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JAPAN INTERNATIONAL COOPERATION AGENCY
NATIONAL WATER SUPPLY AND DRAINAGE BOARD
THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

THE FEASIBILITY STUDY
ON
THE KALU GANGA WATER SUPPLY PROJECT
FOR
GREATER COLOMBO

VOLUME IV
DATA REPORT

NOVEMBER 1994

NIPPON JOGESUIDO SEKKEI CO., LTD.
NIPPON KOEI CO., LTD.

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Meteorological Data

MEAN MONTHLY TEMPERATURE AT COLOMBO

Maximum

unit: degrees celsius

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	31.7	31.5	31.5	31.8	30.9	30.0	29.7	29.7	30.1	30.2	30.0	30.2	30.6
1983	32.0	31.7	32.1	33.1	31.9	30.8	30.4	30.3	29.8	30.6	30.6	30.4	31.1
1984	30.2	30.0	31.1	30.8	31.1	29.9	29.2	29.8	30.1	29.6	29.8	30.2	30.2
1985	31.1	31.0	31.3	31.6	31.6	29.0	29.7	29.3	29.8	29.8	29.9	30.6	30.4
1986	29.9	31.0	31.3	31.9	31.4	30.8	30.5	29.7	30.0	30.0	31.1	31.7	30.8
1987	31.6	31.8	32.8	32.5	32.4	31.2	31.5	30.5	31.3	30.6	30.8	31.1	31.5
1988	32.9	32.0	32.5	32.3	32.3	30.7	30.5	30.2	30.3	31.4	31.1	31.6	31.5
1989	31.4	31.5	31.4	31.8	30.9	29.5	29.8	29.9	30.5	30.1	31.4	31.7	30.8
1990	31.1	32.3	32.4	32.0	31.5	30.9	30.1	30.4	31.3	31.0	30.3	30.6	31.2
1991	31.1	31.2	31.8	31.9	31.9	30.6	30.6	30.4	31.1	30.0	30.5	30.9	31.0
1992	32.1	31.7	32.8	33.2	31.7	30.8	30.0	30.2	30.3	30.4	30.3	30.7	31.2
Mean	31.4	31.4	31.9	32.1	31.6	30.4	30.2	30.0	30.4	30.3	30.5	30.9	30.9

Minimum

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	22.1	21.8	23.9	25.3	24.9	25.7	25.1	25.3	25.0	23.3	22.8	22.5	24.0
1983	22.1	23.2	24.4	26.0	26.0	26.2	25.2	25.6	24.3	24.3	23.1	23.3	24.5
1984	22.7	23.2	23.4	24.5	25.7	25.2	24.5	25.1	24.2	23.8	21.7	22.7	23.9
1985	22.9	22.9	24.1	25.6	25.9	24.7	25.4	25.2	25.0	24.0	23.0	22.8	24.3
1986	22.7	22.6	23.5	24.7	25.4	25.8	26.1	24.5	25.2	24.4	23.6	23.4	24.3
1987	23.2	22.5	24.4	25.0	25.2	26.5	26.4	24.9	25.3	24.2	24.3	23.6	24.6
1988	23.3	23.2	25.1	24.8	27.3	25.6	25.5	25.6	24.8	24.8	22.7	22.7	24.6
1989	22.8	21.8	23.1	25.0	25.7	25.1	24.8	25.6	25.1	24.2	23.5	23.1	24.2
1990	22.0	24.1	24.1	25.1	25.6	26.0	24.6	25.5	25.6	24.1	23.1	22.1	24.3
1991	22.1	22.2	24.4	25.1	25.9	25.3	25.8	25.7	25.7	23.8	23.2	22.7	24.3
1992	22.2	22.5	23.5	25.2	25.1	25.5	24.6	25.3	24.7	24.1	23.3	22.5	24.0
Mean	22.6	22.7	24.0	25.1	25.7	25.6	25.3	25.3	25.0	24.1	23.1	22.9	24.3

Daily Mean

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	26.9	26.7	27.7	28.6	27.9	27.9	27.4	27.5	27.6	26.8	26.4	26.4	27.3
1983	27.1	27.5	28.3	29.6	29.0	28.5	27.8	28.0	27.1	27.5	26.9	26.9	27.8
1984	26.5	26.6	27.3	27.7	28.4	27.6	26.9	27.5	27.2	26.7	25.8	26.5	27.0
1985	27.0	27.0	27.7	28.6	28.8	26.9	27.6	27.3	27.4	26.9	26.5	26.7	27.3
1986	26.3	26.8	27.4	28.3	28.4	28.3	28.3	27.1	27.6	27.2	27.4	27.6	27.6
1987	27.4	27.2	28.6	28.8	28.8	28.9	29.0	27.7	28.3	27.4	27.6	27.4	28.1
1988	28.1	27.6	28.8	28.6	29.8	28.2	28.0	27.9	27.6	28.1	26.9	27.2	28.1
1989	27.1	26.7	27.3	28.4	28.3	27.3	27.3	27.8	27.8	27.2	27.5	27.4	27.5
1990	26.6	28.2	28.3	29.6	28.6	28.5	27.4	28.0	28.5	27.6	26.7	26.4	27.7
1991	26.6	26.7	28.1	28.5	28.9	28.0	28.2	28.1	28.4	26.9	26.9	26.8	27.7
1992	27.2	27.1	28.2	29.2	28.4	28.2	27.3	27.8	27.5	27.3	26.8	26.6	27.6
Mean	27.0	27.1	28.0	28.6	28.7	28.0	27.7	27.7	27.7	27.2	26.8	26.9	27.6

Source: Department of Meteorology

MEAN MONTHLY TEMPERATURE AT RATNAPURA

Maximum

unit: degrees celsius

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	33.4	35.6	33.3	33.4	32.4	29.9	30.3	30.9	31.1	31.5	31.2	31.2	32.0
1983	33.5	35.7	35.7	36.0	33.5	31.2	31.4	31.2	30.1	32.5	31.9	31.2	32.8
1984	30.8	30.4	33.1	31.5	31.5	30.1	29.0	31.2	31.7	31.1	30.9	31.6	31.1
1985	32.5	32.9	33.6	33.2	31.7	28.6	29.9	30.0	30.3	30.7	31.1	31.6	31.3
1986	31.0	33.8	32.3	33.5	32.1	31.6	30.7	30.6	29.4	30.7	31.5	32.1	31.6
1987	32.1	35.1	35.8	34.0	33.7	31.5	33.4	30.0	32.8	31.7	31.6	33.0	32.9
1988	33.3	34.0	34.0	33.3	31.9	30.9	30.4	29.8	30.1	32.9	31.7	32.1	32.0
1989	32.3	34.8	34.9	33.7	31.2	29.4	29.2	30.3	30.1	30.9	32.4	32.8	31.8
1990	33.0	35.2	34.2	33.3	31.4	30.5	30.0	31.0	32.2	31.4	31.4	30.9	32.0
1991	32.2	33.9	33.9	33.2	33.0	30.1	30.9	30.3	32.3	30.0	31.3	31.3	31.9
1992	32.4	34.7	37.0	34.8	32.0	30.5	29.7	30.4	30.4	31.0	30.7	30.9	32.0
Mean	32.4	34.2	34.3	33.6	32.2	30.4	30.4	30.5	31.0	31.3	31.4	31.7	32.0

