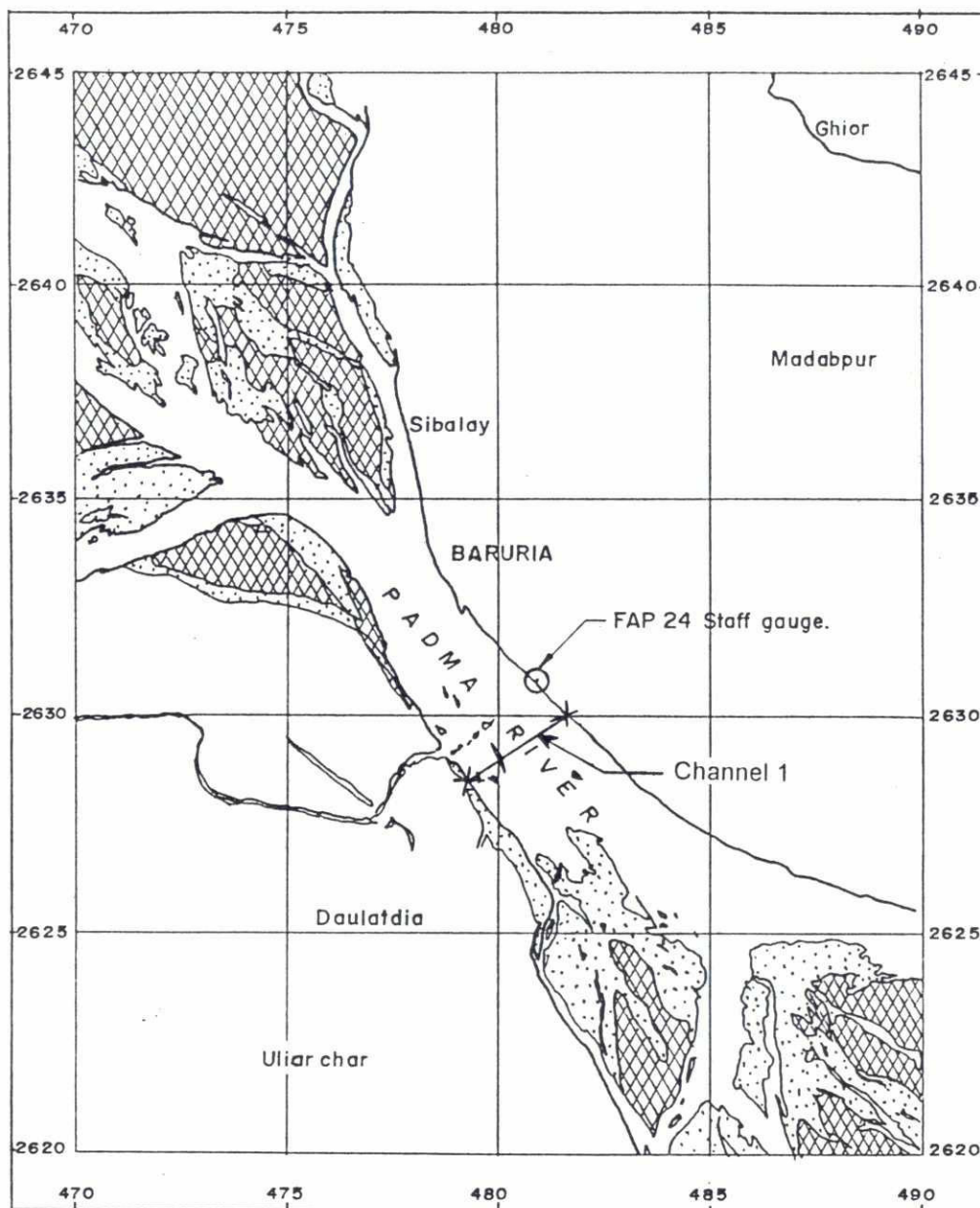
Table 6.5: Bed load

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 153 : 04 May, 1995	
		Location 05 : Padma River, Baruria	
	Date : 25 Sep 1995	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	U5541T01 .ase
Echosounder data	1	QUATTRO	U5541T01 .ech
Sediment transport data	1	QUATTRO	U5541T01 .sed
Bed load sed. analysis	1	QUATTRO	U5541T01 .bdl
Sus. sed. conc. analysis	1	QUATTRO	U5541T01 .ssc
Transect plot data	1	QUATTRO	U5541T01 .trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5541T01 .ct2 U5541T01 .dt2
Table 7.1 PSD 24 Database file description			

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 153 : 04 May, 1995	
		Location 05 : Padma River, Baruria	
	Date : 25 Sep 1995	PSD 24 Database file description	page
	Init : mk		7.1



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



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 161 : 10 - 11 June, 1995

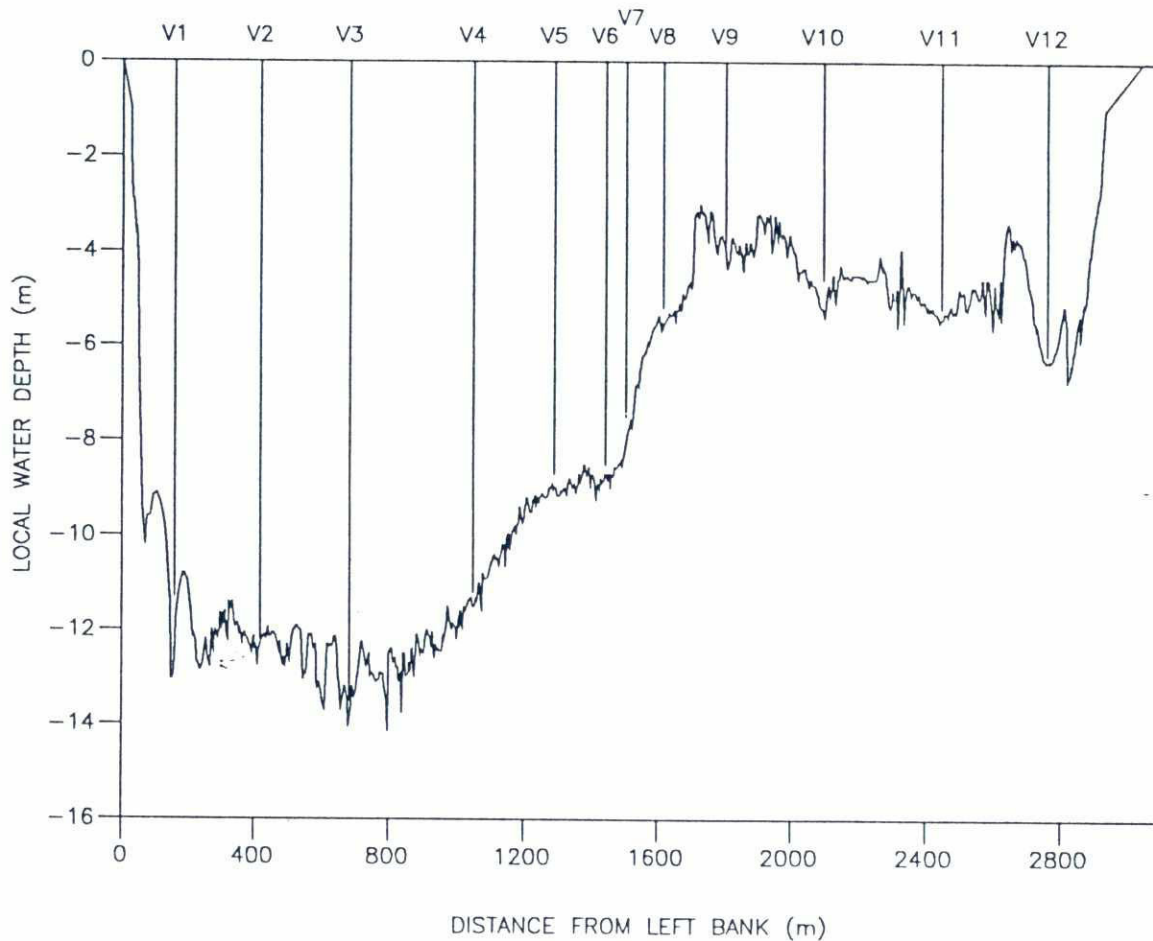
Location 5 : Padma River, Baruria

Date : 30 Sep 1995

Init : mk

Location map

page
1.1



Water-level : 5.55 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	8	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	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	12	-	-	-
	Collapsible bag	-	-	-	-
Bed load	Dune tracking	-	-	-	-
	Helley-Smith sampler	2	-	-	-
	Delft Bottle	23	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

Channel	Width (m)	Area (m ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Near bed transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3039	23270	5.55	23519	307 *	8374

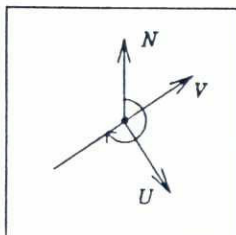
Table 2.2: Key figures * based on Delft bottle measurements

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	10 June 95	5.55	FAP 24
		11 June 95	5.56	

Table 2.3: Water-levels

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 161 : 10- 11 June, 1995	
		Location 5 : Padma River, Baruria	
File : U56A1T02	Date : 30 Sep 1995	Survey programme as made and key figures	page
	Init : mk		2.1

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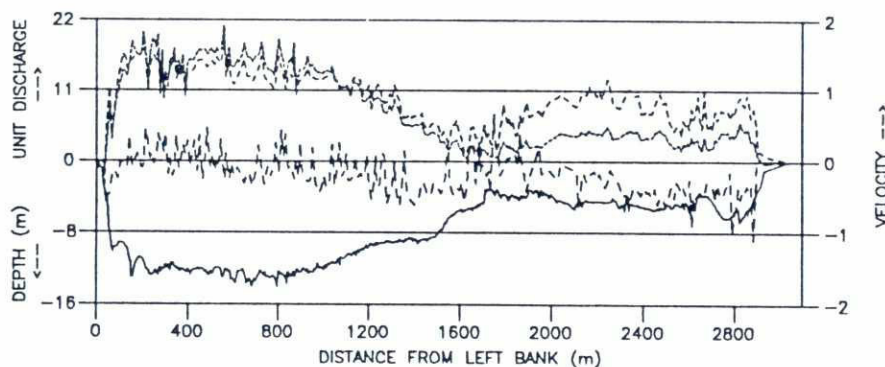


TRANSECT AZIMUTH = 236°

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)

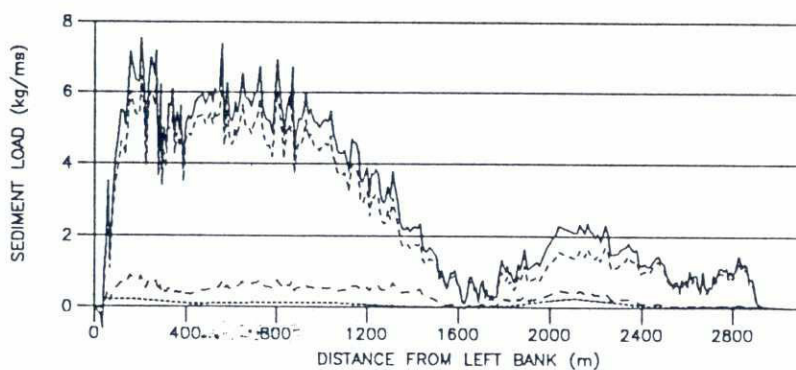
--- U - (m/s)

-.- V - (m/s)

STAGE = 5.55 (m+PWD)

A = 23270 (m³)

Q = 23519 (m³/s)



SEDIMENT TRANSPORT

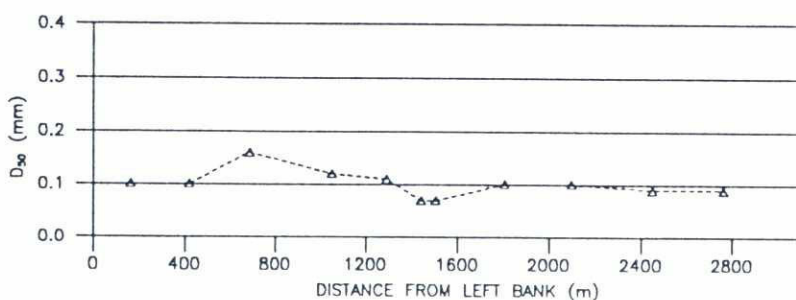
LEGEND :

— S_TOTAL 8681 (kg/s)

--- S_WASH LOAD 7324 (kg/s)

..... S_SUSP. BED 1050 (kg/s)

-.- S_NEAR BED 307 (kg/s)



GRAIN SIZE

LEGEND :

◇◇◇◇◇ D₅₀ SUSP. (mm)

△△△△△ D₅₀ NEAR BED (mm)

□□□□□ D₅₀ BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 161 : 10- 11 June, 1995

Location 5 : Padma River, Baruria

File : U56A1T02

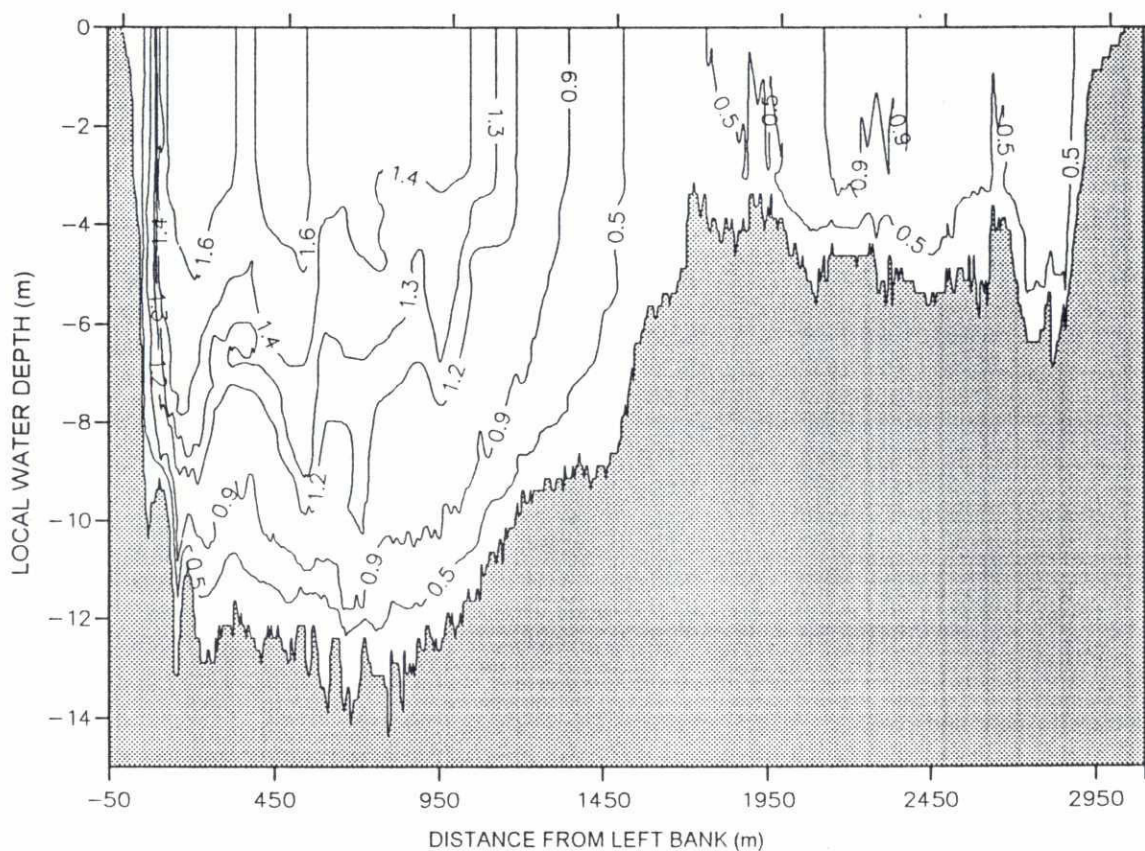
Date : 30 Sep 1995

Init : mk

Horizontal distribution of flow and sediments
Channel 1

page

31



Iso-velocity contours (m/s)

Water-level : 5.55 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 161 : 10- 11 June, 1995

Location 5 : Padma River, Baruria

File : U56A1T02

Date : 30 Sep 1995

Init : mk

Cross-sectional distribution of flow velocity
Channel 1

page

4.1

Helley-Smith


Channel	Vertical	Time (YYMMDDHHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	3 3	9506101132-1243 9506101132-1243	13.50 13.50	0.14 0.12	99.86 99.88	0.268 0.260	0.311 0.303	0.361 0.355

Table 5.1 : Grain sizes of bed load

Delft Bottle

Channel	Vertical	Time (YYMMDDHHMM)	Depth (m)	Weight percent < 0.06 mm > 0.06 mm		D35 (mm)	D50 (mm)	D65 (mm)
1	1 2 3 4 5 6 7 8 9 10 11 12	9506101059-1106 9506111023-1037 9506101132-1243 9506101344-1357 9506101409-1424 9506101440-1505 9506101532-1548 9506111101-1123 9506111143-1153 9506111206-1225 9506111324-1339 9506111342-1359	11.30 12.20 13.50 11.20 8.70 8.50 7.50 5.20 3.80 4.60 5.20 6.20	17.59 24.90 9.23 11.50 14.12 43.74 45.74 57.52 19.55 4.31 19.82 9.88	82.41 75.10 90.77 88.50 85.88 56.26 54.26 42.48 80.45 95.69 80.18 90.12	0.079 0.076 0.137 0.093 0.085 - - - 0.077 0.085 0.076 0.078	0.096 0.100 0.160 0.118 0.106 0.069 0.067 - 0.093 0.099 0.091 0.088	0.117 0.132 0.187 0.154 0.133 0.088 0.085 0.072 0.113 0.115 0.108 0.100
	1 2 3 4 5 6 7 9 10 11 12	9506101059-1106 9506111023-1037 9506101132-1243 9506101344-1357 9506101409-1424 9506101440-1505 9506101532-1548 9506111143-1153 9506111206-1225 9506111324-1339 9506111342-1359	11.30 12.20 13.50 11.20 8.70 8.50 7.50 3.80 4.60 5.20 6.20	13.00 21.20 9.73 7.62 10.82 30.38 42.97 12.69 6.18 22.84 9.08	87.00 78.80 90.27 92.38 89.18 69.62 57.03 87.31 93.82 77.16 90.92	0.083 0.081 0.138 0.095 0.087 0.067 - 0.082 0.081 0.072 0.078	0.100 0.106 0.161 0.120 0.106 0.081 0.070 0.098 0.092 0.085 0.088	0.121 0.139 0.187 0.154 0.132 0.097 0.089 0.117 0.105 0.101 0.100

Table 5.2 : Grain sizes of near bed load

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 161 : 10- 11 June, 1995	
		Location 5 : Padma River, Baruria	
	Date : 30 Sep 1995	Grain size distributions	page 5.1
	Init : mk		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9506100815-0840 9506100846-0908 9506101605-1628 9506101633-1656 9506110804-0826 9506110833-0856 9506111409-1430 9506111432-1452	U56A1T02 * U56A1T03 U56A1T08 U56A1T09 U56B1T01 U56B1T02 U56B1T08 U56B1T09


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	9506101059-1106 9506111023-1037 9506101132-1243 9506101344-1357 9506101409-1424 9506101440-1505 9506101532-1548 9506111101-1123 9506111143-1153 9506111206-1225 9506111324-1339 9506111342-1359	481473 481259 481038 480726 480530 480404 480347 480255 480108 479863 479569 479313	629501 629362 629213 629008 628875 628791 628754 628695 628588 628428 628234 628051	11.30 12.20 13.50 11.20 8.70 8.50 7.50 5.20 3.80 4.60 5.20 6.20	U56A1P01 * U56B1P01 * U56A1P02 ** U56A1P03 * U56A1P04 * U56A1P05 * U56A1P06 * U56B1P02 *** U56B1P04 * U56B1P05 * U56B1P06 * U56B1P07 *

Table 6.2: Vertical profiles * S4 and MEX not available ** MEX not available *** ADCP, 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	9506101132-1243	481038	629213	13.50

Table 6.3: Suspended sediment - point sample

<div>FAP 24</div> <div></div> <div>DELFT - DHI</div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	<div>Survey Bulletin 161 : 10- 11 June, 1995</div>	
			<div>Location 5 : Padma River, Baruria</div>	
	<div>Date : 30 Sep 1995</div>	<div>Collected data and their storage (1)</div>		<div>page</div> <div>6 1</div>
	<div>Init : mk</div>			

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9506101059-1106	481473	629501	11.30
		2	1	9506111023-1037	481259	629362	12.20
		3	1	9506101132-1243	481038	629213	13.50
		4	1	9506101344-1357	480726	629008	11.20
		5	1	9506101409-1424	480530	628875	8.70
		6	1	9506101440-1505	480404	628791	8.50
		7	1	9506101532-1548	480347	628754	7.50
		8	1	9506111101-1123	480255	628695	5.20
		9	1	9506111143-1153	480108	628588	3.80
		10	1	9506111206-1225	479863	628428	4.60
		11	1	9506111324-1339	479569	628234	5.20
		12	1	9506111342-1359	479313	628051	6.20


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	3	9506101132-1243	481473	629501	13.50	C106
		3	9506101132-1243	481038	629213	13.50	C170

Table 6.5: Bed load

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Delft Bottle Sample	1	1	9506101059-1106	481473	629501	11.30	A223
		2	9506111023-1037	481259	629362	12.20	A1008
		3	9506101132-1243	481038	629213	13.50	A507
		4	9506101344-1357	480726	629008	11.20	A477
		5	9506101409-1424	480530	628875	8.70	A425
		6	9506101440-1505	480404	628791	8.50	A227
		7	9506101532-1548	480347	628754	7.50	A178
		8	9506111101-1123	480255	628695	5.20	A142
		9	9506111143-1153	480108	628588	3.80	A1044
		10	9506111206-1225	479863	628428	4.60	A769
		11	9506111324-1339	479569	628234	5.20	A993
		12	9506111342-1359	479313	628051	6.20	A1042
		1	9506101059-1106	481473	629501	11.30	A386
		2	9506111023-1037	481259	629362	12.20	A973
		3	9506101132-1243	481038	629213	13.50	A152
		4	9506101344-1357	480726	629008	11.20	A196
		5	9506101409-1424	480530	628875	8.70	A211
		6	9506101440-1505	480404	628791	8.50	A449
		7	9506101532-1548	480347	628754	7.50	A482
		9	9506111143-1153	480108	628588	3.80	A947
		10	9506111206-1225	479863	628428	4.60	A1049
		11	9506111324-1339	479569	628234	5.20	A942
		12	9506111342-1359	479313	628051	6.20	A1004

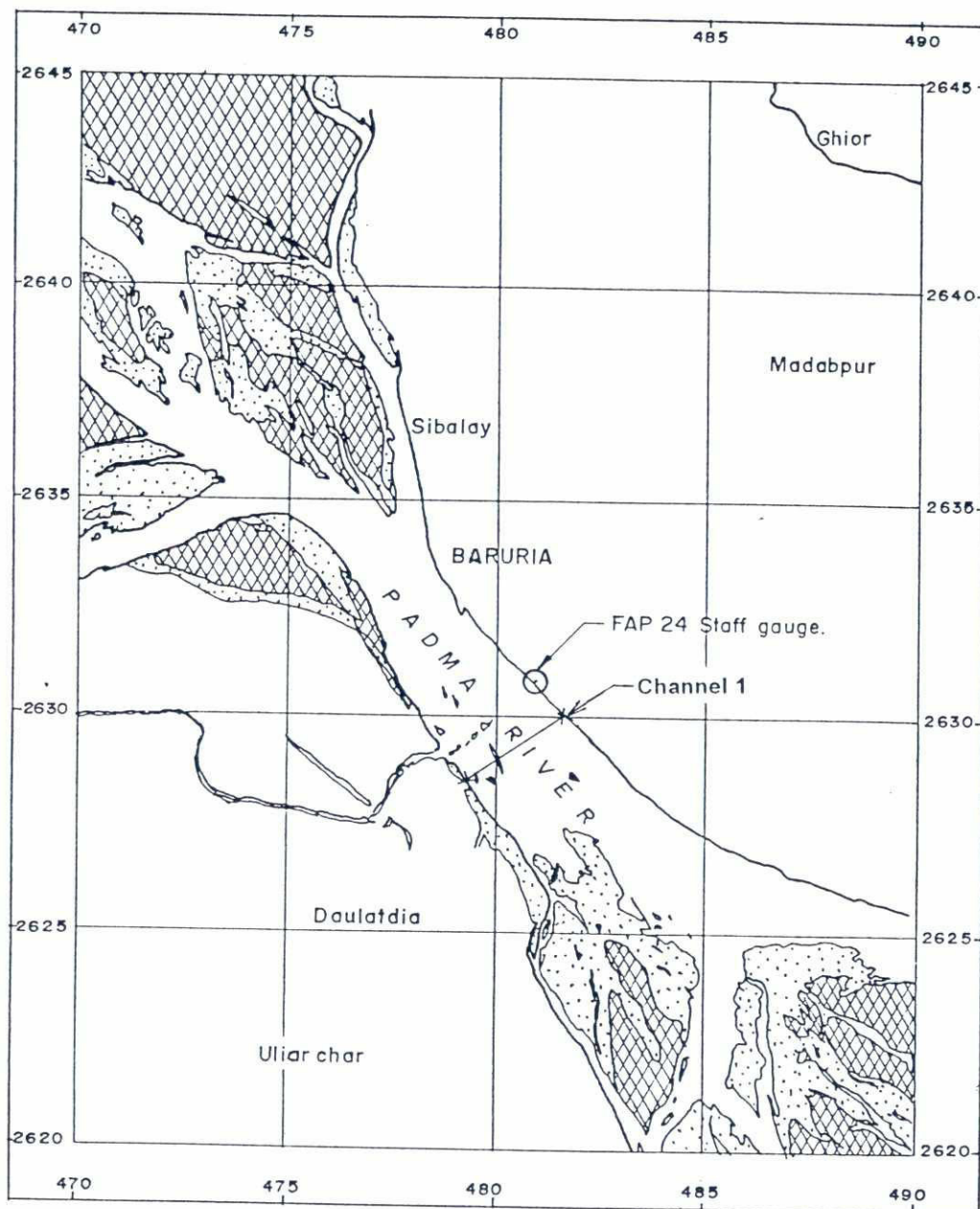
Table 6.5: Near bed load

<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 161 : 10- 11 June, 1995	
			Location 5 : Padma River, Baruria	
	Date : 30 Sep 1995	Collected data and their storage (2)		page 62
	Init : mk			

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U56A1T02 .ase
Echosounder data	1	QUATTRO	U56A1T02 .ech
Sediment transport data	1	QUATTRO	U56A1T02 .sed
Bed load sed. analysis	1	QUATTRO	U56A1T02 .bdl
Sus. sed. conc. analysis	1	QUATTRO	U56A1T02 .ssc
Transect plot data	1	QUATTRO	U56A1T02 .trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U56A1T02 .ct2 U56A1T02 .dt2

Table 7.1 PSD 24 Database file description

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LEGEND:

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

5000m 2500m 0

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 171 : 03 - 05 July, 1995

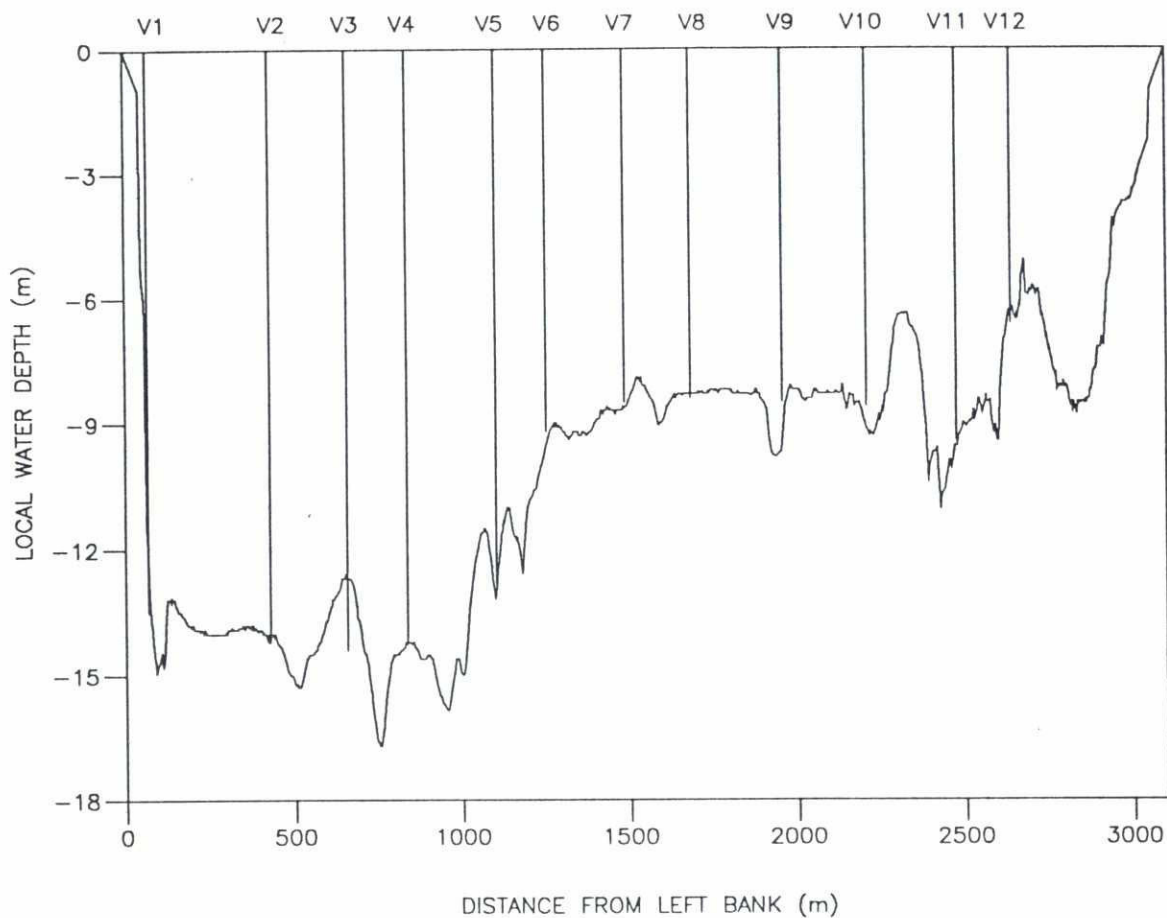
Location 5 : Padma River, Baruria

Date : 26 Oct 1995


Init : ss

Location map

page
1.1



Water level : 7.58 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 171 : 03 - 05 July, 1995
	Location 5 : Padma River, Baruria		
File : U5741T07	Date : 26 Oct 1995	Cross-sections and measured verticals Channel 1	page 1.2
	Init : ss		

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	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	2	-	-	-
	Delft Bottle	24	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-

Table 2.1: Survey programme as made


Channel	Width (m)	Area (m ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Near bed transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3099	30884	7.58	61766	2911 *	46003

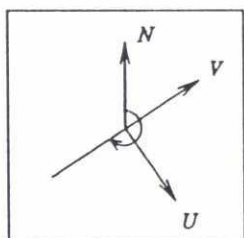
Table 2.2: Key figures

* based on Delft bottle measurement

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	03 Jul 95	7.45	FAP 24
		04 Jul 95	7.58	
		05 Jul 95	7.70	

