

（注）

（注）

（注）

（注）

JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF LANDS, MINERAL RESOURCES AND ENERGY
REPUBLIC OF FIJI

THE STUDY
ON
GROUNDWATER DEVELOPMENT IN NORTH VITI LEVU
IN THE REPUBLIC OF FIJI

VOLUME IV

FINAL REPORT
DATA BOOK

JICA LIBRARY



1120252101

29889

MAY 1995

NIPPON KOEI CO., LTD.
NIKKO EXPLORATION & DEVELOPMENT CO., LTD.

LIST OF REPORTS

VOLUME I EXECUTIVE SUMMARY

VOLUME II MAIN REPORT

VOLUME III SUPPORTING REPORT

APPENDIX - A	GEOLOGY
APPENDIX - B	GEOPHYSICAL PROSPECTING
APPENDIX - C	TEST WELL DRILLING AND PUMPING TEST
APPENDIX - D	WATER SUPPLY SYSTEM AND WATER USE
APPENDIX - E	SOCIO-ECONOMY
APPENDIX - F	POPULATION PROJECTION

VOLUME IV DATA BOOK

DATA BOOK - A	SUMMARY OF WELL INVENTORY SURVEY
DATA BOOK - B	METEORO-HYDROLOGY
DATA BOOK - C	WATER QUALITY
DATA BOOK - D	GROUNDWATER SIMULATION
DATA BOOK - E	LIST OF SURVEY EQUIPMENT BROUGHT BY JICA STUDY TEAM

国際協力事業団

27889

ABBREVIATIONS

AES	Agricultural Experimental Station
APHA	American Public Health Association
AWWA	American Water Works Association
EPA	Environmental Protection Agency (United States)
FEA	Fiji Electricity Authority
FMS	Fiji Meteorological Service
FSC	Fiji Sugar Corporation
GDP	Gross Domestic Product
GNP	Gross National Product
GOF	Government of Fiji
GOJ	Government of Japan
JICA	Japan International Cooperation Agency
MFARD	Ministry of Fijian Affairs and Regional Development
MLMRE	Ministry of Lands, Mineral Resources and Energy
MOH	Ministry of Health
MRD	Mineral Resources Department
PWD	Public Works Department
WEF	Water Environment Federation (United States)
WHO	World Health Organization
EIRR	Economic Internal Rate of Return
FIRR	Financial Internal Rate of Return
O&M	Operation and Maintenance
EI	Elevation
HWL	High Water Level
LWL	Low Water Level
WL	Water Level

ABBREVIATIONS OF MEASUREMENT

Length

cm	=	Centimeter
m	=	Meter
km	=	Kilometer
ft	=	Foot
yd	=	Yard
mm	=	Milimeter
inch	=	Inch

Area

cm ²	=	sq.cm	=	Square centimeter
m ²	=	sq.m	=	Square meter
ha	=		=	Hectare
km ²	=	sq.km	=	Square kilometer

Volume

cm ³	=	cu.cm	=	Cubic centimeter
l	=	lit	=	liter
kl	=		=	Kiloliter
m ³	=	cu.m	=	Cubic meter
gal.	=		=	Gallon
MCM	=		=	Million Cubic Meters

Weight

mg	=	Milligram
g	=	Gram
kg	=	Kilogram
ton	=	Metric ton
lb	=	Pound

Time

min	=	Minute
sec	=	Second
hr	=	Hour
d	=	Day
yr	=	Year

Electrical Measures

V	=	Volt
A	=	Ampere
Hz	=	Hertz (cycle)
W	=	Watt
kW	=	Kilowatt
MW	=	Megawatt

Other Measures

%	=	Percent
PS	=	Horsepower
°	=	Degree
'	=	Minute
"	=	Second
°C	=	Degree centigrade
10 ³	=	Thousand
10 ⁶	=	Million

Derived Measures

m ³ /s	=	m ³ /sec = Cubic meter per second
cusec	=	Cubic feet per second
mgd	=	Million gallon per day
kWh	=	Kilowatt hour
MWh	=	Megawatt hour
kVA	=	Kilovolt ampere
mg/l	=	Milligram per liter
meg/l	=	Milliequivalent per liter
MS/cm	=	Micro Siemens per centimeter
ppm	=	Part per million
NTU	=	Nephelometric turbidity unit
lpcd	=	Liter per capita per day

Money

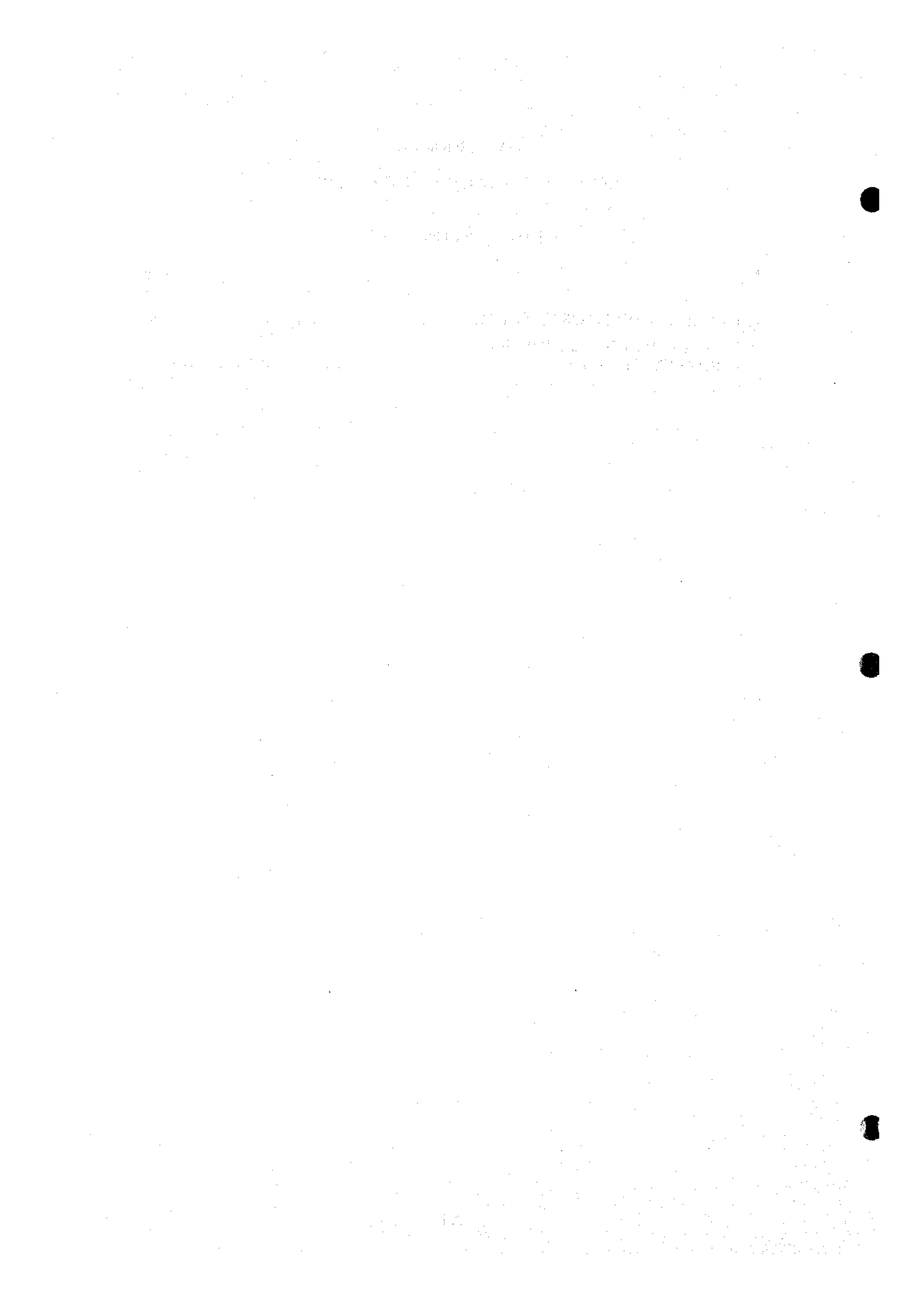
F\$	=	Fijian Dollar
US\$	=	US dollar
J.Yen	=	Japanese Yen

DATA BOOK - A

DATA BOOK - A
SUMMARY OF WELL INVENTORY SURVEY

TABLE OF CONTENTS

<u>No.</u>	<u>Page</u>
A-1 WELL INVENTORY FORM.....	A-1
A 2 SUMMARY OF WELL INVENTORY SURVEY (1) - (12).....	A-2



1. Well No. _____ 2. Owner: _____

3. Location: _____

FMG Coordinates: _____ mE _____ mN

Geographical Coordinates: E. Long. _____ S. Lat. _____

Elevation (above sea level): _____ m (map /altimeter /level)

4. Method of drilling: (dug/ direct rotary/ air rotary/ percussion)

Date well completed: _____ Drilled by: _____

5. Well structure A. Tube well B. Dug well

Drilling depth: _____ m _____ m , diameter: _____ mm/inch

_____ m _____ m , diameter: _____ mm/inch

_____ m _____ m , diameter: _____ mm/inch

Casing depth: _____ m _____ m , diameter: _____ mm/inch

_____ m _____ m , diameter: _____ mm/inch

Screen depth: _____ m _____ m , diameter: _____ mm/inch

_____ m _____ m , diameter: _____ mm/inch

Casing type (steel/galv./PVC/threaded/welded/concrete/rock)

Screen type (v-slot/ slit/ steel/ galv/ ss/ PVC)

6. Method of water lift: (pump/ bucket)

Pump (Type: _____ Manufacture: _____ Model No.: _____)

HP: _____ Volts: _____ Capacity: _____ Pump intake at: _____ m)

Column pipe dia: _____ inch, Discharge pipe dia: _____ inch

Power Supply: (Engine/ Electric), HP: _____ Volts: _____

Pump runs dry: yes/no , after _____ hrs/min. Recovery: _____ hrs

Yield (estimate/measure): _____ (l/s)

Drawdown(estimate/measure) _____ (m)

7. Water use: (domestic/ irrigation/ industry/ _____)

Domestic - approximate number of persons: _____

Irrigation - area _____ ha, main crops _____

Other uses - _____

Average pumpage duration: _____ hrs/day, _____ day/week, _____ months/year,

Estimated discharge rate: _____ m³/d, _____ m³/month, _____ m³/year,

8. Water level : (date at _____) by (record/estimate/measures)

Static water level : _____ (m), Pumping water level: _____ (m)

Specific Capacity: _____ (l/s/m) at _____ hours

Trend of water level: _____ Yearly variation: _____ (m)

9. Water quality: (sample analyzed?(yes/no) where _____ when _____)

Users judgment: good/fair/bad (fresh/brackish/saline)

Electric conductivity: _____ (micro S/cm), pH _____, Temperature _____ (°C)

10. Formation log:

geology _____ color hardness from(m) to(m)

11. Suitability of well for investigation purposes

Pump test: yes/no, Groundwater level monitoring: yes/no,

Water quality sampling: yes/no, Availability of geophysical log: yes/no.

12 Inventory made by _____, date _____

13 Sketch map of well location

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	
THE STUDY ON GROUNDWATER DEVELOPMENT IN NORTH VITI LEVU IN THE REPUBLIC OF FIJI	
A-1	WELL INVENTORY FORM
NIPPON KOEI CO., LTD NIKKO EXPLORATION & DEVELOPMENT CO., LTD	

SUMMARY OF WELL INVENTORY SURVEY (1)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mN	Well type	Well Drilled Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. (m)	EC (MS/cm)	Temp. (°C)	PH	Memo
GW 001	Arun Kumar	Koronubu	1894200	3934220	D	1991	3.85	1,000	D			3.02	495	23.4	7.87	
GW 002	Jitien Kumar	Tivoro line	1892400	3937040	D	1943	7.55	1,200	D			5.41	69	26.2	5.46	
GW 003	Hari Shankar	Koronvto	1891140	3937920	D	1987	7.82	1,200	D			4.45	285	26.0	7.03	
GW 004	PWD	Veisaru	1891680	3938680	B	1968	60.00	150	WS	T	1.40		145	22.1	8.07	VIT4/17,Production BH
GW 005	Anand Prakash	Vaqia	1888240	3937180	D	1980	4.80	1,200	D			3.00	160	25.7	6.48	
GW 006	Chandra kumar	vunisamakoa	1889300	3936420	D	1963	9.72	2,000	D			6.54	125	26.0	6.57	
GW 007	Ram Chandra	Nadrau	1888060	3934580	D	1943	6.76	1,200	D			2.79	370	24.6	7.61	
GW 008	Krishna Chand	Galau	1936350	3956340	D		3.47	1,200	D			2.13	530	26.0	6.67	
GW 009	Ganga Dharan	Colasi	1938650	3958900	D	1960	2.56	1,200	D			1.41	535	25.2	6.73	
GW 010	Raju	Wairuku	1933700	3958100	D	1960	5.65	1,500	D			1.57	440	24.4	7.17	
GW 011	Manoa Sovatabua	Natuvu	1930200	3958450	D	1992	5.02	1,200	D			2.79	460	25.7	6.95	
GW 012	Rajesh Chand	Nanuku	1925550	3958650	D	1985	3.15	1,000	D			1.25	710	27.8	6.78	
GW 013	MRD	Yaqara	1918140	3950600	B	1989	60.00	200	TW			5.65	260	24.6	8.05	89/10
GW 014	MRD	Yaqara	1918400	3950460	B	1989	40.00	200	TW			7.99	330	27.4	6.60	89/24
GW 015	Abhay Singh	Rabulu	1914220	3951920	D	1934	4.85	1,800	D			3.81	860	24.9	7.03	
GW 016	Sai Raj	Balat2	1913500	3950700	D	1950	2.60	1,200	D			1.74	540	24.5	7.40	
GW 017	Sarjit Singh	Korovou	1908800	3951000	D	1963	5.75	1,500	D			3.22	1,100	25.3	7.46	
GW 018	Mohamed Aslam	Balata1	1909560	3948360	D	1983	7.67	2,000	D			5.48	555	23.8	7.37	
GW 019	Ram Charan	Davoia	1910600	3946100	D	1958	6.75	1,200	D			1.45	140	23.5	6.77	
GW 020	Krishna	Malele	1908180	3946660	D	1981	4.90	1,180	D			1.15	600	24.1	7.05	
GW 021		Yaladro	1906980	3950480	D		4.20	1,400	D			3.22	780	23.5	7.50	
GW 022	Abdul Gafoor	Yaladro	1906980	3950240	D	1943	5.09	1,100	D			3.66	805	24.5	7.34	
GW 023	Maia Orasad Bajaps	Vatukola Toko	1905280	3945800	D		8.24	1,200	D			4.80	680	26.0	7.60	
GW 024	Deo Kumari	Yasi Yasi	1904400	3950120	D	1957	16.50	1,200	D			10.20	590	27.1	7.60	
GW 025	Suinr	Yasi Yasi	1904420	3950840	D		4.41	1,100	D			1.75	1,000	25.1	7.60	
GW 026	Motial	Matalevu	1901640	3948840	B	1990	33.00	150	D	S			230	23.1	8.10	
GW 027	Harbans Singh	Matalevu	1902800	3950020	B	1989	51.00	100	D	P			460	26.6	8.00	
GW 028	Suresh Chandra	Waikona	1900360	3951120	D		9.11	1,100	D			3.98	505	25.7	7.20	
GW 029	MRD	Qqlela	1897300	3949620	B	1987	56.00	150	TW			Flowing	230	28.8	7.40	VIT1/141
GW 030	MRD	Biloto	1897040	3948860	B	1987	56.00	150	TW			0.47	240	25.7	6.90	VIT11/145
GW 031	Comunity(MRD)	Maqere	1895160	3951940	B	1987	56.00	150	WS	T			285	27.9	7.60	
GW 032	Basawanand	Maqere	1895140	3951940	D	1953	2.60	550	D			1.20	320	24.5	7.10	
GW 033	Comunity	Natunuku	1893560	3949800	B	1974	36.00	100	D	H			860	28.7	6.70	
GW 034	PWD	Varavu	1890480	3945720	B	1968	60.30	150	WS	T	2.70		200	26.2	7.09	VIT11/15,ProductinBH
GW 035	MRD	Vatuyaka	1891400	3945660	B	1991	45.00	200	TW			8.27	340	26.6	6.81	91/12
GW 036	PWD	Navori	1892180	3942260	B	1968	30.00	150	WS	T			155	27.0	6.89	VIT1/18,ProductionBH
GW 037	Ram Chandra	Tavarau	1873600	3942780	D	1990	4.60	1,200	D				300	24.1	6.30	
GW 038	Surend Chand	Tuvu	1871960	3941840	D		5.20	900	D			3.12	450	26.5	6.20	
GW 039	Anthony	RaviRavi	1876260	3944320	B	1985		100	D	C			250	24.2	7.20	
GW 040	Mohamed Ibrahahim	Karavi	1880420	3945200	B	1992	27.00	100	D	C						
GW 041		Karavi	1880420	3945200	D	1961	9.35	1,500	D			7.85	5,700	24.9	8.00	
GW 042	MRD	Lousa	1894340	3949500	B	1991	60.00	200	TW			8.24	240	27.0	6.69	91/6
GW 043	MRD	Tavarau	1873760	3942600	B	1988	25.00	150	TW			4.11	340	27.4	7.00	88/1
GW 044	MRD	Raviravi	1878740	3944000	B	1988	40.00	150	TW			2.52	580	26.5	6.83	88/13
GW 045	Padarath	Navau	1881140	3945950	B	1992	7.80	100	E	T			420	27.9	7.07	
GW 046	Padarath	Navau	1881020	3945820	B	1992	19.80	100		S			450	32.2	7.27	
GW 047	Padarath	Navau	1881150	3945750	B	1960				S			385	31.0	6.88	
GW 048	Padarath	Navau	1881200	3945760	D	1960	7.72	1,000	D			5.64	520	28.2	6.88	
GW 049	Padarath	Navau	1881250	3945780	B	1991	7.04					4.36				
GW 050	FSC(1)	Rarawai	188750	3938000	B	1993	57.30	150		S			130	27.0	6.39	stanby

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, &others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (2)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mN	Well type	Well Drilled Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. (m)	EC (MS/cm)	Temp. (°C)	PH	Memo
GW 051	FSC(2)	Rarawai	1987680	3938080	B	1993	38.11	100	S							Not used
GW 052	FSC(3)	Rarawai	1987380	393795	B	1993	42.68	100	S							stand by
GW 053	Hari Prasad	YasiYasi	1904400	3949880	B			100	D							Out of order
GW 054	Vijay Kumar	Yasi Yasi	1904500	3949460	B	1980	25.50	100	D	T		480	27.2	7.08		
GW 055	Mohamed Hussein	YasiYasi	1905100	3948460	B	1983	45.00		D	T		380	25.0	7.18		
GW 056	Mami Singh	YasiYasi	1904900	3949620	B	1986	45.00	100	D	T		520	27.4	6.95		
GW 057	Mohad Shafulia Kh	YasiYasi	1904400	3950200	B	1986										Not used
GW 058	Sheak Imam	Matalevu	1902680	3949780	B	1992	27.00		D	S		530	24.3	7.60		
GW 059	Munif Shah	Matalevu	1903000	3949660	B	1993	24.00				6.79	380	28.3	6.68		No pump
GW 060	Mounif Shah	Matalevu	1903000	3949660	D			2,000	D		3.05	340	24.8	7.07		
GW 061	Didar Shah	Matalevu	1902560	3949400	B	1980	27.00		D	S		400	25.3	7.16		VIT1/117
GW 062	Sheik Amir	Matalevu	1903080	3949300	B	1977	18.00		D	P						
GW 063	Sheik Abdul	Matalevu	1902320	3939080	B		39.00	100	D	P		380	28.8	7.01		
GW 064	Ram Murath	Matalevu	1902300	3949200	B	1992	37.80		D	S		420	28.3	7.14		
GW 065	Sheik Iman	Matalevu	1902520	3949220	B											
GW 066	Ram Jatan	Matalevu	1902460	3948360	B	1986	25.00	100	D	S		580	27.3	6.85		
GW 067	Shiu Parakash	Matalevu	1902400	3948600	B	1992	46.00		D	S		540	27.8	7.09		
GW 068	Kartau Shingh	Matalevu	1902780	3948360	B	1984	52.00		D	S		240	26.9	6.65		VIT1/118
GW 069	Sri Prasad	Matalevu	1902900	3948480	B				D	P		260	24.7	7.11		
GW 070	Sucha Singh	Matalevu	1902660	3948620	B	1977	33.00		D	P	0.30	330	26.6	7.08		
GW 071	Mohan Singh	Matalevu	1902760	3948620	B	1985	34.00		D	C	0.26	280	25.8	7.00		
GW 072	Shue Narayan	Matalevu	1902280	3948740	B	1975	39.00	100	D	P		340	26.9	7.10		
GW 073	Kalika Prasad	Matalevu	1901560	3948260	B	1991	51.00	100	D	T		200	27.1	9.22		
GW 074	Ram Sewak	Matalevu	1901460	3948560	B	1968	48.00	200	D	P						
GW 075	Ram Surat	Matalevu	1901240	3948500	B	1991			D	S	0.36	270	27.8	7.01		
GW 076	Rajendra Pratao	Matalevu	1901560	3948840	B	1991	36.00		D	S	0.60	340	25.7	7.11		
GW 077	Hirara	Matalevu	1901760	3949180	B	1963	31.50		D	P		375	24.9	7.23		
GW 078	Warda Naikan	Matalevu	1900920	3949300	B											VIT1/25,Abandoned
GW 079	Gulam Hussain	Lubu Lubu	1899300	3949580	B	1983	48.90		D	P						VIT1/134,Not used
GW 080	Sukh Deo	Lubu Lubu	1898360	3949500	B	1965	63.00		D	S		700	26.2	7.12		VIT1/6
GW 081	Mohamad Ali	Lubu Lubu	1898500	3949320	B	1991	24.00		D	S	0.45	180	27.1	6.73		
GW 082	Mohamad khalik	Tagi Tagi	1899060	3950640	B	1991	22.50	100	D	S		260	24.5	7.00		
GW 083	PWD	Tagi Tagi	1898300	3951060	B											Abandoned
GW 084	Udum shingh	Waikona	1900520	3951500	B			100	D	S	0.90	350	25.7	6.69		VIT1/87
GW 085	Shiua Prasad	Waikona	1900600	3951400	B		32.10			H						VIT1/66,Out of order
GW 086	Ashack Kumar	Waikona	1900240	3951200	B											VIT1/45,Out of order
GW 087	Subran Singh	Waikona	1899820	3951000	B		33.60		D	P						VIT1/65,Out of order
GW 088	Sohan Singh	Waikona	1900000	3950440	B	1993	36.00									No water
GW 089	Rejendra Singh	Waikona	1899900	3950700	D	1973	9.00	1,600	D		0.72	200	24.1	7.09		
GW 090	Jagendra Singh	Waikona	1801340	3950800	B			75			9.09					Abandoned
GW 091	TagiTagi Public Sc	TagiTagi	1898201	3950800	B	1970	40.50		D	P						Out of order
GW 092	Daud Shaha	Caulay/Vatia	1895000	3953800	B	1984	52.00	100	D	C		380	27.6	6.53		
GW 093	Anil Kumar	Vatia	1895200	3954400	B				D	P		2,000	29.5	7.21		
GW 094	Swatantra Nand	Vatia	1895020	3954800	B		26.20		D	C		2,000	26.3	7.19		
GW 095	Prem Narayan	Vatia	1896700	3955100	B		46.50	100	D	S		500	27.8	7.02		
GW 096	Chandra San	Vatia	1895740	3954300	B	1993	28.50	100	D							Not used
GW 097	Abdul Jalil	Vatia	1894880	3953400	B	1991	75.00	100	D	S		455	25.2	7.20		
GW 098	Mohamed Azim	Vatia	1894080	3953080	B	1970	24.00									No water
GW 099	Mohamed Khalil	Vatia	1895000	3951900	B	1984	31.00				2.60					Not used
GW 100	Ramesh V,Singh	Maqere	1894760	3952240	B											Abandoned

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVE (3)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. (m)	EC (MS/cm)	Temp. (°C)	PH	Memo
GW 101	Beij Nath	Maqere	1895720	3951880	B	1983	33.00	100	D	T		240	25.3	7.08	VIT1/101	
GW 102	Mahendar Datt	Maqere	1895440	3951300	B	1983	65.00	100	D	C	0.30	330	27.4	7.09	VIT1/100	
GW 103	Jim Ash	TagiTagi	1896080	3950520	B		46.50	100	I,D	P	0.23	210	26.8	6.25	VIT1/53	
GW 104	Ram Prasad	Maqere	1895900	3950520	B	1992	52.00	100	D	S	0.75	250	26.8	6.29		
GW 105	Deo Narayan	Maqere	1896000	3950680	B	1980	45.00	100	D	S	0.60	230	26.8	6.38	VIT1/95	
GW 106	Shyam Sundar	Maqere	1896060	3950820	B	1980	52.00	100	D	T	0.30	260	27.2	6.49	VIT1/96	
GW 107	Jai Ram	Maqere	1896040	3951240	B	1992	45.00	100	D	S	0.60	490	27.7	6.87		
GW 108	Sukh Deo	Maqere	1895300	3950780	B	1989	45.00	100								No water
GW 109	Ms. Mecna Singh	Maqere	1895580	3950630	B	1993	34.50	100								Not completed
GW 110	Suren Prasad	Maqere	1895580	3950630	B	1991	45.00	100	D	S	0.45	260	28.2	6.74	VIT1/36	
GW 111	Mani Lal	Maqere	1895900	3950460	B	1980	52.00	100	D	S	0.20	240	28.2	6.58	VIT1/97	
GW 112	Bal Deo Singh	Maqere	1895120	3950740	B	1979	45.00	100	D	P	0.23	490	28.1	7.67		
GW 113	Dewarka Nath	Maqere	1895320	3951180	B	1974	31.50	100	D	P	0.23	300	26.9	6.88	VIT1/98	
GW 114	Vasist Muni School	Maqere	1894840	3951180	B	1984	30.48	100	D	S		320	28.0	7.00	VIT1/116	
GW 115	Ramlu	Lousa	1894740	3950740	B											Not used
GW 116	Ajay Ram	Lousa	1894520	3949960	B	1978	30.00	100	D	C	0.26	610	28.2	6.46	VIT1/41	
GW 117	Hari Shankar	Lousa	1894600	3949880	B	1974		100	D	P	0.19	430	28.1	6.74	VIT1/34	
GW 118	Mohamed Liassen	Lousa	1894720	3949480	B	1983	35.40	100	D	C						Out of order
GW 119	Pratap Singh	Lousa	1894980	3949660	B	1974	33.00	100	D	S	0.50	240	26.9	6.78		
GW 120	Ram Harack	Lousa	1895300	3949580	B	1992	33.00	100	D	P						
GW 121	Mohamed Salim	Lousa	1894720	3949400	B	1977	34.50	100	D	P						VIT1/55
GW 122	Ali Husain	Lousa	1894980	3949040	B	1984	70.00	100								VIT1/125, Pump broken
GW 123	Bhim Sen	Lousa	1895220	3949740	B	1983	31.80	100	D	P	0.20	300	27.1	6.64	VIT1/99	
GW 124	Hari Prasad	Lousa	1894900	3949740	B	1983	30.00	100	D	C	0.11	280	27.5	6.15	VIT1/105	
GW 125	Ram Kissum	Lousa	1894260	3950700	B		28.50	100	D	H						VIT1/40, Pump broken
GW 126	Bihia Mistri	Lousa	1894220	3950000	B	1975	22.50	100	D	P	0.21	380	27.4	6.96		
GW 127	Mani Ram	Lousa	1894100	3949720	B	1974		100	D	S	1.29	450	27.2	7.05	VIT1/33	
GW 128	Ms. Kanya Wati	Lousa	1894440	3949780	B	1972	23.50	100	D	C	0.30	260	27.6	6.75		
GW 129	Vatutauni village	Vatutauni	1893800	3949600	B	1983	27.00	100	D	S						VIT1/115
GW 130	Krishnia Prasad	Natunuku	1893300	3949140	B	1976	24.00	100	D	C	0.45	650	26.8	6.52	VIT1/50	
GW 131	Madhwam	Natunuku	1893260	3949320	B	1982	24.00	100	D	C	1.00	180	25.7	6.24		
GW 132	Ram Dayal	Natunuku	1892540	3949820	B	1992	33.00	100	D	C						No pump
GW 133	Ms. Sheik Amir	Natunuku	1892320	3949820	B	1970	17.40	100	D	P		900	23.4	7.44		
GW 134	Nadij Kanh	Natunuku	1892720	3949660	D		5.28	2,000	D			600	26.2	6.77		
GW 135	Narayan Gosai	Natunuku	1893120	3949640	B	1991	24.00	100	D	S	0.90	540	28.1	6.52		
GW 136	Ganeshua	Natunuku	1893300	3949000	B	1991	25.50	100	D	C	0.90	525	28.0	6.67		
GW 137	Hari Singh	Bilolo	1893220	3948900	B	1983	24.38	100	D	S	1.29	520	27.5	6.86		
GW 138	Hidai	Bilolo	1893660	3948820	B	1990	30.00	100	D	S		460	25.2	7.94		
GW 139	Bal Gobin	Bilolo	1892780	3948160	B	1992		100	D	S		280	28.3	7.07		
GW 140	Bisun Lal	Bilolo	1893200	3948340	B	1992	33.60	100	D	S	0.90	280	28.7	7.00		
GW 141	Busuri Prasad	Bilolo	1892340	3947620	B	1992	48.00	100	D	S	1.00	300	30.0	7.10		
GW 142	Kudan	Bilolo	1891760	3947080	B	1992	23.20	100	D	S	0.45	340	29.2	7.17		
GW 143	Laykat Ali	Vatuyaka	1893060	3944860	B	1992	18.00	100	D	H		220	28.6	6.81		
GW 144	Ram Harak	Nadari	1892120	3945580	B		55.50	100								Abandoned
GW 145	Manik Prasad	Vatuyaka	1891350	3943850	B			100	D	S	0.26	220	25.9	6.45	VIT1/78	
GW 146	Gauri Shankar	Vatuyaka	1892100	3945800	B	1988	50.00	100	D	S		170	24.1	7.09		
GW 147	Babbu Rem	Vatuyaka	1891920	3944940	B	1976	52.00	100	D	P	0.30	170	25.6	6.10	VIT1/71	
GW 148	Chowan Singh	Vatuyaka	1891720	3943820	B	1977	30.00	100								Abandoned
GW 149	Satendra Kumar	Vatuyaka	1891400	3943820	B	1991	50.40	100	D	S		350	28.8	7.31		
GW 150	Brij Lal	Vatuyaka	1891500	3943780	B	1990	52.00	100	D	S	0.56	320	26.5	6.73		

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (4)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Drilled Well Year	Well depth (m)	Water dia. (mm)	Pump use	Yield (l/sec)	Static EC. (mS/cm)	Temp. (°C)	PH	Memo
GW 151	Ram Jasu	Vatuyaka	1890560	3944220	B	1988	33.00	100	D S	0.75	220	25.8	7.10	
GW 152	Shiu Narayan	Vatuyaka	1890240	3944200	B	1992	33.00	100	D S	0.82	300	26.8	7.14	
GW 153	Hari Prasad	Vatuyaka	1891620	3943700	B	1975	45.00	100						Pump broken
GW 154	Jai Ram	Vatuyaka	1891480	3943620	B	1989	46.80	100	D D	0.60	390	24.3	6.93	
GW 155	Mandra Singh	Vatuyaka	1891500	3943340	B	1978	45.00	100	D P		260	21.8	7.21	
GW 156	Ram Pal	Vatuyaka	1891580	3943240	B	1981	41.40	100	D S	0.60	315	23.9	6.93	
GW 157	Jagendra Singh	Vatuyaka	1891440	3943220	B	1990	45.00	100	D S	0.45	280	25.3	7.33	
GW 158	Gurmesh Singh	Vatuyaka	1891360	3943160	B		30.00	100	D H		350	22.7	6.96	
GW 159	Hari Jet Singh	Vatuyaka	1891080	3943140	B	1982	52.00	100	D S					
GW 160	Abhy Chand	Vatuyaka	1890660	3943120	B	1980	30.00	100	D S	0.60	200	26.0	5.78	
GW 161	Sohan Singh	Vatuyaka	1890800	3943360	B	1991	36.00	100	D S	0.64	280	25.0	6.68	
GW 162	Ram Prasad	Navoli	1893000	3943000	B	1983	45.00	100	D S	0.75	195	23.9	6.87	VIT1/127
GW 163	Shue Ram	Navoli	1892480	3942040	B	1980	45.00	100	D S	0.36	36	26.4	6.02	VIT1/130
GW 164	Shue Ram	Navoli	1892480	3942040	D	1965	18.00	1,000	D		90	25.4	6.76	
GW 165	Mohamad D. Khan	Navoli	1893400	3942680	B	1992	36.00	100	D S	1.29	160	26.8	6.58	
GW 166	Nuru Mohammed	Navoli	1893180	3942420	B	1983		100	D S	0.90	195	26.1	6.62	
GW 167	Ram Raj	Navoli	1893400	3942420	B	1985	32.40	100	D H		155	25.6	6.84	
GW 168	Nazir Ali	Navoli	1893440	3943320	B	1985	37.50	100	D S	0.82	65	28.3	6.91	VIT1/126
GW 169	Ram Dward	Bula Bula	1894000	3943400	B	1981	51.00	100	D S	0.75	165	23.1	6.61	VIT1/131
GW 170	Brij Deo	Bula Bula	1894260	3943340	B			100	D					
GW 171	Bans Lochan	Bula Bula	1897340	3943540	B			100	D S		460	23.7	8.00	
GW 172	Bagwat Prasad	Bula Bula	1896060	3943320	B		41.10	100	D S		160	24.2	7.02	VIT1/132
GW 173	Dawendri Kumar	Veisaru	1895940	3941520	B	1967		100						VIT1/2, Not used
GW 174	Brij Mohan	Veisaru	1893060	3941020	B	1984	42.60	100	D S	0.90	38	25.5	6.77	
GW 175	Nagiya Naidu	Veisaru	1892880	3940820	B	1991		100	D S		32	25.7	6.76	
GW 176	Hiramar	Veisaru	1893700	3940800	B			100	D S		160	24.2	6.65	
GW 177	Bhanu Prasad	Veisaru	1893100	3939360	B	1981	33.00	100	D S	0.56	240	25.8	6.47	
GW 178	Veisaru Indisn Schc	Veisaru	1891580	3939240	B									Not used
GW 179	Gyan Deo	Nabatolu	1892220	3931680	D	1991	5.51	1,650	D		200	23.0	7.29	
GW 180	Hari Pal	Nabatolu	1892300	3931300	B	1992		100						Dry hole
GW 181	PWD	Koronubu	1893540	3934840	B	1968	62.40	150	WS T	2.20	580	26.3	6.90	VIT5/19, Production BH
GW 182	Segaran	Koronubu	1892640	3934640	B	1991	48.00	100	D S	0.56	640	28.5	7.73	
GW 183	Chandra Mal	Koronubu	1892080	3934280	B	1991		100	D S	0.18	580	26.1	7.80	
GW 184	Kamal Pramod	Koronubu	1892860	3933780	B	1991		100	D S		660	22.8	7.70	
GW 185	Babu Ram	Koronubu	1892940	3934140	B	1984	33.00	100	D S		660	23.7	7.83	
GW 186	Shiu Prasad	Benai	1894440	3937000	B	1984	30.50	100	D S		560	26.1	7.35	VIT5/34
GW 187	Benai water project	Benai	1894540	3937840	B	1988	30.00	100	WS S					
GW 188	Ram Samy	Benai	1894280	3936700	B	1987	57.00	100	D S	1.29	595	27.7	7.86	
GW 189	Arjun	Benai	1894400	3936600	B	1992		100						Not used
GW 190	Subahash Chand	Benai	1894580	3936220	B									Dry hole
GW 191	Subahash Chand	Benai	1894580	3936220	B		45.00							Dry hole
GW 192	Subahash Chand	Benai	1894580	3936220	D		4.95	1,200	D		580	24.8	7.01	
GW 193	Daya Bhai	Korovuto	1891900	3936820	B	1965	27.00	100	D T					VIT5/5, Stand by
GW 194	Bhawaini Prasad	Korovuto	1891920	3936000	B		49.50	100						VIT5/6, Abandoned
GW 195	Abdul Rahiman	Vunisamaloe	1890400	3935480	B		42.00	100						VIT5/2, Abandoned
GW 196	Vijandra Kumar	Vunisamaloe	1890220	3935600	B		30.00	100						VIT5/1, Abandoned
GW 197	Karen Singh	Vunisamaloe	1890380	3935320	D		18.00	1,000	D C		280	24.9	7.66	
GW 198	Durga Prasad	Vangia	1889380	3935000	B									VIT5/3, Abandoned
GW 199	Janak Nand	Vangia	1889040	3937460	B		50.40							VIT5/12, Abandoned
GW 200	Ms. Prar Gordon	Vunisamaloe	1889320	3936580	B		21.00							VIT5/10, Abandoned