Minimum

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	21.6	22.2	22.9	24.1	23.9	23.9	24.1	23.9	23.7	23.0	22.9	22.6	23.2
1983	21.9	22.6	23.8	24.3	24.5	24.6	24.1	24.3	23.3	23.3	22.7	22.8	23.5
1984	22.3	22.5	22.9	23.6	24.5	24.1	23.2	23.8	22.8	22.7	22.9	22.6	23.2
1985	22.5	22.5	23.3	23.9	24.1	23.4	23.4	23.6	23.4	23.1	22.3	22.7	23.2
1986	22.4	21.8	22.6	23.7	23.9	24.4	24.3	23.1	23.6	23.4	22.9	22.8	23.2
1987	22.6	22.6	23.5	23.6	23.9	25.0	24.0	23.7	23.7	23.8	23.5	23.4	23.6
1988	22.6	22.6	24.0	23.9	25.1	24.1	24.2	24.0	23.6	23.9	22.6	22.4	23.6
1989	22.1	21.5	22.6	23.7	24.3	23.3	23.7	24.0	23.4	23.4	23.6	23.0	23.2
1990	21.7	22.9	23.2	24.2	24.3	24.5	23.4	24.3	23.5	23.4	23.2	22.4	23.4
1991	22.5	21.5	23.5	23.7	24.6	24.4	24.1	24.0	23.6	23.0	22.9	22.5	23.4
1992	21.7	22.1	22.6	23.6	24.1	24.2	23.6	24.0	23.2	-	22.7	-	-
Mean	22.2	22.3	23.2	23.8	24.3	24.2	23.8	23.9	23.4	23.3	22.9	22.7	23.4

Daily Mean

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	27.5	28.9	28.1	28.8	28.2	26.9	27.2	27.4	27.4	27.3	27.1	26.9	27.6
1983	27.7	29.2	29.8	30.2	29.0	27.9	27.8	27.8	26.7	27.9	27.3	27.0	28.2
1984	26.6	26.5	28.0	27.6	28.0	27.1	26.1	27.5	27.3	26.9	26.9	27.1	27.1
1985	27.5	27.7	28.5	28.6	27.9	26.0	26.7	26.8	26.9	26.9	26.7	27.2	27.3
1986	26.7	27.8	27.5	28.6	28.0	28.0	27.5	26.9	26.5	27.1	27.2	27.5	27.4
1987	27.4	28.9	29.7	28.8	28.8	28.3	28.7	26.9	28.3	27.8	27.6	28.2	28.3
1988	28.0	28.3	29.0	28.6	28.5	27.5	27.3	26.9	26.9	28.4	27.2	27.3	27.8
1989	27.2	28.2	28.8	28.7	27.8	26.4	26.5	27.2	26.8	27.2	28.0	27.9	27.5
1990	27.4	29.1	28.7	28.8	27.9	27.5	26.7	27.7	27.9	27.4	27.3	26.7	27.7
1991	27.4	27.7	28.7	28.5	28.8	27.3	27.5	27.2	28.0	26.5	27.1	26.9	27.6
1992	27.1	28.4	29.8	29.2	28.1	27.4	26.7	27.2	26.8	-	26.7	-	-
Mean	27.3	28.2	28.8	28.7	28.3	27.3	27.1	27.2	27.2	27.3	27.2	27.3	27.7

Source Department of Meteorology

MEAN MONTHLY RELATIVE HUMIDITY

COLOMBO

unit:%

Month	Time	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Mean
JAN	day	64	65	76	70	74	71	62	70	67	70	64	68
	night	83	83	92	88	88	85	80	86	84	88	82	85
FEB	day	66	71	75	72	69	67	68	64	69	69	66	69
	night	87	87	91	90	89	87	88	86	87	87	87	88
MAR	day	72	70	71	73	73	69	72	67	75	72	67	71
	night	90	87	91	91	92	88	89	89	89	90	86	89
APR	day	74	69	80	74	75	73	76	76	75	75	68	74
	night	89	86	93	88	93	91	92	89	89	86	86	89
MAY	day	78	77	81	74	77	73	77	79	77	77	79	77
	night	92	89	89	87	88	91	85	88	87	89	89	89
JUN	day	81	80	81	83	77	78	78	81	79	80	80	80
	night	88	88	88	89	86	86	85	80	85	87	87	86
JUL	day	79	79	81	79	77	73	79	81	79	77	81	79
	night	88	89	89	86	85	85	87	87	89	85	89	87
AUG	day	78	79	77	80	78	80	80	77	76	77	78	78
	night	86	89	86	86	88	88	87	84	85	83	86	86
SEP	day	66	82	75	79	79	79	79	77	73	74	79	76
	night	87	91	87	91	88	89	88	87	85	84	88	88
OCT	day	76	78	77	79	80	82	72	78	75	80	77	77
	night	95	91	89	89	91	95	85	91	90	91	88	90
NOV	day	81	76	79	76	73	77	69	74	78	77	79	76
	night	95	92	94	91	90	91	89	92	92	93	93	92
DEC	day	73	77	72	73	75	72	67	67	75	72	71	72
	night	88	93	88	91	91	88	83	87	92	88	87	89

RATNAPURA

Month	Time	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Mean
JAN	day	65	70	80	76	77	77	71	74	70	76	70	73
	night	90	92	93	94	95	-	-	93	-	91	87	92
FEB	day	56	63	81	73	69	63	70	60	69	65	59	66
	night	89	88	95	91	93	91	90	90	-	87	83	90
MAR	day	70	63	73	75	75	66	73	64	75	72	53	69
	night	92	89	93	92	95	93	91	91	-	-	-	92
APR	day	75	65	82	76	78	76	75	72	79	77	69	75
	night	93	86	95	94	-	94	93	81	93	93	89	91
MAY	day	81	75	81	77	78	76	81	81	83	78	80	79
	night	93	93	93	93	95	95	93	94	93	93	-	94
JUN	day	83	81	82	83	76	79	81	85	82	83	79	81
	night	93	94	93	95	93	94	93	95	92	-	89	93
JUL	day	78	78	83	80	78	76	82	84	81	77	81	79
	night	92	93	94	94	93	93	93	95	92	90	90	93
AUG	day	76	79	71	79	78	85	83	80	75	80	79	79
	night	94	93	87	94	-	97	93	94	87	91	-	92
SEP	day	76	82	71	79	85	75	83	83	76	73	81	79
	night	92	95	99	96	96	93		95	91		90	93
OCT	day	82	73	76	82	81	85	73	81	80	81	78	79
	night	94	92	92	91	95	95		95	93		-	93
NOV	day	82	75	81	78	79	83	77	79	81	79	82	80
	night	94	94	93	96	95	96	-	96	93		-	95
DEC	day	79	80	75	79	79	75	76	71	81	76	80	77
	night	93	94	93	96	95	94		93	92			94