Table 2.3: Water-levels

<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 171 : 03 - 05 July, 1995	
		Location 5 : Padma River, Baruria	
File : U5741T07	Date : 26 Oct 1995	Survey programme as made and key figures	page 2.1
	Init : ss		

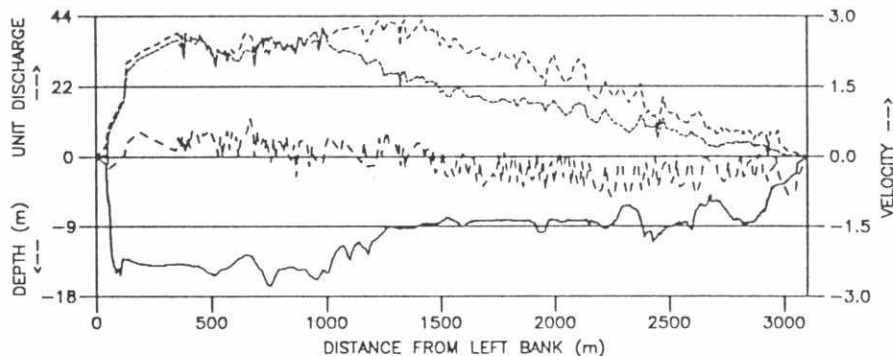


TRANSECT AZIMUTH = 236°

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)

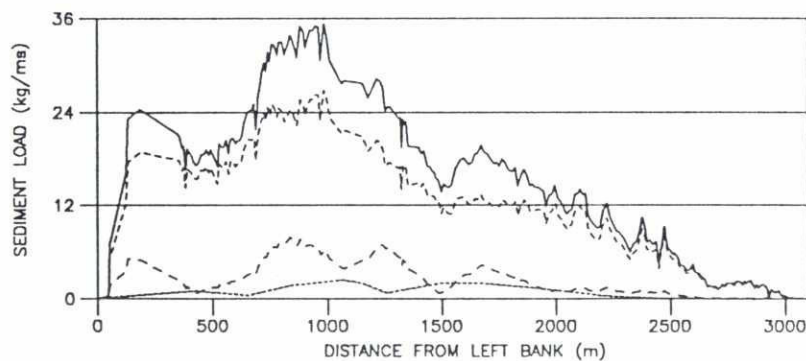
-.- V - (m/s)

STAGE = 7.58 (m+PWD)

A = 30884 (m³)

Q = 61766 (m³/s)

FLOW



LEGEND :

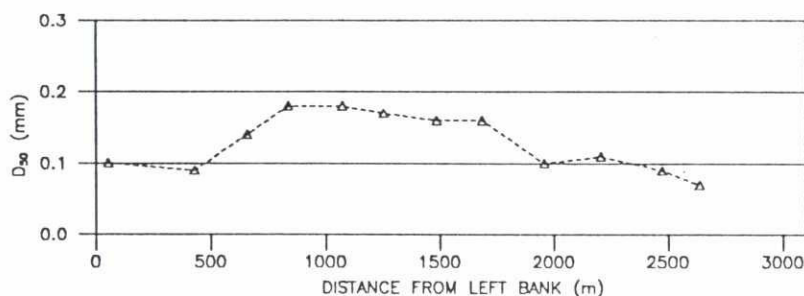
— S_{TOTAL} 48914 (kg/s)

--- S_{WASH LOAD} 38182 (kg/s)

-.- S_{SUSP. BED} 7821 (kg/s)

..... S_{NEAR BED} 2911 (kg/s)

SEDIMENT TRANSPORT



LEGEND :

◇◇◇◇◇ D₅₀ SUSP. (mm)

△△△△△ D₅₀ NEAR BED (mm)

□□□□□ D₅₀ BED MAT. (mm)

GRAIN SIZE

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 : U5741T07

Date : 26 Oct 1995

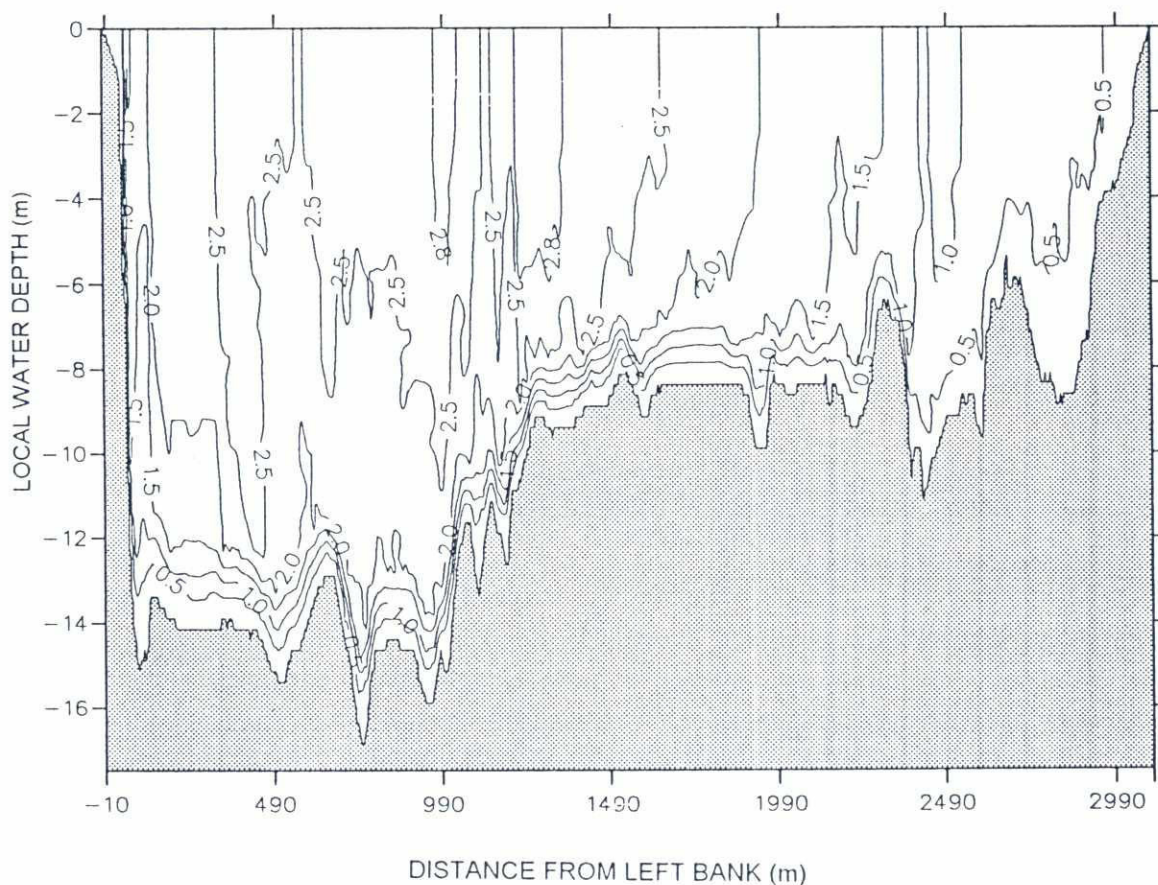
Init : ss

Horizontal distribution of flow and sediments

Channel 1

page

3.1



Iso-velocity contours (m/s)

Water level : 7.58 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 171 : 03 - 05 July, 1995

Location 5 : Padma River, Baruria

File : U5741T07

Date : 26 Oct 1995

Init : ss

Cross-sectional distribution of flow velocity
Channel 1

page


4.1

Helley-Smith								
Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	3	9507031352-1543	14.40	0.55	99.45	0.248	0.294	0.348
	3	9507031352-1543	14.40	0.25	99.75	0.261	0.304	0.355

Table 5.1 : Grain sizes of bed load

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	9507031155-1200	13.50	19.06	80.94	0.093	0.132	0.169
	2	9507031228-1250	14.20	10.99	89.01	0.080	0.093	0.108
	3	9507031352-1543	14.40	13.86	86.14	0.124	0.149	0.177
	4	9507041405-1408	14.20	4.61	95.39	0.150	0.176	0.207
	5	9507041428-1448	12.80	0.83	99.17	0.159	0.183	0.210
	6	9507041517-1533	9.20	1.03	98.97	0.155	0.177	0.203
	7	9507041552-1613	8.50	0.63	99.37	0.152	0.172	0.195
	8	9507050928-0952	8.40	0.62	99.38	0.150	0.172	0.198
	9	9507051031-1051	8.50	6.28	93.72	0.090	0.108	0.133
	10	9507051119-1138	8.60	11.19	88.81	0.093	0.119	0.161
	11	9507051202-1215	9.40	20.17	79.83	0.074	0.087	0.102
	12	9507051234-1248	6.60	36.38	63.62	-	0.082	0.109
	1	9507031155-1200	13.50	33.66	66.34	0.064	0.077	0.093
	2	9507031228-1250	14.20	20.12	79.88	0.073	0.085	0.099
	3	9507031352-1543	14.40	19.71	80.29	0.092	0.130	0.161
	4	9507041405-1408	14.20	4.76	95.24	0.155	0.183	0.215
	5	9507041428-1448	12.80	1.73	98.27	0.152	0.177	0.205
	6	9507041517-1533	9.20	2.15	97.85	0.137	0.160	0.187
	7	9507041552-1613	8.50	2.25	97.75	0.133	0.155	0.181
	8	9507050928-0952	8.40	2.80	97.20	0.112	0.140	0.169
	9	9507051031-1051	8.50	6.17	93.83	0.084	0.098	0.114
	10	9507051119-1138	8.60	18.98	81.02	0.078	0.094	0.115
	11	9507051202-1215	9.40	20.17	79.83	0.073	0.086	0.100
	12	9507051234-1248	6.60	48.55	51.45	-	0.065	0.084

Table 5.2 : Grain sizes of near 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 171 : 03 - 05 July, 1995	
		Location 5 : Padma River, Baruria	
	Date : 26 Oct 1995	Grain size distributions	page 5.1
	Init : ss		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9507030910-0933 9507030936-0959 9507031612-1635 9507031637-1658 9507041236-1259 9507041302-1325 9507041634-1700 9507041708-1735 9507050813-0839 9507050840-0905 9507051340-1405 9507051407-1436	U5731T02 U5731T03 U5731T09 U5731T10 U5741T01 U5741T02 U5741T07 * U5741T08 U5751T01 U5751T02 U5751T04 U5751T05

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	9507031155-1200 9507031228-1250 9507031352-1543 9507041405-1408 9507041428-1448 9507041517-1533 9507041552-1613 9507050928-0952 9507051031-1051 9507051119-1138 9507051202-1215 9507051234-1248	481554 481260 481088 480926 480678 480570 480380 480217 480008 479777 479564 479427	629563 629368 629214 629141 629024 628907 628774 628664 628473 628377 628229 628142	13.50 14.20 14.40 14.20 12.80 9.20 8.50 8.40 8.50 8.60 9.40 6.60	U5731P03 * U5731P04 * U5731P05 ** U5741P03 * U5741P04 * U5741P05 * U5741P06 * U5751P01 * U5751P02 * U5751P03 * U5751P04 * U5751P05 *


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	9507031352-1543	481088	629214	14.40

Table 6.3: Suspended sediment - point sample

<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 171 : 03 - 05 July, 1995	
			Location 5 : Padma River, Baruria	
	<div>Date : 26 Oct 1995</div>	Collected data and their storage (1)		page 6.1
	<div>Init : ss</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	9507031155-1200	481554	629563	13.50
		2	1	9507031228-1250	481260	629368	14.20
		3	1	9507031352-1543	481088	629214	14.40
		4	1	9507041405-1408	480926	629141	14.20
		5	1	9507041428-1448	480678	629024	12.80
		6	1	9507041517-1533	480570	628907	9.20
		7	1	9507041552-1613	480380	628774	8.50
		8	1	9507050928-0952	480217	628664	8.40
		9	1	9507051031-1051	480008	628473	8.50
		10	1	9507051119-1138	479777	628377	8.60
		11	1	9507051202-1215	479564	628229	9.40
		12	1	9507051234-1248	479427	628142	6.60


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	3	9507031352-1543	481088	629214	14.40	A461
		3	9507031352-1543	481088	629214	14.40	A1159


Table 6.5: Bed load

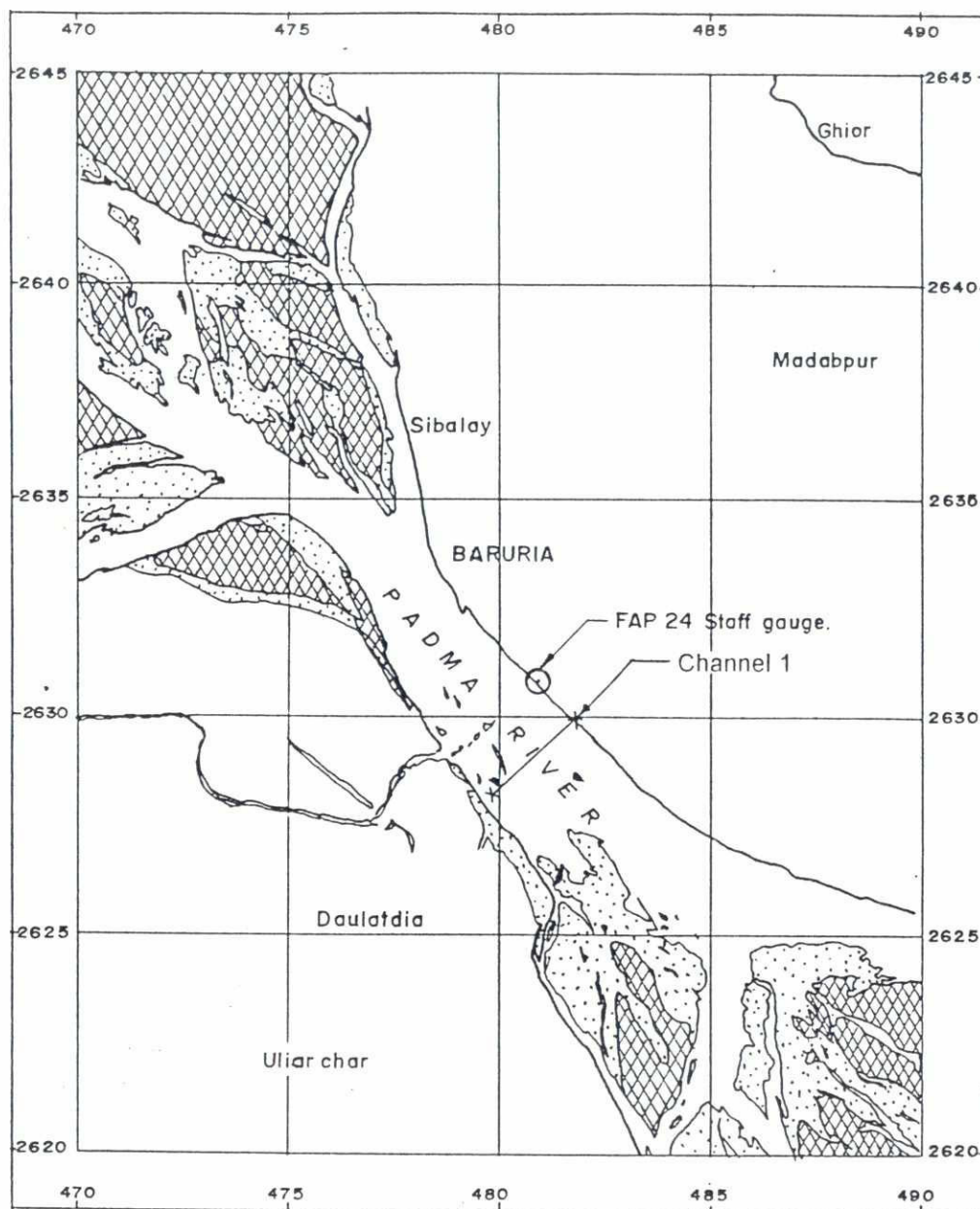
Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Delft-Bottle Sample	1	1	9507031155-1200	481554	629563	13.50	A138
		2	9507031228-1250	481260	629368	14.20	A780
		3	9507031352-1543	481088	629214	14.40	A980
		4	9507041405-1408	480926	629141	14.20	A954
		5	9507041428-1448	480678	629024	12.80	A766
		6	9507041517-1533	480570	628907	9.20	A1026
		7	9507041552-1613	480380	628774	8.50	A474
		8	9507050928-0952	480217	628664	8.40	A1056
		9	9507051031-1051	480008	628473	8.50	A781
		10	9507051119-1138	479777	628377	8.60	A794
		11	9507051202-1215	479564	628229	9.40	A1018
		12	9507051234-1248	479427	628142	6.60	A944
		1	9507031155-1200	481554	629563	13.50	A952
		2	9507031228-1250	481260	629368	14.20	A990
		3	9507031352-1543	481088	629214	14.40	A1046
		4	9507041405-1408	480926	629141	14.20	A1031
		5	9507041428-1448	480678	629024	12.80	A996
		6	9507041517-1533	480570	628907	9.20	A1060
		7	9507041552-1613	480380	628774	8.50	A4083
		8	9507050928-0952	480217	628664	8.40	A624
		9	9507051031-1051	480008	628473	8.50	A782
		10	9507051119-1138	479777	628377	8.60	A998
		11	9507051202-1215	479564	628229	9.40	A773
		12	9507051234-1248	479427	628142	6.60	A951

Table 6.6: Near bed load

 <p>FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>		Survey Bulletin 171 : 03 - 05 July, 1995	
		Location 5 : Padma River, Baruria	
	Date : 26 Oct 1995	Collected data and their storage (2)	page 6.2
	Init : ss		

Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U5741T07 .ase
Echosounder data	1	QUATTRO	U5741T07 .ech
Sediment transport data	1	QUATTRO	U5741T07 .sed
Susp. sed. conc. analysis	1	QUATTRO	U5741T07 .ssc
Transect plot data	1	QUATTRO	U5741T07 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U5741T07 .ct2 U5741T07 .dt2
Table 7.1 PSD 24 Database file description			

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 171 : 03 - 05 July, 1995	
		Location 5 : Padma River, Baruria	
	Date : 26 Oct 1995	PSD 24 Database file description	page
	Init : ss		7.1



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



DELFT - DHI

RIVER SURVEY PROJECT
Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 179 : 05 - 06 August, 1995

Location 5 : Padma River, Baruria

Date : 31 Dec 1995

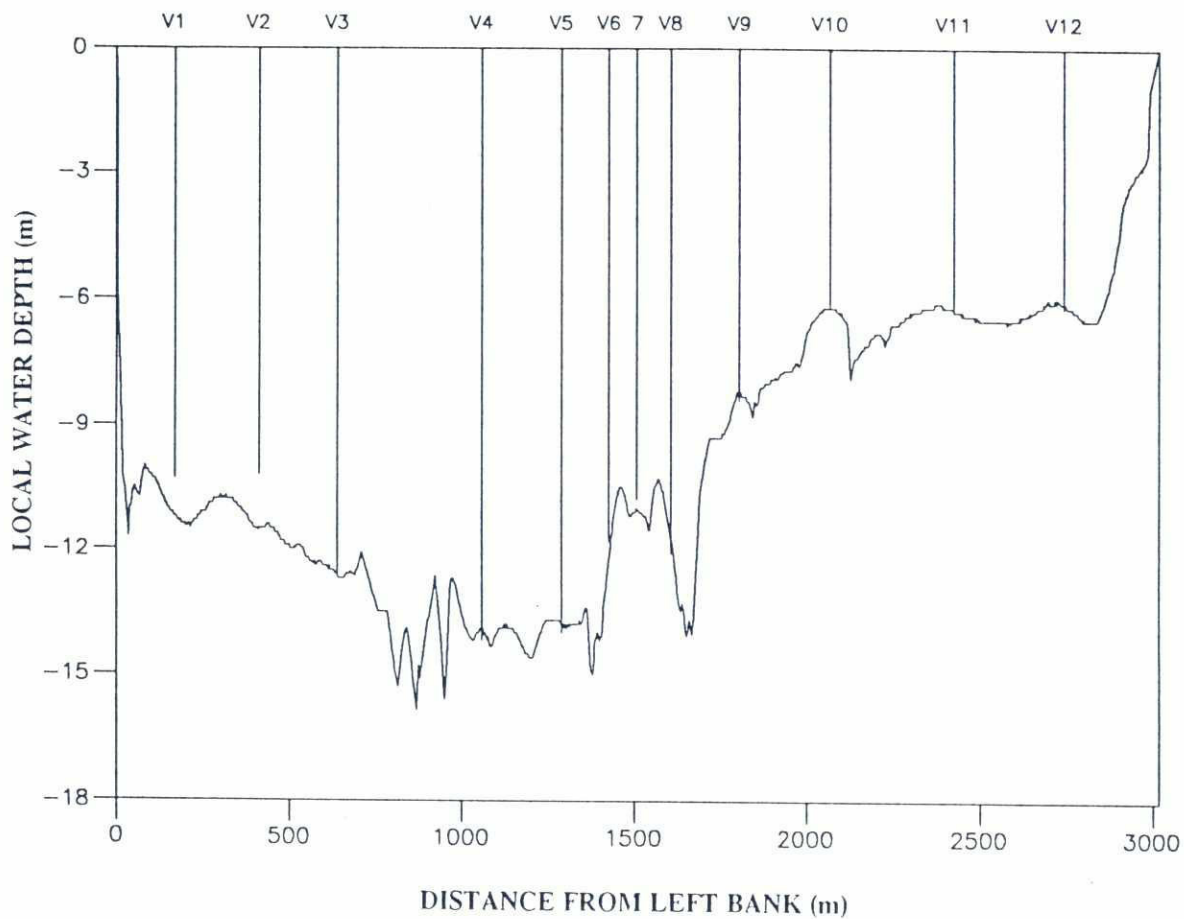
Init : sjr

Location map


page

1.1

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Water level : 7.39 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>		<div>Survey Bulletin 179 : 05 - 06 August, 1995</div>	
		<div>Location 5 : Padma River, Baruria</div>	
<div>File : U5853T02</div>	<div>Date : 31 Dec 1995</div>	<div>Cross-sections and measured verticals</div> <div>Channel 1</div>	<div>page</div> <div>1.2</div>
	<div>Init : sjr</div>		


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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	-	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	-	-	-	-
	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					

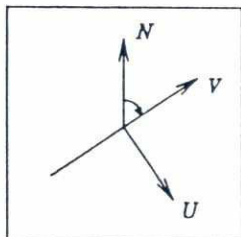
Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3015	29767	7.39	55180	280	39992
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel I	05 Aug 95	7.39	FAP24
		06 Aug 95	7.37	

Table 2.3: Water-levels

<div><div><div>FAP 24</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 179 : 05 - 06 August, 1995	
		Location 5 : Padma River, Baruria	
File : U5853T02	Date : 31 Dec 1995	Survey programme as made and key figures	page 2.1
	Init : sjr		

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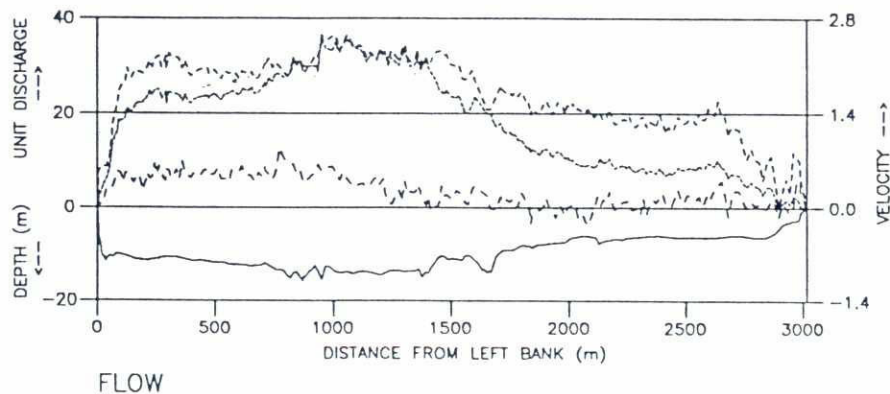


TRANSECT AZIMUTH = 56°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



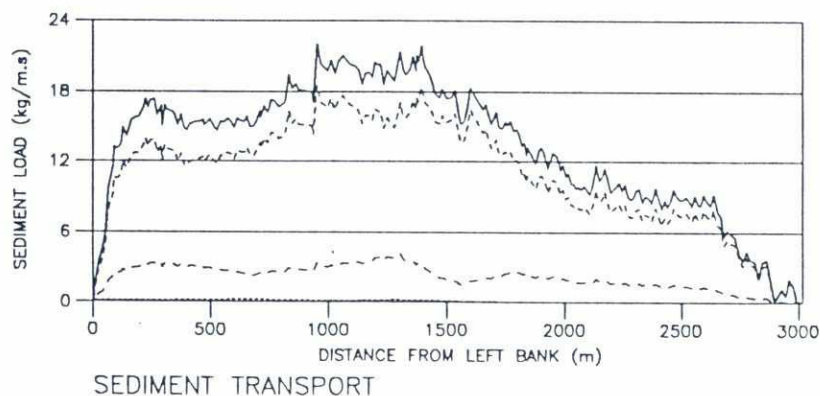
LEGEND :

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

STAGE = 7.39 (m+PWD)

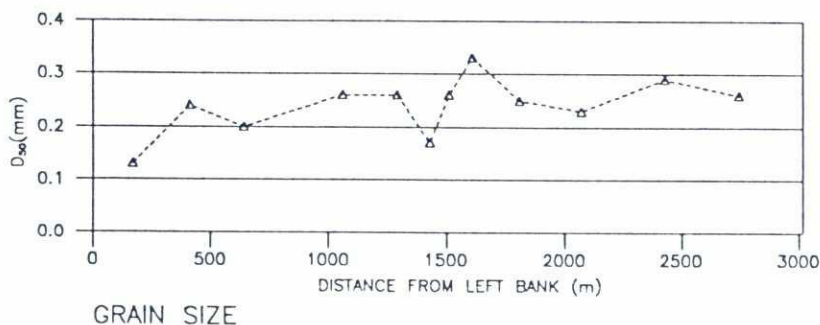
A = 29767 (m³)

Q = 55180 (m³/s)



LEGEND :

— S_{TOTAL} 40272 (kg/s)
 --- $S_{WASH LOAD}$ 33405 (kg/s)
 - - - $S_{SUSP. BED}$ 6587 (kg/s)
 - - - $S_{BED LOAD}$ 280 (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 179 : 05 - 06 August, 1995

Location 5 : Padma River, Baruria

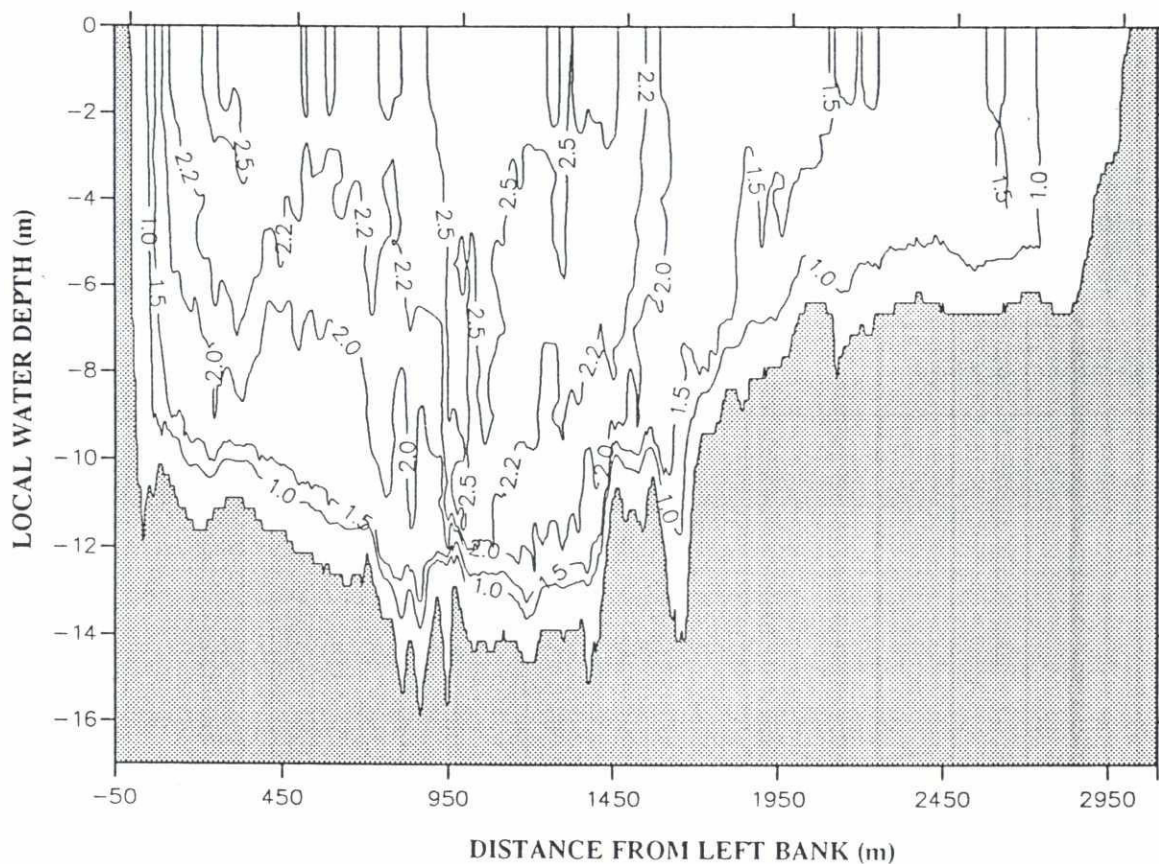
File : U5853T02

Date : 31 Dec 1995

Init : sjr


Horizontal distribution of flow and sediments
 Channel 1

page
 3.1




Iso-velocity contours (m/s)

Water level : 7.39 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 179 : 05 - 06 August, 1995	
		Location 5 : Padma River, Baruria	
File : U5853T02	Date : 31 Dec 1995	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : sjr		

Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	1	9508061036-1047	10.30	4.16	95.84	0.103	0.130	0.164
	2	9508061051-1059	10.20	0.31	99.69	0.293	0.336	0.385
	3	9508061106-1114	12.60	1.34	98.66	0.161	0.190	0.225
	4	9508061122-1130	14.20	0.70	99.30	0.164	0.187	0.214
	5	9508061138-1146	14.00	0.58	99.42	0.293	0.334	0.382
	6	9508061151-1200	11.80	0.93	99.07	0.153	0.179	0.210
	7	9508051500-1511	10.80	0.58	99.42	0.148	0.173	0.201
	8	9508051439-1455	12.10	0.04	99.96	0.287	0.327	0.372
	9	9508051427-1436	8.40	0.82	99.18	0.149	0.174	0.204
	10	9508051414-1423	6.20	1.02	98.98	0.286	0.329	0.378
	11	9508051400-1412	6.30	1.88	98.12	0.226	0.286	0.343
	12	9508051344-1359	6.20	1.77	98.23	0.276	0.322	0.375
	1	9508061036-1047	10.30	3.89	96.11	0.099	0.124	0.158
	2	9508061051-1059	10.20	2.07	97.93	0.117	0.144	0.174
	3	9508061106-1114	12.60	2.08	97.92	0.166	0.200	0.240
	4	9508061122-1130	14.20	0.60	99.40	0.299	0.339	0.385
	5	9508061138-1146	14.00	0.58	99.42	0.164	0.189	0.217
	6	9508061151-1200	11.80	0.88	99.12	0.150	0.171	0.196
	7	9508051500-1511	10.80	0.34	99.66	0.295	0.336	0.384
	8	9508051439-1455	12.10	0.05	99.95	0.292	0.331	0.376
	9	9508051427-1436	8.40	0.11	99.89	0.287	0.328	0.374
	10	9508051414-1423	6.20	2.20	97.80	0.109	0.140	0.179
	11	9508051400-1412	6.30	1.59	98.41	0.247	0.294	0.349
	12	9508051344-1359	6.20	2.46	97.54	0.153	0.194	0.247