NOTE: Well Type: D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (5)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Drilled depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. value (m)	EC (MS/cm)	Temp. PH (°C)	Memo	
GW 201	Govind Sam	Korovuto	1890900	3936680	B	33.00								VIT5/7,Abandoned	
GW 202	Ram Sami	Korovuto	1890920	3936800	B									VIT5/8,Abandoned	
GW 203	Balebuto Ind. School	Balebuto	1889900	3927620	B									VIT5/23,Abandoned	
GW 204	R.L.Sharm	Nukulua	1888320	3931820	B		150							VIT5/28,Abandoned	
GW 205	Moto Santan School	Moto	1887260	3933480	B									VIT5/15,Abandoned	
GW 206	Mohammed Ali	Maranitawa	1884400	3932600	B									VIT5/33,Abandoned	
GW 207	PWD	Vunisamoloa	1889460	3937000	B	105.00								VIT5/20,Abandoned	
GW 208	PWD	Koronubu	1892740	3935000	B	64.80								VIT5/18,Abandoned	
GW 209	FSC Penang mill	Penang	1838600	3958620	B	84.00	200							Abandoned	
GW 210	FSC Penang mill	Penang	1838600	3958620	B									Abandoned	
GW 211	FSC Penang mill	Elington	1843840	3962300	B		200							Stand by	
GW 212	Chandra Bali	Tetataba	1886060	3931760	B	33.60	100	D	S	0.69	340	27.7	7.47		
GW 213	Naruku Prim School	Naruku	1891260	3933840	B	45.00	100	D	S	0.33	580	25.9	8.03		
GW 214	Keshow Ram	Naruku	1891240	3934580	B	51.00	100	D	S	0.26	680	28.1	7.20		
GW 215	MRD	Naruku	1891800	3935380	B	1992	200	TW						Abandoned	
GW 216	Mewaru Singh	Naruku	1891320	3934860	B	1989	54.00	150	D	S	1,200	28.7	9.06		
GW 217	Baruka Ram	Naruku	1890920	3933860	B	1992	45.00	75	D	S	980	27.4	8.96		
GW 218	Muttu Sany	Nakavika	1894300	3932860	B	1993		100	D	S					
GW 219	PWD	Moto	1887380	3933580	B	105.00								Abandoned	
GW 220	Gauri Shanbu	Toilevu	1887060	3937940	B	1965	46.50	100						Abandoned	
GW 221	Bal Krusha	Toilevu	1886640	3938000	B	1965	30.00	100	D	S				VIT5/11,Not used	
GW 222	Ram Chandra	Vaqia	1888640	3935780	B	1977	46.50	100	D	S	535	23.2	7.64		
GW 223	Andra Sangam School	Andra	1889600	3938640	B		30.00	100						Abandoned	
GW 224	Navin Patel	Varondoli	1888000	3940720	B	1993	34.20	100	D	S	400	27.4	6.62	Stand by	
GW 225	G.Nadan	Varondoli	1887800	3940840	B	1986	24.00	100	I	S	310	26.1	7.53		
GW 226	Domalco.ltd	Varondoli	1887900	3940800	B	1992	52.00	100	I	S	0.30	320	28.2	6.85	
GW 227	Ishwar Chand Kiwa	Navatu	1890380	3942262	B	1992		75	D	P	210	29.5	7.22		
GW 228	Nakavika Settlement	Nakavika	1876620	3946000	D		6.37	1,000	D		840	24.7	6.71		
GW 229	Lands Department	Raviravi	1876620	3945450	B										
GW 230	Balmaakun Maharaj	Walalai	1876780	3943250	D	1974	6.24	700	D		125	28.1	6.32		
GW 231	MRD	Matalevu	1901760	3948580	B				TW					VIT1/147,Abandoned	
GW 232	Pravin	Varondoli	1887750	3940570	B	1986	45.00	100	D	S	0.45	460	26.1	6.91	
GW 233	Sheikh T Sahib	Raviravi	1878710	3943600	B	1980	36.00	100	D	P	0.26	420	33.3	8.20	
GW 234	Abdul Shameem	Raviravi	1877860	3944530	B	1993	41.40	100	D	C	1.50	380	28.7	7.82	
GW 235	Rafik Mohammad	Karavi	1879900	3946200	B	1993	45.00	100	D		29.06				
GW 236	Bal Kristuna	Vatuyaka	1891600	3944950	B		49.00	100	D	S	0.90	170	29.3	7.10	
GW 237	Shiu Prasad	Vatuyaka	1891180	3943860	B	1994	51.30	100	D	S	0.50	220	27.8	7.37	
GW 238	Lachman Reddy	Vatuyaka	1892050	3943380	B	1993	40.50	100	D	S	0.60	160	27.6	7.00	
GW 239	Nadessa Naiker	Vatuyaka	1891400	3942740	B	1993	39.00	100	D	H	240	29.0	7.40		
GW 240	Subhag Wati	Veisaru	1892230	3940670	B	1992		100	D	P	0.33	40	27.0	5.55	
GW 241	Jagdish Chandra	Veisaru	1892660	3940720	B	1993	33.60	100	D	S	0.75	38	27.3	6.90	
GW 242	Dirij D Sharma	Bula Bula	1894350	3943380	B		48.00	100	D	S	0.07	180	23.8	7.30	
GW 243	Jamila Bibi	Bula Bula	1893380	3942650	B	1993	41.70	100	D	S	1.10	140	28.2	6.70	
GW 244	Ganga Ram	Namau	1894660	3933000	B	1993	45.00	100	D		8.98	310	27.8	7.15	
GW 245	Gopal	Natunuku	1893140	3949200	B	1994	41.40	100	D	T	0.75	370	28.9	6.93	
GW 246	Subar Mani	Malele	1910120	3946140	B	1993	60.00	100	D	S	0.82	460	28.0	7.90	
GW 247	Bhin Raju	Kavuli	1911140	3952620	B		29.40	100	D	S	0.69	270	29.4	7.27	
GW 248	Chellapan	Kavuli	1911220	3952350	B	1992	22.50	100	D	S	0.12	280	28.0	7.90	
GW 249	Amoin Khan	Rabulu	1912200	3952400	B	1993	21.00	100	D		13.40	590	28.0	7.50	
GW 250	Newes Ali	Kavuli	1910420	3952020	B	1986	48.00	100	D	T	0.38	300	28.6	7.22	

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry,livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (6)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Drilled Well Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. value (m)	EC (MS/cm)	Temp. (°C)	PH	Memo
GW 251	Shamsher Ali	Kavili	1910450	3952180	B	1994	39.00	100	D	S	0.75	440	28.6	6.98		
GW 252	Daya Lal	Natanagata	1903300	3945450	B	1994	44.40	100	D	S	1.28	610	31.9	7.34		
GW 253	Sheik Rasui	Matalevu	1902600	3949580	B	1976		100	D	T		460	27.7	8.27		
GW 254	MRD	Yaqara	1918400	3950250	B	1989	38.00	200	TW		14.89	7.67	275	28.6	7.01	VITI89/22

NOTE: Well Type D:Dug well B:Borehole Water use: D:Domestic I:Irrigation WS:Water supply E:Industry, livestock, & others TW:Test well Pump type: P:Plunger S:Submersible T:Turbine C:Centrifugal H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (7)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Drilled depth (m)	Drilling dia. (mm)	Well use	Pump type	Yield (l/sec)	Static W.L. (m)	EC (MS/cm)	Temp. (°C)	PH	Memo
GW 401	Ajit Kumar	Malele	1909950	3945800	B		100	D	S		461	26.8	7.20		1 dry hole
GW 402	Subran Kaur	Malele	1910175	3945750	B	1987	48.00	100	D	S		521	27.1	6.90	
GW 403	Darshar Singh	Malele	1910150	3945650	B	1987	48.00	100	D	S		568	27.4	7.90	
GW 404	Lok Nadar	Malele	1909675	3946050	B	1990	48.00	100	D	S		475	26.1	7.70	1 dry hole
GW 405	Bhagat Singh	Malele	1909850	3945775	B	1990	45.00	100	D	S		459	28.4	7.40	
GW 406	Jai Chand	Malele	1909825	3945925	B	1992	39.00	100	D	S		405	29.6	8.10	
GW 407	Charaji Prasad	Malele	1909750	3945625	B	1990	58.50	100	D	S		392	36.7	7.90	
GW 408	Jai Ram	Malele	1909700	3945450	B	1992	31.50	100	D	S		437	25.7	7.30	
GW 409	Moti Chand	Malele	1909650	3945125	B	1992	49.50	100	D	S		396	29.1	7.65	1 dry hole
GW 410	kalika Prasad	Malele	1910125	3944610	B	1991	79.50	100	D	S		515	27.6	8.60	1 dry hole
GW 411	Suruji Prasad	Malele	1909800	3944720	B	1989	83.50	100	D	S		502	27.1	7.94	2 dry holes
GW 412	Uday Pal	Malele	1909240	3945110	B	1991	48.00	100	D	C		586	27.6	7.60	
GW 413	Jadish Chand	Malele	1908920	3944880	B	1989	58.50	100	D	S		667	27.2	7.97	1 dry hole
GW 414	Kishari Lal	Malele	1908910	3944500	B	1991	48.00	100	D	S		492	27.4	8.09	
GW 415	Rosha Lal	Malele	1908800	3944450	B	1991	49.50	100	D	S		479	26.7	7.88	
GW 416	Rajesh Lal	Malele	1908750	3944410	B	1992	45.00	100	D	S		345	26.9	6.73	
GW 417	Khem Raj	Malele	1908740	3944320	B	1993	47.40	100	D	S		405	26.6	7.15	
GW 418	Mahen Prasad	Malele	1908900	3944110	B	1991	42.00	100	D	S		405	27.8	7.45	1 dry hole
GW 419	Bagoti Prasad	Malele	1908630	3944875	B	1991	36.00	100							Not used
GW 420	Ram Narayan	Malele	1908640	3944750	B	1991	54.00	100							Not used
GW 421	Naren Prasad	Malele	1908550	3944780	B	1992	28.50	100	D	S		336	28.6	7.81	
GW 422	Shiu Ram	Malele	1909200	3945125	B	1991	45.00	100	D	S		598	25.7	7.21	
GW 423	Nand Lal	Malele	1908410	3945400	B	1986	45.00	100	D	P		339	26.4	7.90	2 dry holes
GW 424	Hari Dutt	Malele	1908570	3945375	B	1991	45.00	100	D	S	0.69	286	26.2	7.80	1 dry hole
GW 425	Ram Chandra	Malele	1908475	3945310	B	1990	46.50	100	D	S		301	26.2	7.80	1 dry hole
GW 426	Har Dayal	Malele	1908450	3945330	B	1989	45.00	100	D	S	0.36	500	26.1	7.30	
GW 427	Tota Ram	Malele	1908450	3945250	B	1989	54.00	100	D	S	0.60	305	26.3	7.95	
GW 428	Bhim Sen	Malele	1908370	3945260	B		54.00	100	D	S	0.82	349	25.7	7.75	2 dry holes
GW 429	Kechar Sharma	Malele	1908270	3945075	B	1991	54.00	100	D	S		359	26.2	7.60	
GW 430	Shu Ram	Malele	1908225	3944875	B	1991	51.00	100	D	C	0.53	451	26.7	7.08	
GW 431	Dwarka Prasad	Malele	1908125	3944900	B	1991	45.00	100	D	S	0.43	610	27.0	7.20	
GW 432	Ami Chand	Malele	1901960	3945030	B	1990	33.00	100	D	S	0.39	375	27.1	7.35	
GW 433	Murai Lal	Malele	1910475	3946475	B	1992	24.00	100	D	S	0.75	728	28.0	7.34	
GW 434	Narayan & Bangrau	Malele	1910390	3947200	B	1987	48.00	100	D	S	0.45	1,145	27.3	7.05	
GW 435	Dharam Singh	Malele	1910100	3946975	B	1987	52.20	100	D	S	0.75	862	26.8	7.15	VIT1/82
GW 436	Narsam Naidu	Malele	1910100	3947375	B	1977	48.00	100	D	H		552	26.3	7.40	VIT1/83
GW 437	Raj Gopal	Balata	1909200	3948400	B	1982	24.00	100	D	H		4,670	28.4	7.10	VIT1/59
GW 438	Wali Mohammed	Balata	1909020	3948575	B	1970	45.00	100							1/162, No water
GW 439	Wali Mohammed	Balata	1909000	3948660	B	1982	45.30	100							Out of order
GW 440	Mt Kan	Balata	1908950	3948650	B	1970	45.00	100							No water
GW 441	Korovou village	Korovou	1909260	3950180	B	1970	45.00	100	D	C		955	28.5	6.88	VIT1/26
GW 442	Tabua Moslim School	Balata	1909300	3950000	B	1965	76.50	100	D	C		591	26.7	7.65	VIT1/12
GW 443	Madhwan Nair	Balata	1909900	3949100	B	1977	45.00	100	D	S	0.75	865	30.6	7.00	VIT1/57
GW 444	Vijay Kumar	Drumaci	1911290	3948250	B	1991	31.50	100	D	S	0.60	172	28.7	5.88	
GW 445	Raj Kumar	Drumaci	1911275	3948125	B	1991	25.50	100	D	C		245	27.8	6.05	
GW 446	Bach Muttu	Drumaci	1911400	3948850	B	1989	41.00	100	D	S	0.25	366	28.3	6.85	
GW 447	Chinta Singh	Drumaci	1912700	3948840	B	1991	45.00	100	D	T	0.20	655	28.7	7.20	
GW 448	F.S.C	Nambuna	1907280	3950350	B	1968	30.30	100	D	T		532	28.3	7.22	VIT 1/14
GW 449	Andhra Angan Schoo	Yaladro	1907400	3948380	B		16.50	100	D	S		553	27.1	7.40	VIT1/9
GW 450	Iraglu	Yaladro	1907370	3948310	B										VIT1/10, Not used

NOTE: Well Type: D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (8)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Drilled Well Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. (m)	EC (MS/cm)	Temp. (°C)	PH	Memo	
GW 451	Pardunah	Matagata	1903600	3945470	B	1992	30.00	100	D	S		544	24.2	7.60			
GW 452	Vishun Deo	Matagata	1903460	3945550	B	1992	22.50	100	D	C	0.53	656	29.7	7.20			
GW 453	Arya Samj School	Matagata	1902730	3945690	B			100								No water	
GW 454	Dhirendra Pratap	Matagata	1902860	3945860	B	1992	54.00	100								No water	
GW 455	Mapria Pran	Matagata	1902100	3945710	B	1991	48.00	100	D	T	0.64	460	31.2	7.10			
GW 456	Madeo	Matagata	1901700	3945220	B	1983	50.10	100	D	T	0.60	586	27.9	7.10			
GW 457	Raju	Matagata	1901980	3945025	B	1981	45.00	100	D	T		475	28.5	7.47	VIT1/104		
GW 458	Vivek Nand	Matagata	1902940	3944100	B	1986	42.00	100	D	C	0.10	564	27.8	7.90	VIT1/103		
GW 459	Ragwa Nand	Vugele	1906400	3942425	B	1989	36.00	100	D	C	0.90	365	25.0	7.75	VIT1/136		
GW 460	Mohammed Ratig	Vugele	1907275	3942570	B	1978	28.80	100	D	S	1.00	509	26.5	7.30	VIT1/137		
GW 461	Mohad Hanif	Kavuli	1908980	3951900	B	1991	33.00	100	D	T	0.67	411	28.9	7.20			
GW 462	Rem Jan Ali	Kavuli	1909175	3952140	B	1991	33.00	100	D	T	0.33	556	29.3	7.05			
GW 463	Mohammed Yunsh	Kavuli	1909320	3952090	B	1991	24.00	100	D	T	1.80	544	28.5	6.95			
GW 464	Mohammed Khalil	Kavuli	1909975	3952500	B	1989	17.10	100	D	T	1.13	537	29.2	6.93			
GW 465	Tagjiwan Prasad	Kavuli	1910630	3952625	B	1992	24.90	100	D	H						Not used	
GW 466	Abbas Mubarak	Kavuli	1910800	3952625	B	1987	18.00	100	D	C							
GW 467	Virendra Sharma	Kavuli	1908480	3952250	B	1990	42.00	100	D	T		1,956	30.5	7.40			
GW 468	Bhim Chandra	Kavuli	1908430	3952120	B	1990	29.40	100	D	T	0.38	571	29.1	6.78			
GW 469	Tamar Nath	Rabulu	1913010	3951930	B	1985	33.00	100	D	C		453	25.0	7.65			
GW 470	Rem Lakau	Kavuli	1911280	3952600	B			100								Not used	
GW 471	Bhim Raju	Kavuli	1911150	3952260	B	1986	24.00	100	D	C		275	25.0	8.28			
GW 472	Kisun Chand	Kavuli	1910770	3952120	B	1993	33.00	100	D	H	0.05	407	29.7	7.47			
GW 473	Sada Nand	Rabulu	1913426	3952140	B	1992	33.00	100								Not used	
GW 474	Shyam Nareyan	Rabulu	1913490	3951980	B	1993	25.60	100				15.05				Not used	
GW 475	Uday Raj	Rabulu	1913620	3951950	B	1993	36.00	100				343	29.6	7.40		Not used	
GW 476	Rabulu water project	Rabulu	1914630	3951375	B	1987	23.00	100								Not used	
GW 477	Paras Rem	Rabulu	1912700	3948830	B	1983	33.00	100	D	P		582	31.9	7.40			
GW 478	Hem Chand	Nanuku	1924080	3957975	B	1992	40.50	100	D	C	0.82	664	29.3	7.20			
GW 479	Jawala sinha water p.	Nanuku	1924575	3957900	B	1992	36.00	100				10.00				Not used	
GW 480	Tilaku Chan	Elington	1943860	3960960	B	1992	22.50	100	D	S	0.69	1,267	27.2	8.00			
GW 481	Satendra Prasad	Elington	1942300	3961156	B	1990	27.00	100	D	C	1.80	930	27.6	6.90			
GW 482	Elington Prim. School	Elington	1942400	3961460	B	1992	22.50	100	D	C		862	28.0	7.20			
GW 483	Tar Mata	Elington	1942500	3961450	B	1992	22.50	100	D,I	C	0.82	912	27.3	6.90			
GW 484	Shiu Dayal	Elington	1942070	3961204	B	1990	24.00	100	D	S	0.69	830	27.3	6.70			
GW 485	Bishu Deo	VoliVoli	1941150	3962800	B	1990	16.50	100	D	H		784	24.8	7.30			
GW 486	Mehbood Khan	VoliVoli	1941800	3964850	B	1991		100	D			1.50	1,045	27.3	7.20		
GW 487	Mehbood Khan	VoliVoli	1941165	3960730	B	1990	30.00	100								Not used	
GW 488	E. Naidu	VoliVoli	1941390	3963680	B	1992	40.50	100	D	T	0.75	748	28.2	7.10			
GW 489	Kamla Prasad	VoliVoli	1939460	3964300	B	1990	28.50	100	D	S	0.45	587	25.0	7.00			
GW 490	Jo Hir	VoliVoli	1939600	3964320	B	1992	36.00	100				1.60	520	27.5	7.00	Not used	
GW 491	Sundres San Gouder	VoliVoli	1939750	3964150	B	1991	39.00	100								Not used	
GW 492	Kista Gaundar	VoliVoli	1939650	3964200	B	1990	27.00	100								Not used	
GW 493	Veera Suni	VoliVoli	1940400	3964380	B	1990	25.50	100				7.70	564	27.0	6.50	Not used	
GW 494	Vijendra Kumar	Raravatu	1940290	3962240	B	1992	48.00	100	D	C	0.75	840	23.7	6.80			
GW 495	Jai Kissun	Elington	1943200	3961230	B	1992	45.00	100								Not used	
GW 496	Jai Kissun	Elington	1943150	3961200	B											Abandoned	
GW 497	Waimari Prem. Sch	Waimari	1933660	3955500	B	1992	33.00	100	D	C	0.64	623	27.3	6.97			
GW 498	Tota Ram	Waimari	1933800	3954620	B											Abandoned	
GW 499	Tota Ram	Waimari	1953920	3954620	B	1992										Abandoned	
GW 500	Pritam Singh	Malele	1935840	3954940	B	1976		100								VIT1/81, Abandoned	

NOTE: Well Type: D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (9)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well type	Well Drilled Year	Well depth (m)	Well dia. (mm)	Well use	Water Pump type	Yield (l/sec)	Static W.L. value (m)	EC (MS/cm)	Temp. (°C)	PH	Memo	
GW 501	Sukan Deo	Garanpani	1907390	3945000	B	1990	45.00	100	D	S	0.15	517	27.5	7.50	1	dry hole	
GW 502	Paras Ram	Garanpani	1907200	3945200	B	1990	42.00	100	D	S		641	28.5	7.87			
GW 503	Uday Chand	Garanpani	1907300	3945270	B	1991	36.00	100	D	S	0.60	188	26.5	6.33			
GW 504	Jag Mohan	Garanpani	1907225	3945380	B	1991	45.00	100	D	S	0.64	338	28.3	7.61	1	dry hole	
GW 505	Barna Nand	Garanpani	1907025	3945280	B	1991	45.00	100	D	S		515	29.4	7.55			
GW 506	Ram Samugh	Garanpani	1907250	3946060	B	1991	45.00	100	D	C	0.16	845	29.0	7.10			
GW 507	Magan Hel	Dociu	1933970	3959530	B	1991	30.00	100				1.50	592	27.4	6.80		
GW 508	Rem Singh	Dociu	1934050	3959080	B												Abandoned
GW 509	Subha Bharatiya	Narewa	1930500	3958610	B	1992	19.80	100	D	T		586	26.1	6.89			
GW 510	Deya Lal	Nanuku	1926050	3958240	B	1984	24.00	100	D	T		606	28.0	7.48			
GW 511	Mania Singh	Nanuku	1926150	3958260	B	1990	24.00	100	D	T		773	28.8	7.15			
GW 512	Wailoa Truckier pro.	Nanuku	1926250	3958120	B	1993	12.00	100				3.15	263	28.2	7.55	5	dry holes, not used
GW 513	Chandra	Tuvu	1869950	3940680	B	1991	29.70	100	D	C	0.82	746	28.2	7.11	2	dry holes	
GW 514	Rahaik Lal	Tuvu	1870010	3940750	B	1992	9.00	100				1.30	781	26.9	7.08	1	dry hole, not used
GW 515	Yasawa Paradais	Tuvu	1870130	3940740	B			100	D	C							
GW 516	Bhim Sen	Tuvu	1870320	3940650	B	1987	17.10	100	D	C	0.53	771	28.4	6.90	1	dry hole	
GW 517	Rajesh Kumar	Tuvu	1870375	3940640	B	1987	22.80	100	D	C	1.00	630	25.5	7.16			
GW 518	Singh narayan	Tuvu	1870400	3940310	B	1987	30.00	100	D	C	0.38	573	28.5	7.30			
GW 519	Bhola Nath	Tuvu	1870520	3939930	B	1982		100	D	C		439	28.6	7.17			
GW 520	Ram Surendra	Tuvu	1870690	3940050	B	1991	39.00	100	D	C		464	26.4	7.60	2	dry holes	
GW 521	Jaw Aharjel	Tuvu	1870490	3940700	B	1992	22.50	100	D	S	0.90	591	30.3	7.10			
GW 522	Bechu	Tuvu	1870620	3940725	B	1966	30.00	100				8.15	1,714	30.1	7.01	VIT4/3	Not used
GW 523	Bechu	Tuvu	1870670	3940730	B	1983	16.80	100	D	C	0.69	1,117	30.1	7.02			
GW 524	Tuvu School	Tuvu	1870850	3940730	B			100	D	C		1,948	29.0	7.30	VIT4/		
GW 525	Tuvu School	Tuvu	1870840	3940650	B	1990	12.00	100	D	C	1.29	555	26.7	7.30			
GW 526	Hari Deo	Tuvu	1870730	3940500	B	1991	25.50	100	D	C		536	22.5	7.39			
GW 527	Bob soutevey	Tuvu	1871100	3940540	B	1987	23.00	100	D	C		520	23.0	7.65			
GW 528	Suria Dip	Tuvu	1871120	3940550	B		22.90	100	D	C		488	22.9	8.20			
GW 529	Ram Sukh	Tuvu	1871600	3941250	B	1986	43.50	100	D	C	0.23	1,096	34.3	7.50			
GW 530	Ram Sanehiny	Tuvu	1871775	3941460	B	1992	42.00	100	D	C	0.45	399	28.6	8.08			
GW 531	Chanclu Ramaiya	Tuvu	1871860	3941525	B			100	D	C	0.90	741	29.5	7.30			
GW 532	Ram Singh	Tuvu	1872000	3941400	B	1985		100	D	C	0.13	640	29.2	7.37			
GW 533	Shiu Barn	Tuvu	1872200	3941650	B	1993	22.50	100	D	S	0.82	605	28.5	7.21			
GW 534	Mohammed	Tavarau	1872340	3942150	B	1993	45.00	100									Not used
GW 535	Warda Raju	Tavarau	1872480	3942325	B	1993	13.50	100									Not used
GW 536	Deo Kumar	Tavarau	1872575	3942490	B	1993	18.00	100	D	T		413	27.7	7.81			
GW 537	Deo Karan	Tavarau	1872850	3942625	B	1992	27.00	100	D	C	0.47	553	28.6	7.30			
GW 538	Ramh kat Ali	Tavarau	1873070	3942910	B	1987	45.00	100	D	S	0.24	800	28.7	7.25			
GW 539	S.B.Karan	Tavarau	1873260	3942700	B	1993	22.50	100	D	S	0.69	474	29.2	7.45			
GW 540	Rem Nand	Tavarau	1873340	3942380	B	1993		100	D	C	0.82	427	29.0	7.24			
GW 541	Naren	Tavarau	1873475	3942325	B	1993	45.00	100	D	S	0.64	423	31.5	7.06			
GW 542	Gurapp	Tavarau	1875180	3943900	B	1993											Not completed
GW 543	Shiri Ram Lu	Tavarau	1875250	3943975	B	1993	58.50	100	D	S	0.75	455	30.4	8.23			
GW 544	Mum Sami	Raviravi	1875300	3943975	B	1986		100	D	C		525	30.0	7.44			
GW 545	Appana Gagaiya	Raviravi	1875425	3943620	B	1977	34.50	100	D	C	0.28	376	28.1	7.03	VIT4/45		
GW 546	Ratnam Goundar	Raviravi	1875480	3943800	B	1991	27.00	100	D	C	0.32	537	27.7	7.05			
GW 547	Jai Karan	Raviravi	1875670	3944450	B	1981	45.00	100	D	C		543	25.2	8.14			
GW 548	Murgessan Mudalia	Raviravi	1875800	3945975	B	1986	30.00	100	D	C	0.28	410	30.0	7.15			
GW 549	Ram Rekha	Raviravi	1876025	3944005	B	1989	19.50	100	D	C	0.53	439	30.1	6.95			
GW 550	Lalta Prasad	Raviravi	1876120	3942425	B	1970	45.00	100	D	C	0.56	388	29.8	7.25			

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

SUMMARY OF WELL INVENTORY SURVEY (10)

WELL NO.	OWNER	LOCATION	FMG	FMG	Well Drilled	Well	Water Pump	Yield	Static EC	Temp.	PH	Memo		
			Coord.	Coord.	type	depth	dia.	use	type	W.L. value				
			mE	mE	Year	(m)	(mm)			(U/sec)	(m) (MS/cm) (°C)			
GW 551	Mohammed Yunus	Raviravi	1875925	3944125	B	1986	25.50	100	D	C	0.45	421	28.3	7.73
GW 552	Chinppa Mudelial	Raviravi	1876290	3944000	B	1985	24.00	100	D	C	0.82	300	28.8	6.83
GW 553	Armugam Naker	Raviravi	1876375	3944225	B	1984	36.00	100	D	S	0.56	392	27.8	7.73 VIT4/101
GW 554	Ram Chandra	Raviravi	1876270	3944225	B	1985	18.00	100	D	C	0.50	313	28.2	7.50
GW 555	Anthoni	Raviravi	1874290	3944340	B	1985	12.00	100	D	C	0.38	319	28.1	7.72
GW 556	Sangan School	Raviravi	1876110	3944380	B	1992	54.00	100	D	C	1.13	478	28.0	7.10
GW 557	Ramzan Shah	Raviravi	1876675	3943875	B	1975	27.30	100	D	H		476	27.6	7.60
GW 558	Manikam Naiker	Raviravi	1876500	3943225	B	1988	34.50				11.00	551	27.1	7.18 Not used
GW 559	Dur Samy	Raviravi	1876750	3943520	B	1990	24.00					610	27.6	7.46 Not used, 1 dry hole
GW 560	Narayan Saminaidu	Raviravi	1877025	3943575	B	1980	42.00	100	D	C	0.21	1,504	28.5	6.90
GW 561	Narayan Sami Catty	Raviravi	1875400	3943740	B	1990	24.00	100	D	C	0.41	343	28.0	7.30
GW 562	Mohammed Shahun	Raviravi	1876475	3945375	B			100	D	T	0.10	236	26.8	6.91
GW 563	Raman Naidu	Raviravi	1876500	3945140	B	1983	45.00	100	D	C	0.82	325	30.4	7.61 VIT4/73
GW 564	Gobind Sami	Raviravi	1876420	3944360	B	1993	36.00	100			26.40	347	29.2	6.84 Not used
GW 565	C.S.Goundar	Raviravi	1876680	3944125	B			100	D	C	0.60	304	29.3	7.20
GW 566	Wisehar Latchni	Raviravi	1876800	3944070	B	1980	22.80	100	D	C	0.90	308	28.0	7.50
GW 567	Sadasi van Naidu	Raviravi	1877070	3944380	B	1981	18.60	100	D	C	0.75	599	28.7	7.66
GW 568	Krishna Sami	Raviravi	1877075	3944200	B	1985	45.00	100	D	C	0.45	690	29.0	7.37
GW 569	Estoff Rachirumi	Raviravi	1876710	3944725	B	1983	28.80	100	D	C	0.75	555	29.7	7.00 VIT4/67
GW 570	Ms. Bhaigam	Raviravi	1876725	3944825	B		16.50	100	D	C	1.29	321	28.3	6.94
GW 571	Prwan Fiji Ltd.	Raviravi	1876900	3945150	B	1989		100	D	S		1,687	25.7	7.28
GW 572	Imam Mohamad	Raviravi	1876725	3945500	B	1982	18.00	100	D	C	0.69	728	28.3	7.25
GW 573	Johur Ali	Raviravi	1876775	3945425	B	1992	24.00	100	D	S	0.60	1,648	28.1	6.40
GW 574	Narayan Sami	Raviravi	1876825	3945575	B	1986		100						
GW 575	Jamalau Din	Raviravi	1876756	3944900	B	1988	26.10	100	D	C	0.41	446	28.0	6.70
GW 576	Ganesh	Raviravi	1877450	3944240	B	1983	30.00	100	D	C	0.47	383	27.5	7.10 VIT4/79
GW 577	Subar Mani	Raviravi	1877450	3943740	B	1986	31.50	100	D	C				Out of order
GW 578	Hari Krishna	Raviravi	1877430	3943900	B	1992	36.00	100	D	C	0.90	402	27.9	7.61
GW 579	Ms. Latchman	Raviravi	1877675	3943875	B	1986	11.40	100	D	C		399	25.5	7.80 2 dry holes
GW 580	Mihammed Hanif	Raviravi	1877720	3944130	B	1987	26.10	100	D	C	0.56	335	26.5	7.10
GW 581	Abdul Jalil	Raviravi	1877790	3944520	B	1993	18.00	100			1.47	380	27.1	7.19 Not used
GW 582	Abdul Jalil	Raviravi	1877790	3944530	B	1992	17.70	100			2.00			Not used
GW 583	Bhan Kumari	Raviravi	1877940	3944550	B	1983	45.00	100	D	C	0.60	637	27.6	8.28 VIT4/74
GW 584	Sheiak	Raviravi	1877960	3944420	B	1971	45.00	100	D	C	0.47	462	28.1	7.20
GW 585	Ram Shay	Raviravi	1877970	3944350	B	1992	36.00	100	D	C	0.39	418	28.9	7.20 1 dry hole
GW 586	Shiu Kandan	Raviravi	1878050	3944300	B	1983	42.60	100	D	C	0.47	560	29.5	7.34
GW 587	Shanti Lal	Raviravi	1877850	3944125	B	1991	45.30	100	D	C	0.60	498	29.9	7.65 3 dry holes
GW 588	Tuli Ram	Raviravi	1877950	3944075	B	1976	46.50	100	D	C		387	26.4	7.73 VIT4/45
GW 589	Kumar Shankar	Raviravi	1877975	3943025	B	1991	45.00	100	D	S	0.50	408	28.2	7.60 1 dry hole
GW 590	Shiu Narayan	Raviravi	1877770	3943770	B	1983	33.90	100	D	C	0.33	470	27.4	7.44 VIT4/72
GW 591	Mohammed Ali	Raviravi	1877760	3943675	B	1992	41.10	100	D	C	0.82	440	28.1	7.10
GW 592	Moidin	Raviravi	1877830	3943650	B	1971	45.00	100	D	C	0.39	706	28.5	7.19
GW 593	Chandra Prasad	Raviravi	1877900	3943390	B	1990	45.00	100	D	C	0.56	393	27.7	7.55
GW 594	Antar Lai	Raviravi	1877920	3942950	B	1989	41.10	100	D	H		206	27.7	7.15 1 dry hole
GW 595	Amer Ali	Raviravi	1878300	3943580	B									Abandoned
GW 596	Karan Chand	Raviravi	1878420	3943625	B	1989		100	D	C		224	25.6	7.89
GW 597	Kismat Ali	Raviravi	1878575	3943050	B	1979	47.10	100	D	H		579	28.2	7.29 VIT4/64
GW 598	Jaleel Singh	Raviravi	1878500	3942850	B	1988	43.50	100	D	H		561	25.8	7.37
GW 599	Nur Mohammed	Raviravi	1878075	3944250	B		45.00	100	D	C				1 dry hole
GW 600	Abdul Khalil	Raviravi	1878075	3944240	B	1983	36.00	100	D	C	0.43	450	28.1	7.35 VIT4/83, 1 dry hole

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:Irrigation E:Industry, livestock, & others P:Plunger T:Turbine H:Hand pump

A-2 SUMMARY OF WELL INVENTORY SURVEY (11)

WELL NO.	OWNER	LOCATION	FMG	FMG	Well Drilled Well	Well	Water Pump	Yield	Static EC	Temp.	PH	Memo			
			Coord.	Coord.	type	depth	dia.	use	type	W.L. value					
			mE	mE	Year	(m) (mm)			(l/sec)	(m) (MS/cm)	(°C)				
GW 601	Mizra Ali	Raviravi	1878075	3944230	B	1983	28.20	100	D	S	0.75	423	28.5	7.10	
GW 602	Ashik Ali	Raviravi	1878090	3944180	B	1992	24.60	100	D	S	0.69	464	27.4	7.20	
GW 603	Jai Karan	Raviravi	1878040	3944200	B	1989	29.30	100	D	S	0.50	447	29.3	7.56	
GW 604	Mohammed Yasin	Raviravi	1878225	3944325	B	1983	24.00	100	D	C	0.56	452	28.7	7.09	
GW 605	Fahima Bibi	Raviravi	1878220	3944450	B	1987	34.50	100	D	T		220	29.2	7.25	
GW 606	Ram Diyari	Raviravi	1878360	3944300	B	1983	22.80	100	D	C	0.50	222	28.9	7.30	
GW 607	HABib Shaib	Raviravi	1878320	3944250	B	1982	9.15	100	D	C		236	29.2	7.10	
GW 608	Hakik Khan	Karavi	1878250	3944550	B	1982	30.00	100	D	C		609	28.8	8.40 VIT4/66	
GW 609	Nur Khan	Karavi	1878625	3944600	B	1991	30.00	100	D	C	0.39	1,793	30.3	6.17	
GW 610	Mohammed Tahir	Karavi	1879040	3944640	B	1984	25.50	100	D	C	1.13	378	29.5	7.73	
GW 611	Mohammed Taiyab	Karavi	1879050	3944700	B	1989		100							
GW 612	Sheikh Khedin	Karavi	1879130	3949450	B	1985	30.00	100	D	C		380	30.9	7.70	
GW 613	Ravundra Dutt	Karavi	1879660	3944800	B	1987	20.40	100	D	C	1.80	913	29.4	7.18	
GW 614	Ganga Prasad	Karavi	1879700	3944740	B	1965	9.00	100	D	H				Out of order	
GW 615	Shiu Dayal	Karavi	1879625	3944675	B	1984	30.00	100	D	C	0.53	852	31.4	7.25 VIT4/89	
GW 616	Shiu Karan	Karavi	1879780	3944260	B	1990	21.00	100	D	C	0.53	479	30.0	7.40	
GW 617	Karavi Farms comty	Karavi	1879750	3943420	B	1976	25.50	100			0.18	0.00	267	27.4	7.25 Self flowing
GW 618	Ram Padarath	Karavi	1879850	3944150	B	1983	18.00	100	D	C		677	28.4	7.16	
GW 619	Karavi public school	Karavi	1879550	3944750	B	1982	32.40	100	D	C		664	28.3	7.71	
GW 620	Ram karan	Karavi	1880200	3944650	B		36.00	100			6.30	571	28.9	7.20	
GW 621	Shiu Kumar	Karavi	1880330	3944720	B	1984	42.00	100	D	C	1.29	443	31.9	7.40	
GW 622	Shan shev Ali	Karavi	1880650	3945090	B	1984	30.00	100	D	C	0.82	433	29.0	7.35	
GW 623	Rabindra Pratap	Karavi	1880540	3945010	B	1984	21.60	100	D	C	0.60	388	30.0	6.88	
GW 624	Mohammed Edvaham	Karavi	1880390	3945080	B	1984	39.00	100						No water	
GW 625	Mohammed Ebrahan	Karavi	1880350	3945150	B	1988	27.00	100	D	C	0.69	444	28.0	7.42	
GW 626	Wali Mohammed	Karavi	1880430	3945230	B		10.50	100	D	C	0.69	371	28.7	7.20	
GW 627	Mohammed Safiq	Karavi	1889475	3945325	B	1980	24.00	100	D	S	0.60	414	28.6	7.20	
GW 628	Ali Buksh	Karavi	1880350	3945340	B	1992	30.00	100	D	C	0.90	392	28.4	7.10	
GW 629	Gulam Mohammed	Karavi	1880275	3945340	B	1975	36.00	100	D	C	0.64	458	27.9	7.50	
GW 630	Ms Kharul Nisha	Karavi	1879850	3945240	B	1991		100	D	C	0.69	389	29.0	6.92	
GW 631	Mansoor Ali	Karavi	1879910	3945750	B	1985	16.80	100	D	H		300	29.8	6.45	
GW 632	Ms. kaharul Nisha	Karavi	1879850	3945800	B	1981		100	D	C	0.30	764	30.0	7.49	
GW 633	Amina Bibi	Karavi	1879860	3945820	B	1989	24.00	100	D	C	0.45	656	30.3	7.40	
GW 634	Iman Ali	Karavi	1879910	3945860	B	1991	21.00	100	D	S	0.82	815	20.8	7.38	
GW 635	Mohammed Safiq	Karavi	1879950	3945950	B	1975	51.00	100	D	C	0.30	511	30.6	7.30	
GW 636	Mohammed Hanif	Karavi	1879950	3946030	B	1984	37.80	100	D	H		486	28.7	7.40	
GW 637	Karavi Public School	Karavi	1879450	3946125	B			100						Not use	
GW 638	Din Ali	Navau	1880250	3946700	B	1986	22.50	100						Out of order	
GW 639	Muntiaz Ali	Navau	1880740	3946340	B	1980		100	D	C		314	31.2	7.45	
GW 640	Amzae Ale	Navau	1880760	3946180	B	1977	29.40	100	D	P	0.35	271	29.2	6.88	
GW 641	Sherab Ali Khan	Navau	1880790	3946110	B	1986		100	D	S	1.29	370	29.0	7.26	
GW 642	Ram Mukesh	Navau	1881180	3945275	B	1991	45.00	100	D	S	0.31	461	27.8	6.94	
GW 643	Daya Nand	Navau	1880900	3945120	B	1984	30.00	100	D	S	1.00	410	26.6	7.35 VIT4/80	
GW 644	Bhupendra Sharma	Navau	1881700	3945080	B	1992	31.80	100	D	C	0.64	303	27.8	6.85	
GW 645	Rahara Ali	Navau	1881675	3944950	B	1990		100	D	H		278	26.9	6.80	
GW 646	Chuani Lal	Navau	1881520	3945700	B	1968		100						Out of order	
GW 647	Chuani Lal	Navau	1881510	3945700	B	1992	36.00	100	D	S	0.75	227	26.7	6.75	
GW 648	Daya Ram	Navau	1881070	3945275	B	1983	36.00	100	D	C	1.29	164	26.8	6.71	
GW 649	Sunder Lal	Navau	1881650	3945450	B	1969	30.00	100	D	C	0.82	196	23.0	7.00	
GW 650	Hari Lal	Navau	1881525	3945400	B	1969	30.00	100						Out of order	