Source:Department of Meteorology

MEAN MONTHLY WIND SPEED

AT COLOMBO

unit : km/hr

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	5.5	2.4	3.3	3.5	3.7	5.5	4.9	4.8	4.2	2.9	2.3	3.5	4.2
1983	3.9	3.2	3.2	3.5	3.8	3.6	3.4	3.8	2.9	3.0	3.0	3.1	3.4
1984	3.0	3.1	2.7	2.8	5.5	4.1	3.9	4.2	3.9	3.3	2.9	4.0	3.6
1985	3.5	3.0	4.6	5.4	6.9	7.2	6.7	6.7	5.9	5.2	5.2	5.3	5.5
1986	7.0	5.5	4.6	4.7	5.7	6.8	7.6	6.2	6.6	5.0	5.4	5.1	5.9
1987	6.7	6.2	5.5	4.9	5.1	7.3	5.9	5.8	5.1	3.9	7.0	6.0	5.8
1988	7.6	5.7	4.8	4.5	6.4	5.7	5.8	5.5	5.6	5.3	5.7	6.1	5.7
1989	6.2	5.5	4.7	4.9	6.4	7.0	7.3	7.3	6.5	4.5	4.1	4.4	5.7
1990	5.0	4.9	4.4	4.8	6.5	7.3	5.8	6.9	6.3	4.5	4.2	3.9	5.4
1991	4.3	4.7	4.4	4.9	4.9	6.0	7.1	7.6	6.3	4.8	3.8	4.3	5.4
1992													
Mean	5.6	4.4	4.2	4.4	5.5	6.3	5.8	5.9	5.3	4.2	4.4	4.6	5.0

AT COLOMBO

unit : m/sec

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	2.4	0.7	0.9	1.0	1.0	1.5	1.4	1.3	1.2	0.8	0.6	1.0	1.2
1983	1.1	0.9	0.9	1.0	1.1	1.0	0.9	1.1	0.8	0.8	0.8	0.9	0.9
1984	0.8	0.9	0.8	0.8	1.5	1.1	1.1	1.2	1.1	0.9	0.8	1.1	1.0
1985	1.0	0.8	1.5	1.5	1.9	2.0	1.9	1.9	1.6	1.4	1.4	1.5	1.5
1986	1.9	1.5	1.3	1.3	1.6	1.9	2.1	1.7	1.8	1.4	1.5	1.4	1.6
1987	1.9	1.7	1.5	1.4	1.4	2.0	1.6	1.6	1.4	1.1	1.9	1.7	1.6
1988	2.1	1.6	1.3	1.3	1.8	1.6	1.6	1.5	1.6	1.5	1.6	1.7	1.6
1989	1.7	1.5	1.3	1.4	1.8	1.9	2.0	2.0	1.8	1.3	1.1	1.2	1.6
1990	1.4	1.4	1.2	1.3	1.8	2.0	1.6	1.9	1.8	1.3	1.2	1.1	1.5
1991	1.2	1.3	1.2	1.4	1.4	2.2	2.0	2.1	1.8	1.3	1.1	1.2	1.5
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean	1.6	1.2	1.2	1.2	1.5	1.7	1.6	1.6	1.5	1.2	1.2	1.3	1.4

Source Department of Meteorology

MEAN MONTHLY WIND SPEED

AT RATNAPURA

unit : km/hr

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	1.7	2.9	1.8	1.9	1.4	2.3	2.2	2.8	2.4	0.9	0.7	0.7	1.8
1983	2.2	3.5	3.7	3.5	3.6	4.1	4.2	4.4	3.3	4.1	3.5	2.5	3.6
1984	2.6	2.7	3.4	3.0	3.3	4.8	4.3	5.2	4.3	3.2	3.3	3.1	3.6
1985	2.3	2.9	2.9	3.1	3.8	4.6	4.1	4.1	3.3	3.3	2.9	2.0	3.3
1986	2.8	2.8	2.3	2.8	3.1	4.5	4.3	3.8	3.3	2.5	2.4	1.7	3.0
1987	2.0	2.6	2.7	2.4	2.3	4.5	3.7	2.6	2.6	1.9	2.1	2.5	2.7
1988	1.7	2.1	2.2	2.2	1.6	1.8	2.6	2.4	2.2	2.4	2.0	1.6	2.1
1989	1.5	2.1	2.6	2.4	2.3	2.2	2.3	2.6	1.7	2.1	3.2	2.4	2.3
1990	2.1	2.3	2.3	2.3	2.5	2.9	2.6	3.6	2.6	2.1	2.2	1.4	2.4
1991	1.6	1.9	2.0	2.0	2.0	2.1	2.4	2.9	2.7	2.4	1.7	1.5	2.1
1992	1.6	2.6	2.7	2.3	2.0	3.2	2.1	2.7	2.4	2.2	1.8	1.4	2.2
Mean	2.0	2.6	2.6	2.5	2.5	3.4	3.2	3.4	2.8	2.5	2.3	1.9	2.6

AT RATNAPURA

unit : m/sec

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	0.5	0.8	0.5	0.5	0.4	0.6	0.6	0.8	0.7	0.3	0.2	0.2	0.5
1983	0.6	1.0	1.0	1.0	1.0	1.1	1.2	1.2	0.9	1.1	1.0	0.8	1.0
1984	0.7	0.8	0.9	0.8	0.9	1.3	1.2	1.5	1.2	0.9	0.9	0.9	1.0
1985	0.6	0.8	0.8	0.9	1.1	1.3	1.1	1.1	0.9	0.9	0.8	0.6	0.9
1986	0.8	0.8	0.6	0.8	0.9	1.3	1.2	1.1	0.9	0.7	0.7	0.5	0.8
1987	0.6	0.7	0.8	0.7	0.6	1.3	1.0	0.7	0.7	0.5	0.6	0.7	0.7
1988	0.5	0.6	0.6	0.6	0.4	0.5	0.7	0.7	0.6	0.7	0.6	0.4	0.6
1989	0.4	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.5	0.6	0.9	0.7	0.6
1990	0.6	0.6	0.6	0.6	0.7	0.8	0.7	1.0	0.7	0.6	0.6	0.4	0.7
1991	0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.7	0.5	0.4	0.6
1992	0.4	0.7	0.8	0.6	0.6	0.9	0.6	0.8	0.7	0.6	0.5	0.4	0.6
Mean	0.6	0.7	0.7	0.7	0.7	0.9	0.9	0.9	0.8	0.7	0.7	0.6	0.7

Source:Department of Meteorology

MEAN MONTHLY SUNSHIME DURATION

COLOMBO unit : hr

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	9.3	10.1	8.8	8.5	7.2	5.3	6.9	6.7	6.5	6.6	6.0	5.3	7.3
1983	8.7	9.5	10.0	8.8	8.2	6.5	6.7	6.3	4.1	7.4	7.4	6.7	7.5
1984	6.3	4.9	8.9	6.3	6.1	6.3	5.6	6.7	5.7	7.0	4.9	5.8	6.2
1985	-	7.6	8.9	8.6	7.0	4.7	7.6	6.3	6.8	7.0	7.2	7.6	6.6
1986	6.9	9.7	6.7	8.4	7.8	7.2	6.1	6.6	6.6	6.0	8.2	-	6.7
1987	7.7	10.5	10.2	8.4	9.0	6.2	9.3	5.8	6.0	5.7	6.9	6.6	7.7
1988	7.2	9.1	8.4	8.3	6.0	6.8	4.9	-	5.9	-	8.3	6.5	6.0
1989	7.0	8.9	9.3	7.4	5.7	5.9	7.3	7.3	5.9	6.7	8.1	8.3	7.3
1990	8.1	9.1	9.2	7.4	6.7	6.9	6.2	6.3	7.9	6.5	6.9	6.5	7.3
1991	7.4	7.2	9.0	8.4	7.3	5.1	6.7	5.6	7.1	4.9	7.4	6.7	6.9
1992													
Mean	6.9	8.7	8.9	8.1	7.1	6.1	6.7	5.8	6.3	5.8	7.1	6.0	6.9