Table 5.1 : Grain sizes of bed load

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 179 : 05 - 06 August, 1995	
		Location 5 : Padma River, Baruria	
	Date : 31 Dec 1995	Grain size distributions	page 5.1
	Init : sjr		

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9508051144-1213 9508051218-1302 9508051527-1616 9508051621-1647 9508060851-0950 9508060956-1031 9508061351-1431 9508061433-1501	U5853T02 * U5853T03 U5853T05 U5853T07 U5863T01 U5863T02 U5863T07 U5863T08

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 2 3 4 5 6 7 8 9 10 11 12	9508061036-1047 9508061051-1059 9508061106-1114 9508061122-1130 9508061138-1146 9508061151-1200 9508051500-1511 9508051439-1455 9508051427-1436 9508051414-1423 9508051400-1412 9508051344-1359	481461 481258 481045 480738 480524 480407 480342 480248 480092 479875 479578 479308	629491 629359 629225 628997 628871 628789 628736 628682 628581 628434 628239 628058	10.30 10.20 12.60 14.20 14.00 11.80 10.80 12.10 8.40 6.20 6.30 6.20	U5863P01 * U5863P02 * U5863P03 * U5863P04 * U5863P05 * U5863P06 * U5853P07 * U5853P06 * U5853P05 * U5853P04 * U5853P03 * U5853P02 *

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	1	1 2 3 4 5 6 7 8 9 10 11 12	1 1 1 1 1 1 1 1 1 1 1 1	9508061036-1047 9508061051-1059 9508061106-1114 9508061122-1130 9508061138-1146 9508061151-1200 9508051500-1511 9508051439-1455 9508051427-1436 9508051414-1423 9508051400-1412 9508051344-1359	481461 481258 481045 480738 480524 480407 480342 480248 480092 479875 479578 479308	629491 629359 629225 628997 628871 628789 628736 628682 628581 628434 628239 628058	10.30 10.20 12.60 14.20 14.00 11.80 10.80 12.10 8.40 6.20 6.30 6.20


Table 6.3: Suspended sediment - depth integrated

<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 179 : 05 - 06 August, 1995	
		Location 5 : Padma River, Baruria	
	Date : 31 Dec 1995	Collected data and their storage (1)	page 6.1
	Init : sjr		

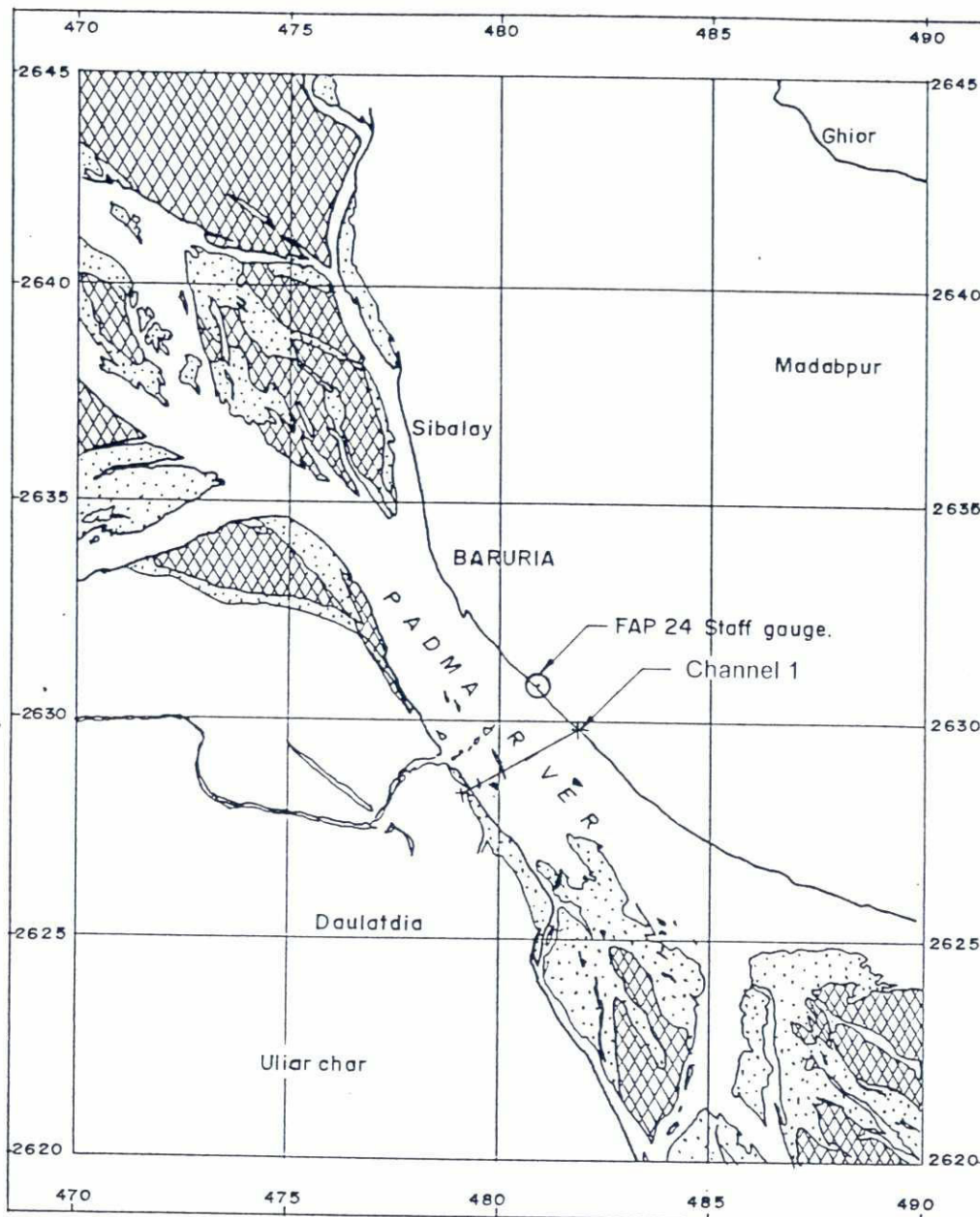
Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9508061036-1047	481461	629491	10.30	C-727
		2	9508061051-1059	481258	629359	10.20	C-156
		3	9508061106-1114	481045	629225	12.60	C-607
		4	9508061122-1130	480738	628997	14.20	C-002
		5	9508061138-1146	480524	628871	14.00	C-153
		6	9508061151-1200	480407	628789	11.80	C-612
		7	9508051500-1511	480342	628736	10.80	C-057
		8	9508051439-1455	480248	628682	12.10	C-521
		9	9508051427-1436	480092	628581	8.40	C-749
		10	9508051414-1423	479875	628434	6.20	C-628
		11	9508051400-1412	479578	628239	6.30	C-688
		12	9508051344-1359	479308	628058	6.20	C-611
		1	9508061036-1047	481461	629491	10.30	C-462
		2	9508061051-1059	481258	629359	10.20	C-723
		3	9508061106-1114	481045	629225	12.60	C-601
		4	9508061122-1130	480738	628997	14.20	C-228
		5	9508061138-1146	480524	628871	14.00	C-719
		6	9508061151-1200	480407	628789	11.80	C-626
		7	9508051500-1511	480342	628736	10.80	C-174
		8	9508051439-1455	480248	628682	12.10	C-739
		9	9508051427-1436	480092	628581	8.40	C-712
		10	9508051414-1423	479875	628434	6.20	C-576
		11	9508051400-1412	479578	628239	6.30	C-586
		12	9508051344-1359	479308	628058	6.20	C-646

Table 6.4: 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 179 : 05 - 06 August, 1995	
		Location 5 : Padma River, Baruria	
	Date : 31 Dec 1995	Collected data and their storage (2)	page 6.2
	Init : sjr		

Types of Data	Channel	Format	Filename 
ADCP/S4/EMF data	1	QUATTRO	U5853T02.ase
Echosounder data	1	QUATTRO	U5853T02.ech
Sediment transport data	1	QUATTRO	U5853T02.sed
Bed load sed. analysis	1	QUATTRO	U5853T02.bdl
Suspended sed. conc. analysis	1	QUATTRO	U5853T02.ssc
Transect plot data	1	QUATTRO	U5853T02.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5853T02.ct2 U5853T02.dt2
Table 7.1 PSD 24 Database file description			

<div><div><div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div></div> <div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div> <div><div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div></div></div> 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LEGEND:

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



5000m 2500m 0

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 186 : 30 - 31 August, 1995

Location 5 : Padma River, Baruria

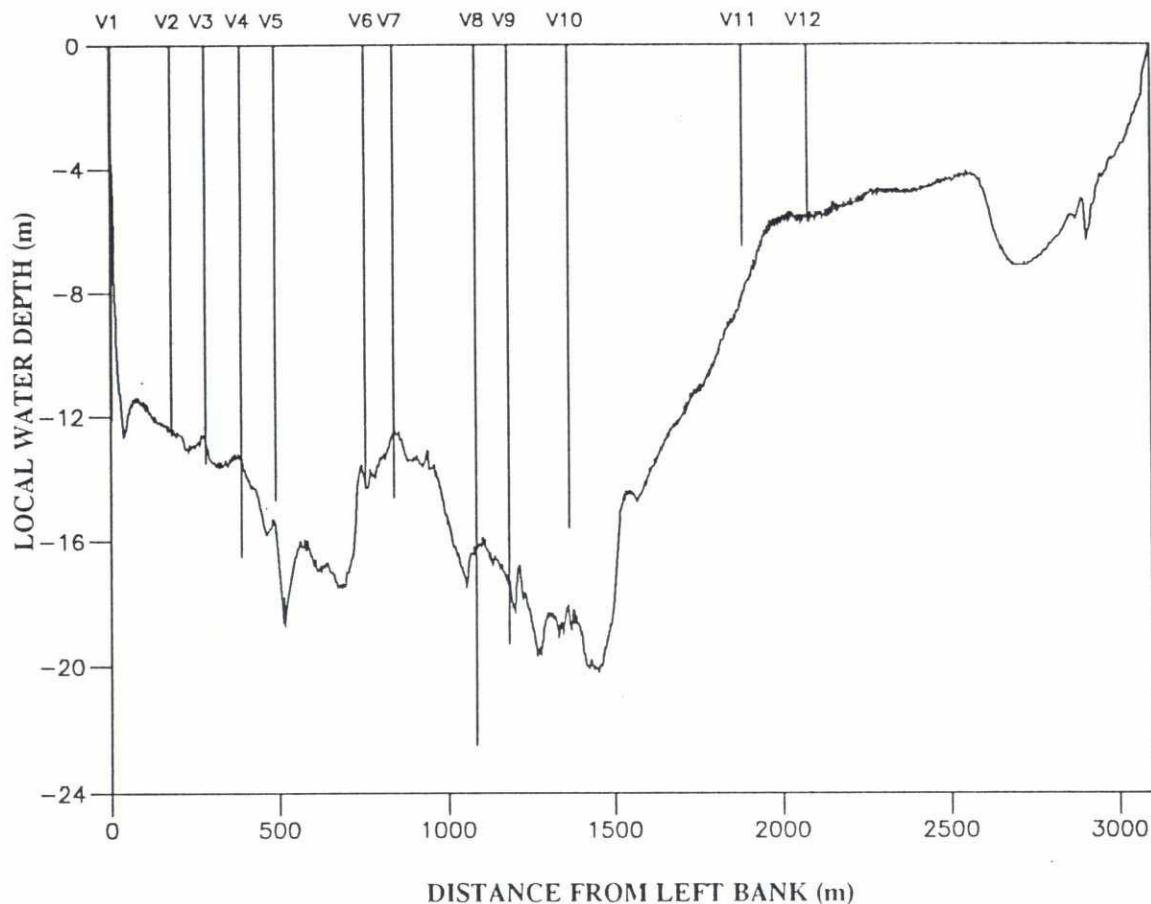
Date : 02 Jan 1996

Init : sjr


Location map

page

1.1



Water level : 8.05 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 186 : 30 - 31 August, 1995	
		Location 5 : Padma River, Baruria	
File : U58U3T04	Date : 02 Jan 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : sjr		

Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	6	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	-	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	-	-	-	-
	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

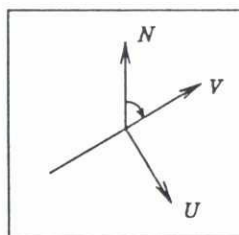
Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3095	33799	8.05	70090	1167	92232

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	30 Aug 95	8.05	FAP24
		31 Aug 95	8.03	

Table 2.3: Water-levels

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 186 : 30 - 31 August, 1995	
		Location 5 : Padma River, Baruria	
File : U58U3T04	Date : 02 Jan 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		

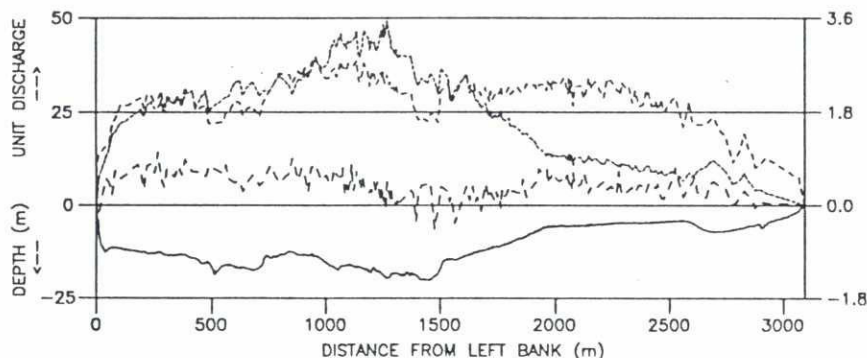


TRANSECT AZIMUTH = 59°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

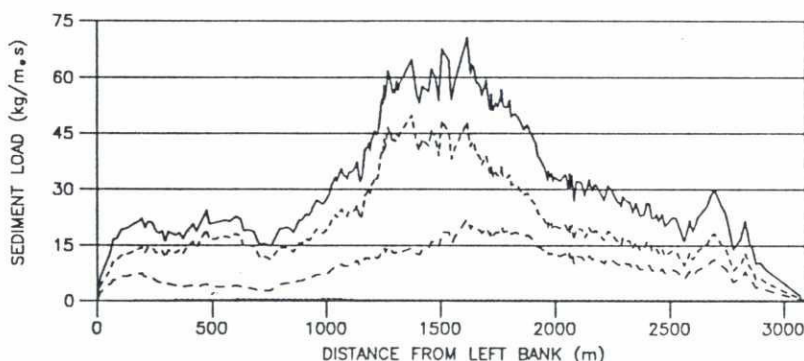
LEGEND :

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

STAGE = 8.05 (m+PWD)

A = 33799 (m²)

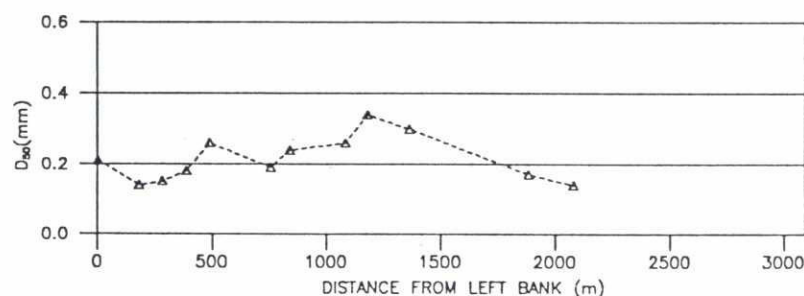
Q = 70090 (m³/s)



SEDIMENT TRANSPORT

LEGEND :

- S_{TOTAL} 93399 (kg/s)
- - - S_{WASH LOAD} 63502 (kg/s)
- ... S_{SUSP. BED} 28730 (kg/s)
- . - S_{BED LOAD} 1167 (kg/s)



GRAIN SIZE

LEGEND :

- ◇◇◇◇◇ D₅₀ SUSP. (mm)
- △△△△△ D₅₀ BED LOAD (mm)
- D₅₀ BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 186 : 30 - 31 August, 1995

Location 5 : Padma River, Baruria

File : U58U3T04

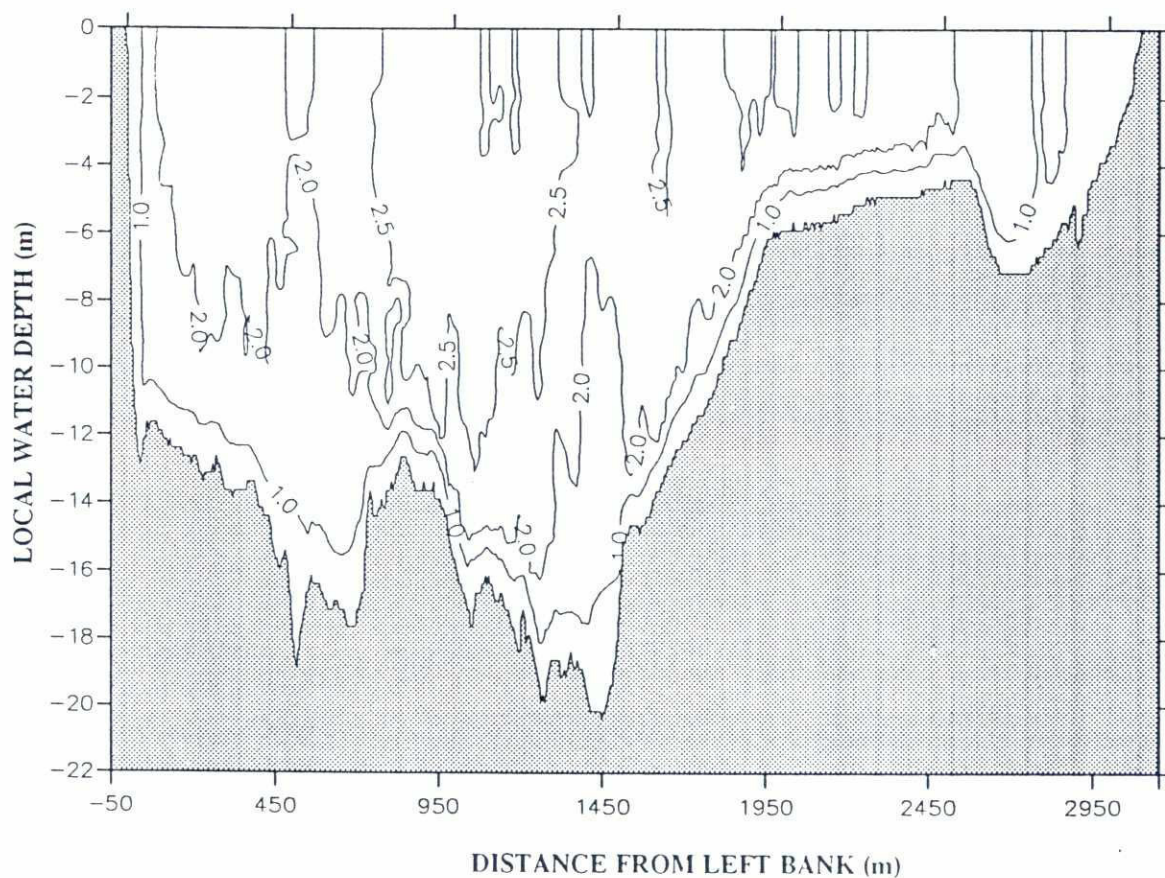
Date : 02 Jan 1996

Init : sjr

Horizontal distribution of flow and sediments
Channel 1

page
3.1

CS



Iso-velocity contours (m/s)

Water level : 8.05 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 186 : 30 - 31 August, 1995

Location 5 : Padma River, Baruria

File : U58U3T04

Date : 02 Jan 1996

Init : sjr

Cross-sectional distribution of flow velocity
Channel 1


page
4.1

96

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	9508301357-1401	12.10	0.53	99.47	0.175	0.208	0.247
	2	9508301414-1420	12.60	3.06	96.94	0.105	0.134	0.175
	3	9508301431-1437	13.50	3.52	96.48	0.117	0.149	0.187
	4	9508301500-1507	16.50	1.49	98.51	0.154	0.181	0.211
	5	9508301514-1521	14.70	1.32	98.68	0.145	0.167	0.193
	6	9508311002-1012	14.30	0.63	99.37	0.162	0.185	0.212
	7	9508311026-1033	14.60	0.49	99.51	0.201	0.252	0.311
	8	9508311047-1053	22.50	0.69	99.31	0.191	0.237	0.297
	9	9508311107-1117	19.30	0.05	99.95	0.293	0.334	0.379
	10	9508311145-1152	15.60	0.25	99.75	0.196	0.243	0.303
	11	9508311205-1212	6.50	2.07	97.93	0.141	0.166	0.197
	12	9508311217-1224	5.70	2.39	97.61	0.121	0.147	0.177
	1	9508301357-1401	12.10	0.85	99.15	0.169	0.209	0.259
	2	9508301414-1420	12.60	3.89	96.11	0.112	0.144	0.180
	3	9508301431-1437	13.50	2.73	97.27	0.122	0.151	0.186
	4	9508301500-1507	16.50	2.26	97.74	0.158	0.189	0.226
	5	9508301514-1521	14.70	0.15	99.85	0.305	0.347	0.393
	6	9508311002-1012	14.30	0.64	99.36	0.165	0.190	0.218
	7	9508311026-1033	14.60	1.19	98.81	0.184	0.225	0.283
	8	9508311047-1053	22.50	0.24	99.76	0.234	0.287	0.342
	9	9508311107-1117	19.30	0.07	99.93	0.309	0.347	0.388
	10	9508311145-1152	15.60	0.06	99.94	0.310	0.348	0.391
	11	9508311205-1212	6.50	1.99	98.01	0.143	0.168	0.196
	12	9508311217-1224	5.70	2.78	97.22	0.108	0.137	0.167

Table 5.1 : 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 186 : 30 - 31 August, 1995	
		Location 5 : Padma River, Baruria	
	Date : 02 Jan 1996	Grain size distributions	page 5.1
	Init : sjr		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9508301032-1147 9508301159-1239 9508301543-1617 9508301619-1652 9508310837-0916 9508310917-0953	U58U3T03 U58U3T04 * U58U3T06 U58U3T07 U58V3T02 U58V3T03

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 2 3 4 5 6 7 8 9 10 11 12	9508301357-1401 9508301414-1420 9508301431-1437 9508301500-1507 9508301514-1521 9508311002-1012 9508311026-1033 9508311047-1053 9508311107-1117 9508311145-1152 9508311205-1212 9508311217-1224	481549 481472 481398 481297 481206 481005 480948 480745 480660 480487 480049 479896	629550 629496 629444 629385 629319 629187 629151 629019 628955 628843 628543 628436	12.10 12.60 13.50 16.50 14.70 14.30 14.60 22.50 19.30 15.60 6.50 5.70	U58U3P01 * U58U3P02 * U58U3P03 * U58U3P04 * U58U3P05 * U58V3P01 * U58V3P02 * U58V3P03 * U58V3P04 * U58V3P05 * U58V3P06 * U58V3P07 *

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	1	1 2 3 4 5 6 7 8 9 10 11 12	1 1 1 1 1 1 1 1 1 1 1 1	9508301357-1401 9508301414-1420 9508301431-1437 9508301500-1507 9508301514-1521 9508311002-1012 9508311026-1033 9508311047-1053 9508311107-1117 9508311145-1152 9508311205-1212 9508311217-1224	481549 481472 481398 481297 481206 481005 480948 480745 480660 480487 480049 479896	629550 629496 629444 629385 629319 629187 629151 629019 628955 628843 628543 628436	12.10 12.60 13.50 16.50 14.70 14.30 14.60 22.50 19.30 15.60 6.50 5.70

Table 6.3: Suspended sediment - depth integrated

FAP 24  DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 186 : 30 - 31 August, 1995	
				Location 5 : Padma River, Baruria	
		Date : 02 Jan 1996 Init : sjr		Collected data and their storage (1)	
				page 6.1	

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Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9508301357-1401	481549	629550	12.10	C114
		2	9508301414-1420	481472	629496	12.60	C459
		3	9508301431-1437	481398	629444	13.50	C128
		4	9508301500-1507	481297	629385	16.50	C790
		5	9508301514-1521	481206	629319	14.70	C231
		6	9508311002-1012	481005	629187	14.30	C132
		7	9508311026-1033	480948	629151	14.60	C531
		8	9508311047-1053	480745	629019	22.50	C151
		9	9508311107-1117	480660	628955	19.30	C631
		10	9508311145-1152	480487	628843	15.60	C495
		11	9508311205-1212	480049	628543	6.50	C581
		12	9508311217-1224	479896	628436	5.70	A37
		1	9508301357-1401	481549	629550	12.10	A50
		2	9508301414-1420	481472	629496	12.60	C236
		3	9508301431-1437	481398	629444	13.50	C675
		4	9508301500-1507	481297	629385	16.50	C667
		5	9508301514-1521	481206	629319	14.70	A44
		6	9508311002-1012	481005	629187	14.30	C529
		7	9508311026-1033	480948	629151	14.60	C671
		8	9508311047-1053	480745	629019	22.50	C772
		9	9508311107-1117	480660	628955	19.30	C574
		10	9508311145-1152	480487	628843	15.60	C157
		11	9508311205-1212	480049	628543	6.50	C141
		12	9508311217-1224	479896	628436	5.70	C181
Table 6.4: Bed load							

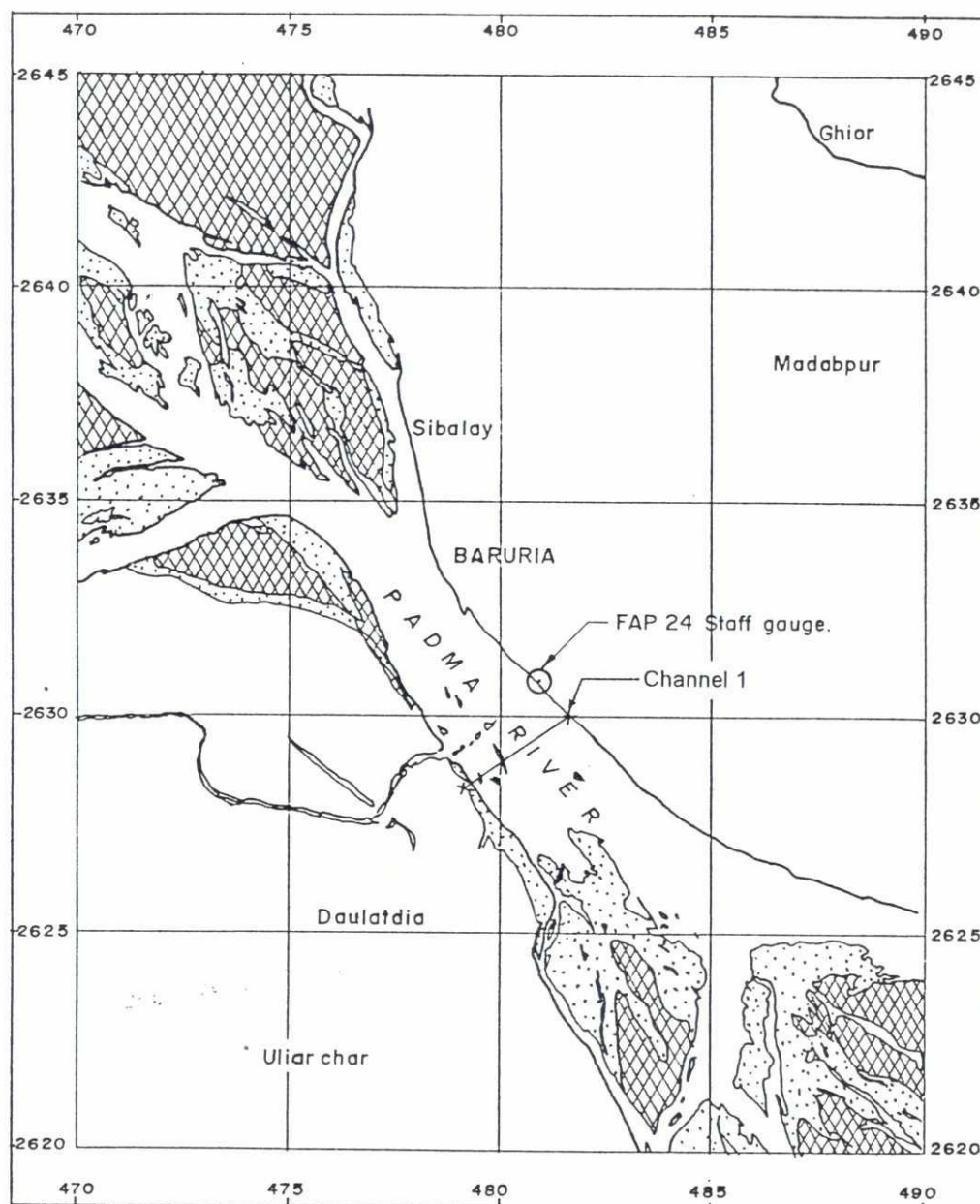
<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 186 : 30 - 31 August, 1995	
		Location 5 : Padma River, Baruria	
	Date : 02 Jan 1996	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	U58U3T04 .ase
Echosounder data	1	QUATTRO	U58U3T04 .ech
Sediment transport data	1	QUATTRO	U58U3T04 .sed
Bed load sed. analysis	1	QUATTRO	U58U3T04 .bdl
Suspended sed. conc. analysis	1	QUATTRO	U58U3T04 .ssc
Transect plot data	1	QUATTRO	U58U3T04 .trs
Iso-velocity plot data	1	MIKE 21	U58U3T04 .ct2 U58U3T04 .dt2

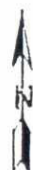
Table 7.1 PSD 24 Database file description

<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 186 : 30 - 31 August, 1995	
		Location 5 : Padma River, Baruria	
Date : 02 Jan 1996		PSD 24 Database file description	page 7.1
Init : sjr			



LEGEND:

- ✕✕ Cross section
- ▨ Highland
- ▤ Unstable/low char
- FAP 24 Staff gauge



5000 m 2500m 0

Map is based on satellite images of March 1995



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

Survey Bulletin 201 : 29 - 30 September, 1995

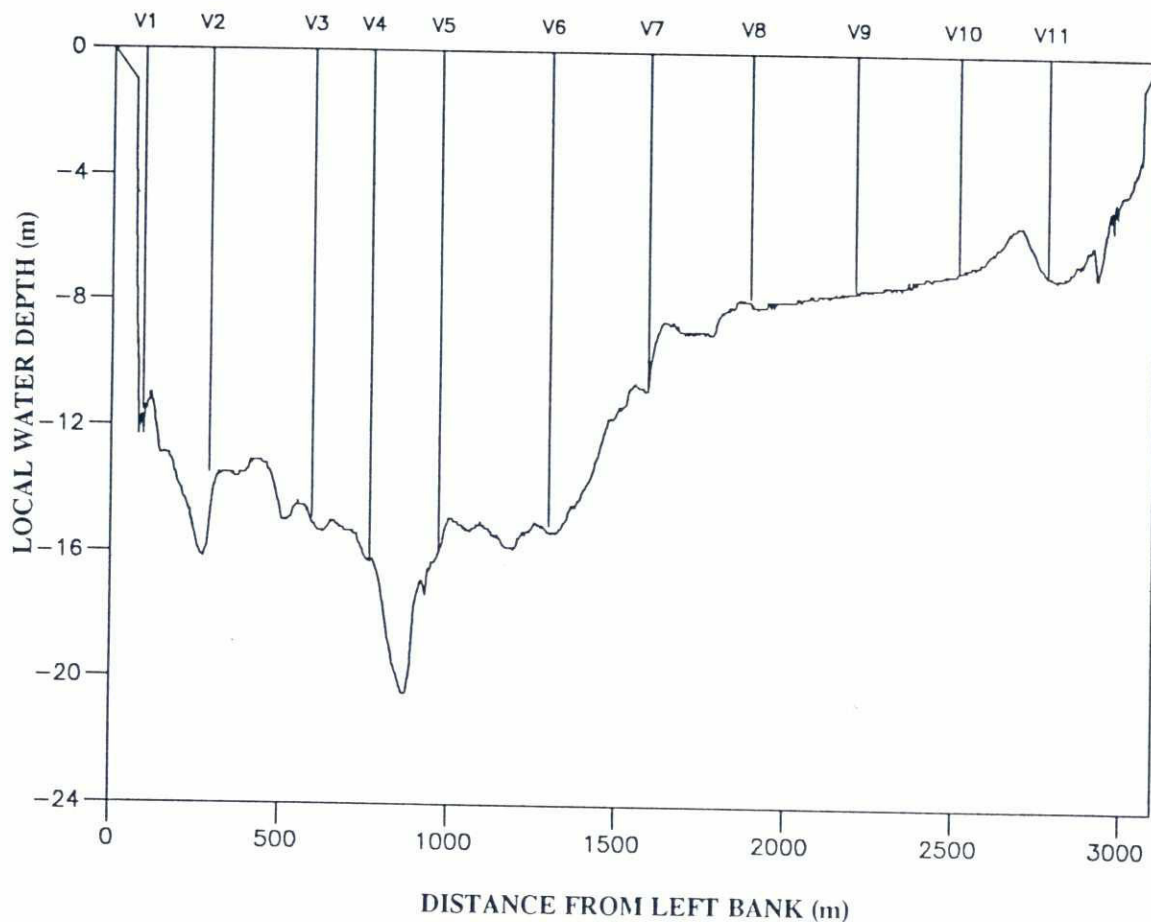
Location 5 : Padma River, Baruria

Date : 2 Mar 1996


Init : sjr

Location map

page
1.1



Water level : 8.23 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 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
File : U59UIT02	Date : 29 Feb 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : sjr		

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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	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	19	-	-	-
	Delft Bottle	1	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

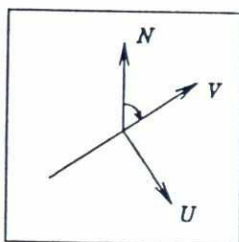
Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3103	32927	8.23	82279	550	146879

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	29 Sep 95	8.19	FAP24
		30 Sep 95	8.23	

Table 2.3: Water-levels

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities DELFT - DHI		Survey Bulletin 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
File : U59U1T02	Date : 29 Feb 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		

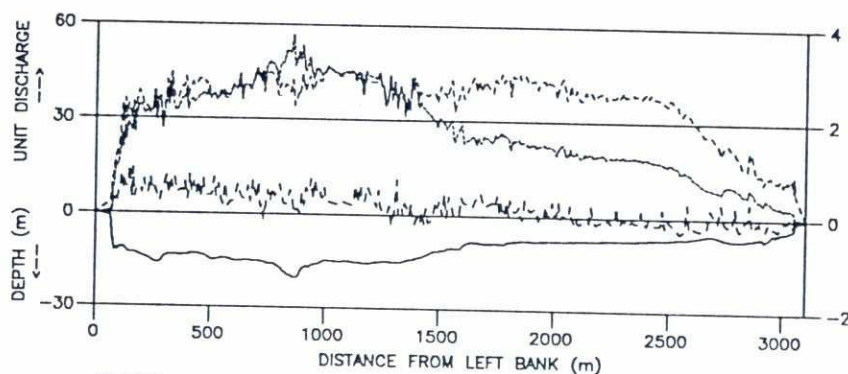


TRANSECT AZIMUTH = 56°

U - VELOCITY NORMAL TO TRANSECT (m/s)

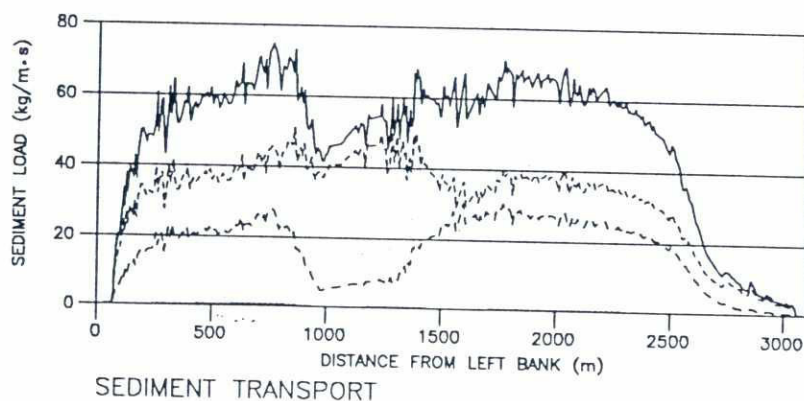
V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



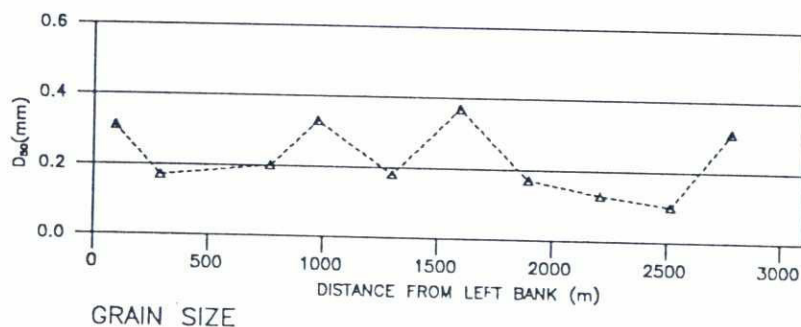
LEGEND :

— WATER DEPTH (m below STAGE)
 — UNIT DISCHARGE (m³/s.m)
 --- U (m/s)
 --- V (m/s)
 STAGE = 8.23 (m+PWD)
 A = 32927 (m²)
 Q = 82279 (m³/s)



LEGEND :

— S_{TOTAL} 147429 (kg/s)
 --- $S_{WASH\ LOAD}$ 96265 (kg/s)
 --- $S_{SUSP.\ BED}$ 50614 (kg/s)
 --- $S_{BED\ LOAD}$ 550 (kg/s)



LEGEND :

◆◆◆◆ $D_{60\ SUSP.}$ (mm)
 ▲▲▲▲ $D_{60\ BED\ LOAD}$ (mm)
 □□□□ $D_{60\ BED\ MAT.}$ (mm)



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

Survey Bulletin 201 : 29 - 30 September, 1995

Location 5 : Padma River, Baruria

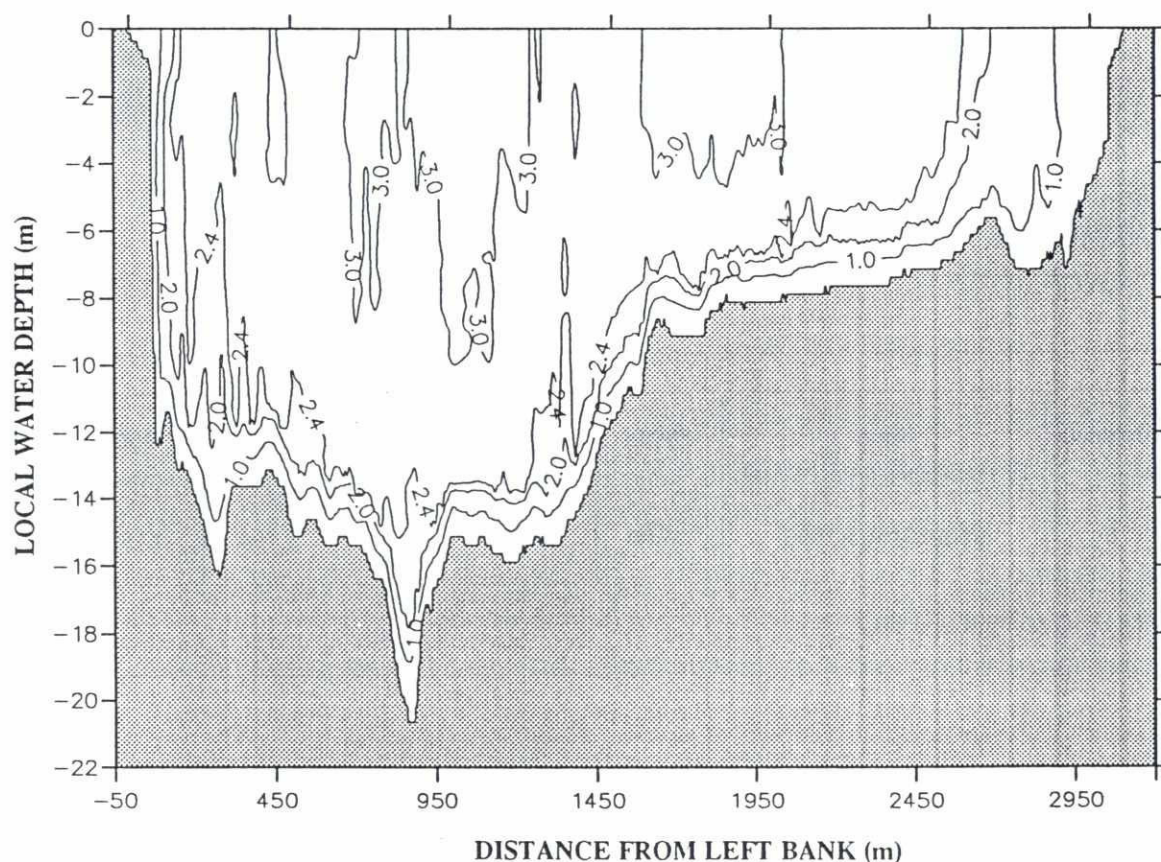
File : U59U1T02

Date : 29 Feb 1996

Init : sjr


Horizontal distribution of flow and sediments
 Channel 1

page
 3.1



Iso-velocity contours (m/s)

Water level : 8.23 m+PWD measured at the station indicated on page 1.1

<div style="display: flex; align-items: center;"> <div style="text-align: center;"> FAP 24  DELFT - DHI </div> <div style="margin-left: 20px;"> RIVER SURVEY PROJECT <small>Flood Plan Coordination Organization Commission of the European Communities</small> </div> </div>		Survey Bulletin 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
File : U59U1T02	Date : 29 Feb 1996	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : sjr		


Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	1	9509301346-1400	11.50	0.38	99.62	0.261	0.304	0.354
	2	9509301412-1424	13.50	1.52	98.48	0.142	0.174	0.213
	4	9509301455-1505	16.30	0.39	99.61	0.167	0.192	0.221
	5	9509301503-1636	16.00	0.45	99.55	0.292	0.333	0.379
	6	9509301230-1236	15.10	0.78	99.22	0.161	0.183	0.209
	7	9509301217-1224	10.70	0.11	99.89	0.332	0.398	0.477
	8	9509301146-1158	7.80	0.98	99.02	0.141	0.164	0.191
	9	9509301129-1138	7.50	1.28	98.72	0.103	0.128	0.158
	10	9509301110-1122	6.90	2.22	97.78	0.087	0.101	0.117
	11	9509301039-1046	7.00	1.02	98.98	0.240	0.291	0.347
	1	9509301346-1400	11.50	0.28	99.72	0.281	0.321	0.368
	2	9509301412-1424	13.50	1.21	98.79	0.140	0.167	0.199
	4	9509301455-1505	16.30	0.36	99.64	0.182	0.217	0.263
	6	9509301230-1236	15.10	0.18	99.82	0.164	0.186	0.212
	7	9509301217-1224	10.70	0.28	99.72	0.305	0.343	0.385
	8	9509301146-1158	7.80	0.85	99.15	0.146	0.169	0.195
	9	9509301129-1138	7.50	1.68	98.32	0.102	0.127	0.157
	10	9509301110-1122	6.90	3.83	96.17	0.084	0.096	0.110
	11	9509301039-1046	7.00	1.41	98.59	0.278	0.321	0.372

Table 5.1 : Grain sizes of bed load

Delft Bottle

Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Depth (m)	Weight percent		D35 (mm)	D50 (mm)	D65 (mm)
				< 0.06 mm	> 0.06 mm			
1	5	9509301503-1636	16.00	0.79	99.21	0.164	0.189	0.219

Table 5.2 : Grain sizes of near 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 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
	Date : 29 Feb 1996	Grain size distributions	page 5.1
	Init : sjr		

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9509291414-1516 9509300833-0953 9509301142-1215 9509301219-1250	U59T3T02 U59U3T04 U59U1T01 U59U1T02 *


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	9509301346-1400	481555	629563	11.50	U59U3P11 *
		2	9509301412-1424	481397	629448	13.50	U59U3P12 *
		3	9509301433-1443	481147	629279	14.90	U59U3P13 *
		4	9509301455-1505	481002	629179	16.30	U59U3P14 *
		5	9509301503-1636	480823	629077	16.00	U59U1P02 **
		6	9509301230-1236	480558	628882	15.10	U59U3P09 *
		7	9509301217-1224	480316	628723	10.70	U59U3P08 *
		8	9509301146-1158	480061	628550	7.80	U59U3P05 *
		9	9509301129-1138	479805	628377	7.50	U59U3P04 *
		10	9509301110-1122	479551	628209	6.90	U59U3P03 *
		11	9509301039-1046	479323	628063	7.00	U59U3P01 *

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	5	6	9509301503-1636	480823	629077	16.00

Table 6.3: Suspended sediment - point sample

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
	Date : 29 Feb 1996	Collected data and their storage (1)	page 6.1
	Init : sjr		

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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9509301346-1400	481555	629563	11.50
		2	1	9509301412-1424	481397	629448	13.50
		3	1	9509301433-1443	481147	629279	14.90
		4	1	9509301455-1505	481002	629179	16.30
		5	1	9509301503-1636	480823	629077	16.00
		6	1	9509301230-1236	480558	628882	15.10
		7	1	9509301217-1224	480316	628723	10.70
		8	1	9509301146-1158	480061	628550	7.80
		9	1	9509301129-1138	479805	628377	7.50
		10	1	9509301110-1122	479551	628209	6.90
		11	1	9509301039-1046	479323	628063	7.00


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	9509301346-1400	481555	629563	11.50	C426
		2	9509301412-1424	481397	629448	13.50	C431
		4	9509301455-1505	481002	629179	16.30	C222
		5	9509301503-1636	480823	629077	16.00	A696
		6	9509301230-1236	480558	628882	15.10	C517
		7	9509301217-1224	480316	628723	10.70	C513
		8	9509301146-1158	480061	628550	7.80	C505
		9	9509301129-1138	479805	628377	7.50	C477
		10	9509301110-1122	479551	628209	6.90	C593
		11	9509301039-1046	479323	628063	7.00	C417
		1	9509301346-1400	481555	629563	11.50	C397
		2	9509301412-1424	481397	629448	13.50	A1159
		4	9509301455-1505	481002	629179	16.30	C370
		6	9509301230-1236	480558	628882	15.10	C253
		7	9509301217-1224	480316	628723	10.70	C904
		8	9509301146-1158	480061	628550	7.80	C566
		9	9509301129-1138	479805	628377	7.50	C771
		10	9509301110-1122	479551	628209	6.90	C647
		11	9509301039-1046	479323	628063	7.00	C585

Table 6.5: Bed load

Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Delft Bottle Sample	1	5	9509301503-1636	480823	629077	16.00	A0600


Table 6.6: Near bed load

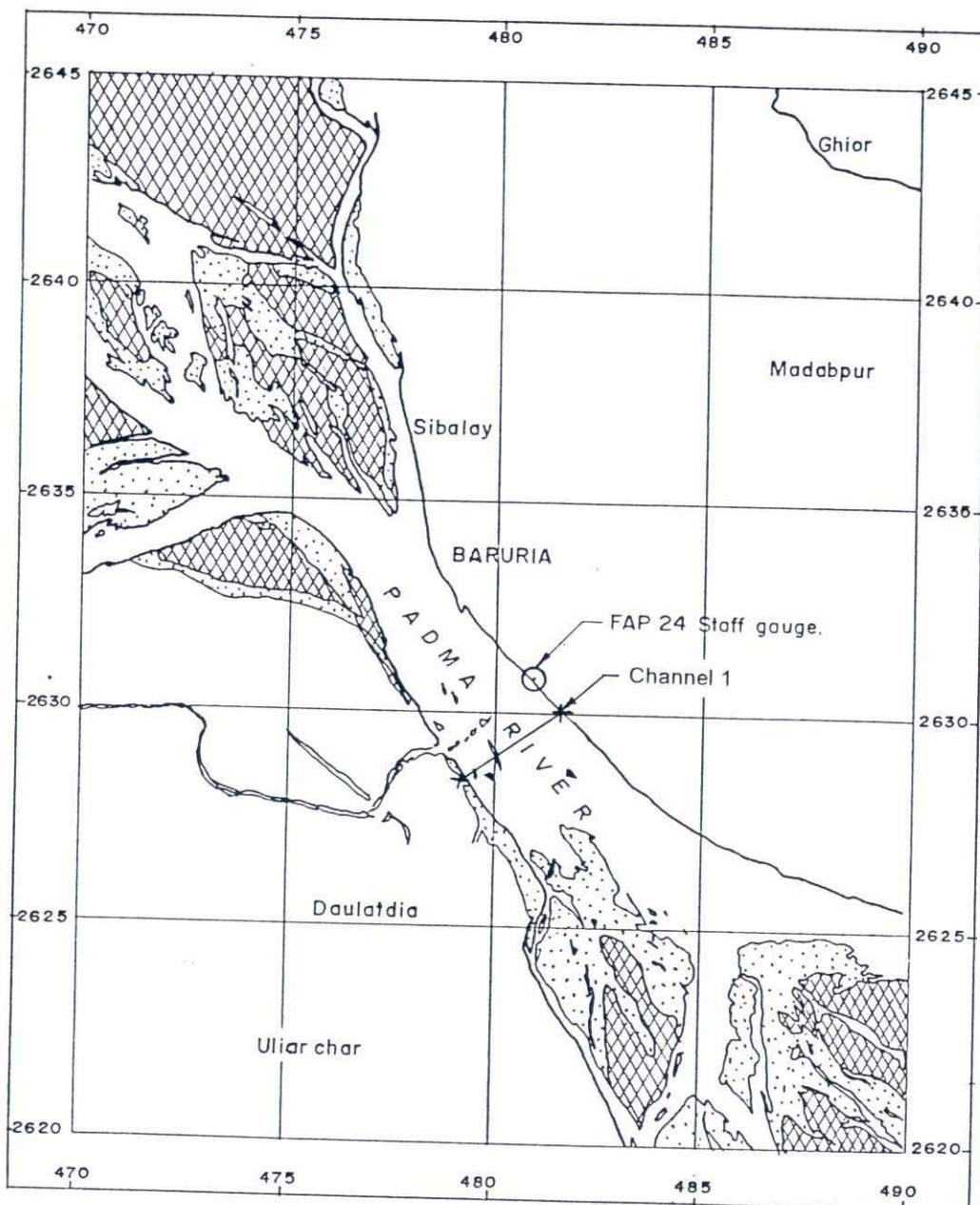
<div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div>		<div>RIVER SURVEY PROJECT</div> <div>Flood Plan Coordination Organization</div> <div>Commission of the European Communities</div>	Survey Bulletin 201 : 29 - 30 September, 1995	
			Location 5 : Padma River, Baruria	
		Date : 29 Feb 1996	Collected 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	U59U1T02.ase
Echosounder data	1	QUATTRO	U59U1T02.ech
Sediment transport data	1	QUATTRO	U59U1T02.sed
Bed load sediment analysis	1	QUATTRO	U59U1T02.bdl
Susp. sed. conc. analysis	1	QUATTRO	U59U1T02.ssc
Transect plot data	1	QUATTRO	U59U1T02.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U59U1T02.ct2 U59U1T02.dt2

Table 7.1: PSD 24 Database file description

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 201 : 29 - 30 September, 1995	
		Location 5 : Padma River, Baruria	
	Date : 29 Feb 1996	PSD 24 Database file description	page 7.1
	Init : sjr		



LEGEND:

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



5000 m 2500 m 0

Map is based on satellite images of March 1995



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

Survey Bulletin 207 : 09 - 10 October, 1995

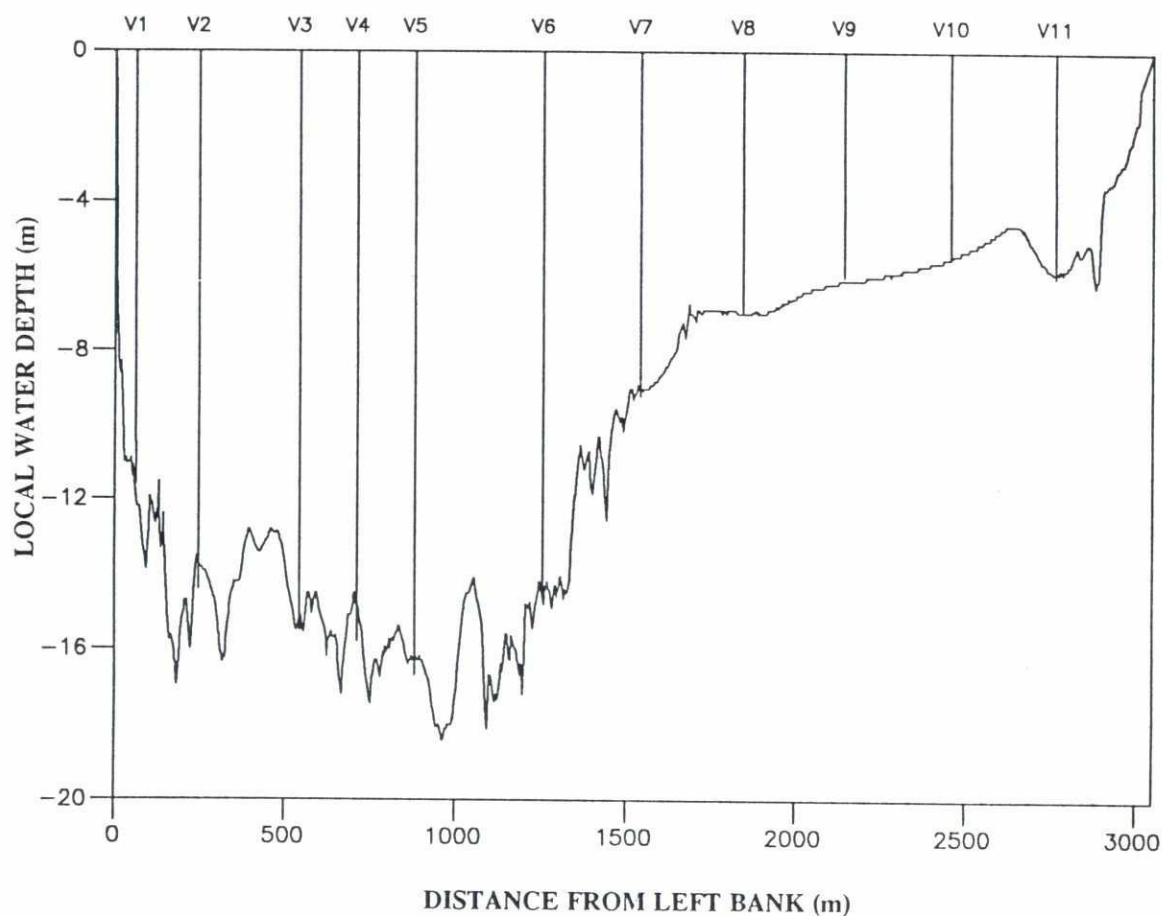
Location 5 : Padma River, Baruria

Date : 03 Mar 1996


Init : sjr

Location map

page
1.1



Water level : 7.01 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 207 : 09 - 10 October, 1995	
		Location 5 : Padma River, Baruria	
File : U5AA3T01	Date : 03 Mar 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : sjr		

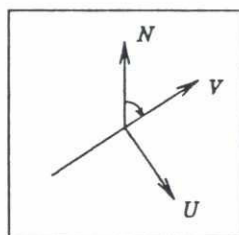
40

Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	3	-	-	-
	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	21	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-
Table 2.1: Survey programme as made					

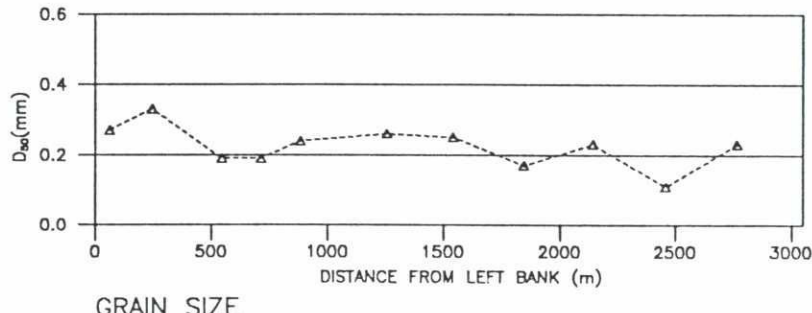
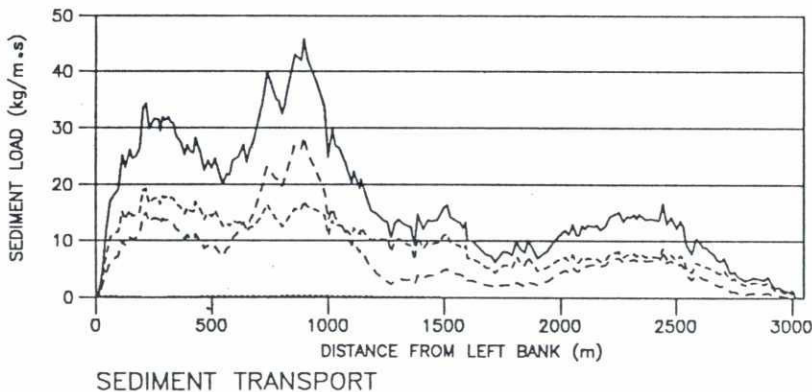
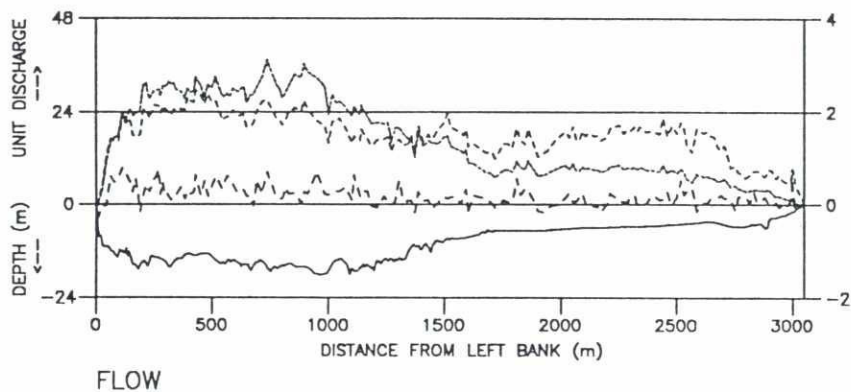
Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	3049	30821	7.01	50428	367	50860
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	09 Oct 95 10 Oct 95	7.16 7.01	FAP24
Table 2.3: Water-levels				

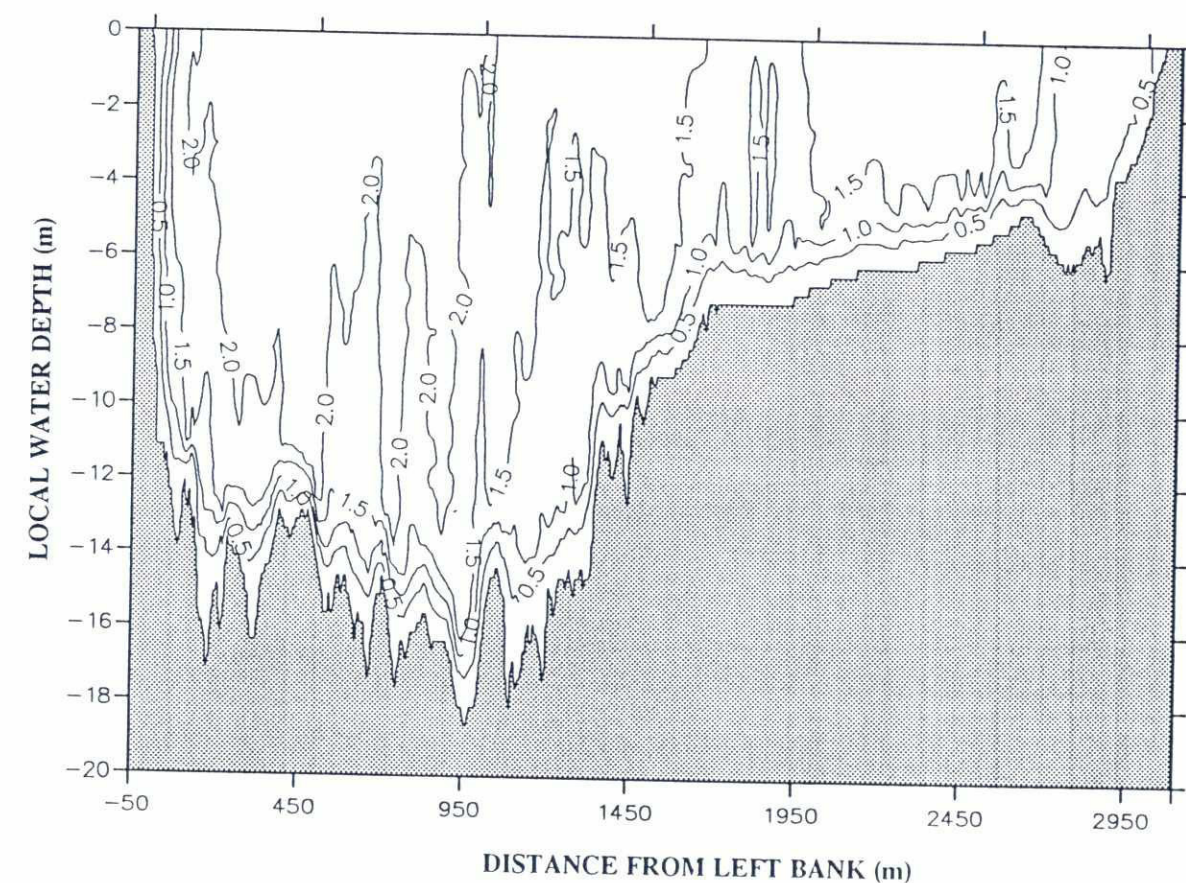
FAP 24  DELFT - DHI		Survey Bulletin 207 : 09 - 10 October, 1995	
		Location 5 : Padma River, Baruria	
File : U5AA3T01	Date : 03 Mar 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		