NOTE: Well Type D:Dug well Water use: D:Domestic WS:Water supply TW:Test well Pump type: S:Submersible C:Centrifugal
 B:Borehole I:irigation E:Industry, livestock &Others P:Plunger T:Turbine H:Hand pump

A-2

SUMMARY OF WELL INVENTORY SURVEY (12)

WELL NO.	OWNER	LOCATION	FMG Coord. mE	FMG Coord. mE	Well Drilled type	Year	Well depth (m)	Well dia. (mm)	Water use	Pump type	Yield (l/sec)	Static W.L. value (m)	EC (MS/cm)	Temp. (°C)	PH	Memo	
GW 651	Hari Lal	Navau	1881525	3945400	B	1992	33.00	100	D,I	T		317	24.7	7.10		3 dry holes	
GW 652	Sarava Sangan School	Sarava	1882540	3944510	B	1970		100									Out of order
GW 653	Kamil Moslim School	Yalalevu	1884860	3941440	B												No water, 3 dry holes
GW 654	Ram Dayal	Yalalevu	1885600	3941100	B			100			5.31	80	26.8	7.56			Not used
GW 655	PWD	Yalalevu	1885560	3940250	B			100									Abandoned
GW 656	Nagan Engineering	Yalalevu	1886320	3940325	B	1986	9.00	100									Out of order
GW 657	Nagan Engineering	Yalalevu	1886310	3940350	B												Abandoned
GW 658	PWD	Koronubu	1892740	3935000	B												VIT5/18, Abandoned
GW 659	Mehal Lal	Koronubu	1893020	3935350	B												VIT5/27, Abandoned
GW 660	Ahmed Ali	Namau	1895675	3932320	B	1992	37.50	100	D	C	0.69	124	27.4	6.70			
GW 661	Naushad	Namau	1895720	3933150	B	1993	45.00	100	D	S	0.82	255	25.7	7.40			
GW 662	Sheik Hassan	Namau	1895580	3933050	B	1992	45.00	100	D	H		410	25.5	7.25			
GW 663	Donsami Goundar	Namau	1896820	3933550	B	1980	25.50	100	D	C	1.00	278	26.0	7.32			
GW 664	Timaraj Naiker	Namau	1896580	3934750	B	1993	31.50	100	D	T	0.43	180	27.9	7.05			
GW 665	Ami Chand	Namau	1898270	3930930	B	1991	39.00	100	D	T	0.26	200	28.6	6.25			
GW 666	Suka Ram	Namau	1899800	3932230	B	1991	42.00	100	D	C	0.30	346	28.9	7.64			
GW 667	Mani Ram	Namau	1898925	3932650	B	1991	23.70	100	D	C	0.75	452	27.4	7.45			1 dry hole
GW 668	Vijay Kumar	Namau	1899620	3932260	B	1991	36.00	100									Not used, 1 dry hole
GW 669	Ram Sudh	Eisari	1890660	3938560	B	1963	37.50	100				24.30	193	28.6	6.97		VIT5/21, not used
GW 670	Brij Lal	Vangia	1889300	3935800	B			100	D	C							VIT5/4
GW 671	Zakir Ali	Nasolo	1885450	3936425	B	1984	33.00	100	D	T		26.10	74	26.1	7.01		VIT5/31
GW 672	Waisea Rokoyawa	Moto	1885380	3934530	B	1985	62.00	100									Not used
GW 673	Louey Enterprises	Maururu	1885930	3938925	B		27.00										Out of order
GW 674	Rup Narayan	Toko	1905250	3946380	B	1966	75.00	100									Not used
GW 675	PWD	Matagata	1903180	3945950	B	1983		100				554	31.5	7.92			Self flowing
GW 676	PWD	Toko	1905890	3948425	B	1983	200.00	100			2.82						VIT1/107, Not used
GW 677	Balata High School	Balata	1908125	3948900	B	1976	33.00	100	D	T							VIT1/56

NOTE: Well Type

D: Dug well
B: BoreholeWater use: D: Domestic
I: IrrigationWS: Water supply
E: Industry, livestock, & othersTW: Test well
P: PlungerPump type: S: Submersible
T: TurbineC: Centrifugal
H: Hand pump



DATA BOOK - B

DATA BOOK - B
METEORO - HYDROLOGY

TABLE OF CONTENTS

<u>No.</u>	<u>Page</u>
B- 1 LIST OF RAINFALL GAUGING STATIONS	B- 1
B- 2 AVERAGE MONTHLY RAINFALL (TABLE).....	B- 2
B- 3 AVERAGE MONTHLY RAINFALL (FIGURES)	B- 3
B- 4 MONTHLY RAINFALL	B- 4
B- 5 CORRELATION COEFFICIENT OF MONTHLY RAINFALL.....	B-20
B- 6 CORRELATION COEFFICIENT OF DAILY RAINFALL.....	B-21
B- 7 EXAMPLE OF DOUBLE MASS CURVE.....	B-22
B- 8 SELECTION OF RECORDS FOR BASIN MEAN RAINFALL.....	B-23
B- 9 BASIN MEAN RAINFALL (BA RIVER: UPSTREAM TOGE G/S).....	B-24
B-10 BASIN MEAN RAINFALL (NASIVI RIVER: UPSTREAM VATUKOULA G/S)	B-25
B-11 BASIN MEAN RAINFALL (NAKAUVADRA RIVER: UPSTREAM VATUSEKIYASAWA G/S)	B-26
B-12 LIST OF STREAM GAUGING STATIONS.....	B-27
B-13 RATING EQUATIONS (BA RIVER AT TOGE).....	B-28
B-14 RATING EQUATIONS (BA RIVER AT NAVALA).....	B-29
B-15 RATING EQUATIONS (NASIVI RIVER AT VATUKOULA).....	B-30
B-16 RATING EQUATIONS (NAKAUVADRA RIVER AT VATUSEKIYASAWA).....	B-31
B-17 DAILY DISCHARGE AT TOGE G/S (1) - (5).....	B-32
B-18 DAILY DISCHARGE AT VATUKOULA G/S (1) - (4)	B-37
B-19 DAILY DISCHARGE AT VATUSEKIYASAWA G/S (1) - (4)	B-41
B-20 DOUBLE MASS CURVE OF RUNOFF DEPTH AND BASIN MEAN RAINFALL	B-45
B-21 SIMULATED RUNOFF (BA RIVER: TOGE G/S).....	B-46
B-22 SIMULATED RUNOFF (NASIVI RIVER: VATUKOULA G/S)	B-47
B-23 SIMULATED RUNOFF (NAKAUVADRA RIVER: VATUSEKIYASAWA G/S)	B-48
B-24 LOCATIONS OF STREAM DISCHARGE MEASUREMENTS.....	B-49
B-25 DISCHARGE MEASUREMENT.....	B-50



B-1 LIST OF RAINFALL GAUGING STATIONS

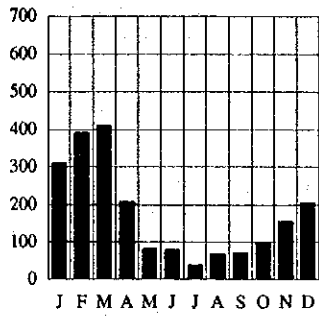
Ref. No.	Station	Authority	Lat.	Long.	Alt. (m)	Data Collected (Year)
V77481	Tavua	FSC Field Officer	17 27 S	177 53 E	9	1955 - 1992
V77482	Tagitagi	FSC Field Officer	17 27 S	177 48 E	53	1956 - 1992
V7748C	Tavua Filter House	PWD	17 27 S	177 52 E	61	1970 - 1992
V77491	Yaquara	Estate Manager	17 26 S	177 59 E	24	1965 - 1992
V77554	Lololo Pine	Fiji Pine Commission	17 34 S	177 35 E	91	1978 - 1992
V77563	Varoka	FSC Field Officer	17 31 S	177 39 E	18	1981 - 1992
V7756D	Ba Filter House	PWD	17 35 S	177 41 E	98	1960 - 1992
V77571	Veisaru	FSC Field Officer	17 33 S	177 44 E	39	1956 - 1992
V77575	Rarawai Mill	FSC Mill Manager	17 33 S	177 42 E	5	1925 - 1992
V77581	Vatukoula	Mines Manager	17 30 S	177 51 E	61	1956 - 1992
V77591	Nadarivatu	Forestry Officer	17 34 S	177 57 E	835	1936 - 1992
V7759C	Waikubukubu	PWD	17 33 S	177 57 E	189	1981 - 1992
V7765A	Navilawa	PWD	17 41 S	177 35 E	275	1972 - 1992
V7765C	Abaca	PWD	17 40 S	177 32 E	119	1983 - 1992
V7768A	Navala	PWD	17 39 S	177 39 E	61	1981 - 1992
V7769B	Nagatagata	PWD	17 41 S	177 56 E	756	1967 - 1992
V7769D	Lewa Village	PWD	17 38 S	177 56 E	769	1982 - 1992
V7769I	Taunabe	PWD	17 37 S	177 57 E	563	1982 - 1992
V7775D	Nadrugu	PWD	17 44 S	177 33 E	152	1983 - 1992
V77765	Vaturu	PWD	17 45 S	177 40 E	546	1982 - 1992
V7777A	Bukuya Depot	PWD	17 47 S	177 46 E	480	1981 - 1992
V7778A	Nanoko	PWD	17 45 S	177 51 E	602	1982 - 1992
V77794	Nadrau Met.	PWD	17 43 S	177 57 E	777	1977 - 1992
V7779C	Koro	PWD	17 42 S	177 55 E	180	1982 - 1992
V78301	Nanuku	FSC Field Officer	17 22 S	178 3 E	9	1982 - 1985
V78311	Penang Mill	FSC Mill Manager	17 22 S	178 10 E	3	1930 - 1992
V7831B	Vaileka Depot	PWD	17 23 S	178 10 E	46	1970 - 1992
V78321	Ellington	FSC Filed Officer	17 21 S	178 13 E	2	1982 - 1985
V78401	Drauniivi Pine	Fiji Pine Commission	17 25 S	178 0 E	35	1979 - 1992
V7840B	Vatukacevaceva	PWD	17 25 S	178 5 E	113	1983 - 1992
V7841A	Narara	PWD	17 25 S	178 9 E	82	1971 - 1992
V7850A	Naseyani	PWD	17 30 S	178 0 E	61	1971 - 1992

B-2 AVERAGE MONTHLY RAINFALL

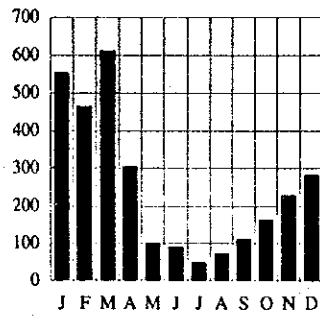
Unit : mm

No.	Ref. No.	Station	Period	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1	V7765C	ABACA	1983 - 1992	336	483	549	283	142	74	52	72	88	91	190	297	2,657
2	V7756D	BA FILTER HOUSE	1960 - 1992	313	392	412	209	83	81	39	68	72	100	157	206	2,133
3	V7777A	BUKUYA DEPOT	1981 - 1992	357	456	541	291	110	87	75	88	59	98	182	373	2,716
4	V78401	DRAUNIIVI PINE	1979 - 1992	272	268	334	163	45	72	35	49	29	69	87	145	1,568
5	V78321	ELLINGTON	1982 - 1985	258	264	403	168	82	112	55	87	40	82	123	158	1,832
6	V7779C	KORO	1982 - 1992	392	399	455	253	74	148	56	93	82	88	187	284	2,511
7	V7769D	LEWA VILLAGE	1982 - 1992	265	408	567	258	107	118	30	88	90	80	205	327	2,542
8	V77554	LOLOLO PINE	1978 - 1992	321	325	352	201	113	88	41	52	70	95	104	189	1,951
9	V77591	NADARIVATU	1936 - 1992	563	624	687	327	149	116	79	106	129	136	254	344	3,513
10	V77794	NADRAU MET	1977 - 1992	492	397	486	276	113	117	66	92	103	129	192	293	2,756
11	V7775D	NADRUGU	1983 - 1992	308	376	502	290	114	64	52	75	66	130	205	369	2,551
12	V7769B	NAGATAGATA	1967 - 1992	511	508	585	258	85	79	65	84	104	192	280	416	3,166
13	V7778A	NANOKO	1983 - 1992	306	407	412	266	117	76	40	77	78	106	229	286	2,401
14	V78301	NANUKU	1982 - 1985	245	261	467	97	51	108	51	59	21	83	105	147	1,696
15	V7841A	NARARA	1971 - 1992	363	347	498	278	118	91	56	63	82	123	182	261	2,463
16	V7850A	NASEYANI	1971 - 1992	337	362	384	210	68	81	45	82	62	136	234	178	2,178
17	V7768A	NAVALA	1981 - 1992	297	298	418	170	87	72	34	69	63	85	121	229	1,945
18	V7765A	NAVILAWA	1972 - 1992	553	466	615	305	100	90	49	75	113	164	230	283	3,044
19	V78311	PENANG MILL	1930 - 1992	309	376	428	228	109	75	46	69	77	83	149	236	2,184
20	V77575	RARAWAI MILL	1925 - 1992	312	400	409	197	97	73	46	53	74	88	132	215	2,096
21	V77482	TAGITAGI	1956 - 1992	265	335	372	185	82	76	39	58	61	90	127	172	1,862
22	V77691	TAUNABE	1982 - 1992	282	490	597	263	85	136	66	79	68	75	197	312	2,650
23	V77481	TAVUA	1955 - 1992	256	350	397	164	65	67	41	56	63	70	103	161	1,793
24	V7748C	TAVUA FILTER HOUSE	1970 - 1992	286	316	366	193	60	67	40	61	63	86	126	174	1,837
25	V7831B	VAILEKA DEPOT	1970 - 1992	331	297	425	239	105	74	46	69	76	107	168	195	2,133
26	V77563	VAROKA	1981 - 1992	298	319	354	176	102	104	39	68	75	60	109	196	1,899
27	V7840B	VATUKACEVEVA	1983 - 1992	215	340	488	255	114	94	53	65	60	59	160	337	2,241
28	V77581	VATUKOULA	1956 - 1992	316	437	409	233	67	76	43	66	82	106	146	215	2,195
29	V77765	VATURU MET	1982 - 1992	432	445	601	267	109	85	55	80	67	125	218	271	2,755
30	V77571	VEISARU	1956 - 1992	304	379	404	203	90	75	39	61	73	92	150	194	2,064
31	V77491	YAQARA	1965 - 1992	262	309	339	159	55	72	27	49	51	61	109	133	1,626
32	V7759C	WAIKUBUKUBU	1982 - 1992	252	461	435	151	78	151	55	54	37	56	113	114	1,958

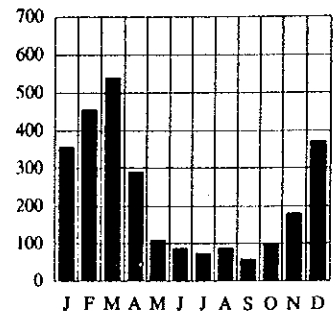
V7756D : Ba Fiter House



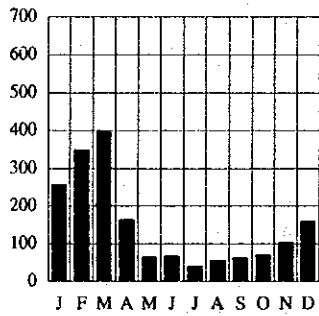
V7765A : Navilawa



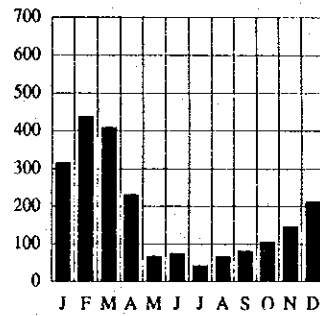
V7777A : Bukuya Depot



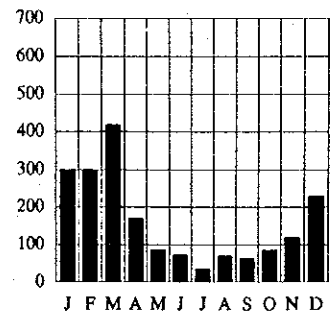
V77481 : Tavua



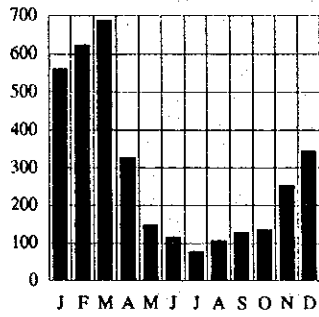
V77581 : Vatukoula



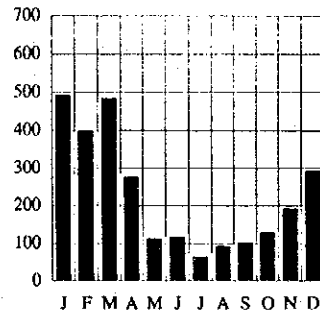
V7768A : Navala



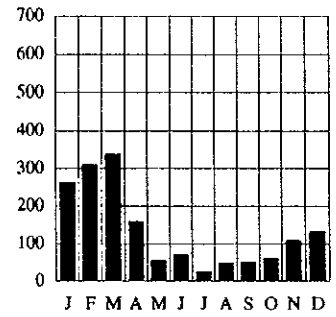
V77591 : Nadarivatu



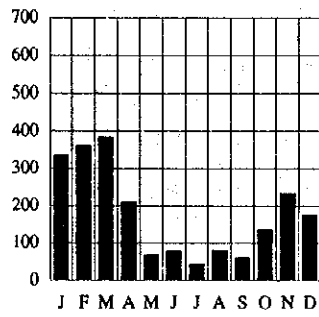
V77794 : Nadrau Mct.



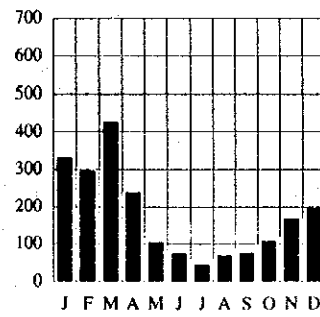
V77491 : Yaqara



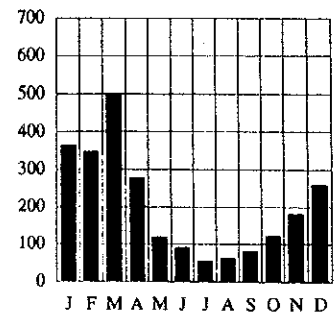
V7850B : Naseyani



V7831B : Vaileka Depot



V7841A : Narara



B-3 AVERAGE MONTHLY RAINFALL

B-4 MONTHLY RAINFALL

Unit : mm
 - Data Incomplete
 ** Data Unreliable

V7765C ABACA

MONTHLY RAINFALL													
V7765C ABACA													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1983	-	-	-	-	-	-	-	-	-	-	134.2	437.8	-
1984	389.8	455.5	753.7	370.2	276.8	83.2	9.2	15.3	82.9	66.6	197.2	240.6	2941.0
1985	385.6	523.6	995.6	148.4	128.0	100.2	163.4	20.2	-	100.6	155.8	-	-
1986	301.0	397.2	742.4	279.6	31.4	137.8	1.4	96.2	51.2	11.0	126.5	263.0	2438.7
1987	100.4	456.6	297.9	76.8	48.5	3.6	17.6	4.6	5.2	8.8	280.9	175.6	1476.5
1988	211.2	409.2	167.7	464.1	150.5	14.9	126.2	-	-	-	261.6	573.6	-
1989	416.6	976.1	315.9	649.2	391.1	35.5	24.2	89.4	184.6	302.2	118.8	259.2	3762.8
1990	246.8	297.8	894.7	57.3	10.4	161.9	37.0	184.0	83.6	48.2	388.8	358.0	2768.5
1991	716.4	396.4	-	312.6	154.6	20.8	73.0	78.3	160.2	61.4	137.6	71.4	-
1992	256.0	438.4	225.8	189.0	82.6	104.0	13.4	87.8	51.6	126.0	95.8	-	-
Ave.	336.0	483.4	549.2	283.0	141.5	73.5	51.7	72.0	88.5	90.6	189.7	297.4	2656.6

V7756D BA FILTER HOUSE

MONTHLY RAINFALL													
V7756D BA FILTER HOUSE													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1960	90.1	498.3	641.1	-	6.9	164.1	61.7	29.8	132.9	89.0	261.0	431.4	-
1961	102.0	651.5	205.5	209.3	27.3	31.3	58.1	102.7	45.7	47.7	445.7	533.6	2460.4
1962	512.6	399.2	360.1	125.3	132.2	33.1	53.1	5.1	14.2	84.2	218.8	189.5	2127.4
1963	459.7	196.0	417.8	292.6	262.9	44.6	118.6	97.7	95.3	33.4	171.3	130.1	2320.0
1964	131.1	521.3	729.4	-	1.0	99.1	21.0	24.1	42.0	92.6	93.9	143.3	-
1965	-	801.1	616.2	98.6	173.7	7.1	15.8	-	117.3	34.4	20.4	58.7	-
1966	178.9	168.6	380.3	296.3	-	12.9	9.7	-	7.0	8.2	39.1	197.4	-
1967	430.2	291.1	404.1	101.4	26.2	0.0	11.7	4.8	47.4	168.7	45.8	68.2	1599.6
1968	188.5	278.1	486.0	177.6	53.1	82.9	66.7	69.2	43.7	62.7	-	112.6	-
1969	103.7	225.2	233.4	73.1	1.1	13.2	48.9	62.4	28.2	9.0	50.9	335.2	1184.3
1970	300.2	700.0	219.9	157.4	169.7	99.3	61.6	0.0	53.9	0.0	235.7	353.4	2351.1
1971	334.1	458.3	712.9	144.0	95.7	85.6	22.4	91.2	97.3	229.4	168.8	533.9	2973.6
1972	471.3	154.7	585.0	87.0	105.0	51.0	13.0	34.0	11.0	194.0	133.0	199.2	2038.2
1973	110.7	245.0	804.5	198.5	5.0	286.0	119.0	151.0	198.0	68.0	331.5	269.0	2786.2
1974	472.5	682.0	553.0	633.0	35.5	21.0	0.0	523.5	11.2	282.0	262.0	354.0	3829.7
1975	424.0	388.0	233.5	207.5	132.0	108.5	0.0	8.0	76.0	313.5	680.5	179.5	2751.0
1976	369.3	399.6	336.4	395.5	59.3	36.0	9.5	54.8	333.5	28.3	81.0	119.5	2222.7
1977	497.0	336.5	581.0	94.5	46.0	11.6	3.0	35.5	62.5	70.7	20.5	61.5	1820.3
1978	158.5	142.5	136.5	225.5	100.5	68.5	44.0	55.0	45.0	315.5	72.0	122.5	1486.0
1979	395.1	231.5	462.5	146.5	137.5	69.0	13.0	32.0	167.0	6.0	126.3	46.5	1832.9
1980	399.0	458.0	211.5	128.0	0.0	260.5	42.0	39.0	145.0	278.7	206.7	90.0	2258.4
1981	572.0	342.1	134.6	199.4	124.5	140.0	10.0	92.9	26.7	19.7	66.5	258.9	1987.3
1982	897.3	371.3	471.1	94.3	16.9	164.6	126.7	73.5	33.8	66.4	32.0	46.3	2394.2
1983	184.2	177.7	158.9	79.5	1.5	28.5	16.0	48.5	22.5	84.5	160.8	224.0	1186.6
1984	240.3	260.7	542.8	171.6	251.0	111.5	0.5	35.5	21.5	93.0	126.7	169.0	2024.1
1985	-	219.4	793.0	118.5	70.5	89.5	133.3	11.5	83.0	86.5	39.0	101.5	1897.2
1986	221.3	414.6	351.0	848.5	16.0	186.2	0.0	49.0	28.5	15.5	92.7	58.7	2282.0
1987	77.3	372.5	155.0	47.0	0.0	0.0	10.0	0.0	4.0	9.0	134.2	154.0	963.0
1988	122.3	516.5	245.0	242.6	59.9	2.0	80.6	0.0	23.0	94.7	234.9	539.9	2161.4
1989	420.0	1160.0	231.0	451.0	389.0	2.5	14.0	82.0	95.5	257.0	83.5	199.3	3384.8
1990	153.5	237.9	639.5	23.0	31.0	241.9	64.0	182.0	115.2	101.0	225.5	-	-
1991	457.0	289.5	439.0	252.5	43.0	48.1	45.0	76.7	144.5	42.8	92.0	118.0	2048.1
1992	219.0	346.0	132.0	165.0	75.0	81.0	1.0	42.0	14.0	30.0	64.9	-	-
Ave.	312.7	392.0	412.2	209.2	82.8	81.2	39.2	68.2	72.3	100.5	156.8	206.4	2133.4

V777A BUKUYA DEPOT

MONTHLY RAINFALL

V777A BUKUYA DEPOT

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1981	553.7	-	181.4	435.1	110.8	154.0	5.2	168.0	37.2	108.0	-	-	-
1982	-	-	690.3	-	28.8	185.2	275.6	122.2	51.2	62.4	69.5	-	-
1983	-	651.7	493.7	150.2	27.8	40.2	54.2	94.2	38.0	106.6	210.0	352.8	-
1984	391.8	286.4	746.0	359.9	241.6	131.2	4.4	68.4	59.8	69.0	392.4	327.8	3078.7
1985	519.0	386.2	1595.0	57.2	134.0	107.0	188.4	37.4	-	-	-	199.7	-
1986	139.2	474.2	426.4	901.6	49.8	197.6	4.0	110.0	34.6	57.6	56.8	265.4	2717.2
1987	153.6	289.8	508.2	60.0	4.2	2.2	36.6	13.8	9.8	14.8	141.6	205.7	1440.3
1988	488.5	319.1	330.2	267.0	70.5	4.6	151.2	2.6	-	-	-	919.0	-
1989	491.0	894.9	499.1	245.2	350.5	23.0	38.4	58.2	84.6	177.0	123.6	319.2	3304.7
1990	61.1	248.0	669.9	85.5	24.0	159.8	63.2	220.5	47.3	128.8	450.4	525.0	2683.5
1991	433.0	529.4	200.0	350.4	95.6	0.0	41.2	67.9	200.0	183.0	60.6	46.7	2207.8
1992	336.4	476.6	155.0	-	180.2	42.4	34.0	88.2	26.3	68.4	134.5	570.8	-
Ave.	356.7	455.6	541.3	291.2	109.8	87.3	74.7	87.6	58.9	97.6	182.2	373.2	2716.0

V78401 DRAUNIIVI PINE

MONTHLY RAINFALL

V78401 DRAUNIIVI PINE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1979	504.8	218.5	386.4	-	-	9.3	59.0	-	-	-	-	-	-
1980	-	-	-	-	9.5	-	74.3	41.7	50.2	154.0	97.7	50.7	-
1981	344.9	503.2	163.5	287.1	77.3	79.0	24.2	127.8	18.9	32.2	20.8	168.0	1846.9
1982	864.0	329.9	590.9	119.1	15.0	199.8	123.9	72.1	12.2	64.5	98.9	16.0	2506.3
1983	163.0	261.8	112.9	56.4	3.0	16.5	24.5	68.0	10.0	220.0	223.6	240.8	1400.5
1984	98.5	300.7	611.7	123.1	52.1	135.2	0.0	17.8	21.5	40.5	138.5	70.8	1610.4
1985	72.4	253.8	491.0	43.0	63.0	34.4	41.6	73.5	26.0	77.5	26.9	43.0	1246.1
1986	86.0	149.9	297.7	423.1	12.2	124.6	0.0	50.5	0.8	7.4	64.2	226.5	1442.9
1987	-	111.8	277.7	33.8	2.0	5.0	20.5	6.1	3.0	0.0	121.1	148.0	-
1988	126.7	333.8	220.1	278.7	20.5	2.7	58.9	0.0	4.3	47.2	26.7	548.6	1668.2
1989	240.6	695.9	186.7	312.8	191.6	1.7	5.2	48.4	59.0	169.9	51.1	129.3	2092.2
1990	177.0	152.5	584.9	31.7	83.5	187.7	30.8	0.0	0.0	52.1	131.3	34.0	1465.5
1991	465.9	132.8	269.0	135.2	8.3	26.9	5.2	88.0	170.0	9.8	65.0	3.4	1379.5
1992	124.7	44.3	148.2	108.8	43.0	119.5	14.9	38.2	5.4	20.3	68.8	199.8	935.9
Ave.	272.4	268.4	333.9	162.7	44.7	72.5	34.5	48.6	29.3	68.9	87.3	144.5	1567.7

V78321 ELLINGTON

MONTHLY RAINFALL

V78321 ELLINGTON

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	406.1	142.8	475.7	196.9	40.4	141.2	74.2	165.8	46.8	41.8	161.0	89.6	1982.3
1983	95.8	473.2	193.7	66.9	31.2	31.6	53.1	91.3	26.1	143.8	144.8	-	-
1984	250.0	260.4	-	214.2	166.5	214.3	11.3	56.6	35.4	55.0	105.2	185.3	-
1985	281.7	177.7	539.2	192.2	89.3	62.6	82.8	32.4	52.2	88.4	81.2	200.2	1879.9
Ave.	258.4	263.5	402.9	167.6	81.9	112.4	55.4	86.5	40.1	82.3	123.1	158.4	1832.3

V7779C KORO

MONTHLY RAINFALL

V7779C KORO

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	845.0	414.0	468.5	155.5	31.0	197.0	80.0	39.0	41.0	47.5	36.5	140.5	2495.5
1983	121.0	278.5	560.4	139.0	15.5	38.0	38.0	49.5	73.5	66.0	183.4	437.6	2000.4
1984	308.0	275.0	538.0	263.0	189.0	210.5	0.4	22.0	71.0	86.0	152.0	313.0	2427.9
1985	402.0	362.0	912.0	221.2	51.8	166.0	131.0	17.0	78.0	-	188.0	247.0	-
1986	78.0	-	413.0	902.0	31.0	185.0	7.0	185.0	53.0	47.0	104.0	175.0	-
1987	845.0	414.0	268.0	155.5	31.0	177.5	99.0	10.0	41.0	47.5	28.5	78.0	942.0
1988	230.0	498.0	269.0	291.0	64.0	0.0	95.0	34.0	0.0	173.0	326.0	627.0	2607.0
1989	384.0	791.1	307.0	274.0	117.0	301.0	8.5	267.0	183.0	210.8	269.0	318.0	3430.4
1990	252.0	310.0	554.0	27.0	23.0	200.0	101.0	257.0	128.0	80.0	384.0	141.0	2457.0
1991	644.0	451.0	-	253.0	182.0	38.0	47.0	68.0	218.0	90.0	176.0	64.0	-
1992	208.0	194.0	257.0	106.0	74.0	119.0	11.8	69.0	15.0	30.0	213.0	585.0	1881.8
Ave.	392.5	398.8	454.7	253.4	73.6	148.4	56.2	92.5	82.0	87.8	187.3	284.2	2511.2

V7769D LEWA VILLAGE

MONTHLY RAINFALL

V7769D LEWA VILLAGE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	-	-	-	167.5	-	-	-	-	-	54.5	118.5	64.0	-
1983	271.5	349.0	824.0	178.7	1.0	-	-	80.0	42.0	113.0	136.0	303.5	-
1984	151.5	261.5	692.5	212.0	138.5	188.0	1.0	25.0	48.2	103.0	245.0	-	-
1985	407.0	289.9	1260.0	-	113.5	93.5	134.5	23.0	-	-	152.6	184.6	-
1986	107.0	438.5	-	887.5	25.3	211.0	5.0	108.0	41.0	60.0	-	-	-
1987	217.5	334.5	301.5	80.0	19.5	3.0	26.0	38.5	5.0	5.0	151.5	383.0	1565.0
1988	257.0	543.5	348.0	355.5	80.0	12.5	-	-	97.0	-	-	851.5	-
1989	361.5	977.0	293.5	403.0	313.2	99.0	8.0	95.0	204.5	184.5	336.0	188.5	3463.7
1990	195.0	276.0	862.0	42.0	36.0	285.0	36.5	215.5	152.0	64.5	398.5	108.5	2671.5
1991	415.5	405.0	278.0	197.5	123.5	32.0	22.0	96.0	200.0	116.5	124.5	55.5	2066.0
1992	-	200.5	243.1	55.0	214.5	138.5	9.0	109.0	22.0	17.5	183.5	804.5	-
Ave.	264.8	407.5	567.0	257.9	106.5	118.1	30.3	87.8	90.2	79.8	205.1	327.1	2542.0

V77554 LOLOLO PINE

MONTHLY RAINFALL

V77554 LOLOLO PINE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1978	370.6	165.0	127.0	171.0	152.7	50.8	81.6	42.8	47.2	278.1	93.7	84.1	1664.6
1979	474.8	242.0	403.2	240.0	118.2	57.5	28.6	36.5	214.6	9.6	168.7	39.2	2032.9
1980	293.4	503.1	201.1	133.7	12.6	56.3	52.1	35.0	97.1	175.4	172.9	85.8	1818.5
1981	648.6	469.0	192.2	282.2	203.1	149.6	7.5	123.2	26.5	50.6	105.1	215.2	2472.8
1982	734.6	372.2	432.7	95.6	20.3	285.8	130.7	82.1	28.5	50.2	40.0	36.9	2309.6
1983	212.4	186.2	285.9	46.6	3.0	11.1	25.7	76.7	11.5	86.7	127.5	278.9	1352.2
1984	154.7	228.2	508.5	193.5	230.8	102.4	2.5	20.0	34.0	58.1	97.2	105.5	1735.4
1985	102.6	344.8	854.4	61.0	51.8	59.3	124.3	2.1	40.7	198.6	59.6	104.9	2004.1
1986	122.5	265.5	420.4	536.6	80.0	222.4	0.0	44.1	-	0.0	85.1	61.4	-
1987	47.3	365.1	154.9	67.1	4.0	1.1	10.2	3.0	3.8	34.4	108.2	177.9	977.0
1988	290.3	381.7	211.0	334.0	142.0	5.3	80.5	0.0	50.6	112.6	176.3	657.1	2441.4
1989	351.5	812.5	280.5	356.7	606.3	22.4	13.4	73.9	108.5	178.8	109.7	189.2	3103.4
1990	183.1	114.4	655.3	33.3	7.0	196.0	40.0	143.1	85.2	36.6	61.4	233.9	1789.3
1991	542.5	221.9	334.1	383.3	18.3	26.0	10.4	63.9	216.5	117.8	50.7	28.8	2014.2
1992	291.0	209.0	211.3	79.9	46.5	67.7	6.5	38.0	13.6	42.8	97.5	532.0	1635.8
Ave.	321.3	325.4	351.5	201.0	113.1	87.6	40.9	52.3	69.9	95.4	103.6	188.7	1950.6