RATNAPURA unit : hr

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	8.0	8.7	6.5	6.3	5.2	4.0	4.6	6.1	5.4	4.7	4.4	4.2	5.7
1983	6.7	9.0	9.6	7.6	7.2	5.5	5.6	5.4	4.2	6.8	6.4	4.6	6.6
1984	3.9	3.6	6.2	4.7	5.0	4.8	3.6	6.2	5.5	6.3	4.0	5.9	5.0
1985	6.1	6.1	6.3	6.5	5.6	2.4	5.5	5.0	5.7	4.9	5.6	4.8	5.4
1986	5.5	8.0	4.8	6.3	6.7	6.0	4.9	5.6	1.4	4.3	5.9	5.5	5.4
1987	5.7	9.5	7.7	6.3	7.0	5.6	8.0	3.8	6.7	4.5	5.2	6.0	6.3
1988	6.3	7.1	6.2	5.4	3.7	5.5	3.7	4.0	4.1	7.3	5.3	5.7	5.4
1989	5.3	8.0	7.7	7.1	4.3	4.6	3.7	5.5	4.0	4.5	5.9	6.3	5.6
1990	7.4	7.6	7.2	5.8	5.1	5.5	5.1	4.8	6.2	5.2	5.2	4.1	5.8
1991	5.4	7.6	7.0	5.7	6.6	3.7	5.4	4.5	6.0	3.8	4.6	4.8	5.4
1992	6.7	8.1	8.6	-	-	-	-	-	-	-	2.6	3.3	2.4
Mean	6.1	7.6	7.1	6.2	5.6	4.8	5.0	5.1	4.9	5.2	5.0	5.0	5.6