TRANSECT AZIMUTH = 56°
 U - VELOCITY NORMAL TO TRANSECT (m/s)
 V - VELOCITY PARALLEL TO TRANSECT (m/s)
 N - MAGNETIC NORTH



<div data-bbox="223 1792 367 1937"> <p>FAP 24</p> <p>DELFT - DHI</p> </div> <div data-bbox="399 1825 702 1915"> <p>RIVER SURVEY PROJECT</p> <p>Flood Plan Coordination Organization</p> <p>Commission of the European Communities</p> </div>		Survey Bulletin 207 : 09 - 10 October, 1995	
		Location 5 : Padma River, Baruria	
File : U5AA3T01	Date : 03 Mar 1996	Horizontal distribution of flow and sediments Channel 1	page 3.1
	Init : sjr		



Iso-velocity contours (m/s)

Water level : 7.01 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 207 : 09 - 10 October, 1995

Location 5 : Padma River, Baruria

File : U5AA3T01

Date : 03 Mar 1996


Init : sjr

Cross-sectional distribution of flow velocity
Channel 1

page
4.1

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	9510091540-1552	11.60	0.74	99.26	0.187	0.226	0.282
	2	9510091606-1616	14.40	0.05	99.95	0.288	0.328	0.373
	3	9510091623-1633	15.50	0.35	99.65	0.172	0.199	0.230
	4	9510091641-1652	15.80	0.70	99.30	0.177	0.209	0.248
	5	9510101029-1039	16.70	0.59	99.41	0.219	0.274	0.330
	6	9510101059-1110	14.50	0.41	99.59	0.207	0.259	0.317
	7	9510101121-1132	9.20	2.16	97.84	0.145	0.177	0.217
	8	9510101139-1150	7.00	3.18	96.82	0.127	0.158	0.197
	9	9510101155-1206	6.00	1.65	98.35	0.123	0.159	0.204
	10	9510101212-1222	5.50	5.35	94.65	0.092	0.112	0.146
	11	9510101227-1236	6.00	3.26	96.74	0.199	0.266	0.326
	1	9510091540-1552	11.60	0.11	99.89	0.275	0.316	0.364
	2	9510091606-1616	14.40	0.23	99.77	0.294	0.335	0.380
	3	9510091623-1633	15.50	0.57	99.43	0.164	0.187	0.214
	4	9510091641-1652	15.80	0.56	99.44	0.157	0.179	0.204
	5	9510101029-1039	16.70	0.30	99.70	0.174	0.205	0.240
	7	9510101121-1132	9.20	0.12	99.88	0.276	0.317	0.365
	8	9510101139-1150	7.00	1.43	98.57	0.149	0.183	0.226
	9	9510101155-1206	6.00	0.67	99.33	0.266	0.311	0.363
	10	9510101212-1222	5.50	4.56	95.44	0.094	0.115	0.147
	11	9510101227-1236	6.00	10.18	89.82	0.145	0.204	0.278


Table 5.1 : Grain sizes of bed load

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 207 : 09 - 10 October, 1995	
	Location 5 : Padma River, Baruria		
	Date : 03 Mar 1996	Grain size distributions	page 5.1
	Init : sjr		

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9510091158-1227 9510101248-1312 9510101319-1346	U5A93T01 U5AA3T01 * U5AA3T02
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	9510091540-1552	481547	629548	11.60	U5A93P01 *
		2	9510091606-1616	481394	629444	14.40	U5A93P02 *
		3	9510091623-1633	481142	629278	15.50	U5A93P03 *
		4	9510091641-1652	480997	629182	15.80	U5A93P04 *
		5	9510101029-1039	480883	629182	16.70	U5AA3P01 **
		6	9510101059-1110	480543	628895	14.50	U5AA3P02 *
		7	9510101121-1132	480318	628720	9.20	U5AA3P03 *
		8	9510101139-1150	480051	628560	7.00	U5AA3P04 *
		9	9510101155-1206	479813	628374	6.00	U5AA3P05 *
		10	9510101212-1222	479550	628217	5.50	U5AA3P06 *
		11	9510101227-1236	479286	628057	6.00	U5AA3P07 *
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	5	6	9510101029-1039	480883	629182	16.70
Table 6.3: Suspended sediment - point sample							

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 207 : 09 - 10 October, 1995	
	Location 5 : Padma River, Baruria		
	Date : 03 Mar 1996	Collected data and their storage (1)	page 6.1
	Init : sjr		


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Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9510091540-1552	481547	629548	11.60
		2	1	9510091606-1616	481394	629444	14.40
		3	1	9510091623-1633	481142	629278	15.50
		4	1	9510091641-1652	480997	629182	15.80
		5	1	9510101029-1039	480883	629182	16.70
		6	1	9510101059-1110	480543	628895	14.50
		7	1	9510101121-1132	480318	628720	9.20
		8	1	9510101139-1150	480051	628560	7.00
		9	1	9510101155-1206	479813	628374	6.00
		10	1	9510101212-1222	479550	628217	5.50
		11	1	9510101227-1236	479286	628057	6.00

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	9510091540-1552	481547	629548	11.60	C223
		2	9510091606-1616	481394	629444	14.40	C493
		3	9510091623-1633	481142	629278	15.50	C515
		4	9510091641-1652	480997	629182	15.80	C463
		5	9510101029-1039	480883	629182	16.70	C655
		6	9510101059-1110	480543	628895	14.50	C313
		7	9510101121-1132	480318	628720	9.20	A1378
		8	9510101139-1150	480051	628560	7.00	C766
		9	9510101155-1206	479813	628374	6.00	A365
		10	9510101212-1222	479550	628217	5.50	A34
		11	9510101227-1236	479286	628057	6.00	C321
		1	9510091540-1552	481547	629548	11.60	C309
		2	9510091606-1616	481394	629444	14.40	C185
		3	9510091623-1633	481142	629278	15.50	C496
		4	9510091641-1652	480997	629182	15.80	A56
		5	9510101029-1039	480883	629182	16.70	C327
		7	9510101121-1132	480318	628720	9.20	C133
		8	9510101139-1150	480051	628560	7.00	C315
		9	9510101155-1206	479813	628374	6.00	C661
		10	9510101212-1222	479550	628217	5.50	C134
		11	9510101227-1236	479286	628057	6.00	A366


Table 6.5: Bed load

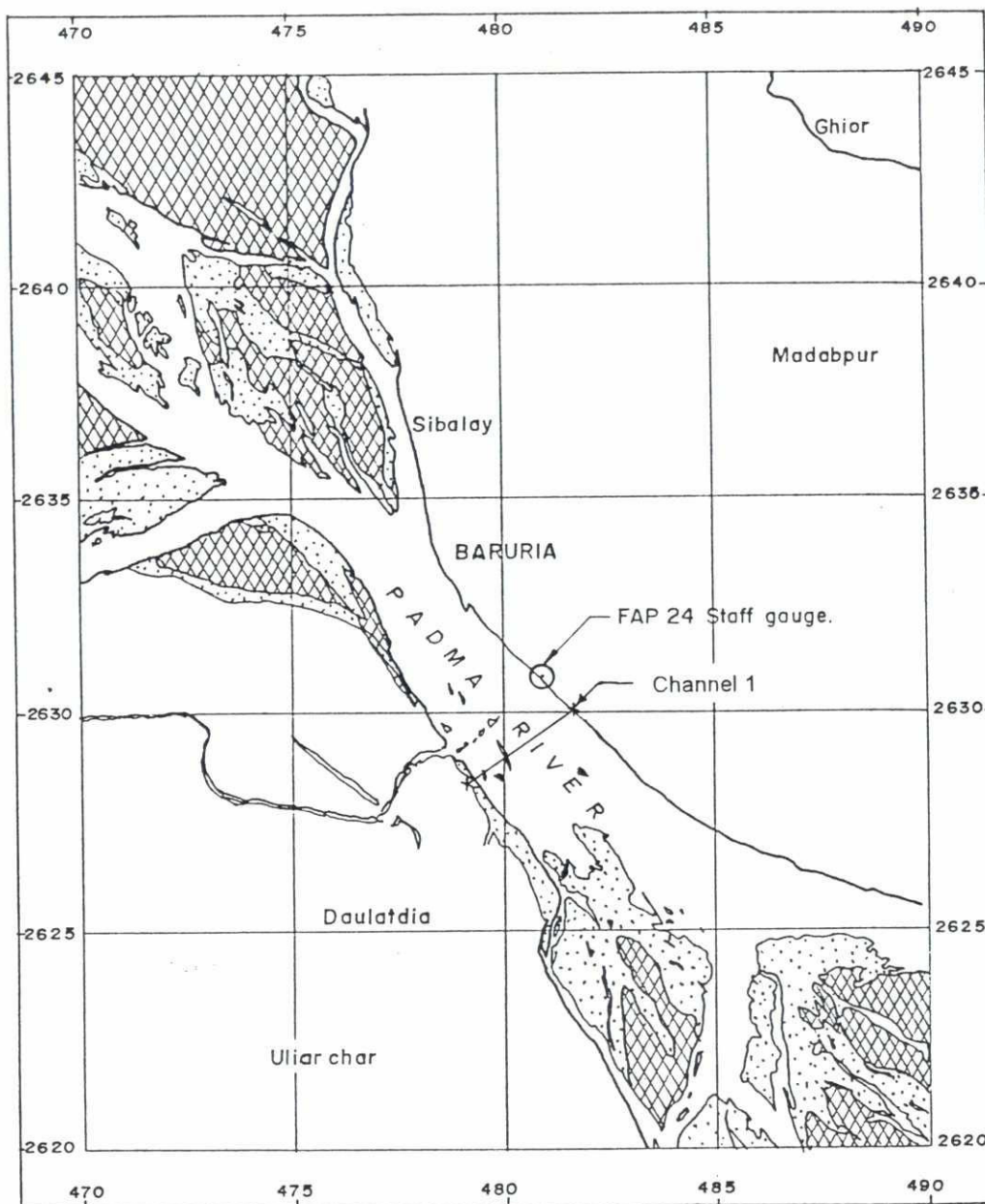
<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 207 : 09 - 10 October, 1995	
		Location 5 : Padma River, Baruria	
	Date : 03 Mar 1996	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	U5AA3T01.ase
Echosounder data	1	QUATTRO	U5AA3T01.ech
Sediment transport data	1	QUATTRO	U5AA3T01.sed
Bed load sediment analysis	1	QUATTRO	U5AA3T01.bdl
Susp. sed. conc. analysis	1	QUATTRO	U5AA3T01.ssc
Transect plot data	1	QUATTRO	U5AA3T01.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5AA3T01.ct2 U5AA3T01.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 207 : 09 - 10 October, 1995		
	Location 5 : Padma River, Baruria		
	Date : 03 Mar 1996	PSD 24 Database file description	page 7.1
	Init : sjr		



LEGEND:

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



5000 m 2500m 0

Map is based on satellite images of March 1995



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

Survey Bulletin 216 : 26 - 27 October, 1995

Location 5 : Padma River, Baruria

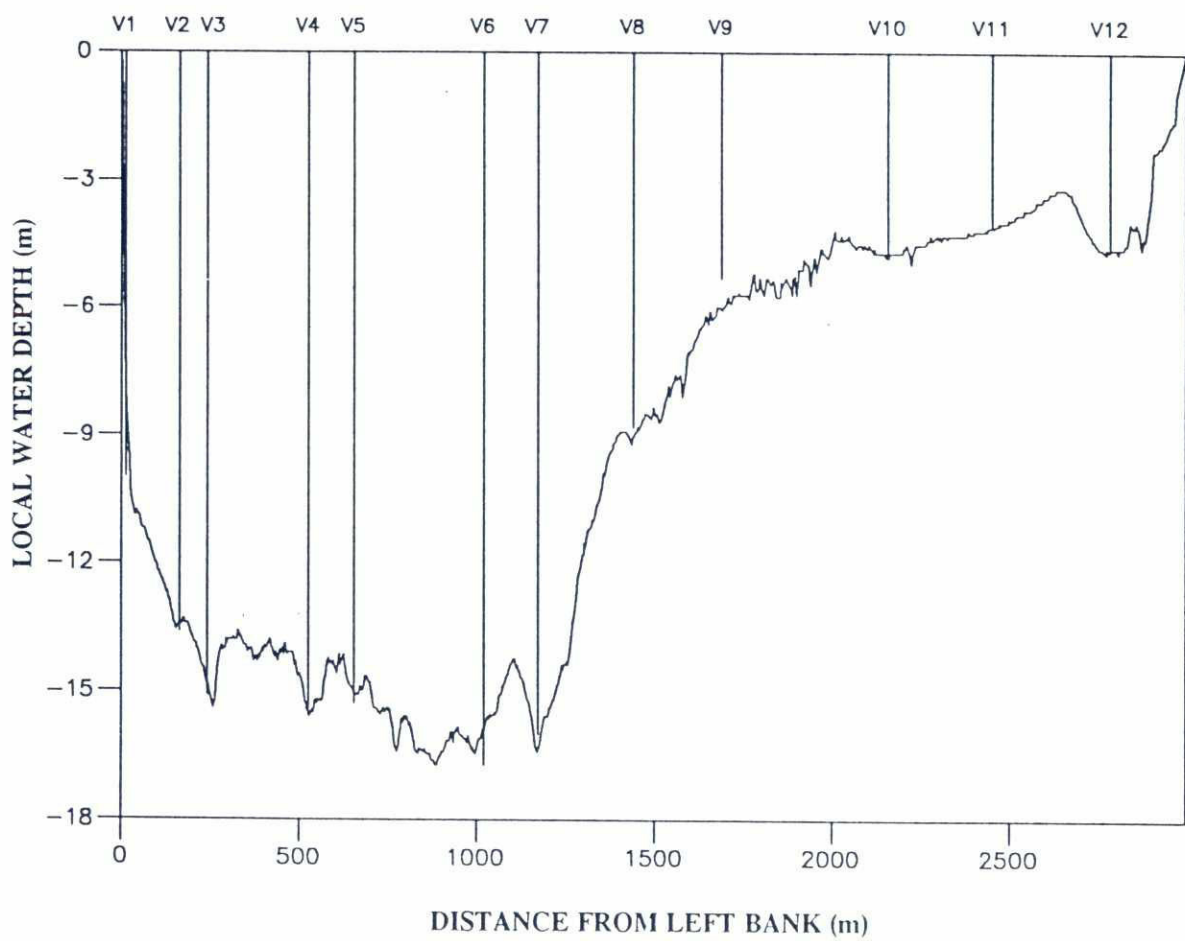
Date : 04 Mar 1996

Init : sjr


Location map

page
1.1

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Water level : 5.63 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 216 : 26 - 27 October, 1995	
		Location 5 : Padma River, Baruria	
File : U5AR3T06	Date : 04 Mar 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : sjr		

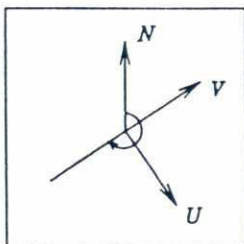
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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	6	-	-	-
	EMF transect	-	-	-	-
	Echo-Sounding	-	-	-	-
Vertical current profile	No. of verticals in channel	12	-	-	-
	ADCP	12	-	-	-
	S4 current meter	1	-	-	-
	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					

Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2994	27690	5.63	27221	34	10188
Table 2.2: Key figures						

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel I	26 Oct 95 27 Oct 95	5.74 5.63	FAP24
Table 2.3: Water-levels				

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 216 : 26 - 27 October, 1995	
		Location 5 : Padma River, Baruria	
File : U5AR3T06	Date : 04 Mar 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		

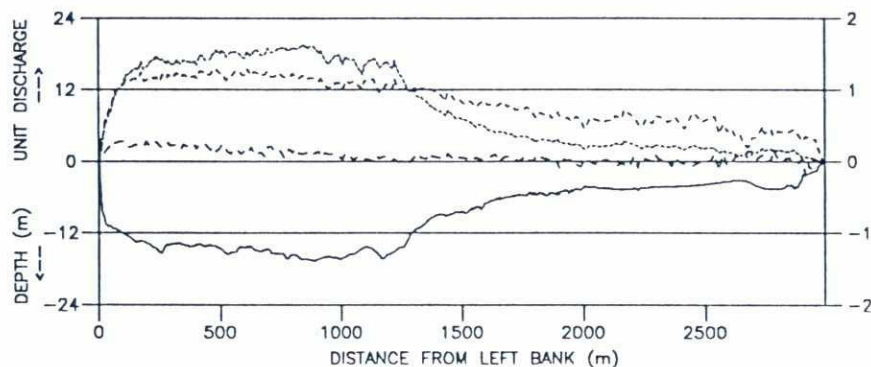


TRANSECT AZIMUTH = 236°

U - VELOCITY NORMAL TO TRANSECT (m/s)

V - VELOCITY PARALLEL TO TRANSECT (m/s)

N - MAGNETIC NORTH



FLOW

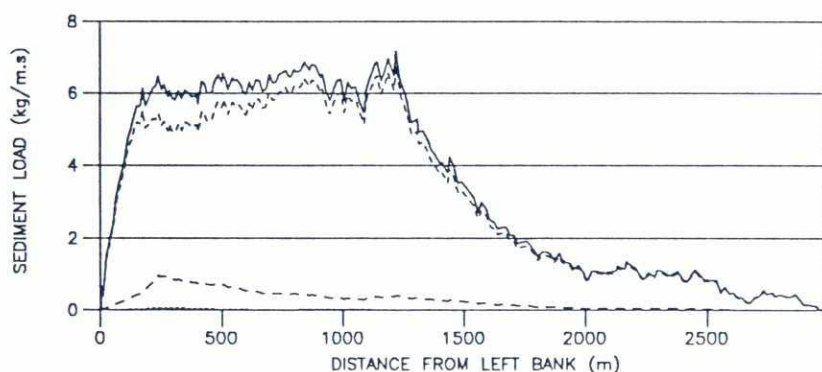
LEGEND :

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

STAGE = 5.63 (m+PWD)

A = 27690 (m³)

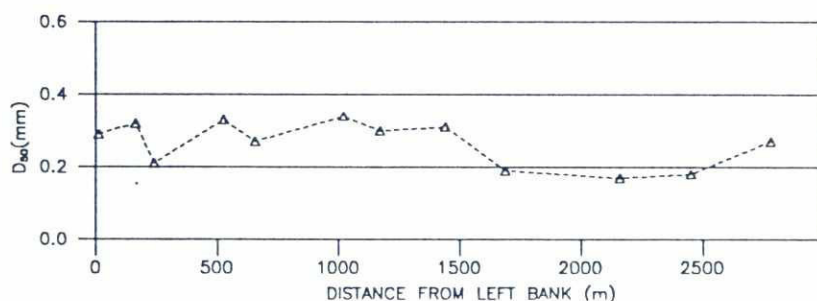
Q = 27221 (m³/s)



SEDIMENT TRANSPORT

LEGEND :

— S_{TOTAL} 10222 (kg/s)
 --- S_{WASH LOAD} 9387 (kg/s)
 ... S_{SUSP. BED} 801 (kg/s)
 -.- S_{BED LOAD} 34 (kg/s)



GRAIN SIZE

LEGEND :

◇◇◇◇◇ D₅₀ SUSP. (mm)
 △△△△△ D₅₀ BED LOAD (mm)
 □□□□□ D₅₀ BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
 Commission of the European Communities

Survey Bulletin 216 : 26 - 27 October, 1995

Location 5 : Padma River, Baruria

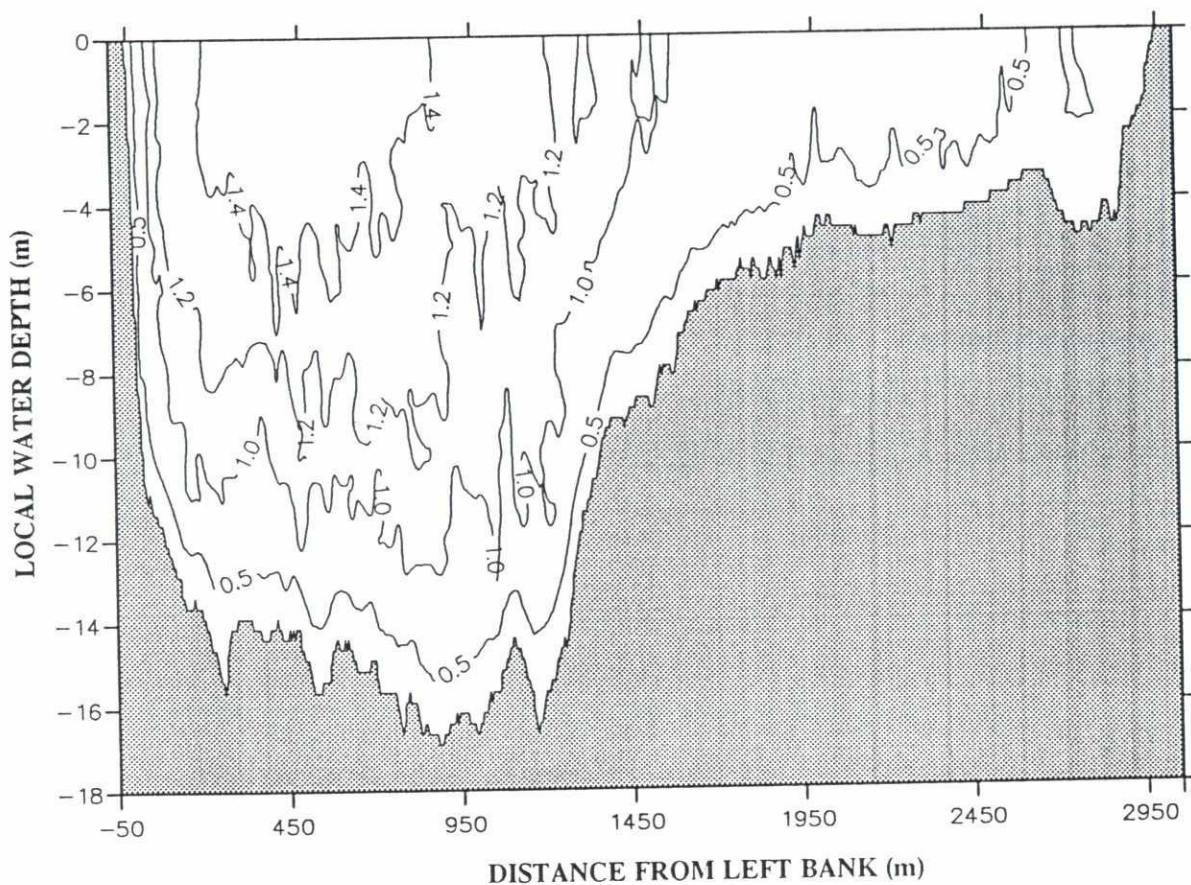
File : USAR3T06


Date : 04 Mar 1996

Init : sjr

Horizontal distribution of flow and sediments
 Channel 1


page
 3.1



<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 216 : 26 - 27 Octoer, 1995	
		Location 5 : Padma River, Baruria	
File : U5AR3T06	Date : 04 Mar 1996	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : sjr		

✓

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	9510261310-1319	10.00	0.14	99.86	0.224	0.277	0.333
	2	9510261332-1343	13.60	0.02	99.98	0.292	0.331	0.375
	3	9510261348-1404	15.10	0.30	99.70	0.181	0.215	0.257
	4	9510261410-1420	15.40	0.03	99.97	0.292	0.332	0.377
	5	9510261427-1437	15.30	0.06	99.94	0.278	0.319	0.366
	6	9510261444-1451	16.70	0.06	99.94	0.310	0.350	0.394
	7	9510261508-1516	16.00	0.25	99.75	0.239	0.288	0.341
	8	9510270902-0916	8.80	0.04	99.96	0.265	0.308	0.357
	9	9510270918-0927	5.30	0.13	99.87	0.163	0.186	0.211
	10	9510270932-0941	4.80	0.94	99.06	0.112	0.140	0.171
	11	9510270944-0954	4.10	1.78	98.22	0.135	0.176	0.229
	12	9510271000-1008	4.60	0.34	99.66	0.219	0.275	0.331
	1	9510261310-1319	10.00	1.27	98.73	0.245	0.295	0.351
	2	9510261332-1343	13.60	0.11	99.89	0.265	0.308	0.357
	3	9510261348-1404	15.10	0.41	99.59	0.176	0.206	0.242
	4	9510261410-1420	15.40	0.04	99.96	0.293	0.332	0.376
	5	9510261427-1437	15.30	0.42	99.58	0.178	0.210	0.247
	6	9510261444-1451	16.70	0.12	99.88	0.294	0.334	0.381
	7	9510261508-1516	16.00	0.07	99.93	0.275	0.317	0.364
	8	9510270902-0916	8.80	0.51	99.49	0.270	0.312	0.360
	9	9510270918-0927	5.30	0.22	99.78	0.171	0.198	0.231
	10	9510270932-0941	4.80	1.34	98.66	0.171	0.209	0.259
	11	9510270944-0954	4.10	3.69	96.31	0.144	0.189	0.248
	12	9510271000-1008	4.60	0.52	99.48	0.201	0.254	0.315
Table 5.1 : 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 216 : 26 - 27 October, 1995	
		Location 5 : Padma River, Baruria	
	Date : 04 Mar 1996	Grain size distributions	page 5.1
	Init : sjr		

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9510261019-1041 9510261049-1114 9510261528-1549 9510261552-1615 9510271019-1042 9510271113-1136	U5AQ3T02 U5AQ3T03 U5AQ3T11 U5AQ3T12 U5AR3T01 U5AR3T06 *

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	9510261310-1319	481567	629565	10.00	U5AQ3P01 *
		2	9510261332-1343	481462	629472	13.60	U5AQ3P02 *
		3	9510261348-1404	481383	629432	15.10	U5AQ3P03 *
		4	9510261410-1420	481152	629269	15.40	U5AQ3P04 **
		5	9510261427-1437	481062	629169	15.30	U5AQ3P05 *
		6	9510261444-1451	480851	628823	16.70	U5AQ3P06 *
		7	9510261508-1516	480599	628937	16.00	U5AQ3P07 *
		8	9510270902-0916	480380	628778	8.80	U5AR3P01 *
		9	9510270918-0927	480240	628533	5.30	U5AR3P02 *
		10	9510270932-0941	479791	628374	4.80	U5AR3P03 *
		11	9510270944-0954	479551	628715	4.10	U5AR3P04 *
		12	9510271000-1008	479271	628028	4.60	U5AR3P05 *


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	6	9510261410-1420	481152	629269	15.40

Table 6.3: Suspended sediment - point sample


<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 216 : 26 - 27 October, 1995	
		Location 5 : Padma River, Baruria	
	Date : 04 Mar 1996	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	9510261310-1319	481567	629565	10.00
		2	1	9510261332-1343	481462	629472	13.60
		3	1	9510261348-1404	481383	629432	15.10
		4	1	9510261410-1420	481152	629269	15.40
		5	1	9510261427-1437	481062	629169	15.30
		6	1	9510261444-1451	480851	628823	16.70
		7	1	9510261508-1516	480599	628937	16.00
		8	1	9510270902-0916	480380	628778	8.80
		9	1	9510270918-0927	480240	628533	5.30
		10	1	9510270932-0941	479791	628374	4.80
		11	1	9510270944-0954	479551	628715	4.10
		12	1	9510271000-1008	479271	628028	4.60

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	9510261310-1319	481567	629565	10.00	A900
		2	9510261332-1343	481462	629472	13.60	C303
		3	9510261348-1404	481383	629432	15.10	C339
		4	9510261410-1420	481152	629269	15.40	C323
		5	9510261427-1437	481062	629169	15.30	C348
		6	9510261444-1451	480851	628823	16.70	C037
		7	9510261508-1516	480599	628937	16.00	C308
		8	9510270902-0916	480380	628778	8.80	C539
		9	9510270918-0927	480240	628533	5.30	C594
		10	9510270932-0941	479791	628374	4.80	C319
		11	9510270944-0954	479551	628715	4.10	C337
		12	9510271000-1008	479271	628028	4.60	C326
		1	9510261310-1319	481567	629565	10.00	C330
		2	9510261332-1343	481462	629472	13.60	C285
		3	9510261348-1404	481383	629432	15.10	A355
		4	9510261410-1420	481152	629269	15.40	C680
		5	9510261427-1437	481062	629169	15.30	C289
		6	9510261444-1451	480851	628823	16.70	C292
		7	9510261508-1516	480599	628937	16.00	C587
		8	9510270902-0916	480380	628778	8.80	C469
		9	9510270918-0927	480240	628533	5.30	C019
		10	9510270932-0941	479791	628374	4.80	C271
		11	9510270944-0954	479551	628715	4.10	A689
		12	9510271000-1008	479271	628028	4.60	C167


Table 6.5: Bed load

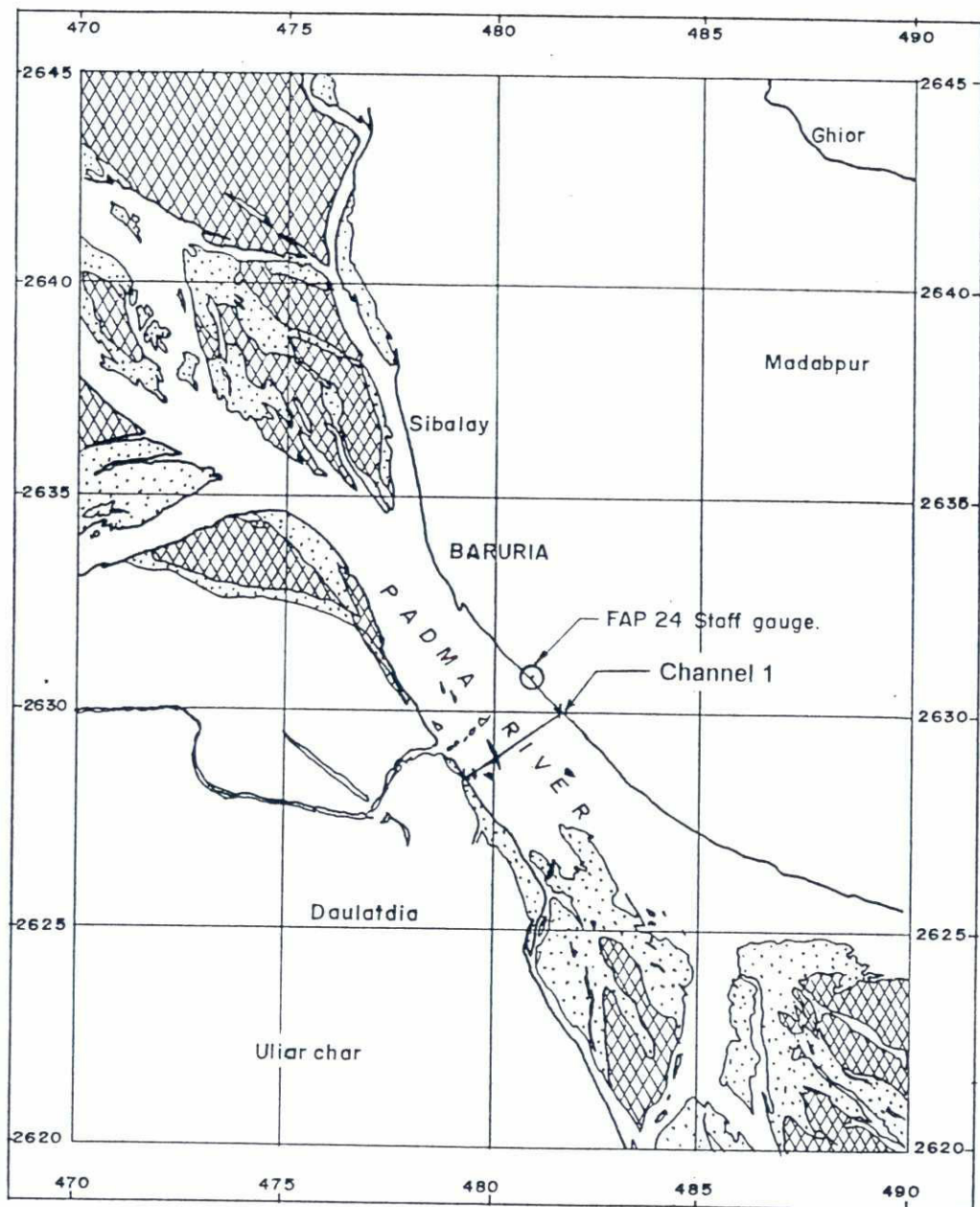
<div><div><div><div><div></div><div>FAP 24</div></div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div></div>		Survey Bulletin 216 : 26 - 27 October, 1995	
		Location 5 : Padma River, Baruria	
	Date : 04 Mar 1996	Collected data and their storage (2)	page 6.2
	Init : sjr		