V77591 NADARIVATU

MONTHLY RAINFALL
V77591 NADARIVATU

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1936	332.6	313.7	728.2	372.6	201.1	3.0	8.9	52.6	54.2	260.9	256.3	97.1	2681.2
1937	362.5	815.4	327.1	380.9	286.7	79.4	65.2	149.2	46.8	97.8	82.7	429.0	3122.7
1938	467.0	1415.7	793.3	272.0	125.1	157.8	21.8	138.2	393.1	231.8	263.9	1551.5	5831.2
1939	1716.9	696.8	1416.0	641.0	456.4	10.7	159.3	231.6	47.5	110.8	95.7	274.1	5856.8
1940	521.7	235.0	263.6	294.9	98.5	39.6	105.6	50.8	229.4	271.6	106.9	85.7	2303.3
1941	277.0	386.1	377.4	212.1	52.0	261.5	136.2	49.1	132.1	12.4	131.6	328.1	2355.6
1942	77.9	337.1	330.0	166.7	68.4	328.3	49.7	-	-	-	-	-	-
1943	-	491.4	-	-	-	-	50.8	30.2	116.3	312.1	306.6	333.9	-
1944	675.2	507.4	633.6	225.6	191.3	30.7	59.8	31.4	222.1	147.1	27.2	266.6	3018.0
1945	391.2	433.4	491.3	190.4	296.6	202.6	30.2	44.8	125.6	155.5	174.1	304.9	2840.6
1946	576.6	944.8	731.0	42.6	91.7	161.1	83.8	124.2	12.5	152.9	89.6	72.4	3083.2
1947	254.0	693.6	557.7	502.8	110.8	188.1	118.3	73.6	171.0	36.9	198.2	762.7	3667.7
1948	822.7	780.1	246.3	353.5	98.1	128.3	76.8	119.0	38.6	76.9	603.2	329.0	3672.5
1949	746.4	583.4	534.5	579.9	210.2	26.1	34.7	91.0	153.0	66.9	203.0	691.3	3920.4
1950	560.7	1095.8	1952.1	407.1	159.2	62.8	24.4	50.1	298.2	331.6	445.2	341.3	5728.5
1951	882.4	589.9	705.5	245.9	519.0	154.1	26.3	62.4	83.3	164.2	7.7	165.3	3606.0
1952	165.3	465.3	315.8	16.5	80.9	62.3	303.6	44.3	42.7	12.0	358.3	274.1	2141.1
1953	1027.0	781.5	829.8	234.6	53.4	158.2	63.4	9.5	25.2	50.3	46.0	478.8	3757.7
1954	1020.2	336.3	546.1	198.3	67.5	115.4	134.9	47.1	372.3	52.9	471.1	249.8	3611.9
1955	422.6	298.0	1972.7	377.5	516.6	133.7	36.4	68.6	269.8	217.5	583.7	524.7	5421.8
1956	598.3	2412.8	1644.6	574.0	331.4	90.2	194.8	82.0	96.0	257.8	506.0	212.9	7000.8
1957	1370.5	810.9	608.4	254.4	152.6	-	14.0	133.6	82.3	127.0	87.7	135.1	-
1958	85.5	407.2	338.8	322.6	52.6	5.4	69.2	60.0	54.5	204.9	150.2	285.3	2036.2
1959	896.8	112.2	963.7	256.7	158.8	63.9	24.4	490.4	171.4	73.2	127.0	431.3	3769.8
1960	341.7	1109.8	1126.0	450.3	64.0	151.7	77.8	102.4	228.5	239.0	369.8	600.4	4861.4
1961	246.6	554.5	268.6	320.2	73.1	220.8	57.8	195.3	140.7	40.6	305.5	526.9	2950.6
1962	876.1	637.3	662.2	135.7	35.8	53.4	19.3	27.4	11.2	48.8	386.1	305.1	3198.4
1963	567.1	328.9	425.8	514.5	220.4	-	155.3	118.7	193.0	79.3	237.5	214.4	-
1964	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	-	-	-	-	-	-	-	-	-	-
1968	-	-	-	-	-	-	-	-	-	-	-	-	-
1969	-	-	-	-	-	-	-	-	-	-	-	-	-
1970	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	85.4	378.1	1142.5	1381.2	-
1976	706.0	566.4	639.3	554.3	132.1	164.7	28.8	152.7	379.2	50.3	315.9	82.8	3772.5
1977	635.6	611.5	1112.5	318.1	102.2	15.3	14.4	103.2	50.8	47.9	96.6	240.9	3349.0
1978	589.1	241.1	218.1	306.7	122.0	45.6	93.7	125.1	51.4	283.8	258.9	205.7	2541.2
1979	658.1	379.9	932.0	325.3	218.4	149.7	42.8	54.6	183.2	13.8	36.2	34.8	3028.8
1980	362.6	451.5	275.9	377.2	8.3	63.4	73.3	71.5	176.9	222.2	167.7	110.4	2360.9
1981	920.9	784.9	254.6	413.9	159.2	184.1	36.7	212.0	40.1	111.8	80.0	257.2	3455.4
1982	1248.5	489.5	880.2	174.7	33.0	76.1	116.0	204.6	44.0	81.6	93.4	70.7	3512.3
1983	481.2	620.7	426.8	122.9	10.0	35.6	104.5	72.5	31.5	162.8	267.0	426.0	2761.5
1984	210.2	-	782.3	248.7	202.0	221.2	10.5	54.3	94.0	186.1	278.7	334.2	-
1985	391.3	357.5	1252.9	235.2	107.5	96.1	238.0	69.0	68.0	174.8	106.5	159.7	3256.5
1986	66.3	564.7	640.5	1282.8	36.5	242.2	0.0	175.6	46.9	57.8	73.0	56.7	3243.0
1987	286.3	288.2	344.8	100.2	38.1	5.0	84.1	25.9	9.2	1.9	358.5	-	-
1988	226.5	560.8	341.7	606.0	88.4	12.5	227.7	1.5	23.0	74.5	394.7	-	-
1989	-	2096.0	658.0	-	317.0	59.9	86.8	127.0	247.1	235.7	276.9	-	-
1990	99.3	170.7	905.6	72.9	29.1	395.1	69.4	298.1	185.0	78.0	563.2	138.0	3004.4
1991	659.1	432.3	407.1	207.0	75.0	19.0	86.4	117.5	226.5	73.7	155.8	-	-
1992	387.2	256.3	374.0	153.1	89.9	199.4	22.9	136.3	29.5	30.3	146.8	-	-
Ave.	563.0	623.8	687.2	326.6	148.7	116.0	78.6	106.3	128.5	135.5	254.1	344.3	3512.6

V77794 NADRAU MET

MONTHLY RAINFALL
V77794 NADRAU MET

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1977	-	-	-	-	-	23.9	25.1	53.6	76.0	80.5	112.8	316.0	-
1978	1002.9	156.5	368.9	248.2	58.7	89.5	173.1	87.0	64.0	243.7	187.5	234.8	2914.8
1979	760.8	185.3	633.8	220.5	227.4	158.0	29.0	64.5	234.5	35.0	85.0	68.4	2702.2
1980	328.7	379.0	307.0	407.9	18.3	62.5	92.4	46.4	213.3	329.2	200.0	77.0	2461.7
1981	578.5	316.5	230.5	246.5	98.5	118.0	4.5	173.0	32.5	131.5	146.0	174.2	2250.2
1982	1164.5	380.5	537.0	130.1	80.0	199.7	158.3	116.8	69.5	67.5	215.6	78.5	3198.0
1983	199.9	697.8	568.3	125.5	15.8	62.5	59.6	92.1	92.2	116.8	177.5	445.7	2653.7
1984	330.5	237.3	600.7	284.2	133.5	264.4	9.5	55.0	49.5	79.5	160.2	262.5	2466.8
1985	462.0	337.9	1171.6	288.7	136.0	110.4	140.5	117.5	69.5	186.6	217.0	282.3	3520.0
1986	123.0	538.7	348.0	868.2	46.1	243.0	3.2	108.6	57.0	111.0	75.0	351.0	2872.8
1987	307.2	232.5	459.3	96.0	38.2	10.8	22.0	55.5	7.5	33.5	178.0	422.0	1862.5
1988	446.8	508.6	353.2	348.0	189.1	20.2	150.8	10.6	37.9	122.8	240.9	629.4	3058.3
1989	504.2	915.4	263.0	355.4	355.3	87.9	37.0	42.8	249.5	208.6	196.5	387.7	3603.3
1990	253.1	267.2	870.0	72.9	104.8	243.5	77.8	260.0	146.0	111.5	481.4	161.5	3049.7
1991	652.5	518.0	313.0	297.9	78.0	39.7	28.5	107.2	212.5	137.0	164.8	102.8	2651.9
1992	272.4	287.5	266.0	150.4	109.4	141.4	39.9	88.5	28.7	64.6	233.3	702.0	2384.1
Ave.	492.5	397.2	486.0	276.0	112.6	117.2	65.7	92.4	102.5	128.7	192.0	293.5	2756.4

V7775D NADRUGU

MONTHLY RAINFALL
V7775D NADRUGU

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1983	-	-	482.5	240.9	1.4	1.6	68.2	87.0	25.2	87.6	347.2	332.6	-
1984	308.4	447.8	740.1	278.3	306.6	103.0	1.8	51.4	54.6	63.4	246.2	473.8	3075.4
1985	425.0	372.0	1223.8	71.8	98.0	136.6	171.0	42.8	50.2	240.4	39.6	152.0	3023.2
1986	50.8	350.4	500.6	834.6	24.6	168.6	0.4	98.5	45.0	115.4	124.8	134.4	2448.1
1987	195.3	317.3	337.4	50.6	1.6	4.0	34.4	26.5	7.8	18.2	139.2	229.4	1361.7
1988	333.9	424.7	316.7	286.1	43.0	7.6	91.8	0.0	8.8	-	415.1	1084.0	-
1989	465.1	318.1	409.2	490.4	440.0	47.4	38.0	42.6	157.4	262.6	249.0	359.8	3279.6
1990	96.7	221.2	668.6	59.7	9.4	137.8	60.0	255.8	110.2	74.2	297.6	263.0	2254.2
1991	659.1	555.3	213.7	393.0	94.2	0.0	43.0	88.9	171.7	174.2	51.7	61.4	2506.2
1992	237.6	375.3	123.9	198.0	124.8	32.8	10.0	56.9	33.1	-	142.2	602.5	-
Ave.	308.0	375.8	501.6	290.3	114.4	63.9	51.9	75.0	66.4	129.5	205.3	369.3	2551.4

V7769B NAGATAGATA

MONTHLY RAINFALL
V7769B NAGATAGATA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1967	-	-	-	-	-	-	-	6.0	89.3	269.7	55.8	251.0	-
1968	221.2	431.6	832.6	319.9	26.2	73.0	231.5	56.8	26.1	150.1	48.8	410.4	2828.2
1969	180.9	297.1	-	48.7	7.9	5.2	28.4	5.3	43.5	174.9	221.0	581.3	1889.1
1970	651.5	772.0	243.8	107.4	206.1	204.4	136.9	14.9	7.2	204.9	580.5	559.8	3689.4
1971	321.8	703.3	773.4	601.2	260.9	62.6	73.9	182.7	237.1	535.7	802.5	842.4	5397.5
1972	747.9	182.0	262.0	146.4	130.8	93.8	34.5	70.1	297.3	431.2	417.5	557.0	3370.5
1973	475.7	268.4	853.2	373.9	47.2	251.8	118.5	35.3	251.5	161.2	303.2	670.3	3810.2
1974	566.0	692.0	829.0	635.0	8.0	9.7	2.1	602.5	124.6	254.4	271.9	611.9	4607.1
1975	1007.8	741.9	496.2	367.9	184.0	92.0	33.4	37.7	8.4	768.0	895.2	-	-
1976	692.8	627.2	743.4	156.6	2.5	9.7	18.3	-	-	-	-	-	-
1977	614.9	1022.5	1355.3	31.3	29.7	0.0	60.9	4.6	87.6	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	836.4	716.4	-	46.3	-	-	35.5	-	1.8	157.7	227.7	-
1980	962.0	633.7	420.5	247.8	69.2	69.0	69.0	44.5	141.5	303.3	113.3	129.1	3202.9
1981	1016.4	545.1	260.7	424.0	102.5	12.4	158.0	41.5	30.0	55.2	374.0	538.5	3558.3
1982	1015.0	478.0	574.5	162.5	43.0	162.0	-	143.0	46.8	-	189.0	-	-
1983	590.0	-	-	92.5	0.0	4.6	53.5	70.5	25.0	57.0	313.5	403.0	-
1984	161.5	460.3	517.5	231.0	24.5	131.5	2.0	13.5	5.5	10.5	11.0	34.0	1602.8
1985	-	128.0	1321.5	188.5	123.0	86.5	121.5	22.5	80.0	263.0	150.6	246.5	-
1986	154.0	521.0	336.5	694.0	17.5	134.0	0.0	145.5	188.0	52.0	137.0	219.2	2598.7
1987	236.0	263.0	372.0	0.0	6.0	1.8	17.0	32.5	4.0	36.0	129.0	317.0	1414.3
1988	235.0	621.0	347.0	304.0	82.0	6.0	130.0	2.0	29.0	108.0	318.0	788.0	2970.0
1989	390.0	774.0	216.0	325.0	390.0	58.0	25.0	49.0	217.0	176.1	268.0	245.0	3133.1
1990	239.0	253.2	691.0	44.0	59.0	209.0	66.0	238.0	139.0	127.0	367.0	134.0	2566.2
1991	494.0	153.0	326.0	384.0	96.0	35.0	18.0	75.0	220.0	71.0	152.0	96.0	2120.0
1992	262.6	284.0	385.0	45.0	84.0	97.0	21.0	82.0	-	18.4	157.0	868.0	-
Ave.	510.7	508.2	585.2	257.9	85.3	78.7	64.5	83.8	104.5	192.2	279.7	415.7	3166.3

V7778A NANOKO

MONTHLY RAINFALL
V7778A NANOKO

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1983	-	-	318.3	187.5	25.2	32.6	46.6	77.0	54.1	127.4	152.0	339.6	-
1984	282.8	218.1	659.4	208.8	236.8	126.5	5.6	35.2	51.6	90.6	191.4	353.0	2459.8
1985	390.1	354.2	740.0	182.3	84.8	116.8	132.8	54.8	57.2	253.6	338.2	137.2	2842.0
1986	118.6	428.6	463.2	509.2	77.5	151.6	3.0	88.2	100.4	50.0	204.0	209.8	2404.1
1987	189.8	444.4	358.7	93.0	2.2	2.6	9.8	9.8	9.6	17.4	233.4	149.3	1520.0
1988	384.4	442.8	232.7	249.8	85.9	3.2	76.8	-	44.7	-	368.4	623.7	-
1989	286.4	760.2	252.2	557.0	391.2	17.0	26.2	-	-	107.2	235.1	246.1	-
1990	384.0	261.6	613.6	93.6	26.4	205.5	40.7	221.8	112.8	74.2	298.8	230.8	2563.8
1991	469.6	539.5	310.5	385.0	87.6	63.6	27.8	57.9	225.0	129.4	95.6	72.2	2463.7
1992	252.4	213.9	171.5	188.9	148.6	43.2	27.8	70.4	50.2	-	177.6	498.2	-
Ave.	306.5	407.0	412.0	265.5	116.6	76.3	39.7	76.9	78.4	106.2	229.5	286.0	2400.6

V78301 NANUKU

MONTHLY RAINFALL
V78301 NANUKU

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	626.4	278.6	613.0	181.0	19.4	214.2	102.0	75.8	15.8	47.0	93.2	19.4	2285.8
1983	134.2	270.6	125.0	14.0	5.0	11.2	17.2	44.1	14.2	184.2	215.3	291.4	1326.4
1984	97.2	300.8	-	87.8	112.9	162.8	2.4	32.8	26.8	36.2	93.8	89.6	-
1985	120.4	194.2	663.0	105.8	68.4	45.2	83.4	85.2	26.8	64.8	18.2	187.8	1663.2
Ave.	244.6	261.1	467.0	97.2	51.4	108.4	51.3	59.5	20.9	83.1	105.1	147.1	1696.4

V7841A NARARA

MONTHLY RAINFALL
V7841A NARARA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1971	77.3	427.1	587.2	122.4	156.7	176.2	21.2	20.9	128.8	291.0	329.5	534.0	2872.3
1972	404.3	327.5	366.0	91.0	91.0	71.0	29.0	65.0	211.0	368.0	88.0	268.0	2379.8
1973	110.0	524.0	665.0	191.0	18.0	229.0	121.4	35.0	156.0	73.0	327.0	155.0	2604.4
1974	663.3	458.4	426.6	-	4.0	2.9	38.0	98.1	119.3	89.1	104.7	150.5	-
1975	417.1	201.1	520.1	925.9	167.6	46.0	42.1	0.8	87.0	256.0	970.0	406.0	4039.7
1976	598.0	406.0	610.0	513.5	128.0	26.0	25.0	157.0	243.0	-	-	-	-
1977	-	-	716.0	224.0	145.0	45.0	8.0	0.0	18.0	-	-	-	-
1978	-	130.0	375.0	258.0	167.0	26.0	112.5	48.0	13.0	158.0	65.0	234.0	-
1979	641.0	167.0	427.0	200.0	329.5	129.0	61.0	14.0	123.0	39.0	70.0	10.0	2210.5
1980	-	-	-	10.0	4.0	5.0	87.0	69.0	247.0	148.0	102.0	93.0	-
1981	505.0	475.0	108.0	310.0	171.0	64.0	6.0	185.0	14.0	183.0	41.0	269.0	2331.0
1982	860.0	235.0	652.0	119.0	24.0	266.0	142.0	125.0	2.0	-	225.0	16.0	-
1983	340.0	695.0	474.0	78.0	7.0	64.0	33.0	66.0	17.0	142.0	158.0	272.0	2346.0
1984	166.0	365.0	575.0	201.0	156.0	261.0	7.0	58.0	50.0	70.0	143.0	124.0	2176.0
1985	140.0	305.0	874.0	318.0	108.0	78.0	92.0	62.0	7.0	87.0	146.0	201.0	2418.0
1986	345.0	357.0	372.0	913.0	22.0	172.0	34.0	83.0	4.0	15.0	42.0	287.0	2646.0
1987	7.0	222.0	497.0	55.0	74.0	6.0	-	38.0	3.0	13.0	266.0	435.0	-
1988	116.0	525.0	151.0	577.0	445.0	68.0	116.0	5.0	10.0	107.0	56.0	916.0	3092.0
1989	306.0	-	304.0	336.0	265.0	32.0	32.0	61.0	101.0	184.0	146.0	87.0	-
1990	206.0	287.0	955.0	64.0	27.0	203.0	85.0	113.0	58.0	49.0	214.0	237.0	2498.0
1991	589.0	-	584.0	178.0	7.0	22.0	83.0	86.0	189.0	57.0	113.0	-	-
1992	403.0	133.0	228.0	150.0	86.0	17.0	10.0	6.0	7.0	5.0	32.0	-	-
Ave.	362.8	346.7	498.4	277.8	118.3	91.3	56.4	63.4	82.2	122.8	181.9	260.8	2463.1

V7850A NASEYANI

MONTHLY RAINFALL
V7850A NASEYANI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1971	74.2	584.4	668.3	163.7	134.2	75.9	5.3	57.7	81.3	270.0	271.4	521.0	2907.4
1972	467.6	183.0	362.0	57.2	110.5	39.0	4.0	16.0	22.1	289.6	48.0	62.0	1661.0
1973	13.3	451.0	465.0	59.0	4.1	204.0	144.0	146.0	104.0	71.0	239.0	190.4	2090.8
1974	629.2	817.0	229.0	360.0	12.2	11.0	84.3	200.9	66.1	325.9	277.1	271.0	3283.7
1975	629.7	353.9	231.4	222.9	111.0	30.0	10.2	6.9	43.5	254.4	1078.3	253.3	3225.5
1976	376.6	413.2	479.1	385.2	35.3	94.3	29.2	61.3	207.8	36.8	201.0	-	-
1977	527.2	607.3	481.8	105.0	33.5	0.0	0.0	38.1	120.0	19.0	-	45.7	-
1978	144.7	36.5	102.5	103.2	41.7	45.9	22.9	63.0	2.9	-	26.7	25.4	-
1979	399.0	392.4	802.4	325.0	234.0	85.0	6.4	8.0	59.9	11.0	20.0	8.5	2351.6
1980	81.0	157.0	123.0	202.2	102.0	30.0	71.0	47.0	163.0	251.0	74.0	31.0	1332.2
1981	697.0	496.0	179.0	363.5	154.0	95.0	17.0	177.0	15.0	47.9	41.0	230.0	2512.4
1982	964.0	440.5	545.0	238.0	12.0	305.0	107.0	75.0	8.0	25.0	114.0	45.0	2878.5
1983	195.0	395.0	289.0	36.0	0.0	68.0	14.0	33.0	18.0	205.0	135.0	252.0	1640.0
1984	204.0	273.0	689.0	173.5	158.0	176.0	0.0	132.0	29.0	105.0	188.0	204.0	2331.5
1985	267.6	360.4	909.0	154.0	55.0	71.0	-	-	41.0	172.0	-	-	-
1986	81.0	305.0	252.0	635.0	8.5	98.0	0.0	-	19.0	49.0	-	-	-
1987	-	267.0	336.0	42.0	-	28.0	66.0	198.0	32.0	0.0	565.0	359.4	-
1988	204.0	284.0	164.0	337.0	33.0	0.0	122.0	0.0	25.0	-	-	-	-
1989	287.0	228.0	251.0	210.0	37.0	161.0	110.0	159.0	-	-	-	-	-
1990	**	**	**	**	**	**	**	**	**	**	**	**	**
1991	159.0	188.0	114.0	20.0	13.0	0.0	39.0	56.7	124.6	183.0	-	-	-
1992	**	**	**	**	**	**	**	**	**	**	**	**	**
Ave.	336.9	361.6	383.6	209.6	67.8	80.9	44.9	82.0	62.2	136.2	234.2	178.5	2178.4

V7768A NAVALA

MONTHLY RAINFALL
V7768A NAVALA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1981	513.8	-	-	-	-	-	23.0	93.6	30.2	92.8	61.6	115.6	-
1982	763.6	290.4	482.0	37.2	21.9	-	64.0	132.2	30.0	12.4	19.4	176.2	-
1983	101.8	37.0	287.2	53.2	0.2	0.0	5.2	103.5	46.6	75.0	232.4	282.0	1224.1
1984	171.6	442.4	580.8	201.4	182.8	105.8	12.0	20.9	25.2	75.0	111.6	206.8	2136.3
1985	-	287.4	820.0	91.7	65.3	122.0	103.0	22.2	79.0	153.8	135.2	241.8	-
1986	163.6	283.5	369.1	623.6	19.4	137.2	2.4	62.1	51.2	96.4	85.2	157.2	2050.9
1987	79.8	146.3	299.4	25.6	2.2	0.8	12.0	2.2	3.2	19.0	108.4	104.1	803.0
1988	373.3	461.2	266.0	330.8	48.4	13.6	80.0	0.0	8.0	-	64.0	725.8	-
1989	292.9	438.0	561.2	105.1	385.1	21.0	26.6	55.5	175.0	146.0	198.2	191.0	2595.6
1990	96.8	255.2	578.0	42.5	79.3	225.0	60.0	191.5	63.0	75.5	212.5	210.4	2089.7
1991	534.4	419.8	278.6	271.1	63.5	37.0	18.0	94.2	213.0	157.0	127.0	104.5	2318.1
1992	179.5	222.0	80.5	92.0	85.5	61.7	5.4	55.5	34.5	30.0	90.5	-	-
Ave.	297.4	298.5	418.4	170.4	86.7	72.4	34.3	69.5	63.2	84.8	120.5	228.7	1944.7

V7765A NAVILAWA

MONTHLY RAINFALL
V7765A NAVILAWA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1972	602.7	332.7	726.0	131.2	104.0	82.0	11.0	32.0	53.0	434.0	144.0	331.1	2983.7
1973	138.0	289.0	894.0	304.0	6.5	213.5	99.0	77.0	202.3	188.0	266.2	480.7	3158.2
1974	653.2	802.0	786.0	1163.0	136.0	60.0	47.8	373.8	137.2	394.5	217.1	437.7	5208.3
1975	643.7	371.8	474.3	344.9	244.4	77.3	15.3	33.0	20.1	307.8	654.4	301.3	3488.3
1976	441.8	504.9	-	399.9	33.6	108.5	27.2	66.9	469.8	267.2	124.2	269.1	-
1977	661.9	573.2	812.3	184.6	53.7	4.1	3.8	29.3	139.6	28.8	25.9	124.3	2641.5
1978	656.6	108.3	202.1	136.1	133.1	73.7	69.9	40.1	53.3	241.5	393.5	210.0	2318.2
1979	793.0	301.0	998.0	257.0	112.5	94.0	16.0	14.5	252.0	31.5	198.5	69.5	3137.5
1980	356.0	487.0	332.5	186.0	0.0	46.0	39.0	37.0	174.5	163.5	333.5	81.0	2236.0
1981	882.0	478.5	233.0	389.0	132.0	110.0	9.0	148.0	64.5	35.0	240.0	227.0	2948.0
1982	1343.0	641.0	-	301.5	25.0	250.5	183.0	127.0	23.0	70.0	110.0	-	-
1983	504.0	535.0	667.0	85.5	2.0	23.5	43.0	34.0	8.0	130.5	99.0	-	-
1984	330.0	476.0	835.0	324.0	290.0	103.0	2.0	16.0	75.0	67.0	272.0	159.0	2949.0
1985	683.0	293.0	1409.7	86.0	114.0	120.0	181.0	0.0	167.0	-	-	89.0	-
1986	247.0	511.0	626.0	1010.0	36.0	221.0	0.0	70.0	102.0	50.0	83.0	112.0	3068.0
1987	97.0	424.9	304.0	113.0	4.0	4.0	16.0	2.0	2.0	5.0	115.0	350.0	1436.9
1988	544.0	553.0	330.0	299.0	146.0	0.0	144.0	0.0	15.0	232.0	225.0	1091.0	3579.0
1989	724.0	1048.0	303.0	490.0	423.0	27.0	37.0	61.0	215.0	226.0	262.0	124.0	3940.0
1990	179.0	142.0	1122.0	69.0	0.0	200.0	28.0	232.0	2.0	39.0	576.0	361.0	2950.0
1991	900.0	436.0	393.0	48.0	85.0	32.0	51.0	101.0	179.0	277.0	122.0	49.0	2673.0
1992	235.0	476.0	229.0	88.0	24.0	49.4	0.0	70.0	29.0	101.0	142.0	514.0	1957.4
Ave.	553.1	465.9	614.6	305.2	100.2	90.5	48.7	74.5	113.5	164.5	230.2	283.2	3044.0

V78311 PENANG MILL

MONTHLY RAINFALL
V78311 PENANG MILL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1930	214.4	169.5	166.9	112.8	70.2	17.5	103.7	15.6	122.0	0.0	192.0	71.9	1256.5
1931	240.7	1432.3	224.0	94.6	96.1	17.2	49.9	115.7	99.4	45.5	147.9	55.4	2618.7
1932	368.4	416.7	222.2	294.5	19.5	29.1	145.8	100.4	26.7	51.3	187.9	382.9	2245.4
1933	67.8	417.3	894.3	570.9	69.0	46.0	6.1	9.0	1.0	23.9	105.4	187.6	2398.3
1934	277.8	340.3	441.5	257.9	207.0	85.9	79.7	62.5	91.3	66.2	20.7	86.8	2017.6
1935	548.7	112.2	441.1	148.0	96.9	6.1	77.0	94.9	42.6	234.8	124.4	247.7	2174.4
1936	154.7	64.2	590.2	145.3	260.0	15.8	11.0	44.7	35.1	125.1	90.9	106.2	1643.2
1937	309.5	366.3	111.5	167.0	97.9	53.9	18.0	44.0	14.0	49.6	70.4	337.7	1639.8
1938	239.3	495.0	413.7	92.9	90.3	82.8	15.7	37.6	179.3	42.1	297.5	825.4	2811.6
1939	553.1	386.1	764.9	256.2	325.4	13.4	32.0	140.0	17.7	35.9	26.5	133.5	2684.7
1940	230.3	274.6	186.5	365.6	38.9	21.8	57.5	15.7	252.1	153.2	17.1	134.1	1747.4
1941	160.1	223.1	21.0	105.3	32.7	90.2	53.3	16.5	70.4	27.5	13.7	341.8	1155.6
1942	39.9	107.9	163.5	111.6	62.9	138.2	75.2	131.6	36.1	81.4	22.8	229.2	1200.3
1943	278.5	116.1	462.7	370.8	170.9	6.6	0.8	18.3	46.0	148.2	100.4	130.4	1849.7
1944	318.7	251.2	370.4	249.6	70.9	9.2	46.9	12.3	199.6	14.0	22.9	121.4	1687.1
1945	289.6	199.7	269.3	185.9	201.8	59.6	5.6	40.5	184.1	97.0	267.1	134.2	1934.4
1946	664.7	685.6	759.8	57.7	47.0	35.0	25.5	62.7	7.6	77.3	51.7	78.3	2552.9
1947	134.5	219.8	320.3	68.8	63.3	40.4	34.0	44.0	120.8	35.3	159.8	524.5	1765.5
1948	457.1	310.9	159.8	302.6	110.7	42.8	34.0	53.4	99.6	73.7	310.8	226.3	2181.7
1949	274.9	358.3	721.1	295.1	102.0	30.1	58.5	56.0	65.9	14.1	216.1	306.9	2499.0
1950	558.8	304.8	864.8	175.8	106.9	22.2	19.5	45.2	179.2	121.2	255.1	283.2	2936.7
1951	192.9	392.6	463.0	178.7	188.5	130.2	48.9	5.1	78.0	194.3	5.2	35.4	1912.8
1952	281.3	395.6	382.2	237.3	113.0	73.7	78.9	38.1	12.0	15.5	234.7	309.3	2171.6
1953	480.2	353.1	415.7	256.3	109.4	103.7	84.8	6.0	17.6	34.4	8.1	227.7	2097.0
1954	585.4	144.6	336.5	206.3	42.0	105.8	83.2	25.7	57.3	119.7	315.9	115.2	2137.6
1955	225.2	329.0	900.9	215.8	249.7	96.0	7.4	74.8	238.7	82.8	416.0	196.7	3033.0
1956	626.1	1182.0	950.7	195.8	114.4	50.3	86.2	19.8	37.7	165.4	260.6	142.6	3831.6
1957	754.1	489.7	486.1	126.9	164.8	66.5	3.7	52.9	14.6	71.6	94.9	39.4	2365.2
1958	17.7	221.4	204.7	704.6	31.2	4.6	33.1	317.2	50.2	107.0	125.7	279.9	2097.3
1959	542.8	39.1	363.7	288.5	29.7	56.6	9.7	286.8	104.9	31.2	103.4	203.5	2059.9
1960	231.4	633.3	456.8	192.6	43.8	181.2	52.3	26.7	260.4	119.2	193.9	315.4	2707.0
1961	175.0	502.4	150.0	307.9	39.4	149.4	9.6	125.3	112.9	27.2	472.1	332.9	2404.1
1962	625.8	320.6	342.0	160.1	101.0	146.1	57.4	6.1	2.6	114.6	298.2	173.8	2348.3
1963	455.7	134.4	467.4	155.2	209.1	42.9	49.1	167.3	157.5	49.8	113.4	139.7	2141.5
1964	56.5	623.0	1169.1	130.0	100.7	74.9	16.7	40.9	68.8	78.0	166.4	203.2	2728.2
1965	321.9	921.2	453.4	194.8	122.1	1.1	31.5	14.7	178.4	30.2	16.1	125.5	2410.9
1966	305.2	162.8	116.1	457.0	24.1	58.0	5.8	45.2	6.9	15.0	61.1	140.4	1397.6
1967	399.3	521.2	368.2	311.0	13.0	4.2	12.2	149.0	84.4	182.7	21.8	42.8	2109.8
1968	143.2	251.5	623.1	253.4	65.5	102.3	93.5	39.4	24.1	72.8	188.5	83.3	1940.6
1969	95.9	174.9	123.4	126.7	46.4	28.7	38.8	9.1	23.6	11.4	136.3	313.2	1128.4
1970	129.3	537.4	141.6	122.5	175.4	282.9	17.6	26.2	44.1	93.7	138.6	380.3	2089.6
1971	238.6	406.2	625.7	36.7	168.3	130.8	19.6	8.9	154.5	344.4	247.6	536.9	2918.2
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	52.2	-	-	-	-	-	-	-
1981	-	-	-	293.4	178.7	-	-	173.8	-	-	-	-	-
1982	582.2	200.9	465.0	205.6	36.2	272.0	84.7	161.0	20.4	62.6	213.3	77.7	2381.6
1983	204.5	732.7	172.6	52.2	12.2	40.2	56.3	103.6	30.4	223.0	167.4	307.5	2102.6
1984	222.0	397.8	521.0	213.0	197.8	257.2	14.9	89.8	19.6	37.2	153.2	119.8	2243.3
1985	281.4	225.0	818.9	191.2	144.8	58.4	100.6	66.0	42.0	135.4	138.8	251.1	2453.6
1986	358.8	278.6	385.4	786.9	22.0	148.2	0.8	109.4	4.0	16.0	40.4	208.6	2359.1
1987	9.4	262.4	372.2	84.4	65.2	35.2	22.2	69.6	9.4	25.2	264.8	418.8	1638.8
1988	205.2	460.4	251.0	-	320.8	66.6	94.4	10.8	19.5	98.2	49.6	817.1	-
1989	300.9	937.1	177.0	406.5	289.0	60.4	65.0	46.2	82.0	243.4	43.4	99.6	2750.5
1990	216.0	185.1	739.1	72.8	16.8	188.8	89.6	96.2	52.8	39.8	290.6	206.6	2194.2
1991	476.0	143.0	421.2	-	9.6	14.4	10.8	-	163.8	35.2	88.0	102.2	-
1992	265.6	114.8	264.2	262.1	85.4	92.9	92.2	-	17.4	25.0	111.6	593.0	-
Ave.	309.2	376.0	428.3	228.0	108.7	74.8	45.7	68.7	77.0	83.4	148.7	235.6	2183.9

V77575 RARAWAI MILL

MONTHLY RAINFALL
V77575 RARAWAI MILL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1925	180.2	245.1	734.2	435.5	300.8	6.4	30.5	17.8	70.3	222.8	58.9	51.3	2353.8
1926	71.6	271.0	184.7	94.9	43.5	86.1	78.8	1.3	24.8	97.9	57.1	97.7	1109.4
1927	483.3	557.9	150.0	187.1	157.5	147.3	9.6	205.1	166.4	273.1	245.1	381.1	2963.5
1928	113.2	325.6	453.6	357.6	228.0	35.3	86.5	46.2	28.5	61.5	77.1	189.1	2002.2
1929	275.4	411.6	313.7	277.4	189.1	112.2	81.2	116.1	42.5	85.4	70.8	120.9	2096.3
1930	65.3	160.0	208.4	131.9	42.4	10.1	100.5	0.0	142.3	0.0	93.3	71.1	1025.3
1931	123.2	1059.2	55.4	41.7	38.7	0.8	43.7	80.7	43.9	46.4	104.4	110.4	1748.5
1932	499.3	622.8	318.8	127.2	73.4	30.7	165.9	90.5	10.7	57.2	167.1	441.6	2605.2
1933	110.3	363.4	940.7	545.9	87.5	13.2	0.5	8.6	28.9	89.1	242.1	245.5	2675.7
1934	369.9	463.9	434.1	146.8	71.0	21.4	78.3	32.0	90.6	69.1	26.4	61.7	1865.2
1935	298.2	341.4	659.1	147.8	86.8	27.2	71.7	112.0	140.7	175.8	165.0	79.8	2305.5
1936	230.1	163.7	555.6	159.7	139.5	0.0	0.5	25.6	27.5	120.4	120.4	112.5	1655.5
1937	369.4	412.3	142.4	138.1	86.9	64.6	9.9	80.0	5.1	61.0	72.7	302.4	1744.8
1938	199.5	719.8	459.5	131.5	68.0	128.4	14.3	1.3	208.5	116.2	197.7	928.4	3173.1
1939	568.6	526.5	877.4	212.7	295.6	3.9	34.2	193.3	13.5	126.5	89.3	106.3	3047.8
1940	245.2	222.4	148.3	234.8	35.9	51.5	49.8	12.7	96.6	161.3	56.3	78.0	1392.8
1941	238.1	266.1	43.6	153.9	5.6	220.7	77.2	26.6	141.7	16.0	128.8	310.2	1628.5
1942	66.4	210.5	252.5	122.2	62.4	150.8	37.7	79.0	30.0	81.6	44.8	231.3	1369.2
1943	335.2	194.3	283.3	241.0	252.8	30.2	0.0	24.9	104.9	248.2	157.8	187.3	2059.9
1944	331.7	288.5	448.7	165.2	52.0	6.1	3.6	20.9	152.9	58.3	74.1	232.7	1834.7
1945	333.4	207.8	261.5	196.0	169.6	109.0	47.1	10.3	93.4	187.2	80.3	195.7	1891.3
1946	563.3	614.5	452.1	79.2	72.6	51.8	48.1	36.0	1.1	39.9	118.1	176.9	2253.6
1947	222.9	403.9	309.8	118.1	48.7	59.7	79.2	37.1	67.1	55.1	79.3	386.0	1866.9
1948	486.7	504.6	118.4	336.8	34.0	89.6	58.4	42.9	112.7	124.3	370.6	115.7	2394.7
1949	360.4	224.0	412.4	366.9	113.8	67.6	24.9	83.0	128.6	102.0	149.9	193.6	2227.1
1950	537.6	402.7	907.3	230.7	72.0	31.5	7.4	57.2	130.6	173.8	175.9	223.9	2950.6
1951	255.3	518.4	318.1	213.1	246.5	110.0	8.9	44.7	85.1	130.8	7.4	62.7	2001.0
1952	154.6	312.6	295.2	109.1	52.9	96.4	38.6	10.7	77.6	84.9	86.4	457.6	1776.6
1953	538.5	288.6	603.6	274.1	21.2	131.1	45.9	0.0	12.9	9.5	25.3	294.4	2245.1
1954	719.0	328.9	441.8	283.8	59.1	136.7	101.9	15.2	112.8	27.3	188.0	176.2	2590.7
1955	224.6	190.5	856.5	239.6	196.9	130.0	2.0	42.9	200.6	29.2	349.0	191.5	2653.3
1956	526.3	951.9	986.6	244.0	135.2	55.1	143.6	22.4	37.9	180.8	237.7	93.2	3614.7
1957	723.0	680.9	470.1	101.9	146.6	112.1	1.8	59.7	13.1	25.9	69.9	88.4	2493.4
1958	35.2	194.2	169.9	327.3	21.6	4.6	27.4	15.5	15.5	106.7	107.7	45.7	1071.3
1959	508.6	33.3	569.1	166.3	49.0	50.6	3.8	191.5	81.6	23.6	41.8	226.1	1945.3
1960	211.4	609.7	600.8	359.5	7.9	139.4	70.2	30.0	142.3	76.7	238.2	403.2	2889.3
1961	88.4	705.5	158.9	234.0	33.6	23.9	52.9	148.4	36.5	34.3	504.2	567.5	2588.1
1962	522.2	367.0	383.4	186.0	86.1	26.5	57.7	4.6	5.3	72.7	266.1	307.3	2284.9
1963	450.3	131.2	312.6	261.4	275.7	66.6	131.6	96.5	166.9	25.9	115.6	157.3	2191.6
1964	104.2	589.9	1067.2	78.5	30.1	120.7	27.8	27.1	45.2	73.1	187.2	158.0	2509.0
1965	417.8	613.8	412.4	53.8	229.1	10.7	6.4	33.6	104.2	19.9	11.2	30.3	1943.2
1966	160.4	121.8	358.8	244.5	34.6	23.1	9.4	26.7	13.3	7.7	43.2	190.6	1234.1
1967	377.9	375.0	445.4	50.2	23.1	0.0	9.7	5.6	48.0	152.6	46.9	93.0	1627.4
1968	179.7	284.0	603.1	114.6	18.5	83.0	60.8	95.3	74.6	38.1	23.7	168.5	1743.9
1969	79.8	268.9	179.4	59.0	0.0	14.2	32.6	72.4	22.9	6.4	124.4	251.9	1111.9
1970	213.8	606.0	289.7	105.4	145.7	118.9	90.2	0.0	72.2	74.2	189.7	280.1	2185.9
1971	294.7	948.6	802.1	169.5	108.2	152.9	18.3	58.7	75.2	236.0	194.3	572.2	3630.7
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	130.1	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	566.2	210.8	327.6	119.7	157.9	102.9	14.2	24.6	142.2	1.8	108.2	25.9	1802.0
1980	360.0	419.1	175.0	121.0	0.0	56.4	46.5	40.1	167.3	163.8	161.0	88.4	1798.6
1981	566.7	320.4	96.9	255.3	61.2	156.2	9.6	111.9	12.0	57.4	44.5	195.1	1887.2
1982	753.1	319.0	561.4	102.5	48.0	202.2	69.0	109.7	37.3	47.2	41.7	49.4	2340.5
1983	132.8	379.7	61.0	93.0	2.5	3.3	33.2	43.7	19.6	113.4	190.3	290.5	1363.0
1984	216.1	285.0	579.4	207.6	197.3	115.1	0.7	20.9	28.0	66.8	113.1	196.9	2026.9
1985	223.4	352.6	705.7	78.3	62.4	80.7	120.4	18.0	96.5	98.2	95.3	97.1	2028.6
1986	203.9	301.6	331.7	777.5	16.8	185.3	0.2	59.9	25.3	23.8	96.3	86.2	2108.5
1987	113.6	338.5	138.5	42.3	1.6	1.4	7.8	0.8	4.1	15.0	126.0	121.3	910.9
1988	201.8	405.7	249.8	266.1	47.3	1.6	85.1	2.0	6.8	104.4	236.8	628.7	2236.1
1989	340.9	936.1	200.0	399.2	402.4	19.8	19.7	78.9	113.9	233.4	96.4	171.1	3013.8
1990	92.3	192.1	565.1	20.6	21.1	245.6	72.7	152.4	109.3	87.0	206.2	257.2	2021.6
1991	622.8	337.7	432.7	175.6	41.7	46.0	35.2	68.3	159.8	27.3	142.0	107.8	2196.9
1992	176.2	296.8	102.6	132.0	89.3	90.3	6.5	42.5	16.5	28.2	118.3	339.6	1438.8
Ave.	312.0	400.0	409.5	197.5	96.7	73.3	45.7	52.7	73.5	87.8	132.1	214.8	2095.6