Source:Department of Meteorology

MEAN MONTHLY EVAPORATION

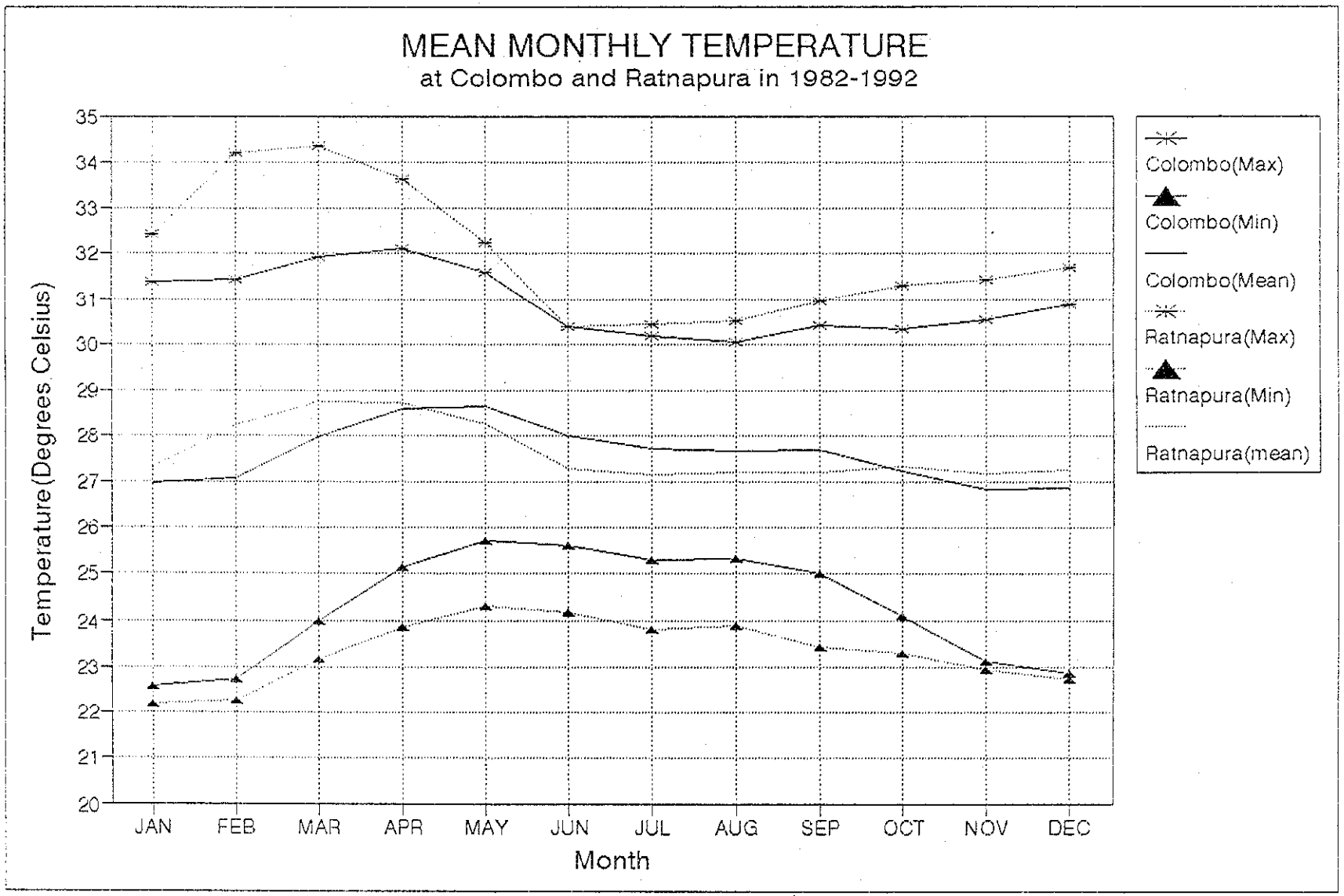
COLOMBO unit:mm

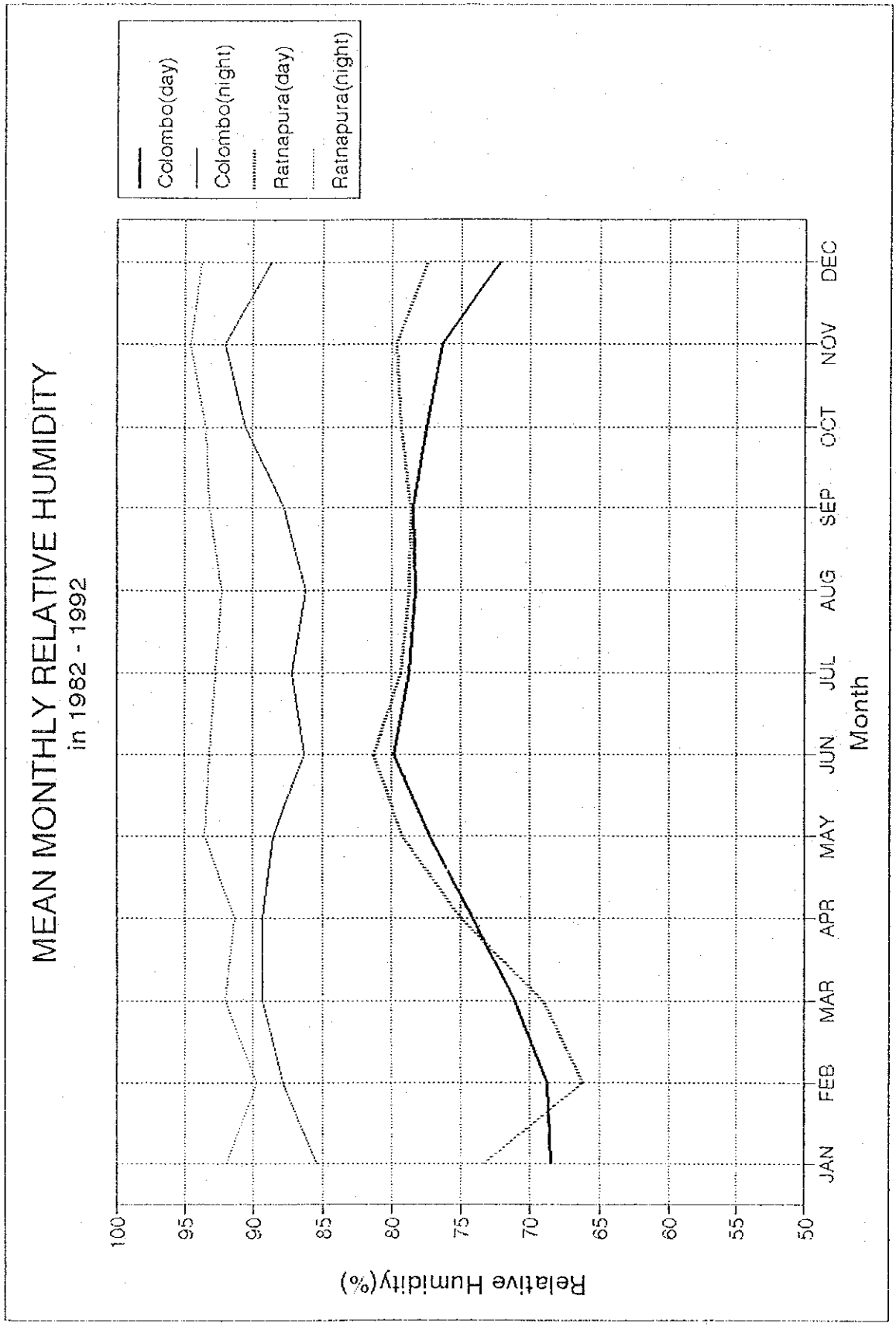
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	-	-	-	-	-	-	-	-	-	-	-	-	
1983	-	-	-	-	-	-	3.91	1.97	-	4.53	4.25	3.34	3.60
1984	-	-	-	-	-	-	-	-	-	-	-	-	
1985	-	-	-	-	-	-	-	-	-	-	-	-	
1986	3.07	4.36	3.78	3.90	4.10	4.17	2.93	3.58	3.39	2.89	3.44	3.23	3.57
1987	3.70	4.58	5.33	3.99	4.21	3.86	4.42	2.45	4.18	3.12	2.73	3.37	3.83
1988	3.48	4.39	5.07	4.27	3.49	3.16	3.33	4.01	4.18	3.93	3.67	4.02	3.92
1989	5.70	4.06	3.18	3.98	3.70	3.89	3.45	4.04	-	-	4.00	3.66	3.97
1990	3.47	4.58	4.91	4.32	3.53	3.42	3.27	3.33	4.14	3.53	-	2.66	3.74
1991	3.40	4.07	4.75	4.07	4.23	3.75	3.85	4.27	4.13	2.99	3.35	-	3.90
1992	3.95	4.45	5.19	4.51	3.48	4.02	3.35	3.77	3.97	3.44	2.66	3.24	3.84
Mean	3.82	4.36	4.60	4.15	3.82	3.75	3.56	3.43	4.00	3.49	3.44	3.36	3.79