Types of data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U5AR3T06.ase
Echosounder data	1	QUATTRO	U5AR3T06.ech
Sediment transport data	1	QUATTRO	U5AR3T06.sed
Bed load sediment analysis	1	QUATTRO	U5AR3T06.bdl
Susp. sed. conc. analysis	1	QUATTRO	U5AR3T06.ssc
Transect plot data	1	QUATTRO	U5AR3T06.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5AR3T06.ct2 U5AR3T06.dt2

Table 7.1: PSD 24 Database file description



 FAP 24 RIVER SURVEY PROJECT <small>Flood Plan Coordination Organization Commission of the European Communities</small> DELFT - DHI	Survey Bulletin 216 : 26 - 27 October, 1995		
	Location 5 : Padma River, Baruria		
	Date : 04 Mar 1996	PSD 24 Database file description	page 7.1
	Init : sjr		



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 226 : 17 - 18 November, 1995

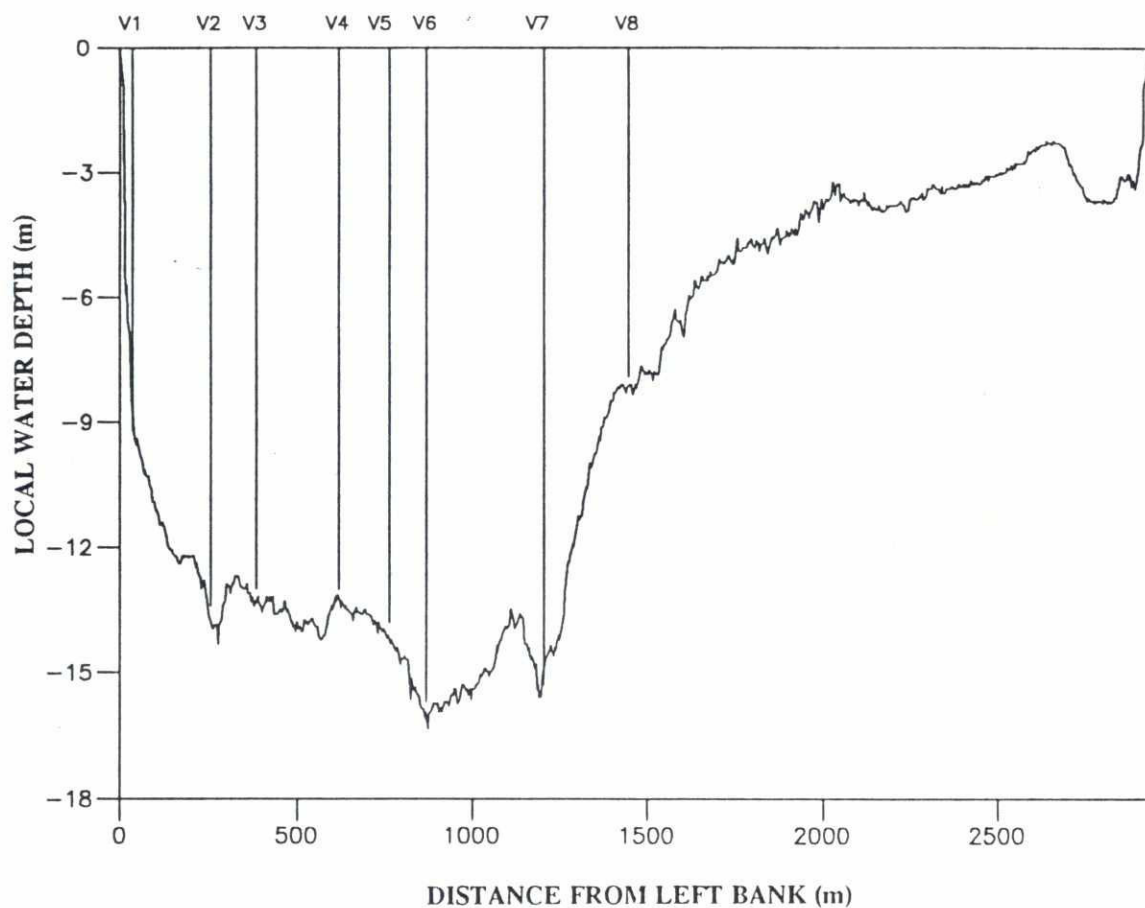
Location 5 : Padma River, Baruria

Date : 10 Mar 1996


Init : sjr

Location map

page
1.1



Water level : 4.77 m+PWD measured at the station indicated on page 1.1

 DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 226 : 17 - 18 November, 1995	
			Location 5 : Padma River, Baruria	
File : U5BH1T01	Date : 10 Mar 1996	Cross-sections and measured verticals Channel 1	page 1.2	
	Init : sjr			

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

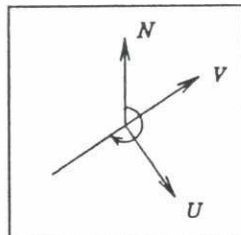
Channel	Width (m)	Area (m ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2946	24974	4.77	18384	9	4178

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	17 Nov 95	4.77	FAP24
		18 Nov 95	4.73	

Table 2.3: Water-levels

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities DELT - DHI		Survey Bulletin 226 : 17 - 18 November, 1995	
		Location 5 : Padma River, Baruria	
File : USBHIT01	Date : 10 Mar 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		

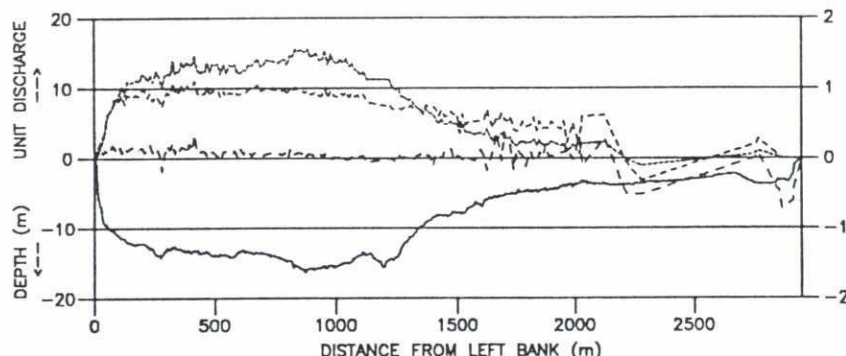


TRANSECT AZIMUTH = 236°

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 ($m^3/s.m$)

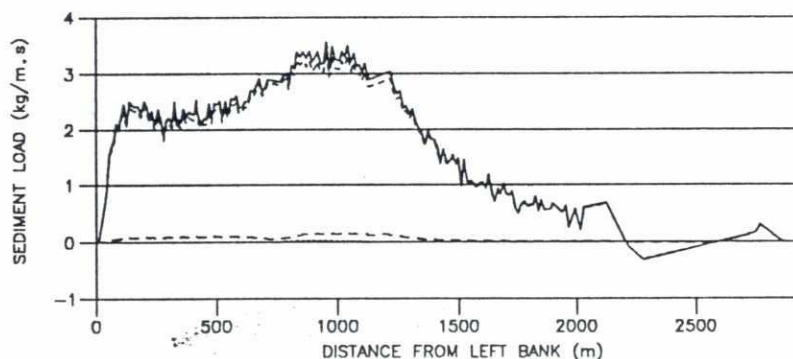
... U (m/s)

-.- V (m/s)

STAGE = $4.77 (m+PND)$

A = $24974 (m^3)$

Q = $18384 (m^3/s)$



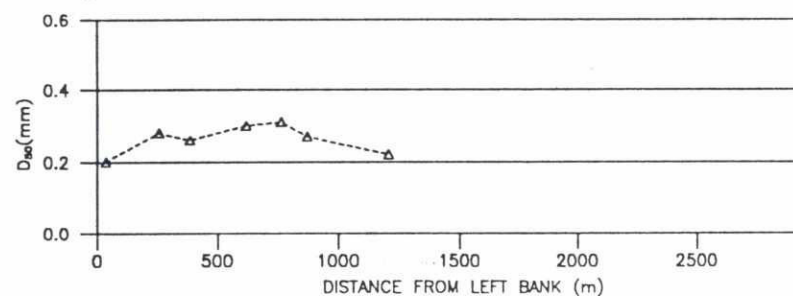
LEGEND :

— S_{TOTAL} 4187 (kg/s)

--- $S_{WASH\ LOAD}$ 4030 (kg/s)

... $S_{SUSP. BED}$ 148 (kg/s)

-.- $S_{BED\ LOAD}$ 9 (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 226 : 17 - 18 November, 1995

Location 5 : Padma River, Baruria

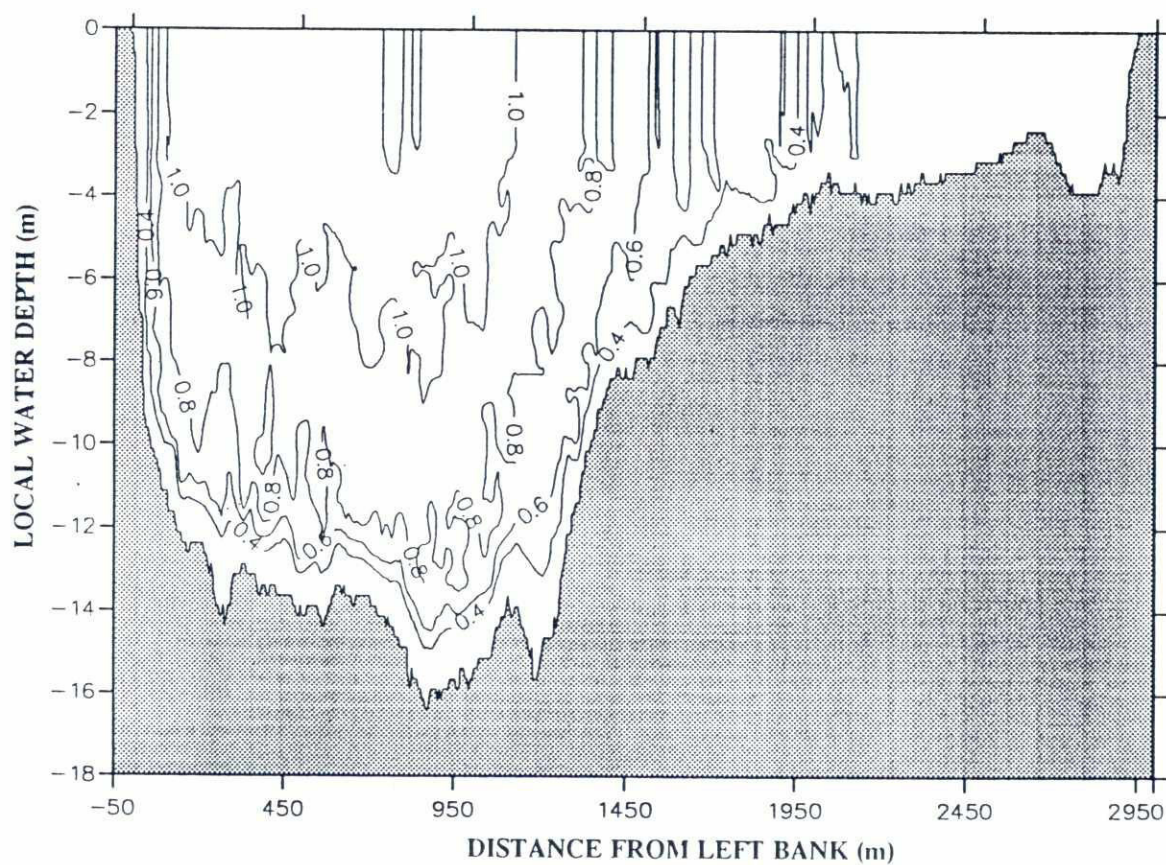
File : U5BH1T01

Date : 10 Mar 1996

Init : sjr

Horizontal distribution of flow and sediments
Channel 1

page
3.1



Iso-velocity contours (m/s)

Water level : 4.77 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 226 : 17 - 18 November, 1995

Location 5 : Padma River, Baruria

File : USBH1T01


Date : 10 Mar 1996

Init : sjr

Cross-sectional distribution of flow velocity
Channel 1

page
4.1


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	9511171145-1159	9.20	9.28	90.72	0.159	0.205	0.265
	2	9511171212-1232	13.40	0.62	99.38	0.222	0.276	0.331
	3	9511171352-1400	13.00	0.04	99.96	0.219	0.272	0.328
	4	9511171409-1429	13.00	0.14	99.86	0.263	0.305	0.355
	5	9511171439-1446	13.80	0.14	99.86	0.280	0.321	0.368
	6	9511181101-1306	15.70	0.17	99.83	0.196	0.239	0.298
	7	9511181017-1032	15.30	1.30	98.70	0.180	0.215	0.260
	1	9511171145-1159	9.20	13.40	86.60	0.153	0.195	0.247
	2	9511171212-1232	13.40	0.05	99.95	0.226	0.278	0.332
	3	9511171352-1400	13.00	0.16	99.84	0.204	0.252	0.311
	4	9511171409-1429	13.00	0.05	99.95	0.261	0.304	0.354
	5	9511171439-1446	13.80	0.22	99.78	0.248	0.293	0.344
	6	9511181101-1306	15.70	0.06	99.94	0.244	0.291	0.344
	7	9511181017-1032	15.30	1.44	98.56	0.190	0.232	0.290
Table 5.1 : Grain sizes of bed load								

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 226 : 17 - 18 November, 1995	
	Location 5 : Padma River, Baruria		
	Date : 10 Mar 1996 Init : sjr	Grain size distributions	page 5.1

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9511170840-0901 9511170904-0928 9511171512-1535 9511171537-1558 9511180819-0838 9511180844-0905 9511181423-1445 9511181446-1509	U5BH1T01 * U5BH1T02 U5BH1T07 U5BH1T08 U5BI1T01 U5BI1T02 U5BI1T04 U5BI1T05
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 2 3 4 5 6 7 8	9511171145-1159 9511171212-1232 9511171352-1400 9511171409-1429 9511171439-1446 9511181101-1306 9511181017-1032 9511180946-1000	481562 481387 481276 481090 480982 480870 480611 480398	629567 629441 629370 629239 629171 629096 628920 628784	9.20 13.40 13.00 13.00 13.80 15.70 15.30 7.90	U5BH1P01 * U5BH1P02 * U5BH1P05 * U5BH1P06 * U5BH1P07 * U5BI1P06 ** U5BI1P03 * U5BI1P01 *
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	6	6	9511181101-1306	480870	629096	15.70
Table 6.3: Suspended sediment - point sample							


<div>FAP 24</div> <div></div> <div>DELFT - DHI</div>		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 226 : 17 - 18 November, 1995	
				Location 5 : Padma River, Baruria	
		Date : 10 Mar 1996		Collected data and their storage (1)	
		Init : sjr			
				page 61	

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9511171145-1159	481562	629567	9.20
		2	1	9511171212-1232	481387	629441	13.40
		3	1	9511171352-1400	481276	629370	13.00
		4	1	9511171409-1429	481090	629239	13.00
		5	1	9511171439-1446	480982	629171	13.80
		6	1	9511181101-1306	480870	629096	15.70
		7	1	9511181017-1032	480611	628920	15.30
		8	1	9511180946-1000	480398	628784	7.90

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	9511171145-1159	481562	629567	9.20	C121
		2	9511171212-1232	481387	629441	13.40	A358
		3	9511171352-1400	481276	629370	13.00	C229
		4	9511171409-1429	481090	629239	13.00	C272
		5	9511171439-1446	480982	629171	13.80	C286
		6	9511181101-1306	480870	629096	15.70	A53
		7	9511181017-1032	480611	628920	15.30	A129
		1	9511171145-1159	481562	629567	9.20	C522
		2	9511171212-1232	481387	629441	13.40	A703
		3	9511171352-1400	481276	629370	13.00	C122
		4	9511171409-1429	481090	629239	13.00	C560
		5	9511171439-1446	480982	629171	13.80	A123
		6	9511181101-1306	480870	629096	15.70	A714
		7	9511181017-1032	480611	628920	15.30	C795

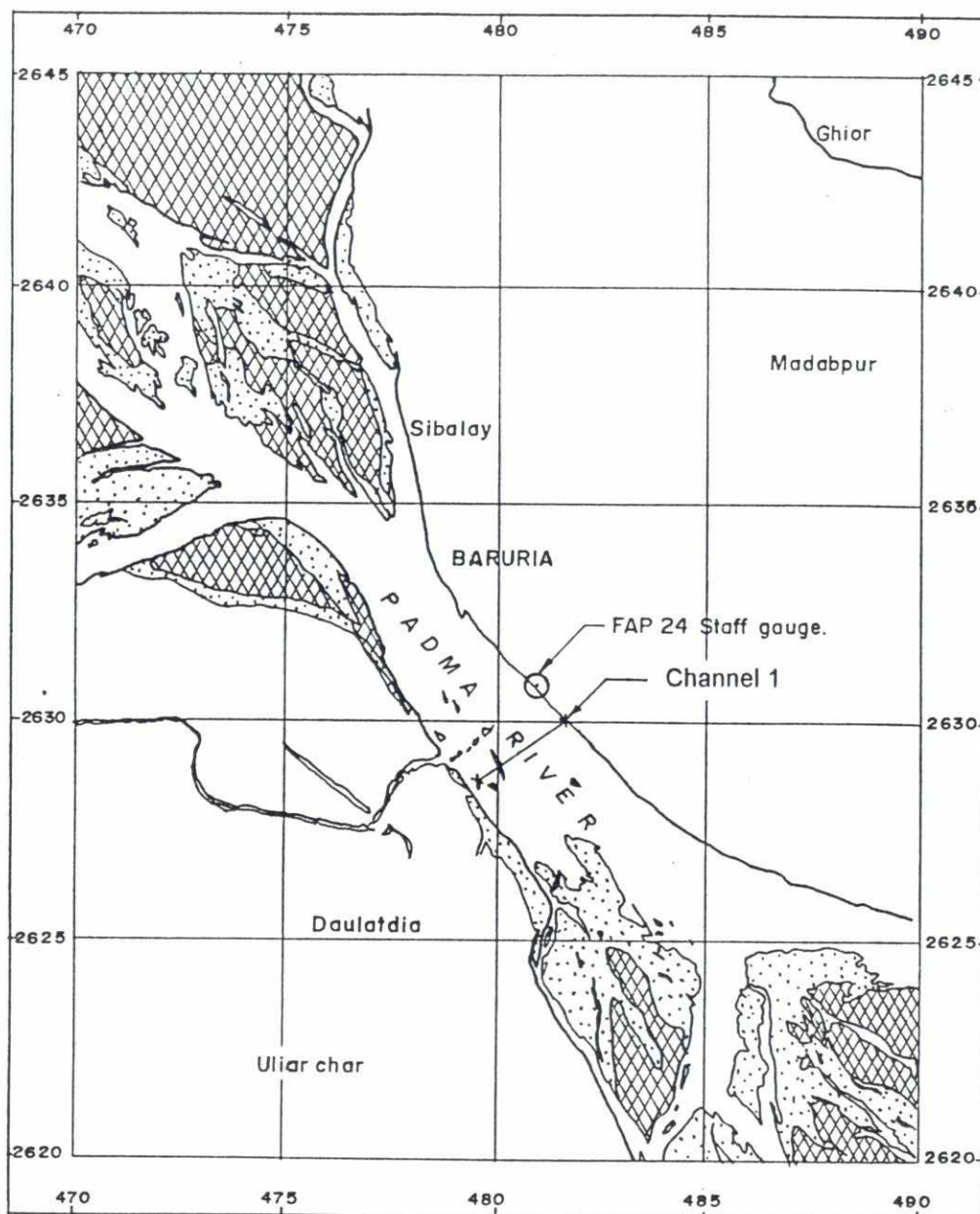
Table 6.5: Bed load

<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 226 : 17 - 18 November, 1995	
		Location 5 : Padma River, Baruria	
	Date : 10 Mar 1996	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	U5BH1T01.ase
Echosounder data	1	QUATTRO	U5BH1T01.ech
Sediment transport data	1	QUATTRO	U5BH1T01.sed
Bed load sediment analysis	1	QUATTRO	U5BH1T01.bdl
Susp. sed. conc. analysis	1	QUATTRO	U5BH1T01.ssc
Transect plot data	1	QUATTRO	U5BH1T01.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5BH1T01.ct2 U5BH1T01.dt2
Table 7.1: PSD 24 Database file description			

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 226 : 17 - 18 November, 1995	
	Location 5 : Padma River, Baruria		
	Date : 10 Mar 1996 Init : sjr	PSD 24 Database file description	page 7.1



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



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 233 : 28 - 29 November, 1995

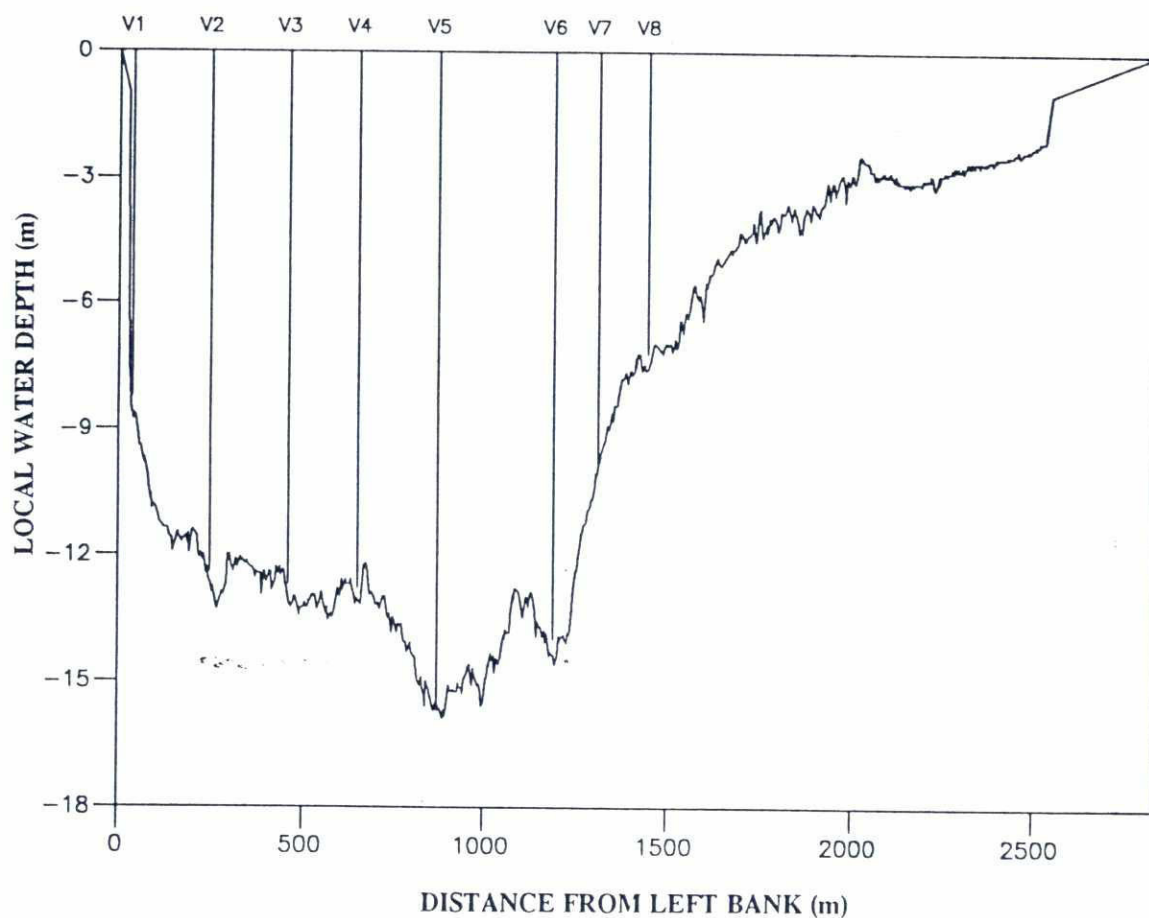
Location 5 : Padma River, Baruria

Date : 12 Mar 1996

Init : sjr

Location map

page
1.1



Water level : 4.09 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 233 : 28 - 29 November, 1995

Location 5 : Padma River, Baruria

File : U5BS1T02

Date : 12 Mar 1996

Init : sjr

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	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	16	-	-	-
	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 ²)	Stage h(m + PWD)	Discharge Q(m ³ /s)	Bed load transport Sb(kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	2832	22101	4.09	13333	1	1954

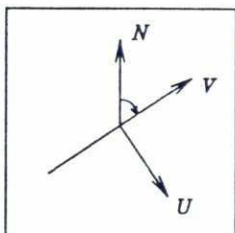
Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m + PWD)	Gauge
Baruria	Channel 1	28 Nov 95	4.09	FAP24
		29 Nov 95	3.98	

Table 2.3: Water-levels

 FAP 24 RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 233 : 28 - 29 November, 1995	
		Location 5 : Padma River, Baruria	
File : U5BS1T02	Date : 12 Mar 1996	Survey programme as made and key figures	page 2.1
	Init : sjr		

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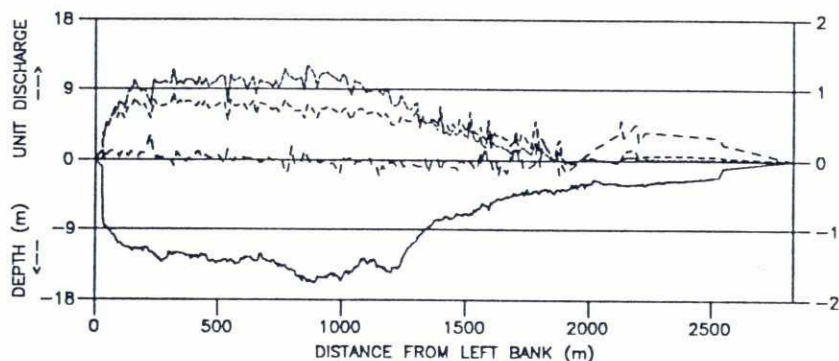


TRANSECT AZIMUTH = 56°

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 ($m^3/s.m$)

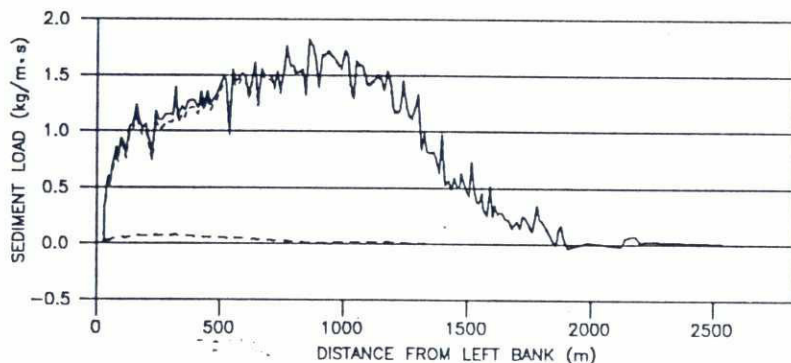
--- U (m/s)

--- V (m/s)

STAGE = 4.09 (m+PWD)

A = 22101 (m^2)

Q = 13333 (m^3/s)



SEDIMENT TRANSPORT

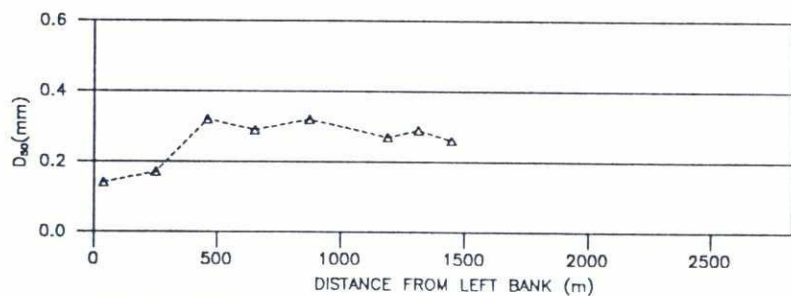
LEGEND :

— S_{TOTAL} 1955 (kg/s)

--- $S_{WASH LOAD}$ 1903 (kg/s)

--- $S_{SUSP. BED}$ 51 (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 233 : 28 - 29 November, 1995

Location 5 : Padma River, Baruria

File : U5BSIT02

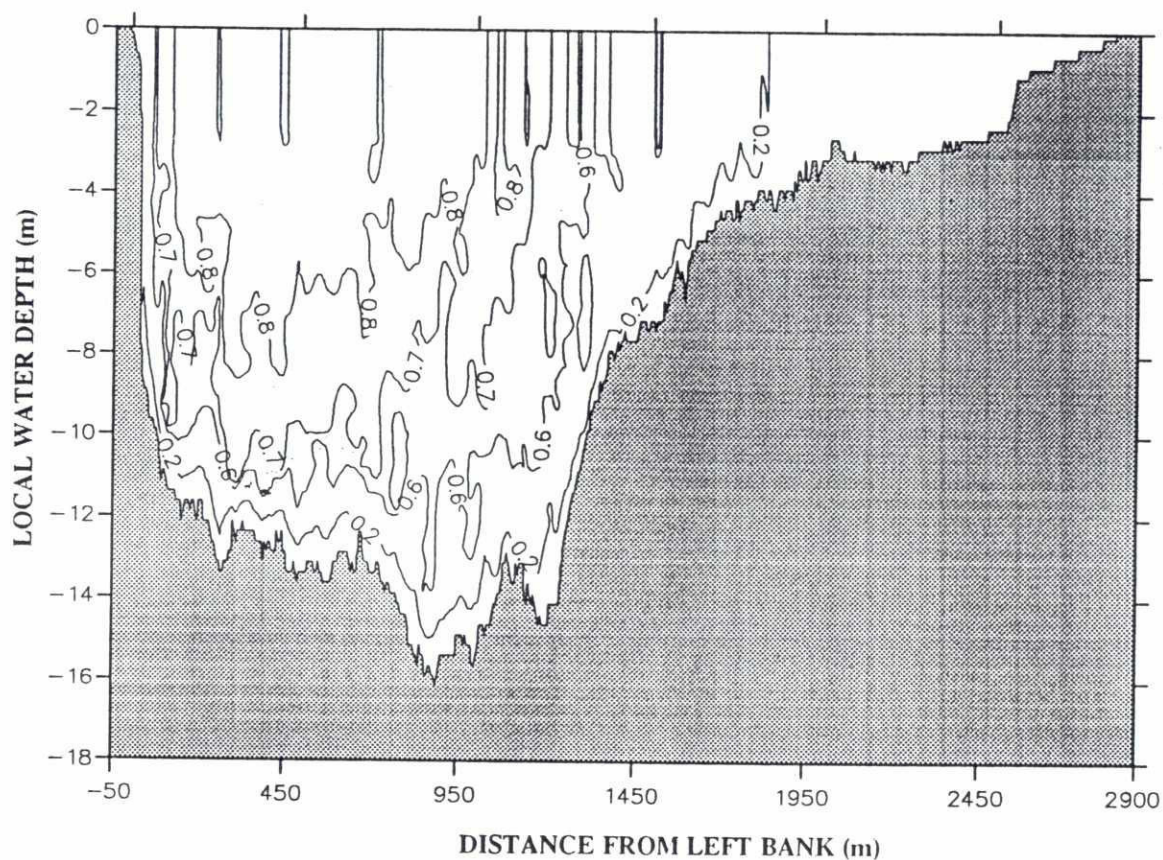
Date : 12 Mar 1996

Init : sjr

Horizontal distribution of flow and sediments
Channel 1


page
3.1

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Iso-velocity contours (m/s)