V77482 TAGITAGI

MONTHLY RAINFALL
V77482 TAGITAGI

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1956	599.6	916.6	1258.0	249.7	242.6	65.5	98.0	-	24.9	216.8	258.1	-	2045.3
1957	569.8	469.6	515.0	69.6	119.3	69.9	0.0	72.2	16.6	44.9	53.4	45.0	979.9
1958	38.7	162.3	98.3	216.7	25.4	0.0	26.5	40.1	29.0	124.9	151.2	66.8	1649.7
1959	435.7	87.8	451.4	141.5	74.8	19.3	3.6	163.0	46.2	28.7	25.9	171.8	3222.6
1960	150.9	640.1	931.0	345.6	42.0	134.9	55.9	35.0	143.5	186.7	88.3	468.7	2184.8
1961	173.8	616.8	58.0	215.5	78.2	67.6	30.8	114.0	53.9	27.0	350.2	399.0	1868.0
1962	465.3	239.6	361.6	186.0	39.2	63.7	71.1	7.9	1.5	36.3	260.4	135.4	1719.4
1963	337.8	192.3	127.1	239.1	178.5	136.8	91.2	99.3	131.3	29.5	67.3	89.2	2507.3
1964	77.5	665.8	1087.5	94.8	27.1	90.9	22.9	31.0	43.9	67.0	122.3	176.6	1831.8
1965	391.2	691.8	331.0	85.6	118.6	8.6	0.0	32.3	109.2	40.1	23.4	0.0	977.0
1966	189.6	34.0	253.2	219.8	10.4	53.1	7.6	66.8	13.0	6.9	35.5	87.1	1545.6
1967	380.1	372.8	376.2	107.0	16.5	0.5	15.8	0.0	60.1	138.1	44.5	34.0	1766.0
1968	188.7	289.2	605.5	171.4	32.5	101.4	62.8	83.6	46.3	59.2	10.4	115.0	1075.2
1969	52.1	236.9	119.8	121.4	22.6	10.9	33.2	0.0	30.5	4.3	188.0	255.5	1804.1
1970	154.3	433.2	164.8	129.4	125.0	142.2	32.0	0.0	65.3	87.5	139.9	330.5	2503.8
1971	188.5	454.6	683.3	108.2	101.6	58.3	2.0	11.5	65.0	193.0	176.2	461.6	1478.5
1972	147.2	128.0	343.2	52.6	211.1	23.6	13.2	22.1	33.0	166.7	105.4	232.4	2011.3
1973	14.0	411.1	602.8	154.2	0.0	239.9	134.5	59.2	100.3	8.1	210.0	77.2	3979.3
1974	468.2	504.9	541.1	545.6	457.2	19.3	17.3	248.4	59.2	269.5	411.0	437.6	2354.7
1975	365.6	194.3	226.8	213.6	85.1	61.2	38.6	4.6	58.9	383.3	575.1	147.6	1978.2
1976	472.2	292.6	281.2	291.1	27.4	105.9	8.9	71.6	241.8	57.2	89.4	38.9	1210.0
1977	-	-	-	-	-	0.0	18.8	-	-	-	-	-	-
1978	127.2	84.6	129.6	271.3	71.1	46.0	65.6	49.7	35.3	214.3	22.6	92.7	1501.5
1979	618.7	260.5	276.2	108.5	113.0	11.0	0.0	0.0	93.0	-	12.0	-	1193.0
1980	167.0	320.0	223.0	191.5	0.0	75.0	48.5	46.0	95.5	156.0	127.0	52.0	1459.0
1981	517.0	364.0	143.5	-	89.0	145.0	8.0	100.1	31.0	28.0	23.0	154.0	1993.5
1982	619.5	216.0	327.5	146.0	14.0	250.0	72.0	123.5	15.0	89.0	76.0	45.0	1193.0
1983	153.5	225.0	131.0	0.0	0.0	2.0	15.0	23.5	12.5	80.0	164.5	386.0	1459.0
1984	55.0	274.0	429.0	122.0	144.0	194.0	0.0	23.0	18.0	29.0	41.0	130.0	1551.0
1985	246.0	220.0	544.0	143.0	40.0	60.0	139.0	34.0	0.0	64.0	0.0	61.0	1459.0
1986	77.0	122.0	284.0	579.0	20.0	101.0	0.0	45.5	15.0	14.0	167.5	34.0	749.4
1987	35.0	246.0	155.0	49.0	0.0	9.0	19.0	0.0	6.0	0.0	165.2	65.2	1861.9
1988	148.0	346.5	181.0	355.0	55.0	0.0	140.0	0.0	79.0	39.0	29.0	489.4	2285.5
1989	231.0	867.0	111.0	305.5	289.0	12.0	35.0	41.0	91.0	126.0	56.0	121.0	1946.0
1990	178.0	102.0	582.0	45.0	4.0	314.0	81.0	194.0	150.0	33.0	138.0	125.0	1526.0
1991	363.0	218.0	368.0	154.0	8.0	19.0	36.0	67.0	159.0	27.0	107.0	0.0	1224.5
1992	158.0	165.0	95.0	53.5	79.0	91.0	11.0	126.0	17.0	61.0	60.0	308.0	1862.4
Ave.	265.4	335.1	372.1	185.2	82.3	75.7	39.3	58.2	60.9	89.6	127.1	171.6	1862.4

V77691 TAUNABE

MONTHLY RAINFALL
V77691 TAUNABE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	-	-	628.3	138.8	24.7	296.8	174.0	95.0	94.8	69.2	52.2	20.1	-
1983	370.6	902.9	433.9	148.5	15.7	36.5	115.5	54.6	2.5	-	191.9	348.9	-
1984	249.6	319.3	796.0	280.4	97.1	192.0	3.0	-	66.1	106.7	237.6	305.5	-
1985	376.6	263.5	1575.5	171.5	128.5	105.5	177.5	40.4	103.5	164.5	132.3	218.1	3457.4
1986	68.5	578.0	644.0	973.7	25.4	227.5	4.5	121.2	53.7	65.5	90.0	175.5	3027.5
1987	228.1	250.5	386.7	63.5	28.5	5.5	41.6	32.0	10.0	8.0	178.3	468.9	1701.6
1988	170.2	491.4	355.7	383.0	80.0	9.3	-	-	-	-	297.9	1268.5	-
1989	326.5	1217.1	315.1	463.1	343.6	21.0	46.5	143.5	198.5	153.0	360.9	73.2	3662.0
1990	226.0	238.8	856.0	51.0	43.3	432.5	17.0	56.5	64.0	51.5	446.2	179.1	2661.9
1991	676.5	492.9	336.1	111.3	85.2	29.0	25.5	86.0	58.5	32.9	48.3	63.0	2045.2
1992	125.0	145.0	242.5	102.7	67.2	141.3	54.0	81.5	29.5	25.0	135.2	-	-
Ave.	281.8	489.9	597.3	262.5	85.4	136.1	65.9	79.0	68.1	75.1	197.3	312.1	2650.5

V77481 TAVUA

MONTHLY RAINFALL

V77481 TAVUA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1956	658.6	958.1	1085.5	325.9	160.4	63.3	104.4	20.8	12.0	151.8	268.2	52.0	3861.0
1957	715.3	419.2	372.1	58.1	88.7	76.8	0.0	37.1	7.1	38.9	63.4	45.5	1922.2
1958	38.0	153.2	123.3	165.0	45.3	0.8	22.7	45.2	38.3	66.3	104.6	82.5	885.2
1959	417.4	118.4	469.3	125.6	64.9	25.2	10.9	149.8	84.9	5.8	17.4	181.9	1671.5
1960	147.6	626.0	782.2	256.8	19.4	109.0	45.3	58.0	198.8	187.4	153.9	491.0	3075.4
1961	186.1	496.0	117.0	205.9	48.8	56.0	22.8	112.0	107.9	17.5	301.9	338.9	2010.8
1962	495.0	218.1	322.2	195.2	35.8	79.4	65.3	8.4	0.0	31.5	284.6	133.7	1869.2
1963	294.0	197.6	208.6	237.2	170.7	87.2	88.4	89.9	131.4	39.5	97.8	89.0	1731.3
1964	42.0	559.2	1162.3	95.3	22.4	62.9	26.0	36.1	73.0	86.9	97.8	181.7	2445.6
1965	403.8	694.9	407.9	84.8	98.6	22.0	0.5	55.4	87.2	46.3	22.9	18.3	1942.6
1966	156.2	54.5	232.0	240.0	16.5	53.1	-	56.3	-	6.9	25.4	58.1	-
1967	-	302.2	358.3	73.1	10.4	0.8	4.8	0.0	86.6	95.3	37.9	24.7	-
1968	164.0	288.2	531.1	150.9	50.3	41.7	-	41.7	56.7	58.1	21.4	86.1	-
1969	40.8	283.9	182.2	48.7	0.0	7.1	36.7	3.0	69.3	13.5	101.2	98.8	885.2
1970	130.3	462.7	205.2	133.3	202.6	-	21.9	0.0	46.0	38.9	70.4	305.3	-
1971	181.2	498.2	727.9	106.0	88.1	27.5	3.1	22.1	34.8	177.6	163.0	581.5	2611.0
1972	390.5	144.3	-	83.0	154.1	26.2	16.8	38.4	26.7	175.5	89.6	157.5	-
1973	79.7	415.6	785.9	107.1	0.0	225.2	162.3	96.8	111.5	49.5	302.5	88.3	2424.4
1974	-	466.1	517.8	-	-	-	-	-	-	-	-	-	-
1975	373.2	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	23.0	-
1980	162.1	302.0	132.9	226.0	-	56.8	64.5	54.1	170.8	227.2	80.5	69.0	-
1981	544.6	385.2	168.0	195.4	-	94.0	8.0	159.6	19.9	31.0	22.5	126.0	-
1982	562.5	282.5	406.0	195.0	14.0	207.5	50.0	80.0	12.5	87.0	43.0	71.0	2011.0
1983	132.0	208.0	125.0	8.4	0.0	1.0	16.0	28.0	15.0	87.5	150.5	371.5	1142.9
1984	163.8	261.0	454.0	119.5	110.0	169.0	0.0	20.0	0.0	40.0	61.0	96.0	1494.3
1985	214.0	267.0	553.0	147.0	53.5	49.0	139.0	52.0	28.0	97.0	0.0	84.0	1683.5
1986	60.0	147.0	254.0	574.0	16.0	101.0	0.0	43.0	5.5	9.0	56.5	52.0	1318.0
1987	156.0	169.0	240.0	37.5	1.6	1.5	26.0	0.0	7.0	0.0	202.5	145.1	986.2
1988	113.0	440.0	221.0	275.0	50.0	0.0	131.0	0.0	45.0	63.5	63.0	518.0	1919.5
1989	257.0	851.0	174.0	276.0	282.0	16.0	42.0	79.0	73.0	111.0	31.0	97.0	2289.0
1990	130.0	147.0	459.0	37.0	7.0	234.0	47.0	198.0	184.0	43.0	105.0	138.0	1729.0
1991	382.0	191.0	425.0	233.5	4.0	18.0	34.0	47.0	142.0	10.0	82.0	21.0	1589.5
1992	159.0	177.0	103.0	63.0	57.0	93.0	3.0	110.0	19.0	79.0	77.0	321.0	1261.0
Ave.	256.4	349.5	397.0	163.8	64.6	66.8	41.1	56.2	63.1	70.1	103.2	160.9	1792.7

V7748C TAVUA FILTER HOUSE

MONTHLY RAINFALL

V7748C TAVUA FILTER HOUSE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1970	-	-	-	-	-	-	17.4	0.0	49.8	68.3	132.8	579.6	-
1971	242.2	588.3	827.4	149.9	92.7	42.3	4.0	17.8	51.0	205.7	197.1	483.9	2902.3
1972	395.6	112.2	374.9	52.7	162.8	27.2	15.7	35.8	35.6	129.0	112.9	163.2	1617.6
1973	97.8	460.6	750.4	131.5	7.0	112.0	140.5	63.0	113.0	18.0	309.0	157.0	2359.8
1974	516.0	498.0	589.0	475.0	20.0	8.5	95.5	173.0	43.0	207.5	225.0	168.5	3019.0
1975	407.0	221.0	223.0	191.0	96.0	28.5	6.5	15.0	147.5	141.0	616.0	126.0	2218.5
1976	559.5	237.0	466.5	421.0	52.0	82.5	12.5	96.0	210.0	40.5	98.0	16.5	2292.0
1977	556.0	367.0	549.0	122.0	34.0	10.0	9.5	58.5	29.5	36.0	23.5	24.0	1819.0
1978	231.5	107.3	175.5	269.0	74.3	23.0	51.0	64.5	50.0	213.0	62.4	150.9	1472.4
1979	449.8	315.0	633.5	129.5	152.5	81.0	24.0	15.0	116.0	4.0	33.5	17.5	1971.3
1980	164.0	262.5	132.2	190.6	2.0	59.5	65.5	44.9	143.0	188.6	85.8	67.7	1406.3
1981	481.4	474.5	153.2	186.2	88.5	93.5	10.0	155.2	23.5	28.1	32.8	165.1	1892.0
1982	563.8	279.1	418.1	144.4	16.0	155.6	43.8	81.0	14.9	94.2	57.0	47.0	1914.9
1983	122.8	167.9	99.3	15.9	1.5	3.0	14.7	29.6	16.2	81.5	126.2	286.1	964.7
1984	104.8	254.0	371.3	103.5	119.9	140.4	0.0	18.2	8.8	37.0	65.7	101.3	1324.9
1985	207.1	247.5	507.2	173.0	40.5	51.0	81.2	64.0	27.0	100.0	7.0	113.6	1619.1
1986	59.0	152.8	259.5	568.3	16.0	91.0	0.5	48.5	10.5	12.0	65.5	38.8	1322.4
1987	125.2	208.5	187.0	33.0	4.0	1.0	30.0	2.0	6.0	0.5	227.4	78.9	903.5
1988	101.6	462.0	180.4	292.7	47.5	4.0	131.0	0.0	54.0	52.0	42.4	541.5	1912.1
1989	250.7	957.0	165.0	249.2	241.5	37.0	39.5	56.0	84.5	107.0	41.0	106.0	2334.4
1990	119.0	198.0	454.0	70.0	10.0	287.5	46.0	187.1	151.4	49.5	117.0	143.5	1833.0
1991	393.0	141.7	469.0	223.0	6.0	25.0	69.5	75.0	-	-	-	-	-
1992	146.0	243.0	67.0	48.0	46.0	115.0	0.0	95.0	0.0	68.0	88.0	249.0	1165.0
Ave.	286.1	316.1	366.0	192.7	60.5	67.2	39.6	60.7	63.0	85.5	125.7	173.9	1897.0

V7831B VAILEKA DEPOT

MONTHLY RAINFALL
V7831B VAILEKA DEPOT

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1970	-	-	-	-	-	-	12.2	20.5	91.2	81.3	96.2	-	-
1971	219.6	357.5	665.7	38.5	145.5	80.1	25.6	27.9	96.5	228.1	233.8	446.7	2565.5
1972	519.6	251.1	182.7	91.2	58.0	66.7	28.0	64.6	192.0	138.1	56.3	199.8	1848.1
1973	-	403.1	735.0	187.1	17.0	196.0	107.0	56.0	116.0	93.0	236.7	172.0	-
1974	518.0	397.0	429.0	575.0	15.0	15.0	23.0	259.0	125.0	224.0	300.0	280.0	3160.0
1975	487.4	291.0	159.0	447.0	177.0	38.1	83.0	0.0	112.0	186.5	1011.5	346.0	3338.5
1976	447.6	363.5	497.5	397.0	119.1	-	-	115.5	-	-	130.5	44.4	-
1977	376.3	366.5	438.5	145.0	46.0	30.5	8.0	53.0	38.6	30.5	51.3	233.2	1817.4
1978	404.0	117.5	274.5	220.5	189.0	13.0	68.5	53.0	28.0	166.0	158.0	283.3	1975.3
1979	594.0	228.0	252.0	183.5	342.0	93.0	45.0	19.0	119.0	50.5	133.0	19.5	2078.5
1980	202.4	-	-	-	-	-	24.9	42.2	362.2	143.5	96.0	92.4	-
1981	415.4	447.8	136.6	-	164.2	34.5	29.5	173.0	18.2	158.7	47.9	301.4	-
1982	574.7	197.2	451.4	188.9	26.0	159.5	79.7	141.4	17.7	51.0	172.5	39.8	2099.8
1983	150.7	247.2	-	52.3	2.0	40.6	74.4	85.4	32.9	186.8	143.4	316.5	-
1984	133.9	396.9	574.7	168.1	135.4	209.7	7.8	79.0	43.0	30.5	140.0	145.3	2064.3
1985	190.0	191.3	849.5	177.6	149.8	49.9	91.8	58.5	30.5	115.1	97.5	142.3	2143.8
1986	-	-	-	662.6	19.9	143.0	1.0	71.7	2.1	12.2	41.5	-	-
1987	6.9	210.9	-	131.0	37.0	-	-	25.0	21.0	-	-	-	-
1988	-	394.5	-	-	232.9	31.5	71.3	4.4	16.0	79.0	27.6	-	-
1989	318.5	612.6	166.5	431.5	250.3	27.1	38.5	39.0	37.0	190.6	120.0	64.0	2295.6
1990	204.5	147.5	755.5	63.5	6.0	120.5	60.0	113.5	51.0	51.5	236.0	91.0	1900.5
1991	403.0	154.2	404.3	158.0	12.0	12.0	10.5	76.3	112.5	22.0	80.5	7.0	1452.3
1992	124.0	162.7	260.0	221.0	65.5	41.0	70.5	15.5	16.0	10.5	81.5	484.5	1552.7
Ave.	331.1	296.9	425.4	238.9	105.2	73.9	45.7	69.3	76.3	107.1	167.8	195.2	2132.9

V77563 VAROKA

MONTHLY RAINFALL
V77563 VAROKA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1981	581.9	436.0	131.0	237.4	97.0	102.0	11.4	93.5	28.6	33.5	61.4	195.0	2008.7
1982	638.0	241.0	390.1	122.0	6.9	217.5	71.0	90.0	32.6	32.0	37.0	38.5	1916.6
1983	160.5	276.0	157.6	63.8	2.0	13.0	31.0	38.0	45.0	89.0	159.5	257.5	1292.9
1984	123.0	249.5	508.0	259.5	207.5	114.0	1.0	18.0	23.0	44.5	118.0	222.0	1888.0
1985	32.0	302.0	589.0	91.0	75.0	86.0	139.0	36.0	80.0	93.0	52.0	85.0	1660.0
1986	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	85.5	223.0	483.0	-
1989	275.0	914.0	285.0	385.0	410.3	11.0	9.0	90.5	164.0	121.0	91.0	158.0	2913.8
1990	140.5	67.5	622.0	53.0	7.0	221.5	52.5	124.5	143.0	70.5	208.0	210.0	1920.0
1991	566.0	186.0	398.0	259.0	38.0	64.0	26.0	57.0	147.5	9.0	53.0	25.5	1829.0
1992	161.0	201.5	105.5	109.0	76.0	104.0	9.0	62.0	15.0	22.0	86.0	283.0	1234.0
Ave.	297.5	319.3	354.0	175.5	102.2	103.7	38.9	67.7	75.4	60.0	108.9	195.8	1898.9

V7840B VATUKACEVEVA

MONTHLY RAINFALL
V7840B VATUKACEVEVA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1983	-	-	-	-	-	-	-	-	-	-	205.4	257.0	-
1984	176.4	407.6	830.5	163.4	170.1	288.6	3.6	52.6	58.4	85.4	133.5	202.7	2572.8
1985	201.8	260.0	831.1	179.7	106.8	56.8	95.8	88.0	33.2	99.0	101.4	145.8	2199.4
1986	155.2	337.2	303.7	780.6	25.2	155.4	4.0	92.4	7.0	11.4	67.2	299.0	2238.3
1987	97.4	195.8	261.6	235.6	53.8	9.6	31.8	21.6	0.0	7.4	193.4	346.5	1454.5
1988	209.0	384.8	278.8	-	-	2.4	141.5	12.0	15.4	97.0	63.0	858.6	-
1989	278.4	1090.1	196.1	375.5	285.5	26.1	20.5	70.4	196.7	74.3	73.4	47.0	2734.0
1990	167.0	115.4	836.2	6.7	69.6	193.0	92.8	101.1	78.3	61.0	546.9	118.6	2386.6
1991	435.1	180.7	535.1	182.5	31.5	0.4	-	52.8	149.6	77.0	45.6	-	-
1992	-	89.5	321.1	117.6	171.4	112.0	31.8	91.0	2.2	21.4	173.1	760.1	-
Ave.	215.0	340.1	488.2	255.2	114.2	93.8	52.7	64.7	60.1	59.3	160.3	337.3	2241.0

V77581 VATUKOULA

MONTHLY RAINFALL
V77581 VATUKOULA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1965	533.7	827.5	546.9	134.7	113.1	13.9	2.3	39.7	116.8	37.9	57.6	5.9	2430.0
1966	296.4	130.4	235.1	286.2	19.3	46.5	13.7	59.2	29.2	40.7	37.1	90.9	1284.7
1967	474.0	400.3	472.0	178.7	55.7	0.0	12.7	0.0	86.6	148.8	65.7	98.0	1992.5
1968	189.7	500.2	770.2	209.8	31.0	87.1	89.2	111.0	74.7	64.3	14.4	144.9	2286.5
1969	44.7	392.9	302.9	56.8	26.7	13.7	30.0	1.5	23.6	23.6	221.3	240.0	1377.7
1970	230.8	699.0	234.9	274.4	165.1	170.9	30.2	0.0	59.7	118.9	160.0	468.9	2612.8
1971	214.9	829.7	1014.6	227.0	131.1	38.4	10.5	26.7	86.6	283.4	133.3	680.2	3676.4
1972	505.6	159.6	421.8	71.4	210.4	34.3	16.5	35.8	33.2	260.0	190.1	244.8	2183.5
1973	76.8	506.6	449.8	156.3	1.9	313.1	178.6	90.7	171.6	40.2	354.9	217.0	2557.5
1974	-	881.4	746.1	582.9	41.8	29.1	45.6	240.8	128.8	289.2	293.0	333.7	-
1975	449.4	292.2	274.0	379.1	157.5	44.1	49.3	13.6	104.7	303.4	830.5	296.5	3194.3
1976	607.0	270.0	633.1	398.8	91.6	90.9	15.6	116.4	395.6	36.3	66.5	175.9	2897.7
1977	514.8	732.9	568.2	214.9	79.0	16.7	11.1	72.6	42.3	48.3	33.3	56.0	2390.1
1978	-	-	-	-	-	-	-	-	-	308.9	145.4	116.9	-
1979	349.9	-	-	-	-	-	-	-	-	-	-	-	-
1980	220.6	292.0	145.7	205.3	0.3	66.4	48.8	46.8	120.2	153.1	57.6	64.7	1421.5
1981	488.0	510.5	151.6	237.6	30.4	16.0	14.6	117.2	31.5	27.2	41.5	257.1	1923.2
1982	821.1	384.8	306.3	287.5	18.5	292.4	58.2	130.2	24.7	107.6	59.0	27.7	2518.0
1983	289.0	296.1	203.4	26.7	2.6	19.3	36.6	35.5	18.9	91.1	241.0	-	-
1984	107.5	311.3	543.8	101.8	-	154.9	0.7	34.6	68.2	77.4	135.2	191.3	-
1985	294.6	292.9	732.6	141.7	35.5	51.7	154.6	36.1	32.2	64.5	16.6	98.2	1951.2
1986	63.8	225.9	359.4	710.9	25.0	91.0	0.0	72.9	7.3	8.5	53.1	51.1	1668.9
1987	77.3	212.6	130.7	35.6	1.9	1.8	28.7	0.2	7.1	7.3	88.6	188.4	780.2
1988	92.2	464.4	157.5	360.3	46.4	2.4	164.1	0.0	5.8	54.3	97.3	741.1	2185.8
1989	380.5	990.6	144.5	420.7	271.0	1.1	23.0	61.3	83.5	128.3	125.1	129.9	2759.5
1990	167.7	177.6	548.3	41.9	11.7	259.3	53.8	191.4	180.0	73.5	190.9	245.9	2142.0
1991	469.9	308.8	406.5	237.2	19.2	14.0	21.5	65.9	154.1	35.6	144.0	40.8	1917.5
1992	249.6	277.9	125.6	84.3	83.4	102.4	11.8	110.5	48.4	31.7	96.2	372.8	1594.6
Ave.	315.8	437.2	408.7	233.2	66.8	75.8	43.1	65.8	82.1	106.1	146.3	214.6	2195.4

V77765 VATURU MET

MONTHLY RAINFALL
V77765 VATURU MET

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1982	898.9	330.2	769.0	174.7	28.6	217.3	234.2	123.2	27.0	81.7	71.8	267.1	3223.7
1983	344.6	432.3	621.2	131.7	12.0	24.5	49.2	112.9	36.9	165.6	225.2	268.7	2424.8
1984	396.4	326.1	770.0	490.5	264.4	116.2	3.5	21.3	85.5	54.2	296.8	288.9	3113.8
1985	-	399.7	1318.0	197.7	141.0	101.9	95.8	71.3	52.5	219.3	119.5	220.6	-
1986	180.5	440.0	447.4	927.8	70.7	185.4	0.5	96.0	63.0	42.5	79.4	211.5	2744.7
1987	177.6	402.6	363.6	64.1	1.2	0.8	23.1	11.1	8.0	4.4	132.7	257.6	1446.8
1988	476.8	450.1	358.1	280.7	92.0	10.5	92.6	2.0	47.0	216.0	341.2	373.0	2740.0
1989	684.4	1198.1	522.8	248.4	351.6	20.3	21.8	65.0	121.7	319.5	454.0	213.5	4221.1
1990	216.4	165.8	956.3	50.2	55.8	125.4	39.4	241.5	105.0	104.3	472.4	264.2	2796.7
1991	720.0	-	267.0	278.8	61.5	26.0	26.9	83.7	165.0	114.1	88.5	63.8	-
1992	227.0	308.4	212.1	97.5	124.0	111.0	13.5	47.2	21.5	55.4	117.7	553.0	1888.3
Ave.	432.3	445.3	600.5	267.5	109.3	85.4	54.6	79.6	66.6	125.2	218.1	271.1	2755.5

V77571 VEISARU

MONTHLY RAINFALL
V77571 VEISARU

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1956	114.1	1226.4	1005.9	157.2	140.8	63.2	139.8	60.2	35.8	227.6	298.1	141.6	3610.7
1957	840.5	577.8	472.1	140.8	148.9	130.6	0.0	52.2	19.1	26.7	52.7	127.3	2588.7
1958	57.9	216.9	127.3	230.3	27.1	3.6	37.8	21.1	14.7	93.4	127.6	65.4	1023.1
1959	500.1	81.1	578.3	177.0	46.8	46.2	1.5	232.0	99.6	56.2	52.8	162.3	2033.9
1960	146.3	426.6	540.9	326.0	7.6	150.6	83.1	27.2	167.3	105.6	199.0	383.3	2563.5
1961	82.2	624.5	59.6	250.7	37.5	41.4	50.4	161.7	34.1	38.6	385.4	534.4	2300.5
1962	586.6	429.3	357.1	177.5	54.4	31.8	70.6	8.7	29.7	99.1	234.6	269.1	2348.5
1963	642.2	137.5	263.2	296.2	243.1	80.8	138.6	97.4	199.5	25.7	167.0	141.5	2432.7
1964	109.7	504.8	1026.1	89.0	19.1	69.0	20.4	53.1	-	81.2	158.7	121.9	-
1965	389.6	701.5	544.6	72.1	244.3	13.2	5.1	53.3	114.0	22.1	35.8	14.0	2209.6
1966	217.4	55.7	308.6	288.5	51.3	17.8	16.0	27.4	16.0	19.2	35.6	162.4	1215.9
1967	354.7	404.7	87.4	87.4	26.6	0.0	17.1	0.0	59.0	147.4	31.5	80.6	1296.4
1968	252.9	260.3	663.3	133.5	19.8	77.2	60.7	175.3	81.1	41.9	-	175.6	-
1969	85.6	303.2	260.9	68.3	-	11.4	24.9	48.5	31.7	8.4	227.1	297.5	-
1970	176.4	516.0	288.6	181.2	142.0	145.0	-	0.0	77.3	77.5	201.0	340.3	-
1971	254.9	482.4	799.6	169.9	98.9	53.4	4.6	18.4	51.5	215.0	-	537.7	-
1972	551.1	186.1	349.3	30.3	158.3	60.9	12.2	28.9	23.2	184.4	188.0	234.8	2007.5
1973	96.8	378.2	732.2	173.8	12.0	313.9	130.1	75.0	-	68.1	287.7	127.9	-
1974	374.3	798.9	627.0	528.3	29.2	77.7	31.5	310.8	76.0	-	-	-	-
1975	358.2	288.1	235.8	381.1	128.0	52.0	0.0	0.0	95.2	303.4	636.0	153.3	2631.1
1976	428.0	292.4	446.4	381.1	49.0	54.6	0.0	0.0	395.8	39.9	50.4	79.8	2217.4
1977	-	-	-	-	-	0.0	0.0	-	-	-	-	-	-
1978	250.7	118.4	153.4	222.9	104.7	73.3	45.7	29.6	48.5	279.8	61.8	94.6	1483.4
1979	607.0	250.8	403.6	257.5	259.7	98.0	13.0	28.6	137.7	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	525.0	497.0	213.0	216.0	197.0	108.0	37.0	110.0	29.0	52.0	78.0	199.5	2261.5
1982	855.0	548.5	496.0	255.0	27.0	264.0	121.5	107.0	80.0	64.5	40.0	34.1	2892.6
1983	240.0	416.0	179.5	60.0	0.0	0.0	17.0	39.0	28.0	231.6	267.0	505.0	1983.1
1984	127.0	302.5	508.0	241.0	248.0	158.0	0.0	23.0	10.0	56.0	103.5	182.5	1959.5
1985	171.0	318.4	625.9	99.0	79.2	51.5	114.0	31.0	75.8	81.5	79.3	64.6	1791.2
1986	139.1	234.8	407.8	558.9	18.4	179.8	0.0	42.6	7.0	9.4	44.5	30.1	1672.4
1987	72.2	190.2	136.1	51.8	0.0	1.6	6.0	0.0	3.8	3.0	153.4	82.6	700.7
1988	161.0	360.1	175.8	235.9	25.6	0.0	86.7	0.0	11.9	91.2	91.5	413.3	1653.0
1989	249.3	693.0	202.3	325.1	325.8	2.5	5.8	83.3	91.2	141.8	110.9	141.7	2372.7
1990	140.8	65.1	460.9	25.5	0.1	148.5	38.9	110.0	130.2	45.3	113.8	217.2	1496.3
1991	329.9	158.5	330.3	144.4	31.1	28.0	29.7	53.8	132.4	89.0	55.9	12.5	1395.5
1992	154.5	209.6	87.7	56.9	43.0	93.6	18.1	41.1	12.7	11.2	82.4	259.2	1070.0
Ave.	304.1	378.7	404.4	202.6	89.5	75.0	39.4	61.4	73.3	92.1	150.0	193.6	2064.1

V77491 YAQARA

MONTHLY RAINFALL
V77491 YAQARA

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1965	306.2	569.3	536.5	73.9	120.3	35.6	0.0	30.2	78.2	25.7	39.4	24.6	1839.9
1966	171.0	71.8	254.6	284.6	10.7	22.7	4.6	35.8	5.8	12.7	39.9	75.9	990.1
1967	478.0	270.0	232.5	80.3	6.8	0.0	13.0	0.0	63.0	124.7	23.1	19.8	1311.2
1968	77.0	369.5	496.2	153.8	11.7	83.0	74.8	47.0	17.2	46.9	32.1	88.3	1497.5
1969	31.8	164.1	82.2	66.6	5.1	-	-	-	101.6	8.5	72.3	126.2	-
1970	80.7	441.7	111.8	129.8	171.3	212.3	8.7	0.0	37.0	75.0	85.4	311.5	1665.2
1971	154.2	449.9	647.2	86.0	78.3	38.6	7.4	44.7	70.6	192.7	214.7	332.2	2316.5
1972	389.1	155.3	310.1	-	-	-	-	-	-	-	-	-	-
1973	8.9	360.9	633.1	96.2	4.3	185.9	99.1	33.0	16.8	45.7	191.3	-	-
1974	527.3	497.1	-	-	-	-	-	178.4	44.2	97.8	255.5	156.8	-
1975	338.6	140.9	143.8	149.9	100.1	54.2	4.6	15.2	38.1	182.8	609.0	93.0	1870.2
1976	471.7	398.7	347.7	281.2	30.4	34.1	14.5	63.6	183.4	7.4	-	286.2	-
1977	468.9	358.4	569.5	75.5	39.3	3.8	0.0	25.7	22.1	0.0	48.4	195.9	1807.5
1978	**	**	**	**	**	**	**	**	**	**	**	**	**
1979	629.7	247.0	482.0	197.0	104.0	66.0	36.0	26.0	94.0	9.1	13.0	279.4	2183.2
1980	155.5	237.9	113.1	215.8	0.0	54.8	43.5	49.2	232.2	155.5	66.8	63.0	1387.3
1981	420.1	437.4	195.8	289.3	113.3	82.7	0.0	101.2	4.3	23.4	4.7	57.4	1729.6
1982	745.1	293.6	381.8	131.7	14.5	236.1	97.0	68.6	7.7	72.6	38.5	84.6	2171.8
1983	143.0	275.3	77.1	74.7	0.0	14.0	6.1	44.0	10.1	203.8	151.7	317.2	1317.0
1984	90.6	288.6	816.5	144.0	150.9	186.0	0.0	15.5	10.4	21.6	127.7	105.9	1957.7
1985	141.2	361.2	618.0	72.0	91.0	42.4	156.3	78.9	63.0	85.6	129.5	83.0	1922.1
1986	174.1	190.5	291.5	532.3	18.4	135.4	0.0	44.2	0.0	9.8	49.9	29.9	1476.0
1987	73.7	120.2	229.9	34.5	0.0	0.0	29.0	1.5	4.1	0.0	197.0	168.5	858.4
1988	189.0	444.7	151.1	260.0	59.5	3.1	3.5	0.0	11.1	47.5	42.8	-	-
1989	-	803.4	170.0	280.5	180.4	9.4	33.8	21.2	80.9	72.0	4.1	121.6	-
1990	119.1	79.4	369.9	22.3	14.5	96.1	17.0	185.8	90.2	48.6	126.2	31.8	1200.9
1991	232.9	222.5	374.6	123.0	0.0	30.6	0.0	79.2	35.1	0.0	55.8	8.6	1162.3
1992	194.7	103.8	166.7	117.3	48.8	91.5	9.0	45.5	10.3	10.5	107.3	-	-
Ave.	262.0	309.4	338.6	158.9	54.9	71.6	27.4	49.4	51.2	60.8	109.0	133.1	1626.3

V7759C WAIKUBUKUBU

MONTHLY RAINFALL
V7759C WAIKUBUKUBU

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1981	-	-	-	-	-	-	-	-	-	51.5	59.5	172.0	-
1982	697.6	671.6	649.1	303.0	7.0	338.0	55.5	136.0	3.0	76.0	111.0	79.0	3126.8
1983	115.0	-	127.0	29.0	-	26.0	23.7	17.3	30.0	-	-	-	-
1984	-	291.0	740.0	196.0	190.8	208.2	1.0	8.7	0.0	146.0	252.0	285.0	-
1985	107.0	-	-	137.2	67.9	66.0	208.0	61.6	-	68.0	53.0	89.0	-
1986	97.0	439.0	415.0	-	-	-	-	105.0	17.0	25.0	-	83.5	-
1987	-	-	321.6	-	-	-	-	-	-	-	-	-	-
1988	210.0	444.2	560.1	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	444.3	181.6	-	-	31.5	2.1	171.0	21.4	101.5	31.2	-
1992	283.8	-	224.6	60.0	47.3	119.0	9.7	48.0	0.0	0.0	49.5	-	-
Ave.	251.7	461.5	435.2	151.1	78.3	151.4	54.9	54.1	36.8	56.1	113.4	113.5	1958.1

B-5 CORRELATION COEFFICIENT OF MONTHLY RAINFALL

	V77554	V77563	V7756D	V77571	V77575	V7765A	V7765C
V77554 Lololo Pine		0.943	0.916	0.892	0.923	0.912	0.884
V77563 Varoka			0.954	0.900	0.960	0.870	0.921
V7756D Ba Filter House				0.911	0.945	0.899	0.865
V77571 Veisaru					0.930	0.861	0.876
V77575 Rarawai Mill						0.901	0.888
V7765A Navilawa							0.854
V7765C Abaca							