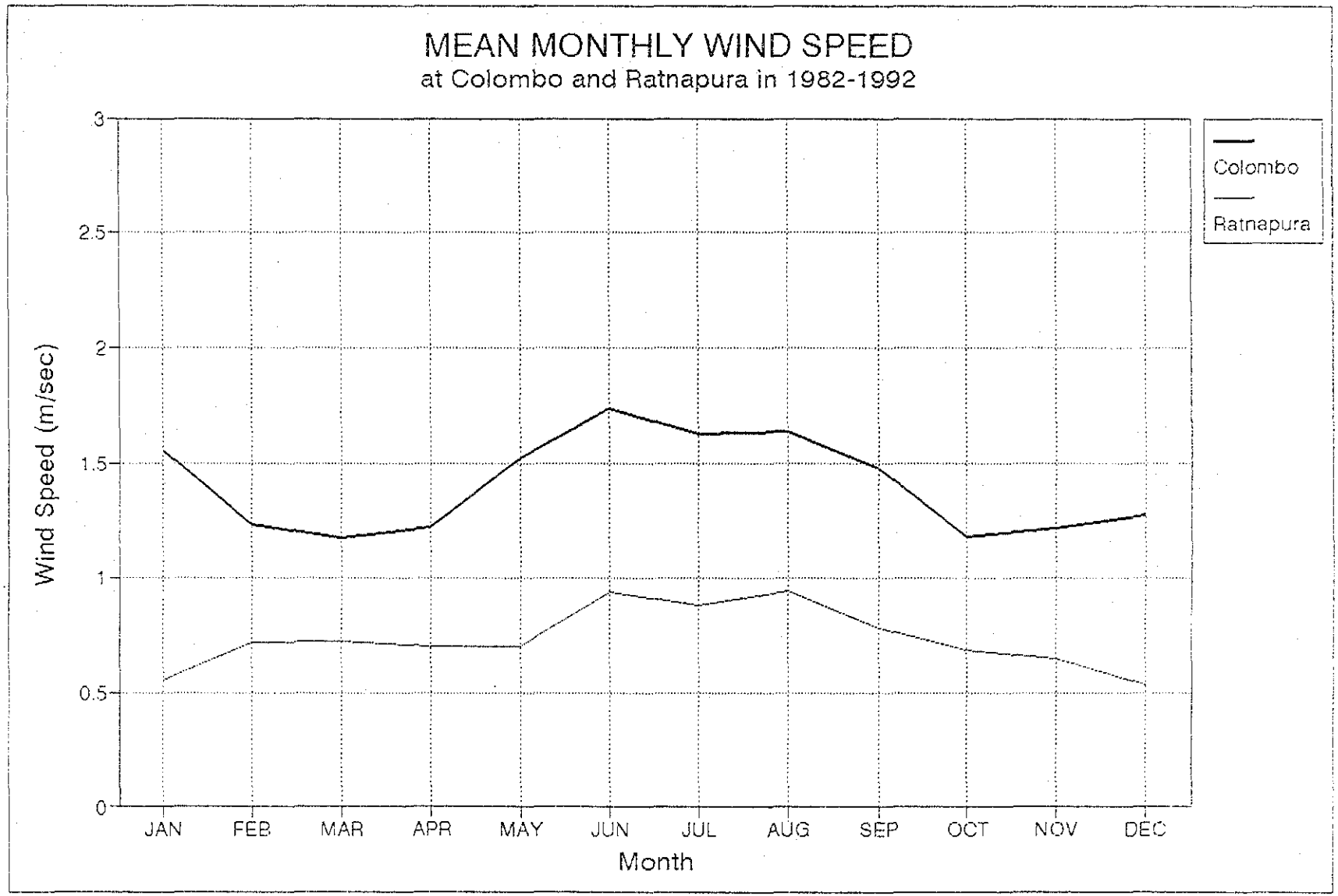
RATNAPURA

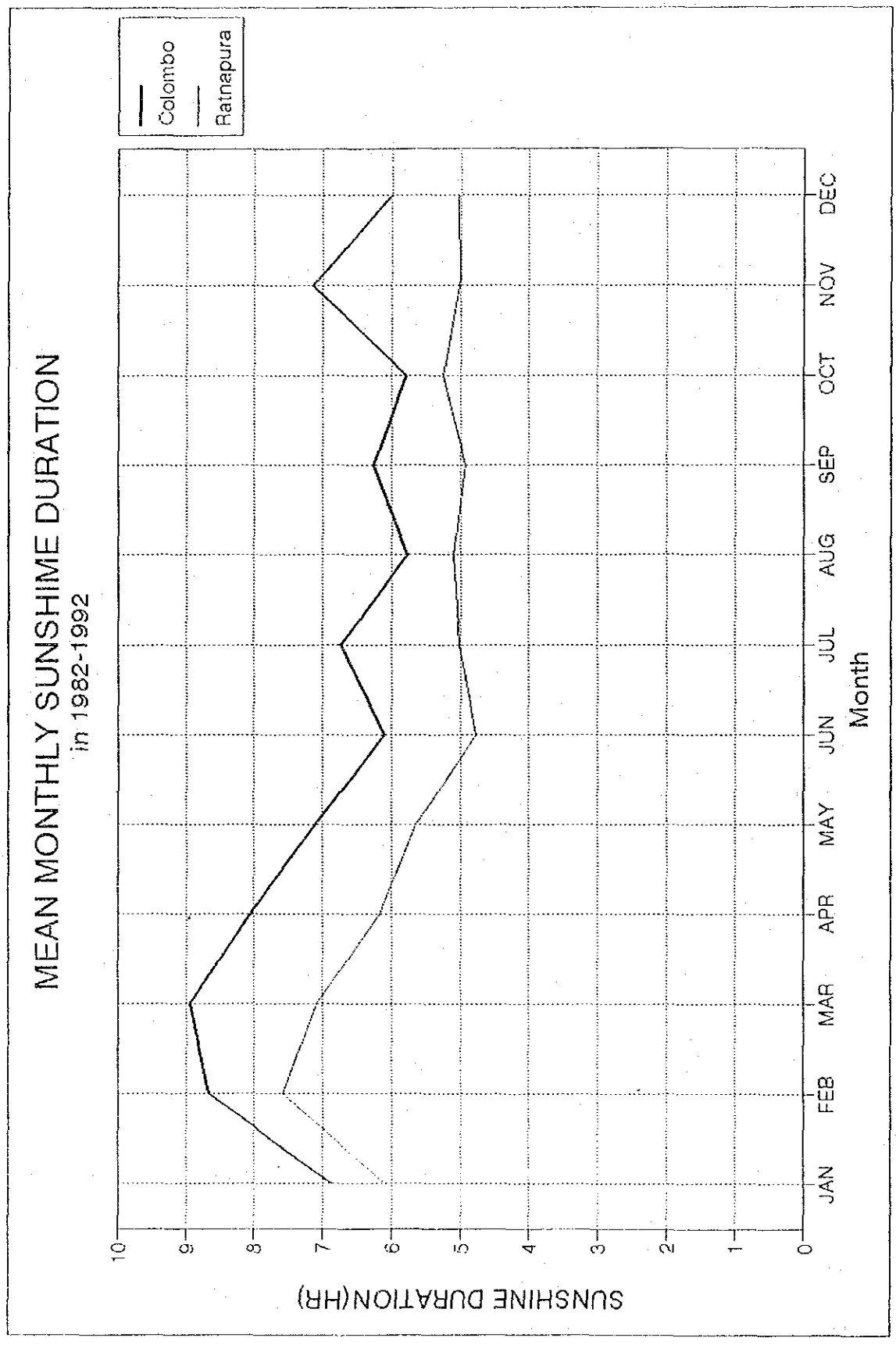
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1982	3.53	4.03	4.21	3.04	3.70	3.51	3.47	2.98	3.54	2.39	3.48	2.94	3.40
1983	3.50	5.06	5.74	4.90	4.28	3.74	3.57	3.49	2.55	3.73	3.71	2.28	3.88
1984	2.96	3.24	3.37	3.01	3.65	3.82	2.89	4.25	4.34	3.67	3.58	3.47	3.52
1985	3.16	4.00	4.58	4.01	3.63	2.76	3.39	3.43	3.42	3.81	3.83	3.02	3.59
1986	3.42	4.41	3.73	4.09	3.59	4.40	3.23	3.83	2.81	3.63	3.39	3.39	3.66
1987	3.72	5.36	5.55	4.87	4.12	4.05	4.46	3.03	4.17	2.79	3.64	3.80	4.16
1988	3.86	4.42	4.44	3.78	3.07	4.20	3.02	3.54	4.05	4.51	4.34	3.43	3.86
1989	3.54	4.90	5.50	4.20	3.71	2.84	3.35	3.35	3.68	4.03	4.25	3.44	4.01
1990	4.32	5.10	4.59	3.87	3.96	3.15	3.23	3.47	3.69	3.12	4.01	3.83	3.93
1991	3.62	4.56	4.38	3.34	4.29	2.86	4.25	3.44	3.97	6.51	3.76	3.38	3.95
1992	3.70	5.53	6.21	4.97	4.18	-	3.61	3.47	3.22	3.24	2.67	2.89	3.97
Mean	3.58	4.60	4.75	4.01	3.83	3.53	3.50	3.48	3.59	3.77	3.70	3.26	