Water level : 4.09 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 233 : 28 - 29 November, 1995	
		Location 5 : Padma River, Baruria	
File : U5BSIT02	Date : 12 Mar 1996	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : sjr		

200

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	9511291355-1420	8.20	12.00	88.00	0.151	0.196	0.255
	2	9511291430-1446	12.40	11.76	88.24	0.143	0.173	0.210
	3	9511291457-1512	12.70	0.08	99.92	0.280	0.321	0.368
	4	9511291321-1338	12.80	0.22	99.78	0.269	0.311	0.359
	5	9511291117-1233	15.70	0.31	99.69	0.258	0.301	0.352
	6	9511281518-1535	14.00	0.05	99.95	0.269	0.311	0.360
	7	9511281453-1509	9.80	0.08	99.92	0.250	0.293	0.344
	8	9511281425-1441	7.20	2.08	97.92	0.198	0.248	0.307
	1	9511291355-1420	8.20	26.67	73.33	0.073	0.094	0.121
	2	9511291430-1446	12.40	15.76	84.24	0.131	0.163	0.203
	3	9511291457-1512	12.70	0.05	99.95	0.284	0.324	0.370
	4	9511291321-1338	12.80	0.85	99.15	0.221	0.275	0.331
	5	9511291117-1233	15.70	0.12	99.88	0.292	0.333	0.379
	6	9511281518-1535	14.00	4.34	95.66	0.182	0.225	0.282
	7	9511281453-1509	9.80	0.64	99.36	0.244	0.290	0.342
	8	9511281425-1441	7.20	0.71	99.29	0.226	0.279	0.333
Table 5.1 : Grain sizes of bed load								

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 233 : 28 - 29 November, 1995	
		Location 5 : Padma River, Baruria	
	Date : 12 Mar 1996	Grain size distributions	page 5.1
	Init : sjr		

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9511281130-1149 9511281152-1211 9511281555-1616 9511281623-1639 9511290951-1012 9511291014-1035 9511291523-1540	U5BS1T01 U5BS1T02 * U5BS1T08 U5BS1T10 U5BT1T02 U5BT1T03 U5BT1T04

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 2 3 4 5 6 7 8	9511291355-1420 9511291430-1446 9511291457-1512 9511291321-1338 9511291117-1233 9511281518-1535 9511281453-1509 9511281425-1441	481564 481389 481221 481053 480877 480615 480503 480396	629565 629442 629329 629220 629102 628924 628854 628777	8.20 12.40 12.70 12.80 15.70 14.00 9.80 7.20	U5BT1P05 * U5BT1P06 * U5BT1P07 * U5BT1P03 * U5BT1P01 ** U5BS1P03 * U5BS1P02 * U5BS1P01 *


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	5	6	9511291117-1233	480877	629102	15.70

Table 6.3: Suspended sediment - point sample

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 233 : 28 - 29 November, 1995	
	Location 5 : Padma River, Baruria		
	Date : 12 Mar 1996 Init : 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	9511291355-1420	481564	629565	8.20
		2	1	9511291430-1446	481389	629442	12.40
		3	1	9511291457-1512	481221	629329	12.70
		4	1	9511291321-1338	481053	629220	12.80
		5	1	9511291117-1233	480877	629102	15.70
		6	1	9511281518-1535	480615	628924	14.00
		7	1	9511281453-1509	480503	628854	9.80
		8	1	9511281425-1441	480396	628777	7.20


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	9511291355-1420	481564	629565	8.20	A2238
		2	9511291430-1446	481389	629442	12.40	A33
		3	9511291457-1512	481221	629329	12.70	C536
		4	9511291321-1338	481053	629220	12.80	A2030
		5	9511291117-1233	480877	629102	15.70	A72
		6	9511281518-1535	480615	628924	14.00	A2259
		7	9511281453-1509	480503	628854	9.80	A2226
		8	9511281425-1441	480396	628777	7.20	A2217
		1	9511291355-1420	481564	629565	8.20	A1901
		2	9511291430-1446	481389	629442	12.40	A40
		3	9511291457-1512	481221	629329	12.70	C116
		4	9511291321-1338	481053	629220	12.80	A116
		5	9511291117-1233	480877	629102	15.70	A2216
		6	9511281518-1535	480615	628924	14.00	A1980
		7	9511281453-1509	480503	628854	9.80	A2155
		8	9511281425-1441	480396	628777	7.20	A3043

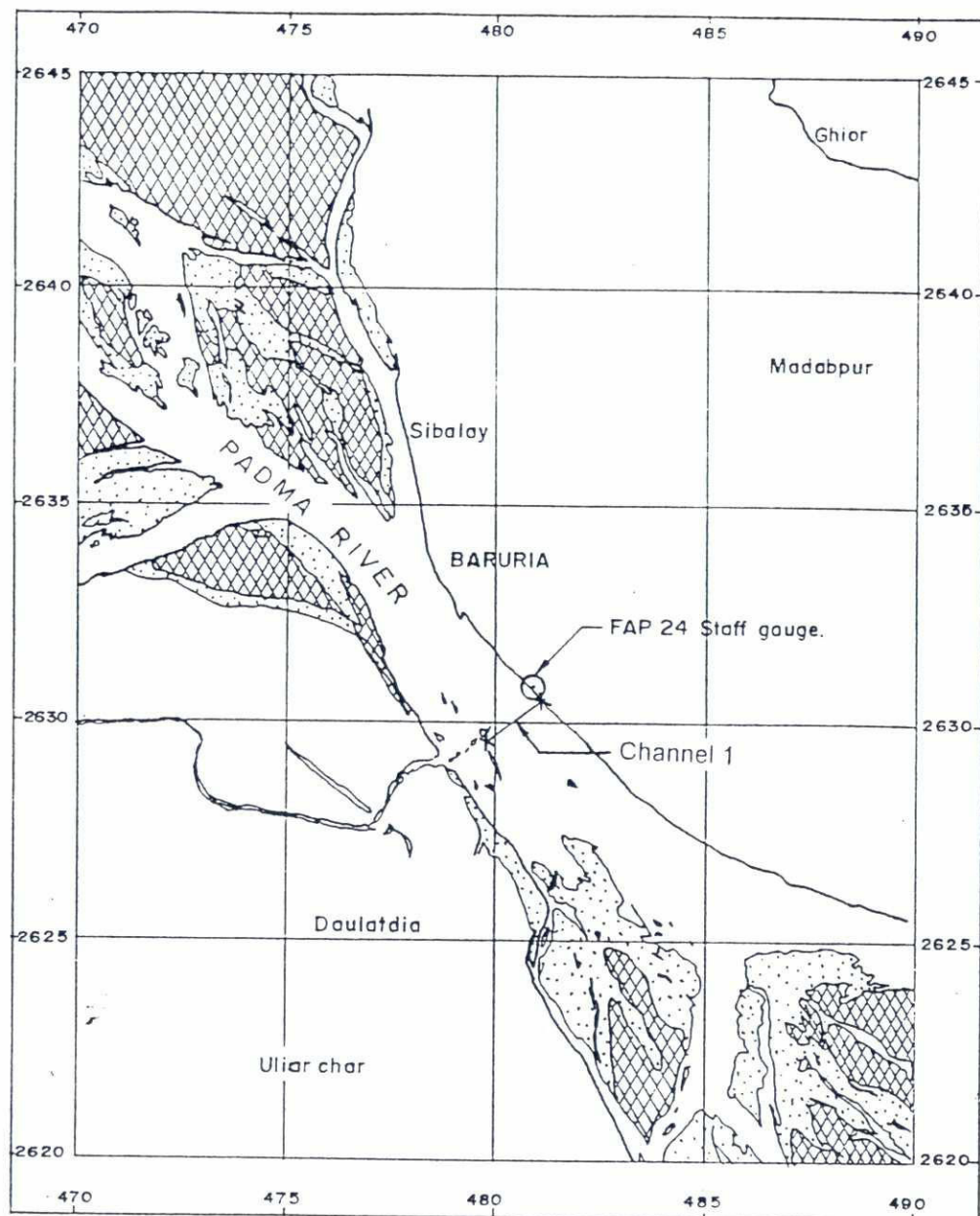
Table 6.5: Bed load

 <p>FAP 24</p> <p>DELFT - DHI</p>	<p>RIVER SURVEY PROJECT</p> <p>Flood Plan Coordination Organization</p> <p>Commission of the European Communities</p>	Survey Bulletin 233 : 28 - 29 November, 1995	
		Location 5 : Padma River, Baruria	
	Date : 12 Mar 1996	Collected data and their storage (2)	page
	Init : sjr		
			6.2

Types of data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U5BS1T02.ase
Echosounder data	1	QUATTRO	U5BS1T02.ech
Sediment transport data	1	QUATTRO	U5BS1T02.sed
Bed load sediment analysis	1	QUATTRO	U5BS1T02.bdl
Susp. sed. conc. analysis	1	QUATTRO	U5BS1T02.ssc
Transect plot data	1	QUATTRO	U5BS1T02.trs
Iso-velocity plot data	1	MIKE 21 MIKE 21	U5BS1T02.ct2 U5BS1T02.dt2
Table 7.1: PSD 24 Database file description			

 <div>FAP 24 DELFT - DHI</div>		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 233 : 28 - 29 November, 1995	
				Location 5 : Padma River, Baruria	
		Date : 12 Mar 1996		PSD 24 Database file description	
		Init : sjr			
				page 7.1	

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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



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization

Commission of the European Communities

Survey Bulletin 247 : 14 - 15 January, 1996

Location 5 : Padma River, Baruria

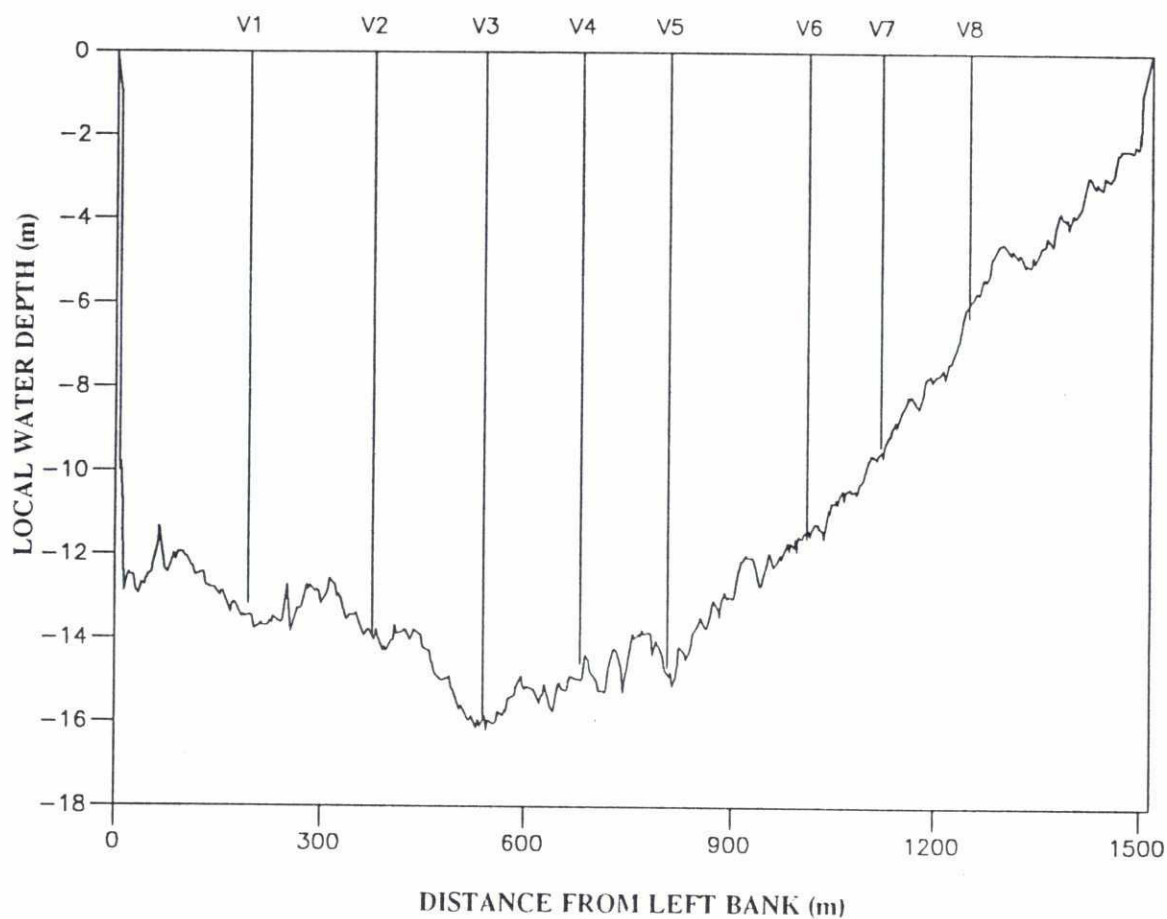
Date : 18 Apr 1996

Init : mk/ss


Location map

page

1.1



Water level : 2.45 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 247 : 14 - 15 January, 1996		
		Location 5 : Padma River, Baruria		
File : U61E1T10	Date : 18 Apr 1996	Cross-sections and measured verticals Channel 1		page 1.2
	Unit : mk/ss			

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	10	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-

Table 2.1: Survey programme as made

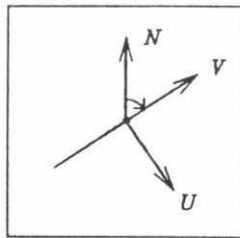
Channel	Width (m)	Area (m ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1514	17036	2.45	6779	0.2	390.8

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	14 Jan 96	2.45	FAP 24
		15 Jan 96	2.41	

Table 2.3: Water-levels

<div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div></div><div></div><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>		Survey Bulletin 247 : 14 - 15 January, 1996	
		Location 5 : Padma River, Baruria	
File : U61E1T10	Date : 18 Apr 1996	Survey programme as made and key figures	page
	Init : mk/ss		2.1

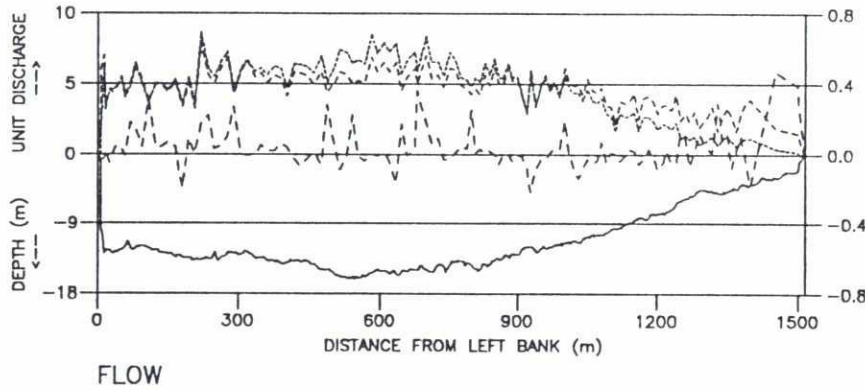


TRANSECT AZIMUTH = 56°

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)

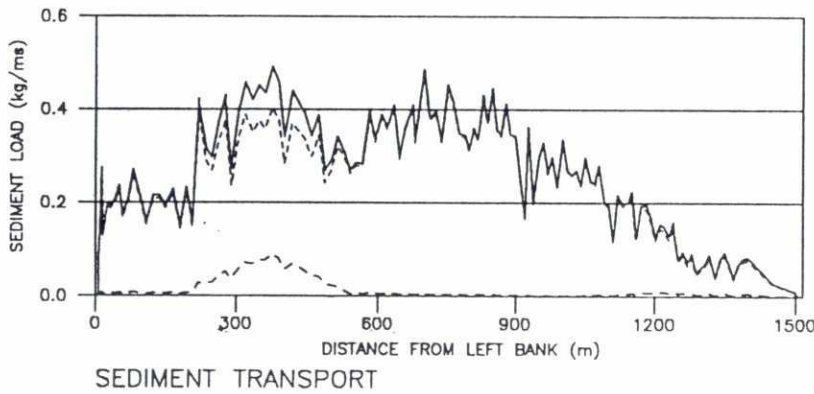
... U - (m/s)

... V - (m/s)

STAGE = 2.45 (m+PWD)

A = 17036 (m²)

Q = 6779 (m³/s)



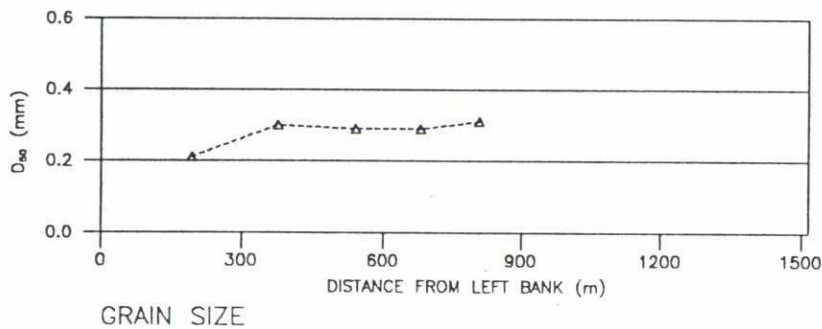
LEGEND :

— S_{TOTAL} 391 (kg/s)

--- S_{WASH LOAD} 369.1 (kg/s)

... S_{SUSP. BED} 21.7 (kg/s)

-.- S_{BED LOAD} 0.2 (kg/s)



LEGEND :

◇◇◇◇◇ D₅₀ SUSP. (mm)

△△△△△ D₅₀ BED LOAD (mm)

□□□□□ D₅₀ BED MAT. (mm)

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 247 : 14 - 15 January, 1996

Location 5 : Padma River, Baruria

File : U61EIT10

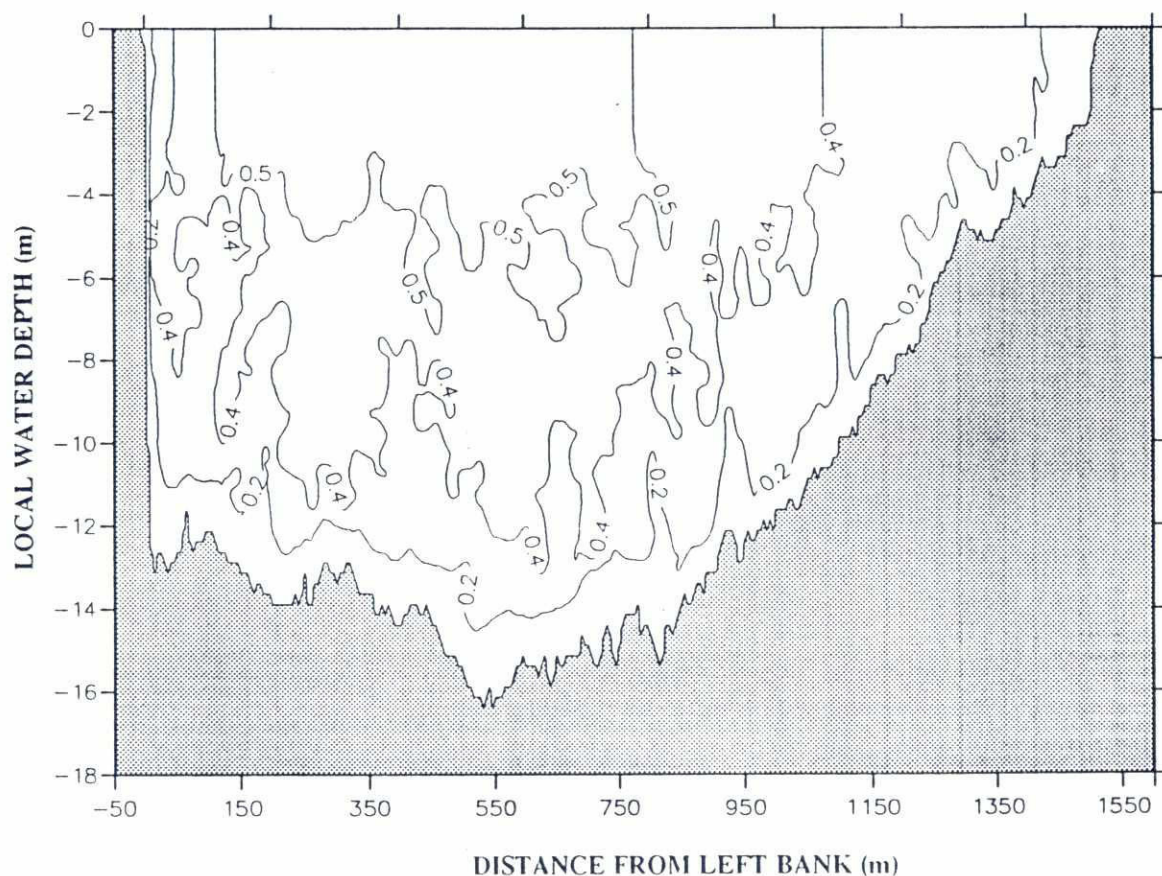
Date : 18 Apr 1996

Unit : m/s

Horizontal distribution of flow and sediments
Channel 1

page
3.1

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Iso-velocity contours (m/s)

Water level : 2.45 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 247 : 14 - 15 January, 1996

Location 5 : Padma River, Baruria

File : U61ETT10

Date : 18 Apr 1996


Unit : m/s

Cross-sectional distribution of flow velocity
Channel 1

page
4.1

202

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	9601141220-1237	13.20	5.84	94.16	0.168	0.208	0.260
	2	9601141247-1304	13.90	0.72	99.28	0.258	0.301	0.350
	3	9601141352-1526	15.90	4.00	96.00	0.214	0.273	0.328
	4	9601141538-1556	14.60	0.59	99.41	0.239	0.288	0.340
	5	9601151001-1019	14.70	0.03	99.97	0.281	0.322	0.368
	1	9601141220-1237	13.20	3.28	96.72	0.177	0.220	0.278
	2	9601141247-1304	13.90	0.08	99.92	0.261	0.304	0.353
	3	9601141352-1526	15.90	0.03	99.97	0.272	0.313	0.361
	4	9601141538-1556	14.60	0.43	99.57	0.257	0.300	0.350
	5	9601151001-1019	14.70	0.47	99.53	0.248	0.293	0.344
Table 5.1 : 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 247 : 14 - 15 January, 1996	
		Location 5 : Padma River, Baruria	
	Date : 18 Apr 1996	Grain size distributions	page
	Init : mk/ss		51

Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9601140942-0956 9601141045-1055 9601141605-1616 9601141618-1630 9601150925-0935 9601150937-0949 9601151315-1326 9601151328-1337	U61E1T02 U61E1T05 U61E1T09 U61E1T10 * U61F1T02 U61F1T03 U61F1T04 U61F1T05

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	9601141220-1237 9601141247-1304 9601141352-1526 9601141538-1556 9601151001-1019 9601151035-1102 9601151121-1149 9601151200-1214	480898 480746 480612 480491 480380 480217 480125 480017	629918 629823 629735 629651 629580 629471 629411 629340	13.20 13.90 15.90 14.60 14.70 11.60 9.40 6.30	U61E1P01 * U61E1P02 * U61E1P04 ** U61E1P05 * U61F1P01 * U61F1P02 * U61F1P04 * U61F1P06 *

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	9601141352-1526	480612	629735	15.90

Table 6.3: Suspended sediment - point sample

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1 2 3 4 5 6 7 8	1 1 1 1 1 1 1 1	9601141220-1237 9601141247-1304 9601141352-1526 9601141538-1556 9601151001-1019 9601151035-1102 9601151121-1149 9601151200-1214	480898 480746 480612 480491 480380 480217 480125 480017	629918 629823 629735 629651 629580 629471 629411 629340	13.20 13.90 15.90 14.60 14.70 11.60 9.40 6.30


Table 6.4: Suspended sediment - depth integrated

FAP 24  DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 247 : 14 - 15 January, 1996	
				Location 5 : Padma River, Baruria	
		Date : 18 Apr 1996 Init : mk/ss		Collected data and their storage (1)	
				page 6.1	

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Method	Channel	Vertical	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)	Sample No.
Helley-Smith Sample	1	1	9601141220-1237	480898	629918	13.20	A0920
		2	9601141247-1304	480746	629823	13.90	C0798
		3	9601141352-1526	480612	629735	15.90	A0342
		4	9601141538-1556	480491	629651	14.60	C0212
		5	9601151001-1019	480380	629580	14.70	C0733
		1	9601141220-1237	480898	629918	13.20	C0699
		2	9601141247-1304	480746	629823	13.90	C0794
		3	9601141352-1526	480612	629735	15.90	A0165
		4	9601141538-1556	480491	629651	14.60	C0391
		5	9601151001-1019	480380	629580	14.70	C0261


Table 6.5: Bed load

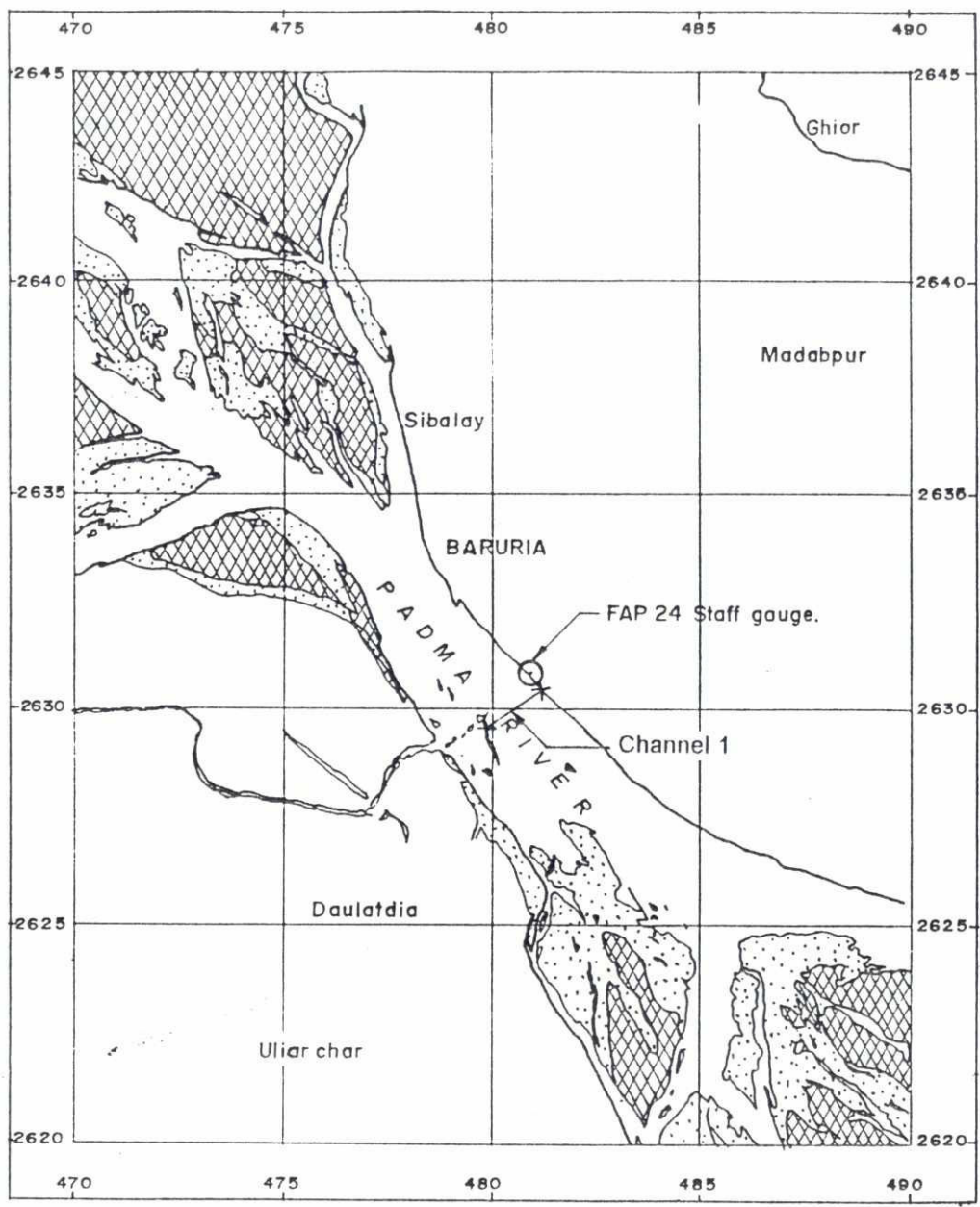
<div><div><div>FAP 24</div><div></div><div>DELFT - DHI</div></div><div><div>RIVER SURVEY PROJECT</div><div>Flood Plan Coordination Organization</div><div>Commission of the European Communities</div></div></div>		Survey Bulletin 247 : 14 - 15 January, 1996	
		Location 5 : Padma River, Baruria	
	Date : 18 Apr 1996	Collected data and their storage (2)	page 6.2
	Init : mk/ss		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U61E1T10 .ase
Echosounder data	1	QUATTRO	U61E1T10 .ech
Sediment transport data	1	QUATTRO	U61E1T10 .sed
Susp. sed. conc. analysis	1	QUATTRO	U61E1T10 .ssc
Bedload sediment analysis	1	QUATTRO	U61E1T10 .bdl
Transect plot data	1	QUATTRO	U61E1T10 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U61E1T10 .ct2 U61E1T10 .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 247 : 14 - 15 January, 1996	
		Location 5 : Padma River, Baruria	
	Date : 18 Apr 1996	PSD 24 Database file description	page 7.1
	Init : mk/ss		



LEGEND:

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



5000 m 2500m 0

Map is based on satellite images of March 1995



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

Survey Bulletin 253 : 27 - 28 January, 1996

Location 5 : Padma River, Baruria

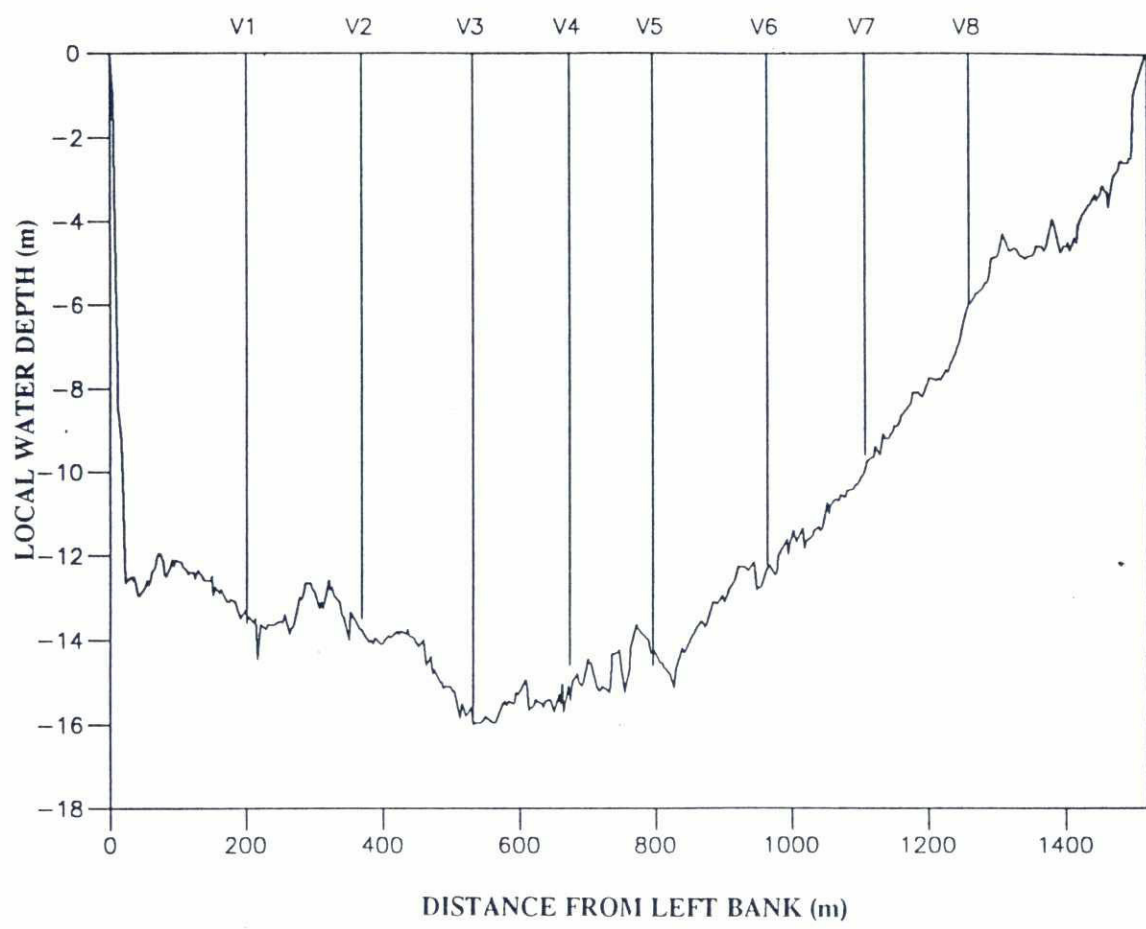
Date : 10 Apr 1996

Init : mks


Location map

page
1.1

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Water level : 2.39 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 253 : 27 - 28 January, 1996	
		Location 5 : Padma River, Baruria	
File : U61R1T01	Date : 10 Apr 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : mk/ss		

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Type of measurement	Method	No. of measurements in channel			
		1	2	3	4
Discharge	ADCP transect	6	-	-	-
	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	-	-	-	-
	Delft Bottle	-	-	-	-
Bed material	US BM-54 bed sampler	-	-	-	-
	Van Veen bed sampler	-	-	-	-


Table 2.1: Survey programme as made

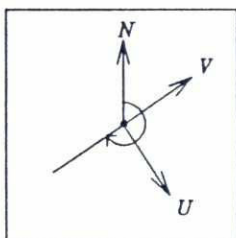
Channel	Width (m)	Area (m ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1511	17124	2.39	7248	-	394

Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	27 Jan 96	2.39	FAP 24
		28 Jan 96	2.36	

Table 2.3: Water-levels

 DELFT - DHI		RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities		Survey Bulletin 253 : 27 - 28 January, 1996	
				Location 5 : Padma River, Baruria	
File : U61R1T01	Date : 10 Apr 1996		Survey programme as made and key figures		page
	Init : mk/ss				2.1

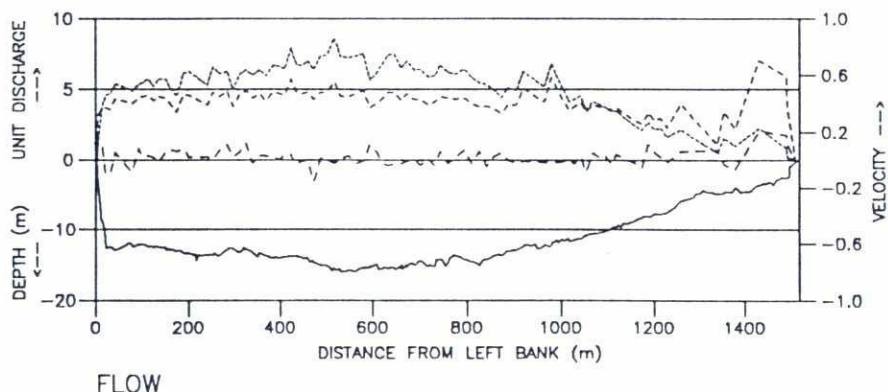


TRANSECT AZIMUTH = 236°

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)

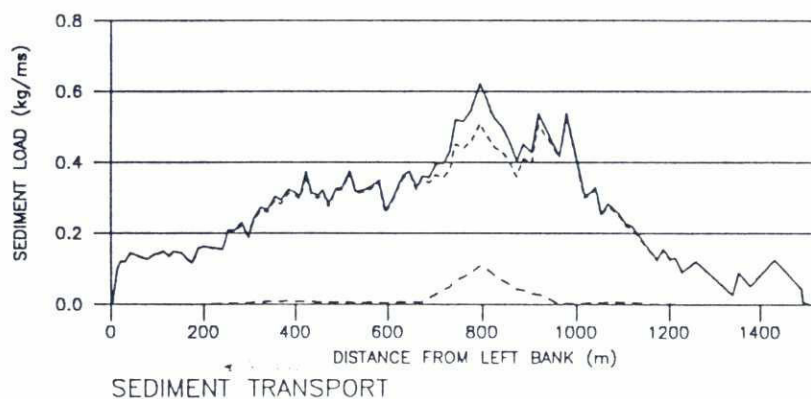
--- U - (m/s)

--- V - (m/s)

STAGE = 2.39 (m+PWD)

A = 17124 (m³)

Q = 7248 (m³/s)



LEGEND :

— S_{TOTAL} 394 (kg/s)

--- S_{WASH LOAD} 374 (kg/s)

--- S_{SUSP. BED} 20 (kg/s)

--- S_{BED LOAD} — (kg/s)

SAMPLE NOT COLLECTED

GRAIN SIZE

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 253 : 27 - 28 January, 1996

Location 5 : Padma River, Baruria

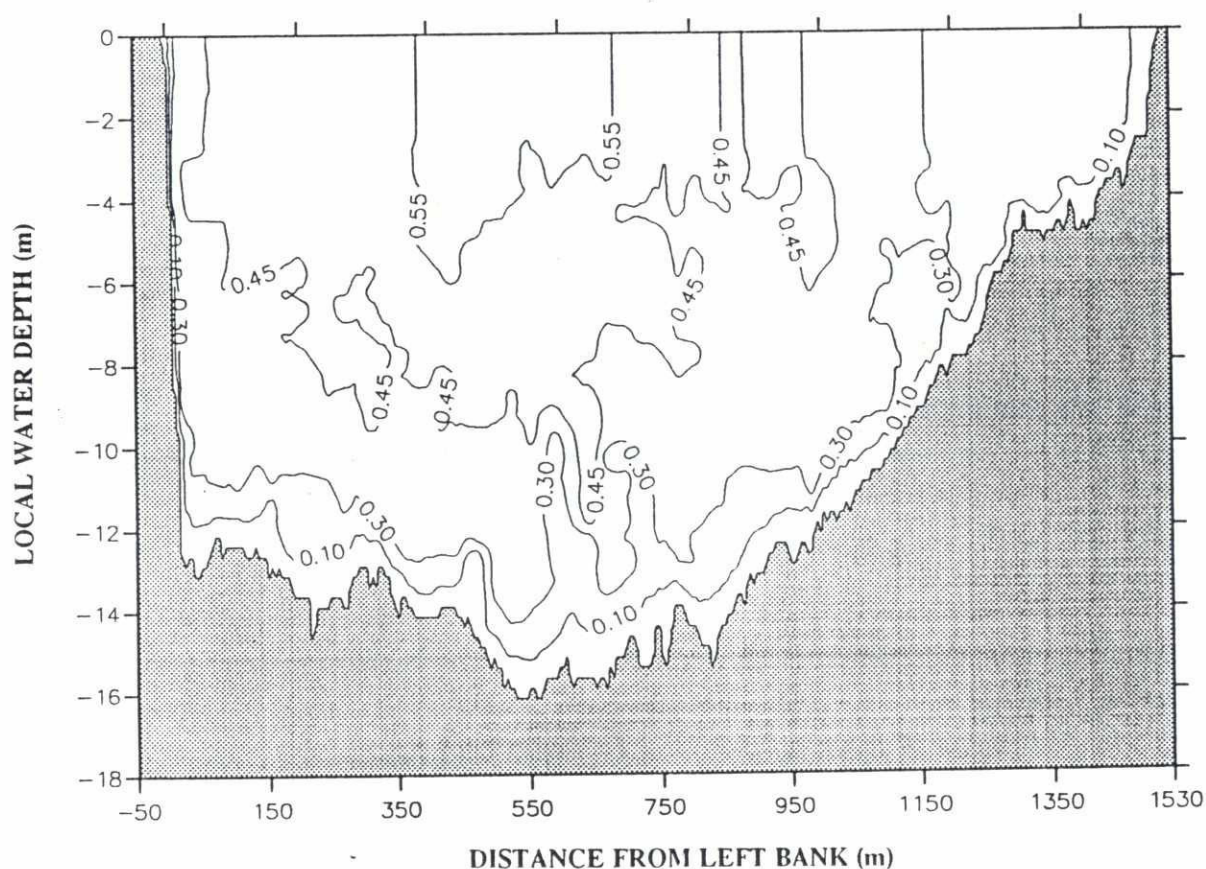
File : U61R1T01

Date : 10 Apr 1996

Init : mk/ss


Horizontal distribution of flow and sediments
Channel 1

page
3.1



Iso-velocity contours (m/s)

Water level : 2.39 m+PWD measured at the station indicated on page 1.1


FAP 24  DELFT - DHI		Survey Bulletin 253 : 27 - 28 January, 1996	
		Location 5 : Padma River, Baruria	
File : U61R1T01	Date : 10 Apr 1996	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Unit : m/s		

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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)
Sample not collected							
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 253 : 27 - 28 January, 1996</div>	
		<div>Location 5 : Padma River, Baruria</div>			
		<div>Date : 10 Apr 1996</div>			
		<div>Init : mk/ss</div>		<div>Grain size distributions</div>	
				<div>page</div> <div>5.1</div>	

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9601271326-1336 9601271337-1348 9601280841-0852 9601280857-0909 9601281350-1400 9601281402-1412	U61R1T01 * U61R1T02 U61S1T02 U61S1T03 U61S1T04 U61S1T05

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	9601281333-1342 9601281240-1301 9601281126-1228 9601281100-1111 9601281033-1049 9601281011-1021 9601280943-0955 9601280920-0934	480875 480749 480615 480491 480385 480260 480136 480016	629905 629821 629733 629649 629584 629494 629415 629333	13.60 13.50 15.80 14.60 14.60 12.20 9.60 5.90	U61S1P09 * U61S1P08 * U61S1P07 ** U61S1P06 * U61S1P05 * U61S1P04 * U61S1P03 * U61S1P02 *

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	9601281126-1228	480615	629733	15.80

Table 6.3: Suspended sediment - point sample

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1 2 3 4 5 6 7 8	1 1 1 1 1 1 1 1	9601281333-1342 9601281240-1301 9601281126-1228 9601281100-1111 9601281033-1049 9601281011-1021 9601280943-0955 9601280920-0934	480875 480749 480615 480491 480385 480260 480136 480016	629905 629821 629733 629649 629584 629494 629415 629333	13.60 13.50 15.80 14.60 14.60 12.20 9.60 5.90


Table 6.4: Suspended sediment - depth integrated

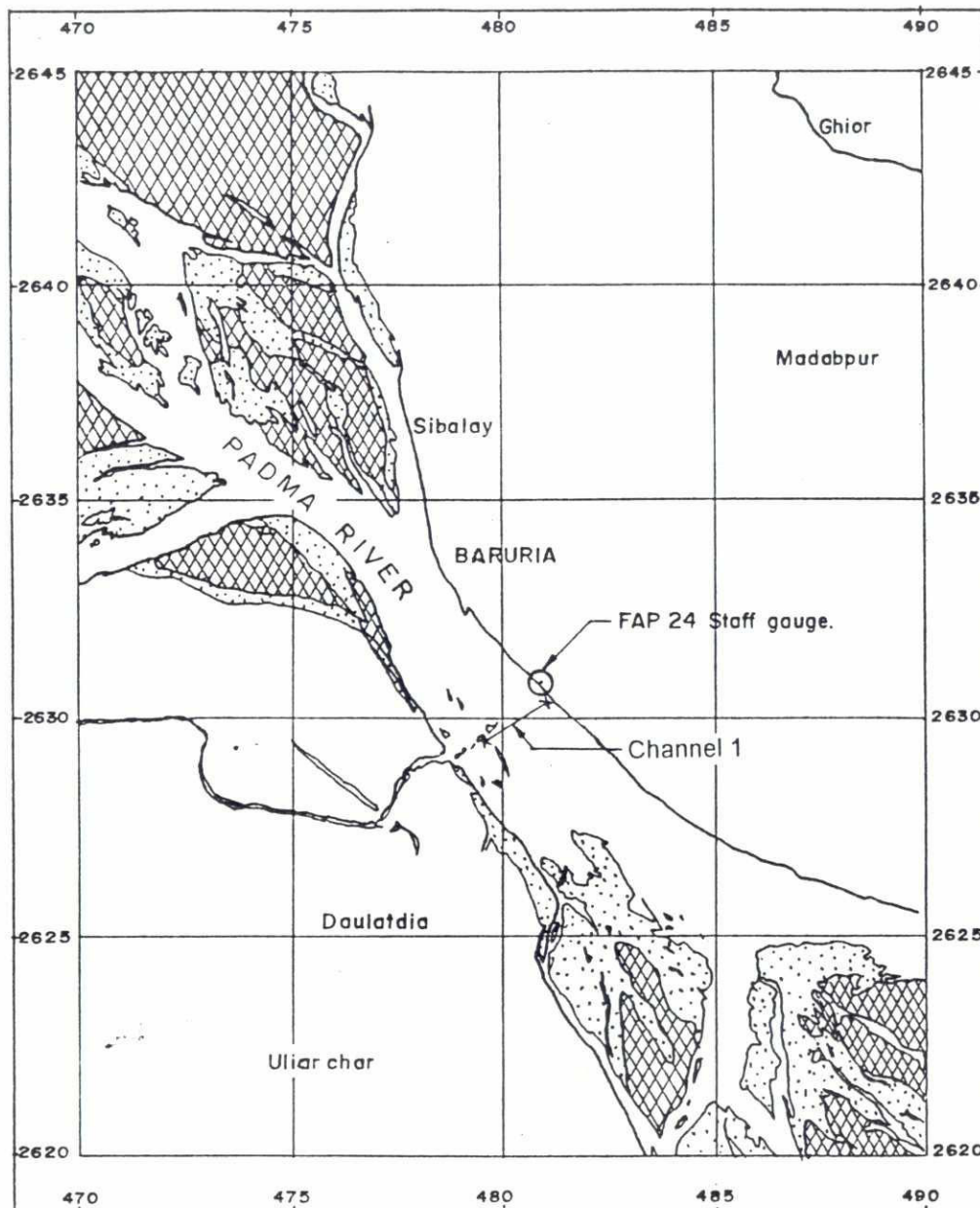
		Survey Bulletin 253 : 27 - 28 January, 1996	
RIVER SURVEY PROJECT <small>Flood Plan Coordination Organization Commission of the European Communities</small>		Location 5 : Padma River, Baruria	
Date : 10 Apr 1996 Init : mk/ss		Collected data and their storage (1)	page 6.1

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U61R1T01 .ase
Echosounder data	1	QUATTRO	U61R1T01 .ech
Sediment transport data	1	QUATTRO	U61R1T01 .sed
Susp. sed. conc. analysis	1	QUATTRO	U61R1T01 .ssc
Transect plot data	1	QUATTRO	U61R1T01 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U61R1T01 .ct2 U61R1T01 .dt2

Table 7.1 PSD 24 Database file description

 <p>FAP 24 DELFT - DHI</p>	<p>RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities</p>	Survey Bulletin 253 : 27 - 28 January, 1996	
		Location 5 : Padma River, Baruria	
	Date : 10 Apr 1996	PSD 24 Database file description	page
	Init : mk/ss		7.1



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



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

Survey Bulletin 255 : 10 February, 1996

Location 5 : Padma River, Baruria

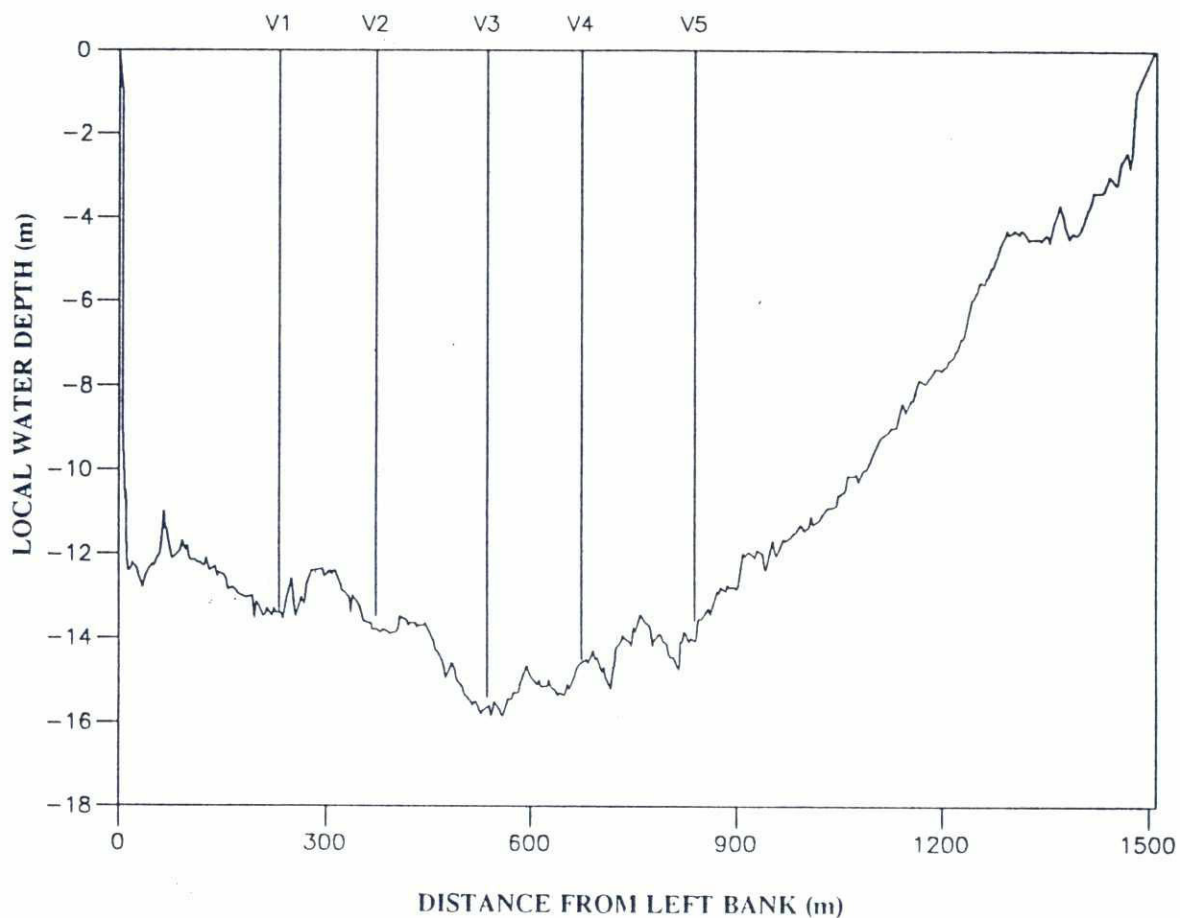
Date : 20 Apr 1996

Init : m/less


Location map

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1.1

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Water level : 2.24 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 255 : 10 February, 1996	
		Location 5 : Padma River, Baruria	
File : U62AIT06	Date : 20 Apr 1996	Cross-sections and measured verticals Channel 1	page 1.2
	Init : mk/ss		

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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	5	-	-	-
	ADCP	5	-	-	-
	S4 current meter	1	-	-	-
	Ott current meter	-	-	-	-
Vertical sediment profile	Pump bottle sampling	6	-	-	-
	Andreasen settling tube	-	-	-	-
	MEX turbidity meter	-	-	-	-
	Integrated bottle sampling	5	-	-	-
	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

Channel	Width (m)	Area (m ²)	Stage h (m+PWD)	Discharge Q (m ³ /s)	Bed load transport Sb (kg/s)	Suspended Sediment transport Ss total (kg/s)
Channel 1	1505	16639	2.24	5840	-	253

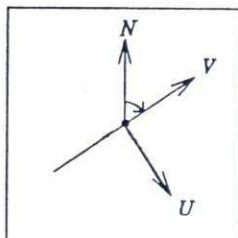
Table 2.2: Key figures

Gauge Location	Channel	Date	Water level (Daily average) (m+PWD)	Gauge
Baruria	Channel 1	10 Feb 96	2.24	FAP 24

Table 2.3: Water-levels

 FAP 24 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 255 : 10 February, 1996	
		Location 5 : Padma River, Baruria	
File : U62A1T06	Date : 20 Apr 1996	Survey programme as made and key figures	page
	Init : mk/ss		2.1

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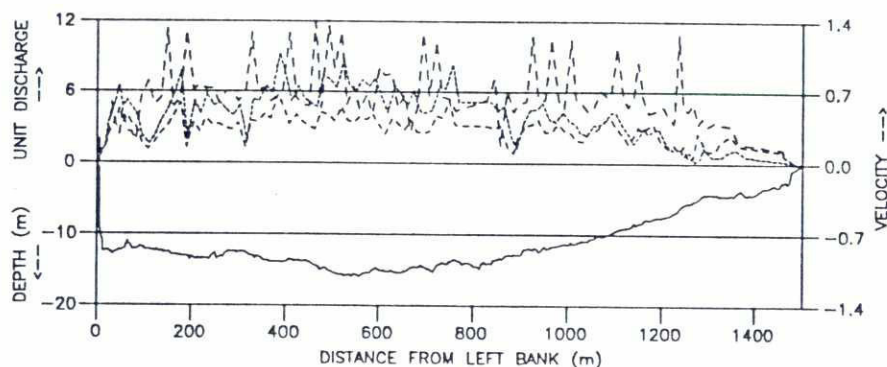


TRANSECT AZIMUTH = 56°

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)

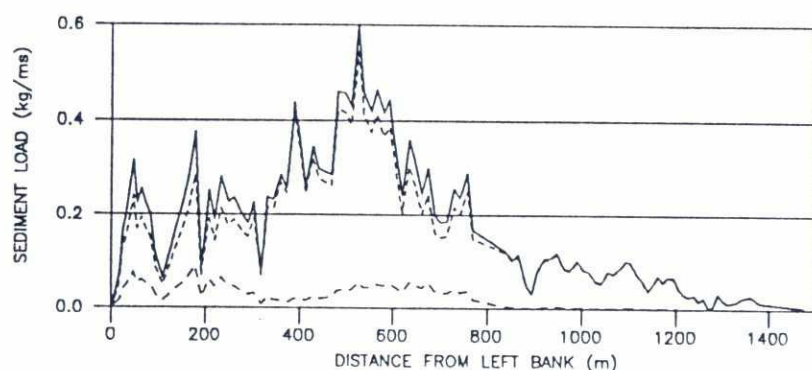
--- U - (m/s)

- . - - V - (m/s)

STAGE = 2.24 (m+PWD)

A = 16639 (m²)

Q = 5840 (m³/s)



LEGEND :

— S_{TOTAL} 263 (kg/s)

--- S_{WASH LOAD} 222 (kg/s)

- . - - S_{SUSP. LOAD} 31 (kg/s)

..... S_{RED LOAD} — (kg/s)

SAMPLE NOT COLLECTED

GRAIN SIZE

FAP 24



DELFT - DHI

RIVER SURVEY PROJECT

Flood Plan Coordination Organization
Commission of the European Communities

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File : U62A1T06

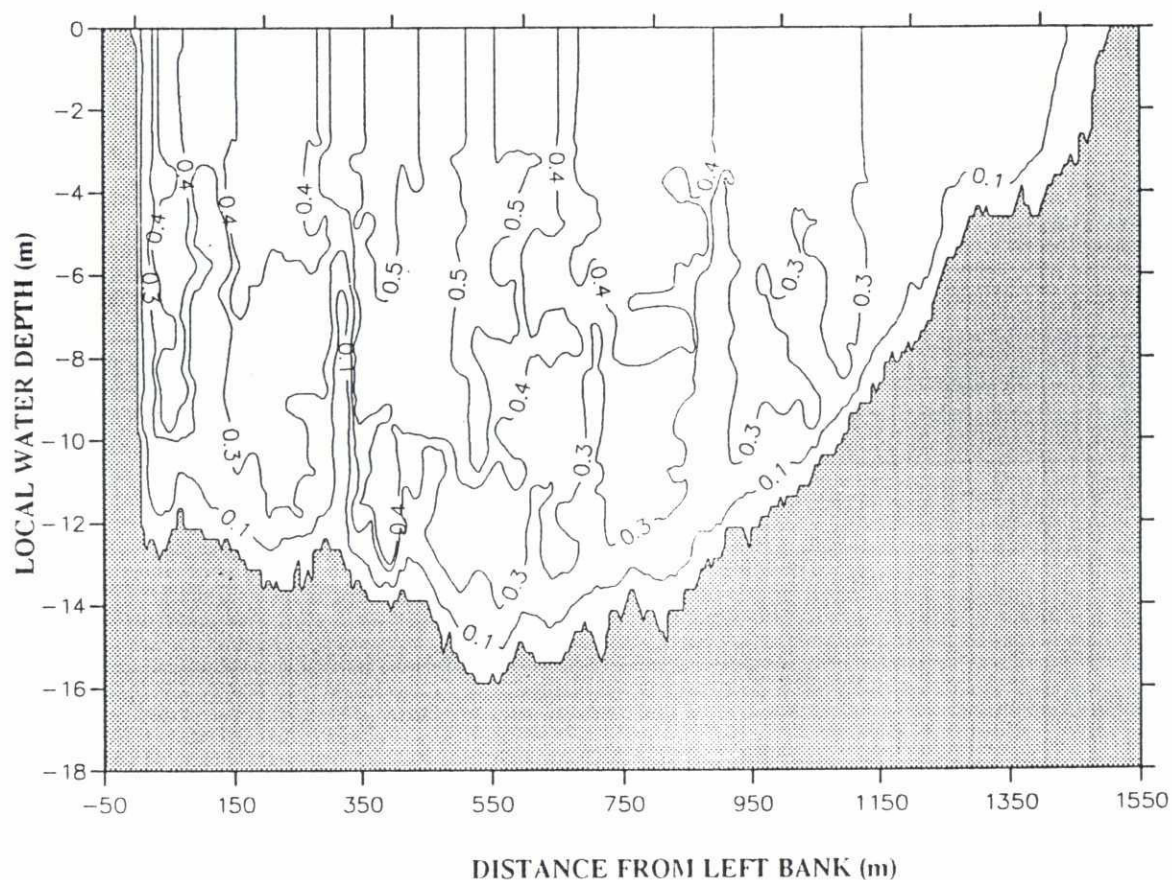
Date : 20 Apr 1996

Unit : m/s

Horizontal distribution of flow and sediments
Channel 1


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3.1

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Iso-velocity contours (m/s)

Water level : 2.24 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 255 : 10 February, 1996	
		Location 5 : Padma River, Baruria	
File : U62A1T06	Date : 20 Apr 1996	Cross-sectional distribution of flow velocity Channel 1	page 4.1
	Init : mk/ss		

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)
Sample not collected							

Table 5.3: Grain sizes of bed load

FAP 24



DELFT - DHI

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

Survey Bulletin 255 : 10 February, 1996

Location 5 : Padma River, Baruria

Date : 20 Apr 1996

Init : mk/ss

Grain size distributions

page

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Method	Channel	Time (YYMMDDHHMM-HHMM)	File name
ADCP & EMF transect	1	9602100820-0830 9602100834-0846 9602101330-1341 9602101343-1352	U62A1T01 U62A1T02 U62A1T06 * U62A1T07

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	9602100949-1003	480864	629905	13.40	U62A1P01 *
		2	9602101018-1030	480748	629825	13.50	U62A1P02 *
		3	9602101043-1144	480615	629729	15.40	U62A1P03 **
		4	9602101156-1211	480490	629653	14.50	U62A1P04 *
		5	9602101221-1242	480368	629582	13.60	U62A1P06 *


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	9602101043-1144	480615	629729	15.40

Table 6.3: Suspended sediment - point sample

Method	Channel	Vertical	No. of samples	Time (YYMMDDHHMM-HHMM)	Easting (m)	Northing (m)	Depth (m)
Suspended sediments	1	1	1	9602100949-1003	480864	629905	13.40
		2	1	9602101018-1030	480748	629825	13.50
		3	1	9602101043-1144	480615	629729	15.40
		4	1	9602101156-1211	480490	629653	14.50
		5	1	9602101221-1242	480368	629582	13.60


Table 6.4: Suspended sediment - depth integrated

<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 255 : 10 February, 1996	
		Location 5 : Padma River, Baruria	
	Date : 20 Apr 1996	Collected data and their storage (1)	page 61
	Init : mk/ss		

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Types of Data	Channel	Format	Filename
ADCP/S4/EMF data	1	QUATTRO	U62A1T06 .ase
Echosounder data	1	QUATTRO	U62A1T06 .ech
Sediment transport data	1	QUATTRO	U62A1T06 .sed
Susp. sed. conc. analysis	1	QUATTRO	U62A1T06 .ssc
Transect plot data	1	QUATTRO	U62A1T06 .trs
Iso-velocity plot data	1	MIKE21 MIKE21	U62A1T06 .ct2 U62A1T06 .dt2

Table 7.1 PSD 24 Database file description

 DELFT - DHI	RIVER SURVEY PROJECT Flood Plan Coordination Organization Commission of the European Communities	Survey Bulletin 255 : 10 February, 1996	
		Location 5 : Padma River, Baruria	
	Date 20 Apr 1996	PSD 24 Database file description	page
	Init mk/ss		7.1