	V7765A	V7765C	V7768A	V7775D	V77765	V7777A	V7778A
V7765A Navilawa		0.854	0.912	0.951	0.955	0.938	0.903
V7765C Abaca			0.813	0.799	0.864	0.830	0.893
V7768A Navala				0.908	0.857	0.872	0.842
V7775D Nadругu					0.833	0.918	0.862
V77765 Vaturu Met						0.913	0.866
V7777A Bukuya Depot							0.866
V7778A Nanoko							

	V77591	V7769B	V7769D	V7769I	V77794	V7779C	V7850A
V77591 Nadarivatu		0.850	0.925	0.913	0.872	0.921	0.873
V7769B Nagatagata			0.926	0.908	0.834	0.867	0.764
V7769D Lewa Village				0.932	0.935	0.934	0.904
V7769I Taunabe					0.913	0.883	0.924
V77794 Nadrau Met						0.943	0.812
V7779C Koro							0.913
V7850A Naseyani							

	V77481	V77482	V7748C	V77581	V77591
V77481 Tavua		0.970	0.942	0.974	0.917
V77482 Tagitagi			0.916	0.909	0.886
V7748C Tavua Filter House				0.935	0.898
V77581 Vatukoula					0.906
V77591 Nadarivatu					

	V77491	V78301	V78311	V7831B	V78321	V78401	V7840B	V7841A	V7850A
V77491 Yaqara		0.924	0.868	0.867	0.782	0.914	0.894	0.812	0.891
V78301 Nanuku			0.874	0.937	0.866	0.941	0.959	0.896	0.934
V78311 Penang Mill				0.947	0.950	0.851	0.943	0.949	0.857
V7831B Vaileka Depot					0.879	0.875	0.933	0.910	0.845
V78321 Ellington						0.759	0.917	0.896	0.842
V78401 Drauniivi Pine							0.902	0.865	0.900
V7840B Vatukaceveva								0.920	0.952
V7841A Narara									0.820
V7850A Naseyani									

B-6 CORRELATION COEFFICIENT OF DAILY RAINFALL

	V77554	V77563	V7756D	V77571	V77575	V7765A	V7765C
V77554 Lololo Pine		0.715	0.687	0.627	0.583	0.637	0.575
V77563 Varoka			0.710	0.743	0.699	0.633	0.656
V7756D Ba Filter House				0.654	0.706	0.534	0.499
V77571 Veisaru					0.725	0.392	0.493
V77575 Rarawai Mill						0.442	0.537
V7765A Navilawa							0.549
V7765C Abaca							

	V7765A	V7765C	V7768A	V7775D	V77765	V7777A	V7778A
V7765A Navilawa		0.549	0.576	0.687	0.790	0.730	0.401
V7765C Abaca			0.395	0.469	0.538	0.472	0.432
V7768A Navala				0.563	0.462	0.585	0.513
V7775D Nadrugu					0.597	0.742	0.619
V77765 Vaturu Met						0.618	0.483
V7777A Bukuya Depot							0.604
V7778A Nanoko							

	V77591	V7769B	V7769D	V7769I	V77794	V7779C	V7850A
V77591 Nadarivatu		0.501	0.614	0.721	0.606	0.447	0.412
V7769B Nagatagata			0.676	0.654	0.460	0.583	0.336
V7769D Lewa Village				0.742	0.692	0.854	0.586
V7769I Taunabe					0.776	0.614	0.603
V77794 Nadrau Met						0.649	0.493
V7779C Koro							0.604
V7850A Naseyani							

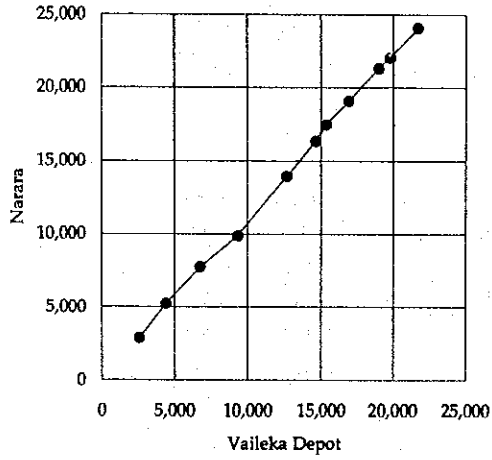
	V77481	V77482	V7748C	V77581	V77591
V77481 Tavua		0.852	0.877	0.811	0.583
V77482 Tagitagi			0.771	0.772	0.658
V7748C Tavua Filter House				0.804	0.578
V77581 Vatukoula					0.724
V77591 Nadarivatu					

	V77491	V78301	V78311	V7831B	V78321	V78401	V7840B	V7841A	V7850A
V77491 Yaqara		0.704	0.412	0.563	0.377	0.593	0.445	0.618	0.552
V78301 Nanuku			0.714	0.673	0.525	0.746	0.680	0.599	0.559
V78311 Penang Mill				0.835	0.795	0.598	0.557	0.682	0.435
V7831B Vaileka Depot					0.626	0.583	0.583	0.648	0.473
V78321 Ellington						0.385	0.523	0.439	0.338
V78401 Drauniivi Pine							0.560	0.549	0.583
V7840B Vatukacevaceva								0.563	0.570
V7841A Narara									0.538
V7850A Naseyani									

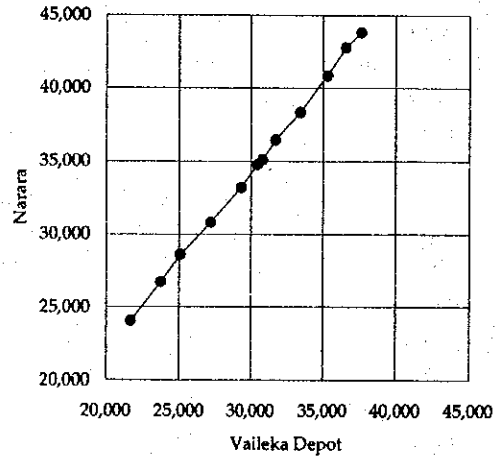
Vaileka Depot - Narara

Unit : mm

1971-1981



1982-1992

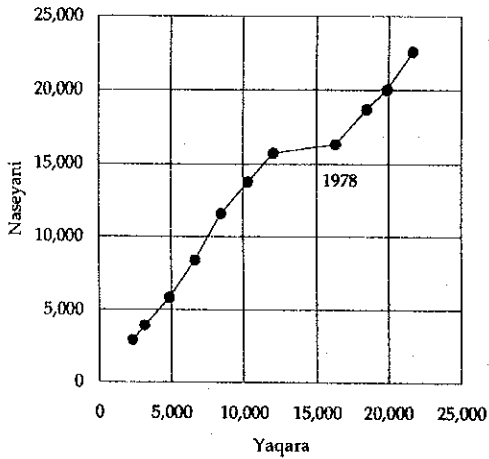


Records are acceptable for both raingauge stations.

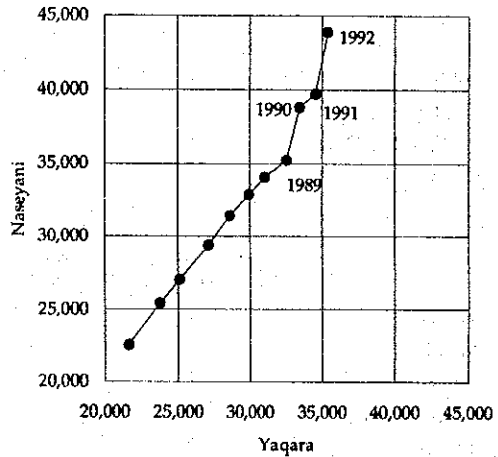
Yaqara - Naseyani

Unit : mm

1971-1981



1982-1992



Yaqara records in 1978 are unreliable.

Naseyani records from 1989 to 1992 are unreliable.

B-7 EXAMPLE OF DOUBLE MASS CURVE

B-8 SELECTION OF RECORDS FOR BASIN MEAN RAINFALL

No.	Ref. No.	Station		Year																			Select	Remarks		
				71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89			90	91
1	V7765C	ABACA																								Located near V7765A
2	V7756D	BA FILTER HOUSE	(1960)																						○	
3	V7777A	BUKUYA DEPOT																							○	
4	V7840I	DRAUNIIVI PINE																							○	
5	V7832I	ELLINGTON																								Recorded period too short
6	V7779C	KORO																								Many accumulations
7	V7769D	LEWA VILLAGE																								Close Location to V7769I
8	V77554	LOLOLO PINE																							○	
9	V7759I	NADARIVATU	(1936-1963)																						○	
10	V77794	NADRAU MET																							○	
11	V7775D	NADRUGU																							○	
12	V7769B	NAGATAGATA	(1967)																							Many accumulations in 1980's
13	V7778A	NANOKO																							○	
14	V7830I	NANUKU																								Recorded period too short
15	V7841A	NARARA																							○	
16	V7850A	NASEYANI																							○	Records unreliable after 1988
17	V7768A	NAVALA																							○	
18	V7765A	NAVILAWA																							○	
19	V7831I	PENANG MILL	(1930)																						○	
20	V77575	RARAWAI MILL	(1925)																							Located near V7756D and V7757I
21	V77482	TAGITAGI	(1956)																						○	
22	V7769I	TAUNABE																							○	
23	V7748I	TAVUA	(1956)																							Located near V7748C
24	V7748C	TAVUA FILTER HOUSE	(1970)																						○	
25	V7831B	VAILEKA DEPOT	(1970)																						○	
26	V77563	VAROKA																							○	
27	V7840B	VATUKA-CEVACEVA																							○	
28	V7758I	VATUKOULA	(1965)																						○	
29	V77765	VATURU MET																							○	
30	V7757I	VEISARU	(1956)																						○	
31	V7749I	YAQARA	(1965)																						○	Records unreliable in 1978
32	V7759C	WAIKUBUKUBU																								Too many missing records

B-9 BASIN MEAN RAINFALL
(BA RIVER : UPSTREAM TO GE G/S)

YEAR	Unit : mm												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1971	310	630	794	361	177	68	41	116	156	373	451	696	4,171
1972	592	182	396	112	132	67	22	48	148	311	267	365	2,644
1973	261	315	763	271	23	255	127	82	206	111	303	432	3,148
1974	536	705	710	633	31	21	14	460	94	268	262	457	4,190
1975	696	500	363	314	163	81	23	23	43	498	783	444	3,930
1976	548	480	558	282	38	44	16	94	304	57	162	112	2,693
1977	481	549	652	183	75	17	15	51	69	65	69	190	2,414
1978	636	153	261	240	85	71	108	74	54	261	166	179	2,288
1979	593	237	633	207	189	118	24	48	196	21	93	55	2,413
1980	325	387	252	279	9	104	66	44	173	261	185	78	2,162
1981	591	376	189	248	99	113	9	141	32	79	110	231	2,218
1982	1,027	389	520	149	48	189	131	111	47	70	127	67	2,874
1983	239	481	396	95	9	41	47	65	52	106	175	394	2,100
1984	261	272	587	226	177	188	6	42	48	86	159	219	2,270
1985	368	290	1,002	197	99	94	144	65	74	145	131	182	2,790
1986	141	456	377	850	33	200	2	87	45	63	75	192	2,520
1987	195	274	307	75	20	6	23	27	6	19	158	295	1,404
1988	301	489	292	344	128	11	131	5	26	105	243	641	2,715
1989	449	1,005	269	411	348	48	32	64	181	218	154	273	3,452
1990	200	239	761	53	59	243	66	222	136	94	371	227	2,670
1991	580	410	348	266	68	35	39	91	181	87	139	93	2,336
1992	256	306	214	147	92	120	23	81	29	54	153	526	1,998
AVE.	436	415	484	270	95	97	50	93	104	152	215	289	2,700

B-10 BASIN MEAN RAINFALL
(NASIVI RIVER : UPSTREAM VATUKOULA G/S)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1971	276	847	1,055	250	152	56	7	24	98	304	213	729	4,011
1972	537	208	465	99	215	38	16	37	65	223	211	249	2,363
1973	85	611	677	193	1	300	205	136	166	48	369	209	3,001
1974	664	910	802	599	45	29	49	225	134	305	330	375	4,466
1975	566	284	277	382	170	43	41	13	95	329	946	306	3,451
1976	637	390	623	456	107	120	21	130	381	41	171	133	3,210
1977	556	667	787	254	87	16	12	84	45	47	59	133	2,747
1978	511	212	243	327	123	40	75	104	52	292	190	152	2,320
1979	473	387	857	266	214	117	34	52	164	8	34	34	2,640
1980	276	354	198	274	4	64	58	56	142	179	103	83	1,790
1981	661	616	192	308	84	87	24	155	35	63	57	252	2,532
1982	985	421	542	234	24	195	82	159	32	94	72	46	2,888
1983	364	427	294	67	6	26	65	51	24	120	247	563	2,253
1984	149	347	634	162	178	180	5	43	78	122	193	248	2,337
1985	330	315	938	179	65	69	187	49	47	110	55	122	2,465
1986	64	364	471	938	30	153	0	115	24	29	61	53	2,301
1987	164	240	219	62	17	3	52	11	8	5	201	224	1,207
1988	147	496	232	457	64	7	188	1	13	62	221	784	2,670
1989	430	1,169	358	419	285	26	50	88	151	171	187	137	3,470
1990	136	171	688	54	19	311	59	233	179	74	344	196	2,463
1991	541	355	398	220	42	16	48	86	182	51	146	55	2,140
1992	303	263	228	112	85	141	16	119	40	31	116	403	1,857
AVE.	402	457	508	287	92	93	59	90	98	123	206	249	2,663

Unit : mm

B-11 BASIN MEAN RAINFALL
(NAKAUVADRA RIVER : UPSTREAM VATUSEKIYASAWA G/S)

YEAR	Unit : mm												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1971	90	409	579	111	148	158	20	22	121	274	308	504	2,743
1972	402	305	338	88	87	69	28	63	199	329	83	252	2,244
1973	105	492	650	182	17	218	116	36	143	72	305	155	2,491
1974	627	441	421	619	5	4	37	112	114	99	123	157	2,757
1975	408	201	461	832	161	44	44	1	85	240	932	378	3,788
1976	563	390	574	481	120	29	24	145	238	55	187	255	3,060
1977	551	556	666	206	129	41	8	6	20	46	50	308	2,584
1978	421	127	353	247	164	24	105	48	15	156	73	231	1,963
1979	617	170	401	193	313	120	57	14	118	38	71	20	2,132
1980	239	329	291	37	4	9	78	64	249	144	97	89	1,629
1981	480	457	110	299	164	60	8	176	14	170	39	257	2,233
1982	806	227	606	122	23	248	131	121	4	121	208	20	2,636
1983	307	622	421	74	6	58	35	65	18	144	152	269	2,170
1984	156	355	566	190	149	246	7	57	47	63	138	122	2,094
1985	140	287	837	289	108	72	92	61	11	87	137	186	2,306
1986	332	345	370	852	21	163	29	78	4	14	41	262	2,511
1987	9	211	455	59	66	8	55	34	4	13	257	416	1,587
1988	131	496	156	540	401	61	105	5	11	99	52	858	2,914
1989	301	835	279	332	253	30	32	56	92	175	135	84	2,603
1990	197	260	890	60	24	186	78	112	57	48	206	211	2,328
1991	544	352	544	169	7	21	71	83	172	51	105	86	2,204
1992	360	131	222	151	80	21	15	8	8	6	38	550	1,589
AVE.	354	363	463	279	111	86	53	62	79	111	170	258	2,389

B-12 LIST OF STREAM GAUGING STATIONS

AUTOMATIC GAUGES

Ref. No.	Station	River	Catchment Area (sq. km)	Date Installed	Data * Collected
127500	Toge	Ba	578.7	20-Jun-79	1979 - 1992
128400	Navala	Ba	322.0	12-Aug-82	1982 - 1992
129400	Koro	Ba	61.6	14-Dec-70	-
129401	Nadoilevu	Ba	48.5	21-Jul-82	-
126501	New Headworks	Varaciva	17.0	26-Oct-82	-
139600	Vatukoula	Nasivi	96.0	13-Oct-77	1977 - 1992
142702	Vatusekiyasawa	Nakauvadra	38.4	22-Jul-80	1980 - 1992

Note : * Data collected by gauge height and discharge rating curve

SPOT MEASUREMENT GAUGES

BA AREA

Stream	Station	Date Installed
Nadrou	Nanuku	28-Jul-75
Varaciva	Downstream Qalinadoi Confluence	6-Jun-79
Nawetavuni	Upstream Pump	1-May-79
Nawetavuni	Upstream Dam	1-May-79
Waisali	Balevuto	23-Sep-70

TAVUA AREA

Stream	Station	Date Installed
Maroleke	Nandelei	29-May-84
Nubunisona	Nandelei	29-May-84
Basala	Vatukoula Road	23-Jul-84
Waikubukubu	Upstream PWD Depot	8-Jun-83
Waikubukubu	Downstream Falls	25-Apr-83

VAILEKA AREA

Stream	Station	Date Installed
Naiyoka	Near PWD Depot	1-Oct-69
Nasaiyani	Yaqara	30-Sep-69
Nakasi	Upstream Vaileka H/W	28-Aug-85
Narara	Upstream Vaileka H/W	28-Aug-85
Matalevu	Matalevu Spring	15-May-87
Matalevu	Right Bank above Dam	9-Jun-87
Matalevu	Below Spring (Downstream)	9-Jun-87
Matalevu	Below Spring	9-Jun-87
Matalevu	Downstream P/Site	18-May-87

**B-13 RATING EQUATIONS
(BA RIVER AT TOGE)**

Nov. 16, 1981 - Mar. 1, 1983	$H < 0.54$	$Q = 66.074 H^{4.290}$
	$0.54 \leq H < 0.90$	$Q = 18.247 H^{2.201}$
	$H \geq 0.90$	$Q = 18.449 H^{2.2863}$
Mar. 3, 1983 - Mar. 17, 1984	$H < 0.54$	$Q = 25.826 H^{2.765}$
	$0.54 \leq H < 0.90$	$Q = 18.243 H^{2.201}$
	$H \geq 0.90$	$Q = 18.449 H^{2.2863}$
Dec. 13, 1984 - Mar. 8, 1986	$H < 1.58$	$Q = 1.578 (H+0.68)^{4.290}$
	$H \geq 1.58$	$Q = 18.45 H^{2.286}$
Mar. 9, 1986 -	$H < 1.50$	$Q = 19.098 H^{2.2}$
	$H \geq 1.50$	$Q = 18.45 H^{2.286}$

B-14 RATING EQUATIONS
(BA RIVER AT NAVALA)

Aug. 12, 1982 - Jan. 3, 1983	$H < 1.40$	$Q = 19.1092 H^{2.7986}$
	$1.40 \leq H < 2.65$	$Q = 22.7568 H^{2.2794}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Jan. 1, 1983 - Jan. 30, 1983	$H < 1.40$	$Q = 19.6893 H^{2.7097}$
	$1.40 \leq H < 2.65$	$Q = 22.7568 H^{2.2794}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Jan. 31, 1983 - Mar. 1, 1983	$H < 1.40$	$Q = 19.1092 H^{2.7986}$
	$1.40 \leq H < 2.65$	$Q = 22.7568 H^{2.2794}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Mar. 3, 1983 - Mar. 16, 1984	$H < 1.90$	$Q = 18.1891 H^{2.7986}$
	$1.90 \leq H < 2.65$	$Q = 22.7568 H^{2.2794}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Mar. 17, 1984 - Nov. 21, 1984	$H < 0.55$	$Q = 39.746 H^{3.9266}$
	$0.55 \leq H < 1.00$	$Q = 18.0 H^{2.6017}$
	$1.00 \leq H < 2.65$	$Q = 18.0 H^{2.5209}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Nov. 22, 1984 - Jan. 18, 1985	$H < 0.62$	$Q = 21.706 H^{3.030}$
	$0.62 \leq H < 1.00$	$Q = 18.0 H^{2.638}$
	$1.00 \leq H < 2.65$	$Q = 18.0 H^{2.521}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$
Jan. 19, 1985 - Mar. 6, 1985	$H < 1.40$	$Q = 16.634 H^{2.753}$
	$1.40 \leq H < 2.65$	$Q = 18.0 H^{2.521}$
	$H \geq 2.65$	$Q = 31.566 H^{1.944}$

B-15. RATING EQUATIONS
(NASIVI RIVER AT VATUKOULA)

Oct. 17, 1977 - Aug. 26, 1978	$H < 0.42$	$Q = 2749.294 H^{9.882}$
	$0.42 \leq H < 0.54$	$Q = 25.172 H^{4.472}$
	$0.54 \leq H < 0.72$	$Q = 12.007 H^{3.271}$
	$H \geq 0.72$	$Q = 10.185 H^{2.770}$
Aug. 28, 1978 - Nov. 18, 1978	$H < 0.40$	$Q = 1725.875 H^{8.891}$
	$0.40 \leq H < 0.54$	$Q = 20.975 H^{4.078}$
	$0.54 \leq H < 0.72$	$Q = 11.204 H^{3.060}$
	$H \geq 0.72$	$Q = 10.185 H^{2.770}$
Nov. 19, 1978 - Oct. 16, 1979	$H < 0.48$	$Q = 165088.264 H^{17.111}$
	$0.48 \leq H < 0.60$	$Q = 24.056 H^{5.075}$
	$H \geq 0.60$	$Q = 9.512 H^{3.259}$
Oct. 17, 1979 - Jan. 6, 1980	$H < 0.46$	$Q = 822.340 H^{9.461}$
	$0.46 \leq H < 0.60$	$Q = 18.886 H^{4.602}$
	$H \geq 0.60$	$Q = 9.512 H^{3.259}$
Jan. 7, 1980 - Apr. 23, 1980	$H < 0.49$	$Q = 57.751 H^{6.402}$
	$0.49 \leq H < 0.82$	$Q = 11.635 H^{4.156}$
	$0.82 \leq H < 1.15$	$Q = 9.605 H^{3.190}$
	$H \geq 1.15$	$Q = 10.165 H^{2.784}$
Apr. 24, 1980 - Dec. 15, 1980	$H < 0.46$	$Q = 24.335 H^{4.790}$
	$0.46 \leq H < 0.68$	$Q = 13.015 H^{3.984}$
	$0.68 \leq H < 1.15$	$Q = 9.598 H^{3.194}$
	$H \geq 1.15$	$Q = 10.165 H^{2.784}$
Dec. 16, 1980 - Dec. 24, 1981	$H < 0.49$	$Q = 57.751 H^{6.402}$
	$0.49 \leq H < 0.68$	$Q = 17.160 H^{4.701}$
	$0.68 \leq H < 1.15$	$Q = 9.598 H^{3.194}$
	$H \geq 1.15$	$Q = 10.165 H^{2.784}$
Dec. 25, 1981 - Mar. 1, 1983	$H < 0.42$	$Q = 16.236 H^{3.802}$
	$0.42 \leq H < 0.68$	$Q = 9.608 H^{3.197}$
	$0.68 \leq H < 1.15$	$Q = 9.598 H^{3.194}$
	$H \geq 1.15$	$Q = 10.165 H^{2.784}$
Mar. 2, 1983 - Oct. 30, 1983	$H < 0.40$	$Q = 328.683 H^{7.053}$
	$0.40 \leq H < 0.68$	$Q = 9.608 H^{3.197}$
	$0.68 \leq H < 1.15$	$Q = 9.598 H^{3.194}$
	$H \geq 1.15$	$Q = 10.165 H^{2.784}$
Oct. 31, 1983 - Nov. 22, 1985	$H < 0.77$	$Q = 50.315 (H-0.37)^{3.007}$
	$0.77 \leq H < 1.57$	$Q = 26.304 (H-0.37)^{2.299}$
	$H \geq 1.57$	$Q = 27.699 (H-0.37)^{2.016}$

B-16 RATING EQUATIONS
(NAKAUVADRA RIVER AT VATUSEKIYASAWA)

July 21, 1980 - Apr. 13, 1981	$H < 0.62$	$Q = 13.217 H^{6.469}$
	$0.62 \leq H < 1.03$	$Q = 4.653 H^{4.285}$
	$1.03 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
Apr. 14, 1981 - Nov. 5, 1981	$H < 0.82$	$Q = 6.253 H^{10.361}$
	$0.82 \leq H < 1.30$	$Q = 2.145 H^{4.969}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
Nov. 6, 1981 - Apr. 24, 1983	$H < 0.82$	$Q = 3.781 H^{7.286}$
	$0.82 \leq H < 1.30$	$Q = 2.145 H^{4.969}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
Apr. 25, 1983 - June 16, 1983	$H < 0.82$	$Q = 4.7125 H^{8.936}$
	$0.82 \leq H < 1.30$	$Q = 2.1568 H^{4.9668}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
June 17, 1983 - Mar. 26, 1984	$H < 0.74$	$Q = 3.7357 H^{5.6577}$
	$0.74 \leq H < 1.30$	$Q = 2.5386 H^{4.375}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
Mar. 27, 1984 - May 23, 1984	$H < 0.82$	$Q = 4.7125 H^{8.936}$
	$0.82 \leq H < 1.30$	$Q = 2.1568 H^{4.9968}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
May 24, 1984 - July 4, 1984	$H < 0.74$	$Q = 3.7357 H^{5.6577}$
	$0.74 \leq H < 1.30$	$Q = 2.5386 H^{4.375}$
	$1.30 \leq H < 2.20$	$Q = 5.100 H^{1.668}$
	$H \geq 2.20$	$Q = 0.662 H^{4.258}$
July 5, 1984 -	$H < 0.93$	$Q = 26.122 (H-0.51)^{2.944}$
	$H \geq 0.93$	$Q = 2.965 H^{5.2}$

B-17 DAILY DISCHARGE AT TOGE G/S (1)

Year	1982												Unit : m ³ /sec
	Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	
1	11.53	422.31	17.91	62.21	13.44	7.31	9.49	18.46	8.96	5.56	4.67	8.21	
2	13.58	253.65	16.38	61.96	12.94	7.18	10.44	13.68	8.62	5.58	4.34	5.72	
3	10.37	107.42	15.57	42.64	12.51	6.99	9.17	11.43	8.59	5.50	4.34	-	
4	9.20	63.45	-	28.17	11.99	7.07	8.70	11.17	8.02	5.50	4.34	-	
5	8.85	45.47	-	23.57	11.14	6.97	8.40	10.02	7.65	5.50	4.34	-	
6	7.41	33.51	-	21.05	10.86	7.07	8.06	9.16	7.40	5.59	4.34	-	
7	6.66	26.82	-	19.25	10.59	7.07	8.06	8.95	7.31	5.73	4.34	-	
8	25.22	22.84	-	17.74	10.47	6.92	7.83	8.56	7.05	7.59	4.29	-	
9	134.78	23.73	-	16.56	10.26	6.83	7.56	8.28	6.89	6.79	4.34	-	
10	93.20	37.33	17.75	15.68	9.97	8.90	-	7.92	6.65	5.88	4.34	4.89	
11	43.26	34.00	16.38	18.68	9.55	10.36	-	7.87	6.37	5.59	4.34	6.47	
12	56.67	270.26	17.61	-	9.35	9.64	-	7.94	6.37	5.44	4.17	9.83	
13	85.19	64.26	25.35	-	9.17	12.68	-	7.40	6.37	5.50	4.00	7.96	
14	-	36.75	72.22	-	9.13	8.60	6.60	7.07	6.37	5.86	4.35	13.52	
15	-	29.01	74.54	23.07	8.89	7.80	6.47	7.13	6.37	9.29	4.89	6.54	
16	-	55.42	130.48	43.26	8.69	264.08	6.56	7.07	6.43	7.40	4.81	5.42	
17	-	46.64	215.22	38.90	8.56	67.09	6.41	7.07	8.47	6.10	4.59	4.86	
18	-	101.37	202.18	64.47	8.32	-	77.15	6.93	14.23	5.79	4.23	4.67	
19	-	-	171.87	51.64	8.32	-	34.90	7.02	-	5.60	4.08	5.07	
20	-	-	97.25	35.75	8.40	-	17.38	7.07	-	5.58	4.05	9.59	
21	-	-	53.64	29.06	10.51	-	24.36	7.07	-	5.30	4.00	6.32	
22	30.54	48.55	39.46	23.74	8.52	-	31.26	7.84	-	5.09	3.89	5.19	
23	38.45	38.07	-	19.89	7.87	-	18.38	0.00	-	5.09	3.68	4.31	
24	42.93	35.51	-	18.25	7.66	10.82	14.06	21.37	-	4.98	3.68	4.00	
25	37.21	33.42	-	70.71	7.70	10.36	11.76	13.12	-	4.96	3.72	4.00	
26	29.26	25.74	94.45	27.51	7.56	10.08	10.65	23.21	-	4.89	3.68	4.15	
27	82.05	22.19	59.89	21.14	7.56	9.69	10.07	25.91	-	4.91	3.73	5.09	
28	164.05	19.62	-	17.86	7.56	9.69	9.97	15.50	5.93	4.89	5.08	4.96	
29	1614.78	-	-	15.88	7.56	9.69	9.97	12.25	5.86	4.89	5.90	4.89	
30	1860.14	-	-	14.55	7.44	9.38	24.58	10.86	5.68	4.95	10.73	10.12	
31	1128.87	-	51.68	-	7.31	-	38.26	9.36	-	4.89	-	12.86	
Ave.	240.62	75.89	73.15	31.23	9.35	21.76	16.17	10.54	7.41	5.68	4.51	6.61	

B-17 DAILY DISCHARGE AT TOGE G/S (2)

Year	Unit : m ³ /sec											
1983												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	20.40	26.56	1171.40	-	7.15	5.09	4.46	3.91	3.80	3.20	-	32.59
2	26.14	19.53	1188.87	-	6.92	5.09	4.31	3.80	3.65	3.20	-	35.77
3	67.14	13.70	204.45	-	6.70	5.06	4.23	3.80	3.59	3.20	-	16.28
4	49.60	11.34	98.52	-	6.60	7.21	4.23	3.80	3.59	3.20	-	23.01
5	26.80	9.75	-	-	6.60	6.19	4.23	3.80	3.59	3.03	-	34.36
6	15.67	9.37	-	-	6.48	5.63	4.23	3.80	3.59	2.94	-	17.66
7	11.58	8.52	26.15	28.81	7.27	5.44	4.06	3.80	4.68	3.02	-	127.35
8	8.98	7.45	21.01	22.59	6.69	5.03	4.01	3.80	5.27	3.02	-	102.85
9	7.86	7.07	17.93	19.20	6.49	4.89	4.01	3.80	-	3.02	-	39.73
10	6.95	9.80	16.00	17.11	6.28	4.89	4.01	3.80	-	3.02	-	20.80
11	6.19	34.61	14.25	15.86	6.15	4.89	4.01	3.80	-	3.02	5.33	13.79
12	5.93	50.93	13.11	12.81	6.15	4.89	4.01	3.80	3.39	3.02	4.53	11.25
13	5.78	35.53	12.03	12.27	6.15	4.89	4.01	3.80	3.39	3.02	4.18	9.49
14	5.67	18.08	12.35	10.57	6.15	4.89	4.01	3.80	3.39	3.02	3.83	21.99
15	5.50	12.64	13.32	10.03	6.03	4.89	4.01	3.80	3.39	3.02	3.64	32.67
16	5.25	10.90	10.79	9.50	5.93	4.89	4.01	3.80	3.39	3.02	3.59	25.69
17	5.04	9.62	10.03	9.07	5.81	4.58	4.01	3.80	3.39	3.02	3.59	17.02
18	4.84	8.45	10.35	8.61	5.71	4.46	4.01	3.80	3.39	3.02	3.28	14.26
19	4.70	8.02	11.19	8.43	5.71	4.46	3.84	3.80	3.39	3.11	3.20	12.93
20	4.70	7.79	12.12	7.92	5.59	4.46	3.80	3.80	3.39	3.20	3.20	23.69
21	4.56	7.75	12.16	7.65	5.50	4.46	3.80	3.80	3.49	3.71	3.09	15.68
22	4.30	23.08	10.56	7.56	5.50	4.46	3.80	3.80	3.49	3.86	3.02	15.85
23	4.00	14.84	9.96	7.56	5.50	4.46	3.80	3.80	3.80	4.07	3.02	11.82
24	4.00	11.37	9.69	8.55	5.50	4.46	3.80	3.47	4.51	3.75	3.32	9.17
25	3.92	66.08	9.69	11.24	5.50	4.61	3.69	3.39	3.27	3.20	3.95	7.74
26	3.68	64.23	9.97	12.51	5.50	4.70	3.92	16.12	3.20	3.20	4.35	6.66
27	3.68	45.24	11.03	9.47	5.46	4.70	7.40	7.15	3.20	3.20	4.89	6.05
28	11.57	183.02	12.49	8.15	5.29	4.53	5.94	4.77	3.20	3.20	8.10	6.60
29	16.71	-	12.17	7.62	5.29	4.46	5.01	3.92	3.20	5.15	30.21	8.30
30	-	-	11.24	7.40	5.18	4.46	4.36	3.80	3.20	7.35	46.88	6.98
31	-	-	11.12	-	5.09	-	4.10	3.80	-	10.57	-	11.23
Ave.	12.11	26.26	102.89	11.69	6.00	4.90	4.23	4.32	3.59	3.63	7.46	23.85

B-17 DAILY DISCHARGE AT TOGE G/S (3)

Year	Unit : m3/sec												
	1984	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Day													
1	12.03	94.13	12.21	18.33	82.22	35.85	8.93	5.29	4.46	-	3.20	58.28	
2	9.14	64.35	11.14	15.85	37.34	24.06	8.47	5.29	4.46	-	3.20	36.93	
3	7.48	32.59	12.77	38.27	29.66	19.12	8.32	5.29	4.26	-	3.71	34.23	
4	8.41	24.16	16.06	42.64	23.26	16.14	8.16	5.49	4.23	-	4.41	45.67	
5	13.25	33.60	29.91	37.81	18.76	14.59	7.88	6.22	4.23	4.31	3.86	42.79	
6	8.32	37.26	69.56	32.42	16.22	15.51	7.65	5.77	4.23	3.94	3.64	16.77	
7	7.14	31.52	42.15	27.23	14.71	16.74	7.33	5.71	4.10	-	3.20	9.28	
8	6.74	27.10	29.17	20.04	13.66	0.00	7.31	5.53	4.01	-	2.88	-	
9	6.02	45.71	26.32	18.48	12.95	21.79	7.15	5.50	4.01	-	2.93	-	
10	8.20	34.25	78.11	16.20	12.15	17.64	6.86	5.35	4.01	-	2.87	-	
11	19.73	30.82	45.73	15.61	11.68	15.28	6.62	5.17	3.86	-	2.84	-	
12	20.26	36.39	25.73	16.37	11.28	14.35	6.75	4.93	3.93	-	2.95	-	
13	14.05	34.40	19.63	14.37	10.88	13.34	6.83	5.03	4.01	-	3.19	18.57	
14	46.51	-	16.54	17.63	10.30	12.63	6.83	5.09	3.86	-	3.20	10.89	
15	38.97	36.89	14.86	19.33	10.17	11.96	6.83	4.95	3.80	-	3.45	7.82	
16	20.32	25.83	18.07	16.27	10.23	13.01	6.83	4.89	3.80	-	3.81	6.57	
17	16.76	122.92	640.49	13.56	9.77	109.29	6.65	4.89	3.92	-	3.61	8.62	
18	36.58	215.27	1215.38	-	9.43	35.00	6.44	4.89	4.53	-	3.59	27.36	
19	43.59	76.70	232.34	-	9.70	22.17	6.37	4.89	4.53	-	3.42	55.46	
20	41.35	77.80	97.40	-	9.59	17.61	6.37	4.89	4.33	-	3.10	24.98	
21	35.65	60.60	61.73	-	10.62	15.31	6.37	4.89	4.23	-	3.02	24.65	
22	19.89	35.06	70.20	-	11.26	13.67	6.37	4.89	4.11	-	6.74	13.62	
23	14.65	26.79	64.99	-	173.45	13.15	6.37	4.74	4.01	-	10.46	18.04	
24	12.24	22.21	37.79	-	49.56	13.71	6.58	4.70	4.01	-	6.74	9.81	
25	10.30	19.32	28.61	19.19	28.35	14.18	6.26	4.70	3.97	-	4.64	7.69	
26	9.08	16.19	39.89	14.88	18.75	10.84	5.94	4.70	3.17	-	3.70	7.03	
27	8.60	14.47	46.68	12.67	25.22	10.02	5.55	4.70	3.02	9.70	3.42	7.27	
28	11.94	13.40	27.57	11.36	73.52	9.97	5.50	4.70	3.25	5.96	4.34	14.94	
29	17.60	12.62	24.52	11.16	47.75	9.76	5.50	4.51	35.25	-	18.03	9.77	
30	17.70	-	25.00	98.49	43.85	9.26	5.35	4.46	4.23	-	40.74	7.51	
31	33.00	-	20.37	-	43.29	-	5.29	4.46	-	-	-	11.21	
Ave.	18.56	46.51	100.03	23.83	28.70	18.87	6.76	5.05	5.06	5.98	5.63	20.61	

B-17 DAILY DISCHARGE AT TOGE G/S (4)