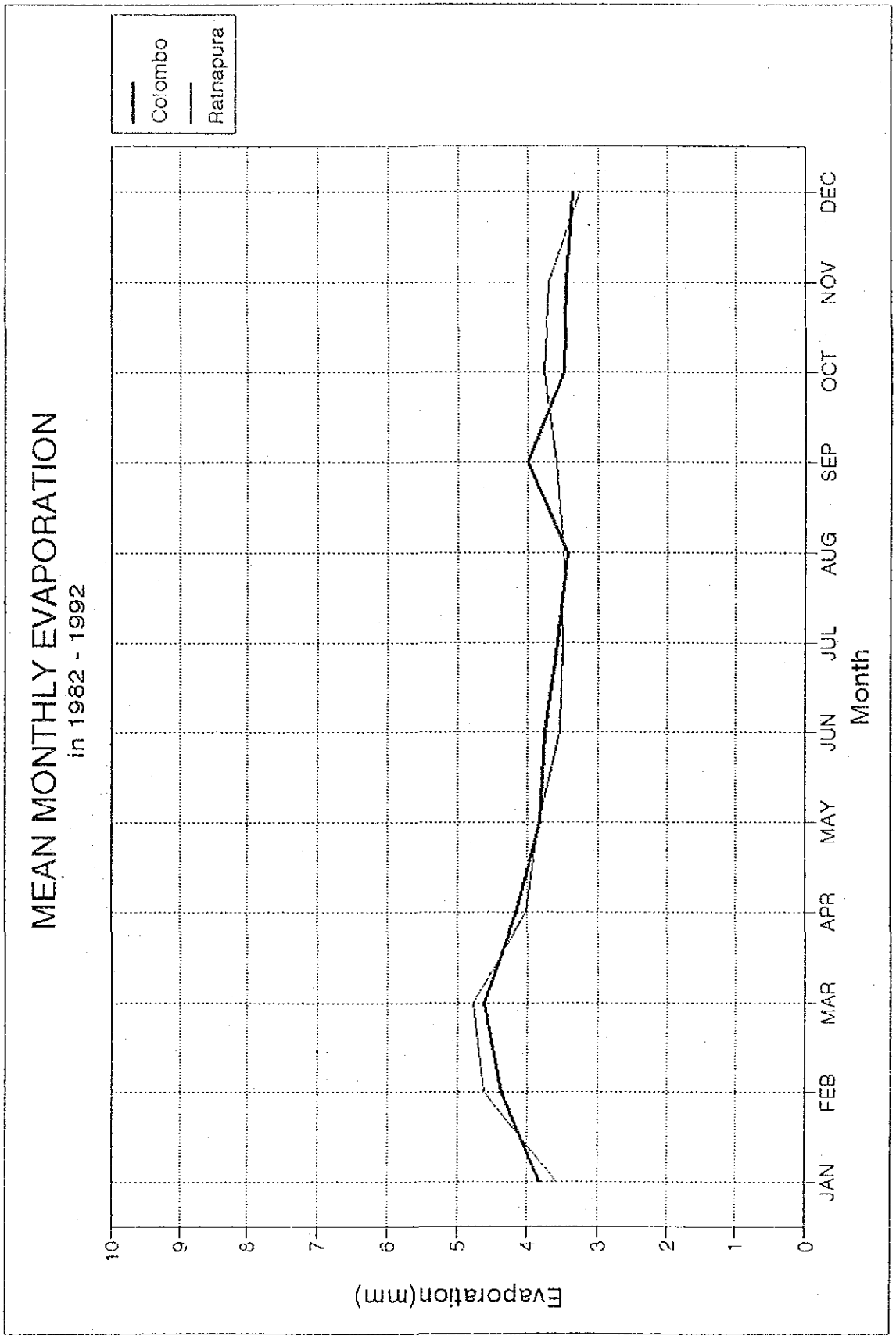
Source:Department of Meteorology


MEAN MONTHLY TEMPERATURE
at Colombo and Ratnapura in 1982-1992
Temperature(Degrees Celsius)
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month
Colombo(Max)
Colombo(Min)
Colombo(Mean)
Ratnapura(Max)
Ratnapura(Min)
Ratnapura(mean)


MEAN MONTHLY RELATIVE HUMIDITY
in 1982 - 1992
Colombo(day)
Colombo(night)
Ratnapura(day)
Ratnapura(night)
Relative Humidity(%)
100
95
90
85
80
75
70
65
60
55
50
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month


MEAN MONTHLY WIND SPEED
at Colombo and Ratnapura in 1982-1992
Wind Speed (m/sec)
3
2.5
2
1.5
1
0.5
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month
Colombo
Ratnapura


MEAN MONTHLY SUNSHIME DURATION
in 1982-1992
Colombo
Ratnapura
SUNSHINE DURATION(HR)
10
9
8
7
6
5
4
3
2
1
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month


MEAN MONTHLY EVAPORATION
in 1982 - 1992
Colombo
Ratnapura
Evaporation(mm)
0
1
2
3
4
5
6
7
8
9
10
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month

TIDE RECORD AT COLOMBO PORT

	unit:m in tide gauge reading			unit:m.MSL		
Year	Mean	Mean(Max)	Mean(Min)	Mean	Mean(Ma	Mean(Min)
1949	0.510			0.080		
1950	0.516			0.086		
1951						
1952	0.466			0.036		
1953	0.501			0.071		
1954	0.520			0.090		
1955	0.529			0.099		
1956	0.507			0.077		
1957	0.523			0.093		
1958	0.522			0.092		
1959	0.555			0.125		
1960	0.531	0.767	0.265	0.101	0.337	-0.165
1961	0.499	0.761	0.250	0.069	0.331	-0.180
1962	0.504	0.748	0.248	0.074	0.318	-0.182
1963	0.502	0.772	0.261	0.072	0.342	-0.169
1964	0.502	0.774	0.251	0.072	0.344	-0.179
1965	0.493	0.770	0.252	0.063	0.340	-0.178
1966	0.502	0.769	0.260	0.072	0.339	-0.170
1967	0.465	0.739	0.214	0.035	0.309	-0.216
1968	0.472	0.742	0.214	0.042	0.312	-0.216
1969	0.468	0.749	0.228	0.038	0.319	-0.202
1970	0.503	0.770	0.261	0.073	0.340	-0.169
1971	0.525	0.795	0.278	0.095	0.365	-0.152
1972	0.463	0.714	0.213	0.033	0.284	-0.217
1973	0.498	0.773	0.246	0.068	0.343	-0.184
1974	0.507	0.763	0.268	0.077	0.333	-0.162
1975	0.502	0.741	0.276	0.072	0.311	-0.154
1976	0.441	0.724	0.193	0.011	0.294	-0.237
1977	0.457	0.715	0.214	0.027	0.285	-0.216
1978	0.555	0.817	0.312	0.125	0.387	-0.118
1979						
1980						
1981	0.537	0.803	0.294	0.107	0.373	-0.136
1982	0.484	0.745	0.247	0.054	0.315	-0.183
1983	0.483	0.746	0.247	0.053	0.316	-0.183
1984	0.507	0.777	0.261	0.077	0.347	-0.169
1985	0.502	0.774	0.252	0.072	0.344	-0.178
1986	0.474	0.748	0.221	0.044	0.318	-0.209
1987	0.506	0.771	0.249	0.076	0.341	-0.181
1988	0.543	0.800	0.305	0.113	0.370	-0.125
1989	0.505	0.774	0.285	0.075	0.344	-0.145
1990	0.497	0.764	0.253	0.067	0.334	-0.177
Average	0.502	0.762	0.252	0.072	0.332	-0.178

Source:Ports Authority

CHAPTER 3

Legislation related to the NWSDB and Urban Council

THE AREAS OF AUTHORITY, AND POWERS, FUNCTIONS AND DUTIES OF THE NATIONAL WATER SUPPLY AND DRAINAGE BOARD

(Extracted from Part II of the National Water Supply and Drainage Board Law No.2 of 1974 of the National State Assembly)

The National Water Supply and Drainage Board Law No.2 of 1974 states the Authority, Powers, Duties and Functions of the Board as follows:

Section 15 (The Areas of Authority of the Board)

(1) The Minister may, with the concurrence of the Minister in charge of the subject of Local government, by order published in the Gazette, declare any such area in Sri Lanka as may be specified in the Order to be an area of authority of the Bards.