Year	Unit : m3/sec											
1985												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	7.92	24.31	-	25.05	11.51	7.40	7.22	7.95	5.23	5.62	14.39	16.55
2	18.06	17.30	-	28.24	10.33	7.19	7.36	7.40	5.08	11.69	23.57	7.72
3	32.29	14.53	-	23.83	9.60	7.01	25.87	7.06	4.92	5.51	18.09	6.42
4	15.85	9.43	-	33.62	11.52	6.57	18.33	6.77	4.88	5.45	61.84	5.95
5	9.21	7.79	-	36.29	14.18	6.50	12.44	6.54	4.88	5.08	39.82	28.85
6	7.10	8.05	-	21.64	10.93	6.50	11.14	6.94	4.88	4.83	17.06	39.75
7	5.73	8.04	-	17.80	9.63	6.35	9.47	7.44	4.88	4.72	11.70	42.09
8	5.30	6.74	127.97	15.71	9.15	6.30	8.52	6.97	4.88	4.72	9.25	14.35
9	4.83	-	83.64	14.41	8.89	6.30	7.92	6.62	4.88	4.59	7.86	14.54
10	4.49	-	78.34	13.95	8.65	6.30	7.21	6.37	4.88	4.56	7.24	9.73
11	4.29	-	133.12	13.24	8.40	6.30	6.91	6.30	4.88	4.56	6.67	7.80
12	4.26	-	99.71	-	8.15	6.30	6.75	6.09	4.88	4.45	6.92	6.75
13	4.26	37.56	65.04	24.51	7.92	6.30	6.58	5.80	4.78	4.41	7.50	6.22
14	4.26	21.83	49.98	36.34	7.99	6.16	6.50	5.74	4.72	4.41	6.29	5.95
15	4.15	19.59	-	78.21	19.95	6.11	6.26	5.74	4.72	4.41	5.86	5.78
16	4.88	32.82	-	45.39	11.81	6.11	6.11	5.74	13.95	4.41	5.62	7.15
17	215.84	25.24	979.59	25.77	9.57	6.11	6.01	5.64	25.51	4.41	5.43	15.87
18	267.89	17.15	136.06	21.05	8.84	6.11	5.92	5.55	8.17	4.59	5.26	17.31
19	599.02	12.79	66.77	17.52	8.56	7.97	5.78	5.42	6.18	12.63	5.12	11.21
20	183.22	11.33	58.40	15.54	8.16	8.17	5.74	5.17	5.50	21.67	5.36	8.43
21	48.96	15.09	50.25	13.69	8.03	6.56	5.74	5.04	5.15	8.76	5.38	8.54
22	27.07	23.67	37.13	12.90	7.84	18.35	5.74	5.04	5.04	6.32	6.19	8.03
23	18.88	39.66	34.44	12.33	7.80	32.35	5.74	5.04	4.91	8.32	6.07	6.60
24	14.69	48.68	30.59	11.40	7.80	15.38	5.60	5.04	4.88	14.23	5.51	6.02
25	12.04	62.22	33.10	11.28	7.59	10.28	5.55	5.04	4.88	9.62	5.23	5.78
26	10.13	78.47	31.29	11.05	7.43	8.78	29.27	5.04	4.76	7.82	4.96	5.61
27	9.08	51.10	24.26	10.98	7.26	8.13	19.27	5.04	4.72	9.38	6.28	5.34
28	8.54	33.22	23.07	10.98	7.10	7.87	12.83	5.13	4.63	15.07	9.49	5.38
29	8.05		23.23	10.75	7.05	7.49	10.88	5.54	4.56	10.39	6.00	5.38
30	7.99		24.36	9.74	9.19	7.35	10.53	6.95	4.46	7.73	7.14	7.86
31	8.93		19.52		7.80		8.88	5.50		7.34		12.01
Ave.	50.88	26.11	100.45	21.49	9.31	8.49	9.62	5.99	6.02	7.47	11.10	11.45

B-17 DAILY DISCHARGE AT TOGE G/S (5)

Year	Unit : m3/sec											
1986												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	20.36	-	-	63.77	17.46	9.71	7.91	5.55	5.17	4.16	8.92	3.98
2	11.77	-	-	102.98	16.86	9.56	7.57	5.55	4.84	4.16	9.88	3.85
3	7.47	-	-	156.47	16.49	9.08	7.40	5.55	4.72	4.16	6.33	3.84
4	6.17	16.02	29.21	97.84	16.10	8.99	7.07	5.55	4.72	4.27	12.03	3.84
5	5.77	14.55	20.63	65.44	15.72	8.99	6.79	5.47	4.72	4.20	8.49	3.80
6	5.47	9.27	50.35	41.35	16.45	10.41	6.81	5.37	4.72	4.16	8.34	4.53
7	5.20	7.43	126.46	38.29	19.49	14.06	6.91	5.33	4.56	4.18	6.01	8.68
8	5.21	6.52	310.19	120.57	17.03	14.75	6.82	5.33	4.53	4.02	5.07	5.44
9	5.21	6.12	138.48	249.41	17.39	11.86	6.78	5.33	4.53	3.98	4.77	5.13
10	4.97	32.98	78.57	1620.99	16.00	11.01	6.81	5.33	4.40	3.98	4.56	4.77
11	4.88	24.97	44.95	667.61	14.55	10.18	6.91	5.50	4.34	4.09	4.37	16.41
12	4.88	164.51	31.81	150.30	13.93	9.86	6.91	5.55	4.43	4.11	4.19	20.55
13	4.88	133.40	25.25	79.63	12.93	9.62	6.91	5.55	4.53	4.16	4.00	8.29
14	5.03	219.88	20.37	75.75	12.68	9.32	6.81	5.35	4.53	4.16	3.98	5.83
15	6.04	126.80	22.13	58.43	12.68	9.27	6.79	5.33	4.40	4.16	3.98	4.77
16	8.35	49.31	25.13	41.14	12.45	9.27	6.91	5.17	4.34	3.99	3.89	4.57
17	8.40	60.27	18.41	45.83	12.34	9.05	6.60	5.13	4.93	3.80	3.77	4.37
18	12.75	48.51	16.44	101.60	12.16	172.02	5.87	5.02	5.59	3.64	3.89	4.34
19	9.86	34.14	15.92	102.43	11.86	42.80	5.89	4.85	4.67	3.72	3.98	4.34
20	32.05	34.36	16.46	78.91	11.69	20.60	5.82	4.92	4.53	3.80	3.84	4.34
21	20.19	23.42	20.92	91.11	11.50	14.36	5.86	4.75	4.63	4.79	3.80	4.71
22	28.29	-	34.00	75.44	11.12	11.84	5.86	4.72	4.92	7.82	3.80	4.98
23	17.02	-	59.18	46.34	11.06	10.23	5.98	4.72	4.69	9.95	3.80	4.71
24	12.29	-	55.06	36.27	11.06	9.45	5.89	13.84	4.38	5.66	3.80	4.09
25	9.49	-	28.03	30.04	10.77	8.91	5.77	15.08	4.34	4.67	3.80	4.16
26	8.58	-	57.95	25.78	10.48	8.37	5.76	7.35	4.34	4.40	3.73	4.24
27	7.70	-	54.11	23.03	10.44	8.18	5.76	6.00	4.20	4.34	3.64	4.34
28	6.85	-	41.85	21.17	10.28	8.18	5.76	5.45	4.16	4.34	3.72	4.43
29	6.30	-	39.86	19.70	10.01	8.18	5.76	5.33	4.16	4.17	4.69	5.29
30	5.87	-	87.13	18.37	9.85	7.95	5.68	5.33	4.16	3.84	4.14	15.02
31	5.58	-	79.17	-	9.85	-	5.65	5.33	-	4.11	-	14.28
Ave.	9.77	56.25	55.29	144.87	13.31	16.87	6.45	5.96	4.57	4.48	5.11	6.32

B-18 DAILY DISCHARGE AT VATUKOULA G/S (1)

Year	Unit : m3/sec											
1982												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1.09	-	-	-	2.04	1.05	1.82	1.97	1.05	0.80	0.60	1.33
2	1.35	-	-	-	1.94	1.05	1.40	1.39	0.98	0.80	0.52	0.90
3	1.10	14.39	-	-	1.82	0.96	1.25	1.13	0.91	0.80	0.50	0.70
4	0.88	9.74	-	-	-	0.86	1.13	0.96	0.86	0.80	0.50	0.64
5	1.00	7.02	-	-	-	0.86	1.03	0.87	0.81	0.80	0.50	0.55
6	0.81	4.81	-	-	-	0.86	0.84	0.86	0.80	0.80	0.50	0.52
7	0.75	3.83	-	-	-	0.86	0.75	0.82	0.80	0.97	0.50	0.45
8	6.75	3.95	-	-	-	0.86	0.75	0.75	0.74	1.39	0.50	0.45
9	6.56	5.83	-	-	-	0.86	0.75	0.75	0.70	1.05	0.50	0.52
10	10.61	-	-	-	-	1.02	0.75	0.70	0.70	0.91	0.47	0.50
11	6.08	-	-	-	-	1.22	0.75	0.70	0.70	0.86	0.41	0.50
12	4.97	-	-	-	-	1.45	0.75	0.70	0.70	0.61	0.37	0.50
13	15.07	-	-	-	1.42	1.68	0.72	0.70	0.70	0.55	0.37	0.48
14	6.01	-	-	-	1.42	1.09	0.70	0.70	0.72	1.29	0.39	0.48
15	5.41	-	-	-	1.42	0.99	0.70	0.70	1.12	3.03	0.50	0.50
16	5.68	-	-	-	1.42	-	0.70	0.70	0.77	1.26	0.44	0.50
17	4.91	-	-	-	1.41	12.93	0.70	0.70	0.69	0.96	0.41	0.50
18	5.51	-	-	-	1.04	4.45	1.89	0.67	0.65	0.82	0.43	0.50
19	6.81	-	-	-	0.86	2.81	1.62	0.65	0.65	0.75	0.41	0.50
20	5.83	-	-	-	0.91	1.99	1.08	0.65	0.60	0.75	0.41	0.52
21	12.84	-	-	-	1.28	1.74	3.38	0.73	0.60	0.72	0.41	0.50
22	7.79	-	-	-	1.01	1.50	2.71	2.38	0.60	0.70	0.39	0.50
23	4.94	-	-	-	0.98	1.34	1.47	-	0.60	0.67	0.33	0.47
24	4.18	-	-	-	0.98	0.87	1.10	-	0.60	0.62	0.33	0.45
25	3.79	-	-	-	0.92	1.19	0.93	-	-	0.60	0.40	0.45
26	3.05	-	-	-	1.01	1.18	0.81	-	-	0.60	0.53	0.45
27	53.49	-	-	3.07	1.12	1.12	0.80	-	-	0.60	1.02	0.45
28	24.76	-	-	2.61	1.12	1.19	0.80	-	-	0.60	2.54	0.45
29	-	-	-	2.32	1.12	1.13	1.29	1.69	-	0.60	2.02	0.45
30	-	-	-	2.08	1.12	1.26	7.98	1.32	0.80	0.60	2.91	0.71
31	-	-	-	-	1.05	-	4.71	1.10	-	-	-	0.74
Ave.	7.57	7.08	-	2.52	1.24	1.74	1.49	0.97	0.75	0.88	0.67	0.55

B-18 DAILY DISCHARGE AT VATUKOULA G/S (2)

Year	Unit : m3/sec											
1983												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	-	-	168.48	1.39	0.43	0.30	0.36	0.43	0.36	0.30	1.12	3.87
2	-	-	111.42	2.50	0.40	0.30	0.36	0.43	0.36	0.30	0.67	5.43
3	6.76	-	15.89	4.89	0.36	0.33	0.36	0.43	0.36	0.30	0.22	3.28
4	2.73	-	10.58	4.42	0.43	0.54	0.36	0.28	0.36	0.30	0.15	12.91
5	1.16	-	7.41	3.93	0.43	0.47	0.40	0.22	0.36	0.30	0.12	7.91
6	0.81	-	4.47	2.16	0.43	0.43	0.43	0.24	0.39	0.30	0.09	4.16
7	0.67	-	3.03	1.56	0.43	0.43	0.43	0.24	0.73	0.30	0.08	46.62
8	0.63	-	2.33	1.30	0.39	0.43	0.43	0.24	0.61	0.30	0.09	29.21
9	0.60	-	1.98	1.09	0.36	0.37	0.43	0.24	0.52	0.30	0.49	8.12
10	0.60	-	1.73	0.99	0.36	0.36	0.43	0.24	0.46	0.30	0.66	3.93
11	-	4.12	1.55	0.87	0.36	0.36	0.43	0.43	0.38	0.30	0.47	2.65
12	-	4.77	1.39	0.80	0.36	0.36	0.43	0.55	0.36	0.30	0.27	1.98
13	-	3.16	1.29	0.74	0.36	0.36	0.43	0.53	0.36	0.30	0.16	2.76
14	-	1.72	1.17	0.70	0.36	0.36	0.43	0.51	0.36	0.30	0.12	3.10
15	-	1.23	1.11	0.69	0.36	0.36	0.43	0.51	0.31	0.30	0.11	4.49
16	-	0.97	1.04	0.64	0.36	0.36	0.43	0.44	0.30	0.30	0.10	3.16
17	-	0.90	0.93	0.58	0.36	0.36	0.43	0.37	0.30	0.30	0.11	2.03
18	-	0.85	0.91	0.56	0.36	0.36	0.43	0.36	0.30	0.30	0.11	1.93
19	-	0.80	0.87	0.52	0.36	0.36	0.37	0.36	0.30	0.30	0.11	1.41
20	-	0.73	0.95	0.51	0.36	0.36	0.36	0.36	0.30	0.37	0.13	1.35
21	-	0.67	0.81	0.51	0.36	0.36	0.36	0.36	0.30	0.55	0.17	1.23
22	-	0.79	0.80	0.46	0.36	0.36	0.36	0.36	0.30	0.65	0.20	1.64
23	-	1.08	0.70	0.43	0.36	0.31	0.36	0.36	0.30	0.68	0.24	1.53
24	-	1.10	0.70	0.43	0.36	0.30	0.49	0.36	0.30	0.70	0.45	1.04
25	-	21.90	0.75	0.43	0.43	0.44	0.51	0.31	0.30	0.70	1.08	-
26	-	10.38	2.34	0.51	0.43	0.52	0.49	0.87	0.30	0.70	0.84	-
27	-	6.11	2.10	0.51	0.43	0.40	1.00	0.60	0.30	0.83	5.14	-
28	-	-	1.61	0.44	0.43	0.36	0.81	0.51	0.30	1.00	4.36	-
29	-	-	1.15	0.43	0.43	0.31	0.61	0.41	0.30	1.37	14.47	3.86
30	-	-	0.95	0.43	0.36	0.34	0.52	0.36	0.30	2.54	5.56	2.55
31	-	-	1.11	-	0.34	-	0.46	0.36	-	0.84	-	9.65
Ave.	1.74	3.60	11.34	1.18	0.38	0.37	0.45	0.40	0.36	0.53	1.26	6.36

B-18 DAILY DISCHARGE AT VATUKOULA G/S (3)

Year	Unit : m3/sec											
1984												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4.41	17.96	1.49	-	6.66	3.53	1.28	0.53	0.63	-	0.34	4.17
2	2.46	12.41	2.16	-	4.77	2.20	1.22	0.53	0.48	-	0.34	3.06
3	1.63	5.01	12.44	-	4.16	1.77	1.12	0.53	0.41	0.55	0.34	2.10
4	1.67	6.21	14.24	1.96	3.21	1.50	1.00	0.53	0.40	0.61	0.32	2.12
5	2.23	24.62	8.10	2.41	2.97	1.35	0.98	0.53	0.35	0.61	0.29	2.01
6	1.66	15.80	8.29	2.25	2.58	8.19	0.98	0.53	0.34	-	0.29	1.30
7	1.37	-	4.55	2.21	2.33	4.15	0.98	0.60	0.34	-	0.29	0.87
8	1.25	-	3.23	1.96	2.16	5.43	0.98	0.61	0.34	-	0.29	0.78
9	1.03	9.91	25.03	1.70	2.04	3.13	0.98	0.54	0.34	-	0.29	0.78
10	1.13	6.51	17.13	2.87	1.96	2.26	0.89	0.53	0.34	-	0.29	0.78
11	2.82	9.21	7.28	3.80	-	1.86	0.88	0.53	0.34	-	0.29	1.83
12	2.30	10.93	3.85	2.35	-	1.57	0.77	0.46	0.34	-	0.29	7.05
13	1.37	6.04	3.11	1.78	-	1.39	0.69	0.46	0.34	-	0.29	3.25
14	1.19	4.18	-	1.77	-	1.22	0.69	0.46	0.34	-	0.29	1.61
15	1.50	3.68	-	1.69	1.02	1.14	0.69	0.46	0.34	0.29	0.29	1.27
16	1.16	2.91	-	1.34	-	3.57	0.69	0.46	0.34	0.29	0.29	1.04
17	1.03	22.16	-	1.22	-	18.18	0.69	0.46	0.38	0.29	0.29	0.92
18	0.94	22.48	-	2.78	-	4.02	0.69	0.46	0.46	-	0.29	22.02
19	1.35	12.19	-	2.12	-	2.51	0.69	0.46	0.46	-	0.29	8.04
20	1.38	8.78	-	9.33	-	1.89	0.69	0.46	0.40	-	0.29	4.23
21	1.58	6.47	-	3.68	1.73	1.56	0.69	0.41	0.42	-	0.30	3.37
22	1.18	4.61	-	2.42	1.87	1.49	0.69	0.40	0.41	-	0.76	2.00
23	1.02	3.49	-	1.84	21.73	1.37	0.62	0.40	0.40	-	1.23	1.64
24	0.92	4.00	-	4.87	5.57	5.78	0.61	0.40	0.40	-	0.66	1.34
25	0.88	2.94	-	3.66	3.51	4.07	0.61	0.40	0.40	-	0.48	1.08
26	0.88	2.39	-	2.18	2.35	2.47	0.61	0.40	0.40	-	0.41	1.05
27	0.88	1.97	7.38	1.81	1.97	1.87	0.61	0.40	0.39	-	0.31	1.02
28	0.93	1.66	5.05	1.68	3.20	1.67	0.61	0.40	-	-	15.79	-
29	0.91	1.55	-	1.54	2.43	1.52	0.61	0.40	-	0.48	7.60	-
30	0.79	-	-	17.08	2.68	1.36	0.61	0.40	-	0.46	8.43	-
31	1.54	-	-	-	4.26	-	0.55	0.48	-	0.36	-	-
Ave.	1.46	8.52	8.22	3.12	3.87	3.13	0.79	0.47	0.39	0.44	1.40	2.99

B-18 DAILY DISCHARGE AT VATUKOULA G/S (4)

Year	Unit : m3/sec											
1985	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	-	0.88	-	-	0.94	0.88	-	-	0.47	0.39	0.55	-
2	1.75	0.83	-	5.75	0.94	0.83	-	-	0.47	0.36	0.55	-
3	1.46	0.78	-	2.69	-	0.77	-	-	0.47	0.33	0.51	-
4	-	0.74	-	2.92	-	0.73	-	-	0.47	0.33	0.47	-
5	-	0.69	-	2.14	-	0.67	1.90	-	0.47	0.33	0.47	0.96
6	-	-	-	1.68	-	0.58	1.78	-	0.47	0.33	-	3.80
7	-	-	-	1.53	-	0.63	1.21	-	0.47	0.33	-	2.84
8	-	-	13.32	1.41	-	0.63	0.96	-	0.47	0.33	-	1.31
9	-	-	6.89	1.35	0.94	0.63	0.84	-	0.42	0.33	-	0.98
10	-	-	10.06	1.35	0.94	0.63	0.76	-	0.39	0.33	-	0.86
11	-	-	42.53	1.28	0.94	0.63	0.73	-	0.39	0.33	-	0.76
12	-	10.92	-	1.13	0.85	0.56	0.67	-	0.34	0.33	-	0.68
13	-	5.03	-	-	0.83	0.55	0.63	1.06	0.38	0.33	-	0.63
14	0.69	2.92	-	-	0.83	0.55	0.63	1.06	0.39	0.33	0.47	0.63
15	0.72	2.03	-	-	1.40	0.55	0.63	0.88	0.34	0.38	0.47	0.63
16	0.61	5.01	-	5.06	1.00	0.55	0.63	0.74	1.33	0.35	0.47	1.42
17	31.54	3.09	-	3.13	0.94	0.60	0.56	0.73	1.90	0.33	0.47	3.77
18	74.85	1.80	-	2.39	0.86	0.69	0.55	0.64	0.73	0.33	0.47	2.71
19	49.93	1.38	6.88	2.70	0.83	0.79	0.55	0.63	0.63	1.88	-	-
20	28.93	1.22	6.49	1.94	0.74	0.91	0.55	0.63	0.63	2.23	-	-
21	13.43	1.23	4.76	1.61	0.73	0.76	0.55	0.63	0.53	0.79	0.47	-
22	4.49	2.45	3.75	1.42	0.73	2.69	0.49	0.63	0.47	0.63	0.47	-
23	2.42	1.57	3.03	1.18	0.73	3.33	0.47	0.63	0.47	0.57	0.47	-
24	1.81	2.47	2.48	1.11	0.73	2.09	0.47	0.63	0.47	6.67	0.47	-
25	1.52	5.89	2.07	1.06	0.73	1.49	0.47	0.56	0.47	2.04	0.47	-
26	1.36	14.51	1.89	1.06	0.73	1.46	31.10	0.55	0.47	1.17	-	-
27	1.23	-	1.87	1.06	0.73	1.34	-	0.49	0.47	1.06	-	-
28	1.11	-	-	1.00	0.73	1.32	-	0.47	0.43	1.02	-	-
29	1.02	-	-	0.94	0.73	1.32	-	0.47	0.39	0.87	-	-
30	0.93	-	-	1.00	1.17	1.32	-	0.47	0.39	0.72	-	0.70
31	0.88	-	-	-	0.94	-	-	0.47	-	0.58	-	27.21
Ave.	11.03	3.27	8.16	1.92	0.86	1.01	2.14	0.65	0.54	0.85	0.48	3.12

B-19 DAILY DISCHARGE AT VATUSEKIYASAWA G/S (1)

Year	Unit : m3/sec											
1981												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	-	1.56	2.58	0.65	1.74	0.51	0.42	0.16	0.21	0.21	0.16	0.26
2	-	0.88	2.03	0.55	0.92	0.57	0.42	1.12	0.18	0.21	0.13	0.19
3	-	0.29	1.35	0.47	-	0.41	0.39	4.10	0.18	0.23	0.12	0.16
4	-	0.14	1.16	0.40	-	0.36	0.37	0.94	0.18	1.00	0.12	0.15
5	-	0.10	-	0.35	1.46	0.36	0.25	0.56	0.18	1.22	0.12	0.16
6	-	2.98	-	0.35	1.14	0.36	0.23	0.43	0.18	0.70	0.19	0.23
7	-	0.91	-	0.38	0.95	0.36	0.21	0.46	0.16	0.78	0.19	0.20
8	0.13	1.03	-	0.37	0.82	0.36	0.21	1.44	0.16	0.97	0.19	1.14
9	0.36	2.60	-	0.33	0.72	0.40	0.20	1.15	0.17	0.71	0.19	0.58
10	0.20	6.62	8.37	0.32	0.83	0.39	0.21	0.79	0.18	0.62	0.19	0.35
11	0.15	4.20	8.27	0.30	1.05	0.34	0.38	4.21	0.18	0.62	0.17	0.23
12	0.13	7.00	4.88	4.13	0.64	0.32	0.26	1.66	0.18	0.58	0.18	0.18
13	0.13	3.08	1.01	28.37	0.49	0.32	0.21	1.06	0.18	0.50	0.19	0.17
14	3.79	2.61	0.92	15.95	0.55	0.32	0.21	0.94	0.18	0.46	0.17	0.18
15	4.37	2.57	0.86	5.43	1.98	0.32	0.21	0.84	0.18	1.34	0.15	0.17
16	3.26	1.74	0.87	1.96	0.67	0.32	0.21	0.71	0.18	0.89	0.15	0.14
17	1.93	4.12	0.78	1.19	0.69	0.32	0.21	0.62	0.18	0.66	0.15	0.13
18	1.03	-	0.71	0.90	0.72	0.32	0.20	0.57	0.18	0.44	0.14	0.13
19	0.70	-	0.69	0.71	0.58	0.32	0.18	0.49	0.18	0.34	0.14	0.53
20	3.04	3.79	0.67	0.63	0.50	0.94	0.18	0.48	0.18	0.30	0.14	1.06
21	1.50	2.51	0.62	0.56	0.52	1.62	0.18	0.45	0.18	0.26	0.15	1.38
22	0.95	1.60	0.63	0.45	0.51	0.74	0.17	0.42	0.20	0.19	0.16	4.04
23	0.91	2.70	0.63	0.38	0.48	0.50	0.16	0.42	0.28	0.18	0.15	1.94
24	1.11	5.68	1.38	0.34	0.43	0.48	0.16	0.46	0.29	0.18	0.18	4.98
25	1.04	5.51	0.96	0.32	0.42	0.45	0.16	0.45	0.26	0.18	0.17	2.32
26	0.77	3.47	0.73	0.30	0.42	0.42	0.16	0.27	0.21	0.19	0.15	1.75
27	0.85	2.01	0.64	0.26	0.46	0.42	0.16	0.28	0.21	0.21	0.17	1.76
28	7.43	1.78	0.60	0.22	0.48	0.42	0.15	0.28	0.21	0.15	0.15	5.38
29	11.75	-	0.66	0.21	0.48	0.39	0.16	0.28	0.21	0.13	1.01	3.49
30	3.29	-	0.64	0.24	0.48	0.42	0.16	0.28	0.21	0.13	0.56	1.42
31	2.69	-	0.74	-	0.48	-	0.16	0.26	-	0.15	-	0.96
Ave.	2.15	2.75	-	2.23	0.74	0.46	0.22	0.86	0.19	0.47	0.20	1.15

B-19 DAILY DISCHARGE AT VATUSEKIYASAWA G/S (2)

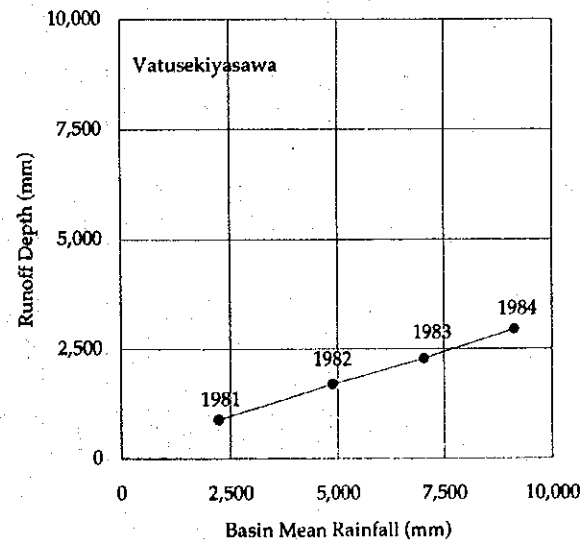
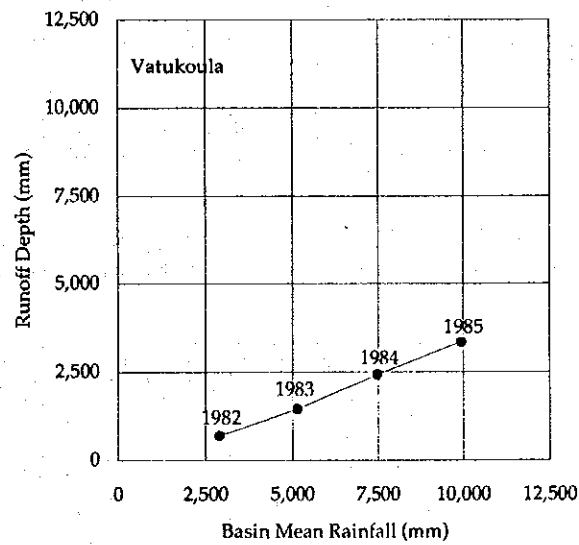
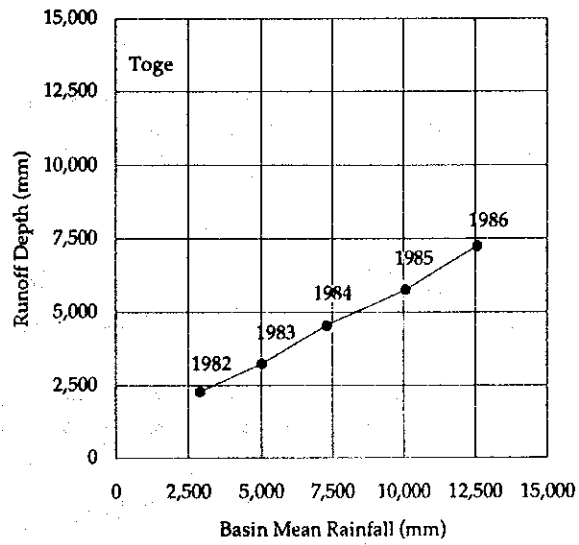
Year	Unit : m3/sec											
1982												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.76	-	0.07	1.49	0.72	0.26	0.97	0.81	0.54	-	0.13	1.30
2	0.56	6.41	0.06	5.64	0.70	0.23	0.71	0.55	0.44	-	0.13	0.85
3	0.45	2.17	0.05	1.84	0.90	0.30	0.52	0.46	-	0.23	0.14	0.52
4	0.40	1.35	0.05	1.14	0.99	0.35	0.43	0.38	-	0.23	0.15	0.37
5	0.54	3.98	0.13	0.91	0.64	0.41	0.35	0.34	-	0.23	0.15	0.32
6	0.40	1.07	0.50	0.77	0.44	0.42	0.32	0.30	-	0.22	0.15	0.27
7	0.40	0.61	0.10	0.82	0.40	0.37	0.32	0.26	0.36	0.40	0.16	0.25
8	4.03	0.63	0.07	0.71	0.40	0.36	0.32	0.26	0.35	0.31	0.16	0.23
9	1.39	0.49	0.34	0.75	0.40	0.36	0.26	0.25	0.32	0.26	0.13	0.18
10	4.34	2.30	0.94	0.64	0.40	0.49	0.25	0.25	0.32	0.23	0.13	0.18
11	2.05	2.93	3.87	0.54	0.40	0.46	0.21	0.34	0.32	0.23	0.12	0.19
12	2.56	11.58	1.98	0.54	0.40	0.86	0.21	0.29	0.32	0.21	0.13	0.21
13	3.83	1.27	1.42	0.48	0.38	0.82	0.20	0.28	0.31	0.19	0.19	0.20
14	2.54	0.67	1.21	0.41	0.36	0.50	0.19	0.26	0.29	0.54	0.25	0.16
15	1.96	0.40	2.04	0.46	0.36	0.44	0.17	0.26	0.34	0.39	0.28	0.15
16	1.70	0.39	16.08	0.99	0.36	10.58	0.17	0.23	0.36	0.26	0.21	0.15
17	2.18	0.28	-	1.00	0.35	-	0.21	0.23	0.34	0.20	0.22	0.15
18	2.87	0.24	-	1.72	0.32	-	0.27	0.26	0.29	0.19	0.31	0.15
19	2.34	0.20	-	1.50	0.34	-	0.23	0.29	0.29	0.19	0.26	0.15
20	2.31	0.81	-	1.21	0.40	-	0.23	0.45	0.29	0.18	0.21	0.17
21	3.42	0.43	-	1.10	0.68	-	-	1.26	-	0.17	0.20	0.16
22	2.26	0.24	-	1.10	0.47	-	-	8.55	-	0.15	0.16	0.16
23	1.78	0.16	-	0.95	0.38	0.54	-	3.73	-	0.16	0.14	0.17
24	1.54	0.17	-	1.44	0.36	0.42	-	2.28	-	0.17	0.13	0.17
25	3.26	0.13	3.41	11.52	0.36	0.34	-	1.75	-	0.17	1.07	0.16
26	2.35	0.11	1.97	1.74	0.30	0.32	-	1.64	-	0.16	0.98	0.14
27	8.99	0.09	1.52	1.27	0.26	0.42	-	1.19	0.23	0.15	3.53	0.31
28	9.21	0.08	1.40	2.00	0.26	0.42	0.18	0.96	0.23	0.15	6.52	0.64
29	-	-	1.62	0.92	0.26	0.33	5.51	0.78	0.23	0.13	-	0.32
30	-	-	1.58	0.80	0.26	0.48	3.73	0.80	0.23	0.13	-	0.40
31	-	-	1.40	-	0.26	-	1.24	0.58	-	0.13	-	0.54
Ave.	2.51	1.45	1.82	1.55	0.43	0.85	0.72	0.98	0.32	0.22	0.58	0.30

B-19 DAILY DISCHARGE AT VATUSEKIYASAWA G/S (3)

Year	Unit : m ³ /sec											
1983	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.40	5.13	9.60	4.25	0.28	0.23	0.17	0.11	-	0.09	0.04	0.73
2	0.41	6.10	9.59	3.62	0.27	0.25	0.17	0.11	-	0.09	-	4.59
3	2.99	3.77	2.35	1.77	0.22	0.47	0.17	0.11	-	0.09	-	1.46
4	1.30	1.74	1.23	1.33	0.22	0.85	0.17	0.12	-	0.09	-	2.80
5	0.77	1.22	0.81	1.09	0.22	0.39	0.16	0.13	-	0.09	-	2.83
6	0.50	0.98	0.50	0.98	0.22	0.33	0.13	0.12	-	0.10	-	1.64
7	0.35	0.78	0.33	0.94	0.22	0.32	0.13	0.10	-	0.10	-	1.96
8	0.27	0.60	0.24	0.86	0.22	0.29	0.13	0.10	0.19	0.10	-	-
9	0.23	0.58	0.19	0.77	0.21	0.23	0.13	0.11	0.15	0.10	6.82	-
10	0.20	0.95	0.16	0.70	0.19	0.20	0.13	0.22	0.12	0.10	2.32	-
11	0.19	0.74	0.13	0.64	0.17	0.17	0.15	0.44	0.10	0.10	1.31	-
12	0.18	0.81	0.11	0.60	0.14	0.14	0.16	0.30	0.09	0.11	0.75	-
13	0.17	0.83	0.10	0.58	0.10	0.14	0.16	0.21	0.09	0.09	0.49	-
14	0.16	0.59	0.09	0.53	0.10	0.13	0.16	0.17	0.08	0.07	0.35	-
15	0.15	0.47	0.08	0.54	0.09	0.13	0.16	0.16	0.08	0.06	0.28	0.57
16	0.15	0.42	0.07	0.52	0.09	0.08	0.16	0.16	0.08	0.05	0.24	0.50
17	0.19	0.40	0.09	0.46	0.12	0.21	0.16	0.15	0.08	0.05	0.20	0.45
18	0.15	0.36	0.25	0.39	0.16	0.19	0.16	0.16	0.08	0.05	0.19	0.39
19	0.13	0.33	0.73	0.36	0.17	0.20	0.12	0.14	0.08	0.05	0.19	0.34
20	0.12	0.47	0.70	0.35	0.15	0.21	0.10	0.13	0.08	0.05	0.18	0.33
21	0.12	0.47	0.64	0.32	0.16	0.20	0.09	0.14	0.08	0.05	0.17	0.33
22	0.11	0.44	0.57	0.32	0.16	0.19	0.09	0.16	0.08	0.13	0.16	0.33
23	0.10	0.43	0.54	0.37	0.17	0.19	0.11	0.13	0.09	0.11	0.15	0.48
24	0.10	4.72	0.57	0.36	0.17	0.19	0.14	0.12	0.10	0.08	0.20	0.50
25	0.10	12.49	1.30	0.32	0.19	0.31	0.13	0.13	0.10	0.07	0.24	0.39
26	0.14	4.73	6.32	0.28	0.22	0.31	0.14	0.50	0.10	0.07	0.23	0.31
27	0.18	2.45	3.48	0.25	0.23	0.24	0.23	0.27	0.09	0.07	1.28	0.28
28	2.12	10.24	1.91	0.23	0.28	0.22	0.17	-	0.09	0.09	0.71	1.12
29	1.57	-	1.29	0.22	0.28	0.19	0.14	-	0.09	5.47	0.50	1.04
30	9.30	-	1.05	0.26	0.28	0.17	0.13	-	0.09	0.68	0.42	1.50
31	6.17	-	0.91	-	0.26	-	0.12	-	-	0.11	-	1.28
Ave.	0.94	2.26	1.48	0.81	0.19	0.25	0.14	0.17	0.10	0.28	0.76	1.09

B-19 DAILY DISCHARGE AT VATUSEKIYASAWA G/S (4)

Year	Unit : m3/sec											
1984												
Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0.86	-	0.96	1.53	1.05	0.23	-	0.30	0.26	0.29	0.17	1.71
2	0.61	-	0.91	1.49	0.96	0.21	-	0.33	0.24	0.21	0.17	0.85
3	0.41	-	1.35	1.37	0.92	0.26	-	0.71	0.23	0.22	0.17	0.54
4	0.62	-	2.05	1.27	0.87	0.31	-	0.47	0.23	0.31	0.17	0.34
5	0.81	-	1.21	2.49	0.85	0.37	-	0.44	0.23	0.23	0.17	0.43
6	0.51	-	0.98	1.34	0.93	3.25	-	0.41	0.23	0.18	0.15	0.72
7	1.94	-	0.85	1.20	1.25	-	-	0.39	0.23	0.15	0.14	0.52
8	1.10	-	0.78	1.24	1.08	-	-	0.36	0.23	0.14	0.14	0.41
9	0.76	-	0.85	1.17	0.88	-	-	0.35	0.21	0.14	0.14	0.35
10	0.56	2.21	4.02	0.96	0.76	-	-	0.35	0.20	0.14	0.12	0.32
11	0.53	1.95	3.39	0.85	0.67	-	-	0.35	0.20	0.14	0.12	0.28
12	0.66	1.94	1.54	0.86	0.64	-	-	0.31	0.18	0.14	0.12	0.24
13	2.42	1.60	1.11	0.82	0.56	-	-	0.30	0.17	0.14	0.12	0.21
14	3.76	1.51	0.98	0.74	0.51	-	-	0.30	0.15	0.14	0.12	0.18
15	3.51	-	3.48	0.65	0.60	-	-	0.30	0.14	0.14	0.12	0.15
16	1.68	-	4.68	0.73	0.48	-	-	0.30	0.14	0.14	0.12	0.13
17	1.22	-	-	0.60	0.38	-	-	0.30	0.21	0.13	0.12	0.12
18	0.95	-	-	1.23	0.50	-	-	0.28	0.25	0.12	0.12	0.26
19	0.74	-	-	1.06	0.48	-	-	0.26	0.20	0.12	0.12	0.38
20	0.74	-	-	-	0.98	-	0.44	0.26	0.20	0.12	0.12	1.00
21	0.68	-	-	-	0.58	-	0.44	0.26	0.20	0.12	0.12	0.61
22	0.56	-	-	-	0.52	-	0.44	0.26	0.20	0.13	0.19	0.53
23	0.51	-	5.33	-	-	-	0.44	0.24	0.18	0.12	0.49	0.94
24	0.50	1.66	3.56	-	-	-	0.51	0.23	0.17	0.12	0.36	1.01
25	0.38	1.46	2.85	-	-	-	0.36	0.21	0.17	0.12	0.27	0.58
26	0.47	1.38	6.17	-	-	-	0.35	0.20	0.17	0.22	0.20	0.46
27	0.52	1.25	3.37	1.24	-	-	0.35	0.20	0.19	0.57	0.14	0.41
28	0.28	1.10	2.81	1.08	-	-	0.35	0.17	0.20	0.27	1.20	0.36
29	0.26	1.12	2.19	1.02	0.61	-	0.33	0.17	0.20	0.21	2.58	0.29
30	0.24	-	1.98	1.13	0.39	-	0.30	0.22	0.19	0.20	7.48	0.27
31	0.35	-	1.73	-	0.26	-	0.32	0.25	-	0.18	-	1.41
Ave.	0.94	1.56	2.36	1.13	0.71	0.77	0.38	0.31	0.20	0.18	0.53	0.52



B-20 DOUBLE MASS CURVE OF RUNOFF DEPTH AND BASIN MEAN RAINFALL

B-21 SIMULATED RUNOFF
(BA RIVER: TOGE G/S)

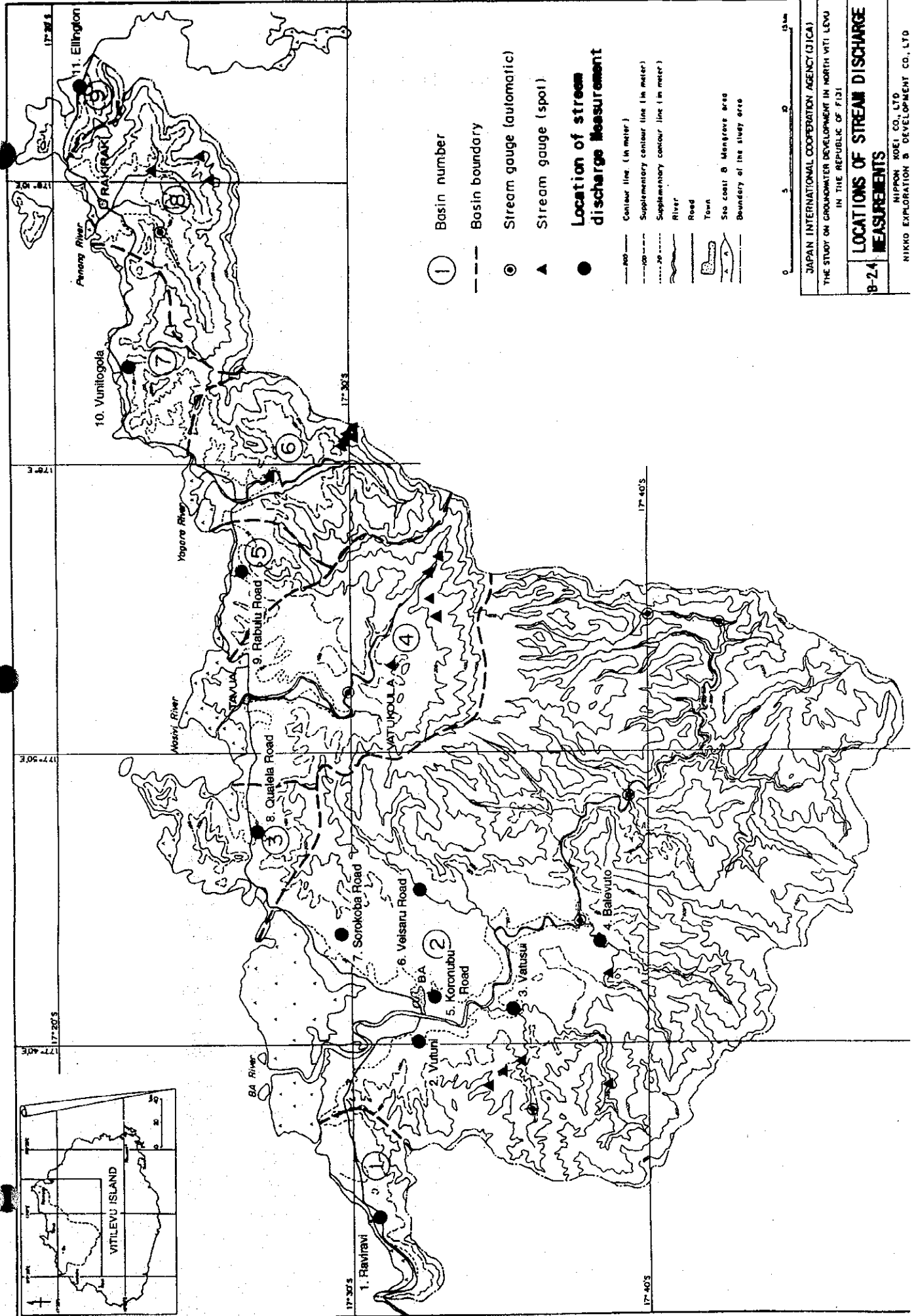
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1971	23.90	80.79	115.99	55.22	19.62	13.75	10.54	13.00	13.33	32.75	51.60	88.70	43.06
1972	89.66	18.09	51.71	15.85	22.96	13.14	10.42	9.25	10.27	38.59	22.74	37.32	28.53
1973	22.95	37.43	104.91	39.19	13.00	41.44	18.99	12.63	15.65	14.22	21.79	48.16	32.52
1974	83.84	103.53	127.82	96.33	20.44	13.95	11.65	58.21	12.23	19.95	30.79	50.09	52.14
1975	97.93	75.58	38.06	53.86	20.83	17.95	14.36	11.97	9.74	53.42	122.65	60.90	47.85
1976	65.41	60.71	88.55	41.30	17.13	14.90	12.84	13.90	25.60	18.56	16.18	10.39	32.05
1977	51.96	83.42	97.06	23.70	14.68	11.34	9.50	8.24	7.00	6.48	6.01	14.17	27.51
1978	78.29	17.47	23.00	26.53	10.31	10.31	11.79	9.47	7.77	18.72	14.20	14.42	20.27
1979	73.00	24.37	79.03	33.06	23.07	14.19	10.16	7.84	17.39	7.51	5.45	4.53	25.05
1980	22.00	45.02	18.30	35.17	8.84	15.28	7.94	6.41	12.12	21.49	10.85	7.52	17.42
1981	56.78	67.06	15.74	30.70	11.92	14.34	6.69	14.18	4.71	4.43	5.56	12.45	20.07
1982	118.17	90.01	59.23	19.47	10.53	24.74	13.65	11.63	7.93	6.03	5.59	5.25	30.72
1983	18.81	33.81	91.32	11.72	4.80	4.34	3.64	4.32	3.58	5.21	11.13	36.15	19.07
1984	10.26	41.36	75.75	17.60	20.92	25.08	8.65	6.74	5.10	5.40	7.03	13.78	19.75
1985	48.70	21.47	162.42	22.03	10.57	12.53	14.33	8.08	8.50	6.82	6.52	11.11	27.98
1986	9.17	50.28	39.98	138.26	9.69	22.21	7.85	8.51	4.98	3.91	4.05	6.65	25.07
1987	10.15	29.59	23.12	13.15	4.71	3.35	2.97	2.68	2.59	2.52	11.23	15.51	10.00
1988	20.96	57.91	41.02	45.57	12.97	7.71	17.65	5.10	3.26	3.58	13.32	78.90	25.58
1989	50.73	154.08	40.16	58.58	36.43	25.44	9.68	8.73	16.18	15.14	11.94	21.60	36.54
1990	16.71	19.43	118.19	10.68	8.60	36.07	9.07	19.45	13.90	7.49	37.84	19.28	26.47
1991	68.28	49.82	50.62	33.23	14.53	9.57	8.28	9.22	20.03	5.02	7.73	5.08	23.30
1992	23.30	14.31	31.10	9.98	10.69	11.60	4.81	7.35	3.58	3.58	6.06	60.60	15.67
AVE.	48.23	53.43	67.87	37.78	14.87	16.51	10.25	11.68	10.25	13.67	19.56	28.30	27.57

B-22 SIMULATED RUNOFF
(NASIVI RIVER: VATUKOULA G/S)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1971	1.36	8.93	16.32	4.69	2.19	1.57	1.25	1.05	1.16	2.25	1.48	7.75	4.17
1972	7.26	2.05	6.07	1.81	3.59	1.36	1.10	0.93	0.86	2.25	1.29	2.43	2.58
1973	0.53	7.25	8.35	2.16	0.99	4.68	2.73	1.57	2.04	0.72	3.34	1.53	2.99
1974	7.20	12.02	15.16	10.20	2.67	1.77	1.64	2.92	1.78	2.48	3.88	3.72	5.46
1975	7.19	3.33	2.80	5.11	2.75	1.81	1.68	1.37	1.32	2.98	14.44	4.24	4.09
1976	7.40	4.87	9.85	7.26	2.64	2.64	2.08	2.35	3.35	2.85	2.32	1.78	4.11
1977	5.89	10.84	12.20	4.02	2.58	2.06	1.83	1.76	1.40	1.23	0.99	0.88	3.81
1978	4.83	2.13	1.88	3.87	1.42	1.05	0.98	1.15	0.80	1.77	1.53	1.24	1.89
1979	5.09	4.66	9.85	4.98	2.41	1.83	1.41	1.13	1.52	0.78	0.53	0.50	2.89
1980	1.43	2.71	1.02	2.48	0.70	0.81	0.62	0.56	0.84	1.10	0.48	0.49	1.11
1981	5.89	10.56	1.52	3.88	1.39	1.28	0.83	1.61	0.54	0.41	0.43	1.34	2.47
1982	10.13	9.60	5.87	2.74	1.41	2.53	1.37	1.65	1.00	0.87	0.58	0.41	3.18
1983	2.84	3.06	7.09	0.79	0.51	0.38	0.53	0.42	0.33	0.58	1.55	5.01	1.92
1984	0.95	3.23	7.67	1.31	1.90	1.90	0.96	0.75	0.63	0.86	1.16	1.33	1.89
1985	4.01	2.35	15.01	1.67	1.10	1.09	1.80	0.93	0.68	0.56	0.31	0.44	2.50
1986	0.47	2.55	4.43	15.98	1.11	1.61	0.88	1.08	0.54	0.36	0.38	0.29	2.47
1987	0.58	1.31	1.06	0.49	0.26	0.25	0.40	0.23	0.23	0.22	1.25	0.77	0.59
1988	0.59	3.53	2.80	5.31	0.77	0.53	2.21	0.31	0.21	0.26	0.89	10.28	2.31
1989	4.69	16.02	6.69	6.65	3.02	3.12	1.54	1.54	1.79	1.52	1.64	1.47	4.14
1990	1.11	1.11	10.77	1.04	0.73	4.59	0.77	1.94	1.50	0.59	2.92	1.31	2.37
1991	4.82	3.23	4.57	2.40	1.07	0.84	0.82	0.84	1.45	0.33	0.77	0.40	1.80
1992	2.26	0.74	3.48	0.51	0.75	0.97	0.27	0.99	0.35	0.24	0.32	4.00	1.24
AVE.	3.93	5.28	7.02	4.06	1.63	1.76	1.26	1.23	1.11	1.15	1.93	2.35	2.73

B-23 SIMULATED RUNOFF
(NAKAUVADRA RIVER : VATUSEKIYASAWA G/S)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1971	0.51	0.94	3.55	0.84	0.76	0.74	0.31	0.18	0.40	0.68	0.93	1.70	0.96
1972	1.89	1.47	1.73	0.73	0.73	0.43	0.26	0.27	0.67	1.68	0.25	0.69	0.90
1973	0.34	1.87	4.68	1.06	0.46	1.32	0.49	0.21	0.43	0.20	0.78	0.44	1.02
1974	2.47	2.36	2.65	3.68	1.09	0.65	0.42	0.56	0.41	0.28	0.35	0.38	1.28
1975	1.59	0.67	1.84	4.73	1.74	0.85	0.62	0.37	0.27	0.64	5.84	2.07	1.77
1976	2.79	2.35	4.35	3.28	1.59	1.20	0.92	0.98	0.97	0.63	0.93	0.75	1.73
1977	2.15	3.58	4.03	1.60	1.43	0.95	0.63	0.41	0.36	0.36	0.34	0.63	1.37
1978	1.99	0.59	1.44	1.33	0.91	0.38	0.31	0.27	0.20	0.57	0.26	0.71	0.75
1979	3.18	0.82	1.53	1.31	1.42	0.83	0.51	0.24	0.34	0.19	0.23	0.14	0.90
1980	0.46	0.98	0.67	0.48	0.14	0.12	0.19	0.17	1.29	0.42	0.13	0.19	0.44
1981	1.52	2.31	0.63	1.72	0.95	0.44	0.19	0.67	0.13	0.49	0.15	0.51	0.81
1982	3.46	1.91	3.35	1.13	0.66	1.36	0.59	0.76	0.24	0.42	0.45	0.30	1.22
1983	0.80	2.59	3.46	0.88	0.39	0.28	0.18	0.19	0.15	0.44	0.39	0.95	0.89
1984	0.27	1.40	3.10	0.88	0.75	1.02	0.33	0.22	0.16	0.18	0.30	0.33	0.74
1985	0.39	0.66	5.18	1.70	0.78	0.58	0.46	0.32	0.16	0.28	0.25	0.53	0.94
1986	1.04	1.52	1.32	5.63	0.97	1.10	0.54	0.44	0.23	0.21	0.21	0.62	1.15
1987	0.18	0.54	1.85	0.46	0.20	0.13	0.21	0.11	0.10	0.09	0.96	1.33	0.51
1988	0.50	1.71	0.95	3.02	2.49	0.72	0.77	0.35	0.21	0.24	0.18	4.20	1.28
1989	2.06	4.91	2.62	2.77	1.24	1.35	0.72	0.53	0.47	0.60	0.51	0.39	1.51
1990	0.49	0.78	5.50	0.92	0.47	1.02	0.36	0.32	0.20	0.19	0.48	0.45	0.93
1991	2.12	1.55	3.64	1.38	0.58	0.38	0.30	0.34	0.55	0.23	0.40	0.16	0.97
1992	1.68	0.20	0.93	0.18	0.38	0.21	0.09	0.08	0.07	0.07	0.06	1.98	0.49
AVE.	1.45	1.62	2.68	1.81	0.92	0.73	0.43	0.36	0.36	0.41	0.65	0.88	1.03



① Basin number

--- Basin boundary

○ Stream gauge (automatic)

▲ Stream gauge (spot)

● Location of stream discharge measurement

--- Contour line (in meter)

--- Supplementary contour line (in meter)

--- Supplementary contour line (in meter)

--- River

--- Road

--- Town

--- Sea coast & Mangrove area

--- Boundary of the study area



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
THE STUDY ON GROUNDWATER DEVELOPMENT IN NORTH VITI LEVU
IN THE REPUBLIC OF FIJI

B-24 LOCATIONS OF STREAM DISCHARGE MEASUREMENTS

NIKHO EXPLORATION & DEVELOPMENT CO., LTD.
NIPPON KOEI CO., LTD.

B-25 DISCHARGE MEASUREMENT

No.	Stream	Location	Catchment Area (sq. km)	Date	Discharge (cms)	Area (sq. m)	Mean Velocity (m/s)
1	Waikorobala	Raviravi	4.8	26-Jan	0.472	2.535	0.186
				31-Jan	0.099	0.435	0.228
				1-Mar	0.128	0.283	0.452
				8-Mar	0.013	0.095	0.137
				31-May	0.007	0.098	0.071
				7-Jun	0.047	0.320	0.147
2	Namosau	Vutuni	17.9	31-Jan	0.870	1.787	0.487
				1-Mar	0.772	1.984	0.389
				8-Mar	0.589	1.742	0.338
				31-May	0.109	0.989	0.110
				7-Jun	0.520	2.171	0.240
				25-Jan	2.318	4.147	0.559
3	Nadrou	Vatusui	108.0	1-Feb	6.175	8.240	0.749
				1-Mar	4.603	7.051	0.653
				8-Mar	5.438	7.051	0.771
				31-May	0.826	2.350	0.351
				7-Jun	3.749	5.493	0.683
				25-Jan	2.632	4.699	0.560
4	Waisali	Balavuto	85.2	1-Feb	6.656	7.711	0.863
				1-Mar	4.035	6.316	0.639
				8-Mar	6.835	7.870	0.868
				31-May	0.597	1.585	0.377
				7-Jun	3.446	4.446	0.775
				25-Jan	0.281	1.017	0.276
5	Elevula	Koronubu Road	37.6	31-Jan	0.946	2.342	0.404
				2-Mar	0.803	2.190	0.367
				9-Mar	0.799	2.407	0.332
				1-Jun	0.231	0.727	0.318
				8-Jun	1.203	5.435	0.221
				25-Jan	0.549	3.020	0.182
6	Navisa	Veisaru Road	41.8	1-Feb	0.847	3.217	0.263
				2-Mar	0.941	2.353	0.400
				9-Mar	1.206	3.189	0.378
				1-Jun	0.297	1.592	0.187
				8-Jun	1.071	2.454	0.436
				26-Jan	0.463	1.427	0.324
7	Nadhari	Sorokoba Road	4.3	1-Feb	0.062	0.190	0.326
				2-Mar	0.056	0.182	0.308
				9-Mar	0.022	0.140	0.157
				1-Jun	0.011	0.145	0.076
				8-Jun	0.076	0.493	0.154
				26-Jan	0.478	1.434	0.333
8	Waitagitaginata	Qualela Road	11.0	1-Feb	0.193	0.639	0.302
				2-Mar	0.092	0.222	0.414
				9-Mar	0.084	0.179	0.469
				1-Jun	0.041	0.321	0.128
				8-Jun	0.179	0.630	0.284
				27-Jan	0.784	1.276	0.614
9	Waikatakata	Rabulu Road	5.9	2-Feb	0.042	0.104	0.404
				3-Mar	0.028	0.279	0.100
				10-Mar	0.020	0.247	0.081
				2-Jun	0.007	0.098	0.071
				9-Jun	0.043	0.373	0.115
				27-Jan	1.671	2.491	0.671
10	Wailoa	Vunitogoa	8.0	2-Feb	0.358	1.056	0.339
				3-Mar	0.181	0.353	0.513
				10-Mar	0.130	0.316	0.411
				2-Jun	0.039	0.263	0.148
				9-Jun	0.127	0.439	0.289
				27-Jan	1.618	4.040	0.400
11	Wairukuleka	Ellington	5.6	2-Feb	0.168	0.534	0.315
				3-Mar	0.080	0.211	0.378
				10-Mar	0.053	0.339	0.156
				2-Jun	0.015	0.169	0.089
				9-Jun	0.114	0.390	0.292

DATA BOOK - C

DATA BOOK - C
WATER QUALITY

TABLE OF CONTENTS

<u>No.</u>		<u>Page</u>
C-1	RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (1) - (6).....	C- 1
C-2	RESULTS OF WATER QUALITY ANALYSIS - RAINY SEASON (1) - (7)	C- 7
C-3	RESULTS OF WATER QUALITY ANALYSIS - TEST WELLS (1) - (2)	C-14
C-4	RESULTS OF AGROCHEMICALS ANALYSIS IN NATURAL WATER - DRY SEASON.....	C-16
C-5	RESULTS OF AGROCHEMICALS ANALYSIS IN NATURAL WATER - RAINY SEASON.....	C-17
C-6	RESULTS OF GEOCHEMICAL ANALYSIS IN NATURAL WATER - DRY SEASON (1) - (6).....	C-18
C-7	RESULTS OF GEOCHEMICAL ANALYSIS IN NATURAL WATER - RAINY SEASON (1) - (7)	C-24
C-8	RESULTS OF GEOCHEMICAL ANALYSIS OF TEST WELLS (1) - (2)	C-31

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

C-1 RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (1)

Sampling date	STANDARD									
	1	2	3	4	5	6	7	8	9	10
07-09/09/93, 11-12/08/93	SP001	GW008	R010	R011	GW009	GW010	GW011	R012	GW012	R013
Sample No	Penang river basin	Penang river basin	Penang river basin	Penang river basin	Penang river basin	Penang river basin	Wailevu-Narewa Dug Well	Wailevu-Narewa River	Wailevu-Narewa Dug Well	Yaqara river basin
Sample Name	Hot Spring									
Region										
Source										
Well Depth		3.47					5.02		3.15	
GL-m							2.79		1.25	
Groundwater Level		2.13					24.9	23.8	26.7	25.0
GL-m							7.22	7.64	7.00	8.31
Water Temperature		6.90	24.1	29.8	25.9	23.8	24.9	23.8	26.7	25.0
°C			7.71	7.46	6.97	7.47	7.22	7.64	7.00	8.31
pH	6.5 - 8.5		280	6,800	530	430	320	470	630	240
Electric Conductivity			7.5	7.5	0.0	2.5	0.0	7.5	2.5	7.5
MS/cm	<15		2.5	5.0	0.50	2.1	0.90	2.9	0.15	1.2
TCU	<5		187	175	255	131	147	198	276	220
NFU			90	260	130	80	150	150	150	100
mg/l			180	1,170	250	160	180	230	291	200
Ca Hardness	<500		90	910	120	80	30	80	141	100
Total Hardness			0.14	0.18	0.04	<0.01	0.01	0.06	0.01	0.03
Mg Hardness	<0.3		0.01	<0.01	0.02	<0.01	<0.01	0.02	<0.01	<0.01
mg/l	<0.1		0.13	0.15	0.08	0.08	0.09	0.10	0.12	0.10
Manganese (Mn)	<0.2		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
mg/l	<0.05		0.02	0.02	0.01	<0.01	0.09	<0.01	<0.01	<0.01
Aluminium (Al)			0.31	<0.01	0.41	0.35	0.16	0.80	0.03	<0.01
Lead (Pb)	<1.0		0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
mg/l	<5.0		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (Cu)	<0.005		3.8	690.0	18.5	18.0	16.7	1.5	18.0	12.0
mg/l	<0.001		0.2	10.2	0.4	0.9	2.8	0.4	0.4	3.2
Zinc (Zn)	<200		11.0	1,650.0	31.0	50.0	50.0	30.0	28.0	10.0
mg/l	<250		0.02	0.04	0.80	0.02	0.02	0.02	0.02	0.04
Cadmium (Cd)			0.30	0.10	0.50	3.20	1.70	0.30	0.60	0.10
Mercury (Hg)	<10		0.03	0.02	0.01	0.01	<0.01	0.01	<0.01	<0.01
mg/l	<0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Cr)	<400		20	150	25	19	27	28	68	11
mg/l	<1.5		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic (As)	<1000		190	4,500	345	285	210	320	417	150
mg/l			2.17	2.14	2.60	4.04	4.51	2.80	3.59	2.31
Sodium (Na)			Cd	Turb., T.H.						
mg/l										
Potassium (K)										
mg/l										
Chlorine (Cl)										
mg/l										
Nitrite (NO2)										
mg/l										
Nitrate (NO3)										
mg/l										
Ammonium (NH4)										
mg/l										
Cyanide (CN)										
mg/l										
Sulfate (SO4)										
mg/l										
Fluorine (F)										
mg/l										
TDS										
mg/l										
Silica (SiO2)										
mg/l										
Items Exceeded the Standard										

C-1 RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (3)

Sampling date	07-09/09/93, 11-12/08/93	STANDARD									
Sample No	21	22	23	24	25	26	27	28	29	30	
Sample Name	GW020	R018	R017	R016	GW023	GW024	GW027	GW026	R101	GW028	
Region	Tavua basin	Tavua basin	Tavua basin	Tavua basin	Tavua basin	Matalevu uplands	Matalevu uplands	Matalevu uplands	Matalevu uplands	Matalevu uplands	
Source	Dug Well	River	River	River	Dug Well	Dug Well	Borehole	Borehole	River	Dug Well	
Well Depth	GL-m 4.90				8.24	12.16				9.11	
Groundwater Level	GL-m 1.15				4.80	10.20				3.98	
Water Temperature	25.7	28.0	29.2	31.7	27.1	27.9	37.7	27.0	26.8	26.0	
pH	6.5 - 8.5	8.80	8.40	7.20	7.42	7.05	7.39	8.12	8.51	6.80	
Electric Conductivity	MS/cm 440	150	1,900	1,500	590	440	500	210	260	460	
Colour	TCU 0.0	2.5	7.5	85.0	5.0	5.0	17.5	0.0	25.0	0.0	
Turbidity	NTU 0.30	1.0	1.5	60.0	1.3	0.41	26.0	0.39	3.5	0.30	
Alkalinity	mg/l 25	110	670	420	265	210	256	134	98	245	
Ca Hardness	mg/l 195	54	500	350	180	246	90	72	68	150	
Total Hardness	mg/l 250	92	580	470	310	296	160	128	130	200	
Mg Hardness	mg/l 55	38	80	120	130	50	70	56	62	50	
Iron (Fe)	mg/l 0.07	0.04	0.20	14.40	2.90	<0.01	1.90	<0.01	0.26	0.02	
Manganese (Mn)	mg/l <0.1	<0.01	0.09	0.98	0.06	<0.01	<0.01	<0.01	0.10	<0.01	
Aluminum (Al)	mg/l <0.2	0.05	0.10	0.21	0.09	0.11	0.05	0.11	0.09	0.09	
Lead (Pb)	mg/l <0.05	<0.01	0.02	0.14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Copper (Cu)	mg/l <1.0	0.01	0.21	1.25	0.01	<0.01	<0.01	<0.01	0.01	0.01	
Zinc (Zn)	mg/l <5.0	<0.01	0.14	0.27	0.14	<0.01	<0.01	<0.01	<0.01	<0.01	
Cadmium (Cd)	mg/l <0.005	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Mercury (Hg)	mg/l <0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Chromium (Cr)	mg/l <0.05	0.03	0.11	0.38	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Arsenic (As)	mg/l <0.05	<0.01	0.14	0.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Sodium (Na)	mg/l <200	14.0	195.0	94.0	26.0	18.5	40.2	2.9	18.1	19.9	
Potassium (K)	mg/l 1.6	1.9	10.8	9.9	0.8	0.8	5.4	0.7	1.2	1.7	
Chlorine (Cl)	mg/l <250	14.0	145.0	89.0	8.0	28.0	9.0	7.0	11.0	6.0	
Nitrite (NO2)	mg/l 0.13	0.06	14.30	1.05	0.03	0.04	0.03	<0.01	0.05	0.03	
Nitrate (NO3)	mg/l <10	0.10	5.00	6.00	1.00	1.90	2.40	0.70	<0.01	1.20	
Ammonium (NH4)	mg/l <0.1	<0.01	<0.01	0.33	0.08	0.02	<0.01	<0.01	0.02	0.01	
Cyanide (CN)	mg/l <400	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Sulfate (SO4)	mg/l 60	10	240	232	95	120	40.6	26	30	45	
Fluorine (F)	mg/l <1.5	<0.01	0.95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
TDS	mg/l <1000	269	1,300	1,000	365	280	350	141	200	281	
Silica (SiO2)	mg/l 1.73	1.64	3.06	3.20	4.60	3.73	3.41	7.13	3.99	2.77	
Items Exceeded the Standard	Cd	pH, Cd	T.H., Cr As, TDS	Col., Turb. Fe, Mn, Al Pb, Cu, Cr As, TDS	Fe	-	Col., Turb. Fe	-	pH, Col. Mn	-	

C-1 RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (4)

Sampling date	07-09/09/93, 11-12/08/93	STANDARD	31	32	33	34	35	36	37	38	39	40
Sample No			GW029	GW032	GW031	GW042	GW033	R001	R002	R003	R004	GW001
Region			Matalevu uplands	Vania-Lousa coastal plain	Vania-Lousa coastal plain	Vania-Lousa coastal plain	Vania-Lousa coastal plain	Mountainous area	Mountainous area	Mountainous area	Koronubu uplands	Koronubu uplands
Source			Borehole	Dug Well	Borehole	Borehole	Borehole	River	River	River	River	Dug Well
Well Depth	GL-m		56.00	2.60		60.00						4.85
Groundwater Level	GL-m			1.20		9.61						3.85
Water Temperature	°C		29.6	31.2	29.0	27.0	29.0	24.0	24.2	23.0	23.6	23.2
pH		6.5 - 8.5	7.60	7.31	7.50	6.69	6.90	8.15	8.35	8.08	8.00	7.64
Electric Conductivity	MS/cm		200	320	240	240	770	280	170	140	120	370
Colour	TCU	<15	0.0	10.0	0.0	2.5	7.5	2.5	2.1	2.1	3.3	7.5
Turbidity	NTU	<5	0.10	20.0	0.50	3.5	12.0	0.56	0.49	7.87	1.0	3.3
Alkalinity	mg/l		101	160	114	105	158	104	101	80	71	177
Ca Hardness	mg/l		49	87	68	55	220	60	52	37	43	120
Total Hardness	mg/l	<500	82	150	104	200	300	88	88	89	71	200
Mg Hardness	mg/l		33	63	36	145	80	28	36	52	28	80
Iron (Fe)	mg/l	<0.3	0.01	3.20	0.11	0.50	4.90	0.03	0.02	0.06	0.09	0.09
Manganese (Mn)	mg/l	<0.1	<0.01	0.06	<0.01	0.40	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminium (Al)	mg/l	<0.2	0.08	0.05	0.05	0.40	0.06	0.02	0.01	0.01	0.02	0.01
Lead (Pb)	mg/l	<0.05	<0.01	0.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (Cu)	mg/l	<1.0	0.01	0.01	0.01	0.75	0.11	0.01	<0.01	<0.01	<0.01	0.01
Zinc (Zn)	mg/l	<5.0	<0.01	<0.01	<0.01	0.11	0.06	0.42	1.04	0.04	0.09	0.56
Cadmium (Cd)	mg/l	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.00	<0.01
Mercury (Hg)	mg/l	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Cr)	mg/l	<0.05	<0.01	<0.01	0.05	0.05	0.05	<0.01	<0.01	<0.01	<0.01	0.01
Arsenic (As)	mg/l	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)	mg/l	<200	6.9	4.0	9.2	8.0	17.0	5.0	3.5	2.3	3.5	14.7
Potassium (K)	mg/l		4.6	0.7	2.8	0.5	3.2	0.9	0.8	0.6	0.2	0.8
Chlorine (Cl)	mg/l	<250	5.0	17.0	18.0	15.0	81.0	8.0	8.0	3.0	4.9	9.0
Nitrite (NO2)	mg/l		<0.01	0.05	<0.01	0.80	0.13	0.02	0.01	0.02	0.05	0.04
Nitrate (NO3)	mg/l	<10	5.60	1.20	0.30	2.00	3.10	1.00	1.00	0.60	0.60	3.10
Ammonium (NH4)	mg/l		<0.01	<0.01	<0.01	0.20	0.02	<0.01	<0.01	<0.01	<0.01	0.02
Cyanide (CN)	mg/l	<0.1	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Sulfate (SO4)	mg/l	<400	8.7	8.2	8.4	100	79	9.0	9.4	24	14	64
Fluoride (F)	mg/l	<1.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TDS	mg/l	<1000	125	200	147	138	478	158	130	93	71	245
Silica (SiO2)	mg/l		6.39	6.71	6.71	4.41	6.17	8.50	11.80	17.80	16.60	23.50
Items Exceeded the Standard				Turb.		Fe, Mn Al, Cr	Turb.					
				Fe, Pb			Fe, Cr			Turb.		

C-1 RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (5)

Sampling date	07-09/09/93, 11-12/08/93	STANDARD	41	42	43	44	45	46	47	48	49	50
Sample No.			R005	GW002	GW003	GW004	GW006	GW005	GW036	GW035	GW034	R008
Sample Name			Koromabu	Ba uplands	Ba uplands	Ba uplands	Ba uplands	Ba uplands	Ba uplands	Ba uplands	Ba uplands	Ba river
Region			uplands									Lower Plain
Source			River	Dug Well	Dug Well	Borehole	Dug Well	Dug Well	Borehole	Borehole	Borehole	River
Well Depth		GL-m		7.55	7.82		9.72	4.80		45.00		
Groundwater Level		GL-m		5.41	4.45		6.35	3.00		8.53		
Water Temperature		°C		26.2	25.8	26.4	26.3	25.0	28.1	26.6	27.0	26.1
pH	6.5 - 8.5		7.93	6.31	7.09	6.80	6.62	6.32	7.06	6.81	6.88	7.75
Electric Conductivity		MS/cm	160	62	230	140	120	120	130	340	200	170
Colour	<15		12.5	2.5	0.0	0.0	12.5	0.0	0.0	2.5	1.5	7.5
Turbidity	<5		3.7	1.8	1.0	1.5	16.0	2.4	0.15	3.5	0.25	3.9
Alkalinity		mg/l	82	23	123	70	40	76	72	165	80	88
Ca Hardness		mg/l	50	7	55	35	15	30	31	90	50	48
Total Hardness	<500	mg/l	72	27	137	74	41	57	77	250	135	82
Mg Hardness		mg/l	22	20	82	39	26	27	46	160	85	34
Iron (Fe)	<0.3	mg/l	0.19	0.01	0.02	0.23	0.12	0.01	0.12	0.10	<0.01	0.09
Manganese (Mn)	<0.1	mg/l	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01
Aluminum (Al)	<0.2	mg/l	0.01	0.09	0.01	0.01	0.08	0.14	0.01	<0.01	0.15	0.10
Lead (Pb)	<0.05	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (Cu)	<1.0	mg/l	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (Zn)	<5.0	mg/l	0.48	0.44	0.90	0.24	0.52	0.24	0.21	0.21	0.34	0.38
Cadmium (Cd)	<0.005	mg/l	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00
Mercury (Hg)	<0.001	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Cr)	<0.05	mg/l	0.01	0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01
Arsenic (As)	<0.05	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)	<200	mg/l	10.5	2.1	5.4	8.8	4.4	3.9	5.5	10.0	18.0	3.0
Potassium (K)		mg/l	0.6	8.3	4.1	1.0	8.3	3.6	3.6	0.2	0.7	3.6
Chlorine (Cl)	<250	mg/l	6.0	4.0	13.0	4.0	7.5	4.0	6.0	18.0	50.0	7.0
Nitrite (NO2)		mg/l	0.01	0.03	0.19	0.01	0.05	<0.01	0.04	0.09	0.09	0.11
Nitrate (NO3)	<10	mg/l	0.30	0.50	4.60	0.80	3.30	0.70	0.60	0.11	0.10	<0.01
Ammonium (NH4)		mg/l	<0.01	<0.01	0.06	<0.01	0.03	<0.01	0.01	0.06	0.05	<0.01
Cyanide (CN)	<0.1	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sulfate (SO4)	<400	mg/l	20	10	31	30	19	5.6	25	105	37	11
Fluorine (F)	<1.5	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TDS	<1000	mg/l	110	35	141	88	77	70	79	200	135	101
Silica (SiO2)		mg/l	15.90	9.10	10.00	23.10	13.40	16.40	53.70	22.60	29.90	13.20
Items Exceeded the Standard				pH			Turb.	pH				

C-1 RESULTS OF WATER QUALITY ANALYSIS - DRY SEASON (6)

Sampling date	STANDARD	51	52	53	54	55	56	57	58	59	60	61
07-09/09/93, 11-12/08/93		R006	R007	R009	GW007	GW040	GW044	GW039	GW043	GW037	GW038	R102
Sample No.		Ba uplands	Ba river Moto uplands lower basin	Moto uplands	Tavarau- Raviravi	Tavarau- Raviravi	Tavarau- Raviravi	Tavarau- Raviravi	Tavarau- Raviravi	Tavarau- Raviravi	Tavarau- Moto uplands	River
Region		River	River	River	Dug Well	Borehole	Borehole	Borehole	Borehole	Dug Well	Dug Well	River
Source												
Well Depth	GL-m				6.63		40.00		25.00	4.65	5.20	
Groundwater Level	GL-m				2.66		3.33		4.15	3.44	3.17	
Water Temperature	°C				24.1	26.7	26.5	27.7	27.4	24.8	26.7	23.2
pH		6.5 - 8.5			7.15	7.33	6.83	7.22	7.00	6.58	6.75	7.20
Electric Conductivity	MS/cm				190	390	580	260	340	270	360	59
TDS	TCU	<15			7.5	0.0	2.0	12.5	2.0	5.0	0.0	12.5
Turbidity	NTU	<5			6.9	0.15	5.0	11.0	7.5	1.7	0.16	5.4
Alkalinity	mg/l				56	198	215	141	220	124	181	32
Ca. Hardness	mg/l				46	90	170	45	110	53	95	13
Total Hardness	mg/l	<500			69	225	365	71	285	98	170	33
Mg. Hardness	mg/l				23	135	195	36	175	45	55	20
Iron (Fe)	mg/l	<0.3	0.88	0.12	0.08	0.02	<0.01	0.16	<0.01	0.14	0.03	0.46
Manganese (Mn)	mg/l	<0.1	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
Aluminum (Al)	mg/l	<0.2	0.08	0.15	0.02	<0.01	<0.01	0.14	0.10	0.05	<0.01	0.10
Lead (Pb)	mg/l	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper (Cu)	mg/l	<1.0	0.03	0.03	0.01	0.01	<0.01	0.01	<0.01	<0.01	0.02	0.02
Zinc (Zn)	mg/l	<5.0	0.17	0.14	0.44	0.26	0.35	0.19	0.74	0.30	0.28	0.28
Cadmium (Cd)	mg/l	<0.005	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)	mg/l	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Cr)	mg/l	<0.05	0.01	0.02	0.01	<0.01	<0.01	0.04	0.01	0.01	0.01	0.01
Arsenic (As)	mg/l	<0.05	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)	mg/l	<200	8.0	14.3	33.5	5.0	12.0	27.0	2.0	25.0	25.0	4.2
Potassium (K)	mg/l		3.4	0.3	0.8	2.3	<0.1	4.3	0.1	1.2	0.5	1.5
Chlorine (Cl)	mg/l	<250	10.0	23.0	4.0	25.0	120.0	8.0	10.0	5.0	6.0	6.0
Nitrite (NO2)	mg/l		0.16	0.05	0.03	<0.01	0.10	0.14	0.05	0.01	<0.01	0.04
Nitrate (NO3)	mg/l	<10	0.70	0.80	3.00	0.20	0.15	0.10	0.10	<0.01	<0.01	0.30
Ammonium (NH4)	mg/l		0.31	<0.01	<0.01	0.01	0.05	0.14	0.05	0.01	<0.01	<0.01
Cyanide (CN)	mg/l	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sulfate (SO4)	mg/l	<400	8	12	88	36	46	19.9	95	44	58	11
Fluorine (F)	mg/l	<1.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TDS	mg/l	<1000	76	110	115	256	348	158	220	185	230	43
Silica (SiO2)	mg/l		13.30	14.40	8.70	4.70	3.96	2.34	6.20	17.60	16.50	23.20
Items Exceeded the Standard		Col., Turb.	Col., Turb.	Col., Turb.	Turb.	Col., Turb.	Turb.	Turb.	Turb.	Turb.	Turb.	Turb., Fe