(2) Any area in respect of of which an order is made under subsection (1) may include the whole, or any part, of the administrative limits of one, or more than one, local authority.

(3) Any Order made by the Minister under the preceding provisions of this section shall come into operation on the date of its publication in the Gazette or on such later date as may be specified therein.

Section 16 (General Duties of the Board in its Areas of Authority)

(1) It shall be the duty of the Board in each area of its authority:-

(a) to develop, provide, operate and control an efficient, coordinated water supply and to distribute water for public, domestics or industrial purposes;

(b) to establish, develop, operate and control and efficient, coordinated sewerage system;

(c) to take over and carry on any water supply or sewerage undertaking transferred to the Board under section 57;

(d) to take over and carry on any water supply or sewerage undertaking of any local authority transferred to the Board under section 64 by a voluntary transfer Order or a compulsory transfer Order;

(e) to provide a supply of water and distribute it or sell water in bulk or otherwise, to any authority, any government department, any other institution or organization, or any individual; and

(f) to do all other acts and things as may be necessary for the aforesaid purposes.

(2) Nothing in this section shall be construed as imposing on the Board, either directly or indirectly, any form of duty of liability enforceable by proceedings before any court or tribunal to which the Board will not otherwise be subject.

(3) Nothing in this section shall preclude the Board from carrying out such works as may be necessary in any part of Sri Lanka for the discharge of its functions.

Section 17 (The Powers of the Board)

The Board may exercise all or any of the following powers:-

(a) to purchase water in bulk;

(b) to carry out investigations and to collect and record data concerning the provision, development and maintenance of water supply and sewerage services;

(c) to acquire, hold take or give on lease or hire, mortgage, pledge or sell otherwise dispose of, any immovable or movable property

(d) to enter into and perform, either directly or through duly authorized agents, all such contracts as may be necessary for the performance of the duties and the exercise of the powers of the Board;

(e) to do anything necessary for the purpose of advancing skill of persons employed by the Board or efficiency of the equipment of the Board, or for improving the manner in which that equipment is operated;

(f) to conduct research into matters affecting the provision, development and maintenance of water supply and sewerage services;

(g) to provide facilities for training persons required to carry out the work of the Board, including the arrangement by the Board with any body or agency for such facilities;

(h) to establish provident funds and pension funds, and to provide welfare and recreational facilities houses, hostels and other like accommodation, for the persons employed by the Board;

(i) subject to the provisions of Part IV of this Law, to make rules in relation to the officers and servants of the Board, including their appointment, promotion, remuneration, disciplinary control, conduct and the grant of leave to the;

(j) to enter into joint schemes with any Government department or any body approved by the Minister, for the provision, development and maintenance of water supply and sewerage services;

(k) to make rules in respect of the administration of the affairs of the Board; and

(l) to do all other things which, in the opinion of the Board, are necessary to facilitate the proper carrying on of its business.

THE POWERS OF MUNICIPAL COUNCILS AND URBAN COUNCILS TO ESTABLISH AND MAINTAIN PUBLIC UTILITY SERVICES

1. Municipal Councils

(Extracted from Government Ordinances gazetted under Chapter 252 Municipal Councils of 15th August 1947)

Section 45 (General Powers of Municipal Councils)

(1) For the purpose of the discharge of its duties under this ordinance, a Municipal Council without prejudice to any other powers specially conferred upon it) shall have the following powers:

(a) to (t) eliminated.

(u) to establish and maintain any of the following public services:

(i) Water supply;

(ii) the lighting of streets, public places and public buildings;

(iii) the supply of electric light or power;

(iv) markets;

(v) public baths, bathing places, laundries and places for washing animals;

(vi) any other form of public service which the Council has resolved to provide.

Below (2) eliminated.

2. Urban Councils

(Extracted from Government Ordinances gazetted under Chapter 577 Urban Councils of 1st January 1940)

Section 129 (Power of Urban Council to Establish and Maintain Public Utility Services)

The Urban Council of a town may, for the purpose of any place or area within the town, either independently or in conjunction with any other local authority, and either directly (with or without the assistance of Government) or through any promoter or body of promoters, establish and maintain for the benefit of the persons inhabiting or resorting to such place or area any of the following public utility services:

(a) water supply;

(b) the lighting of streets, public places and public buildings;

(c) the supply of electric light or power;

(d) markets;

(e) public baths, bathing places;

(f) the manufacture and supply at cost price of squatting plates and latrines;

(g) provision of housing accommodation for the poorer classes;

(h) any other form of public service, subject to such prohibition or restriction of the establishments and maintenance of that service as may be imposed by any other law.

CHAPTER 4

Water Production Data (Labugama, Kalatuwawa, Ambatale)

Water Production at Labugama Water Treatment Plant, 1990

(Unit : mgd)

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	7.59	10.05	8.71	7.07	10.57	7.28	7.66	7.30	8.16	9.17	13.73	8.13
2	8.69	9.02	8.42	7.25	9.86	7.51	7.32	7.20	8.25	12.30	12.59	8.22
3	8.47	9.71	8.51	6.37	9.87	7.89	9.03	7.61	8.29	13.11	14.08	9.34
4	8.30	9.01	7.62	7.10	7.93	7.89	9.99	6.27	6.53	12.85	13.19	7.27
5	7.46	8.48	8.46	8.22	7.45	7.88	9.31	8.60	7.88	9.16	10.43	7.45
6	8.84	8.23	9.32	7.23	8.57	6.86	8.58	7.72	8.01	9.11	7.92	6.05
7	8.20	9.18	9.10	7.13	7.81	7.13	6.38	7.56	8.57	9.74	7.83	5.93
8	8.11	8.56	8.58	7.30	7.45	7.93	8.73	6.92	7.95	9.12	7.47	6.16
9	8.15	9.35	6.89	7.30	7.36	7.04	7.49	8.29	7.80	8.99	7.37	6.58
10	7.15	9.21	8.70	6.31	7.52	7.49	6.24	6.72	8.09	13.41	7.44	6.59
11	9.06	7.84	8.26	7.38	7.55	7.35	8.44	7.70	8.06	13.67	7.41	6.04
12	8.67	9.48	9.01	8.20	7.25	7.07	7.34	8.72	7.92	13.54	7.43	6.95
13	8.23	9.22	8.50	7.19	7.33	7.43	7.28	7.73	7.97	13.14	7.68	7.44
14	8.09	8.30	7.74	6.04	7.61	7.06	7.35	7.71	8.50	14.16	8.08	6.12
15	7.28	10.36	8.68	8.46	7.37	7.33	7.34	7.50	13.88	13.32	7.66	6.95
16	8.03	8.82	7.62	7.08	7.46	7.50	6.40	7.86	14.64	13.68	7.67	6.61
17	9.13	9.00	7.34	6.10	7.46	7.16	8.69	5.57	17.14	13.17	8.18	6.63
18	9.01	8.90	7.15	7.65	7.51	6.81	7.22	7.55	15.73	13.97	8.25	6.56
19	8.33	8.83	7.24	6.74	7.76	7.80	7.50	7.19	14.70	13.91	8.23	6.36
20	7.73	8.72	7.08	7.03	7.69	7.65	7.41	7.49	12.18	13.28	7.66	6.12
21	8.02	8.29	6.36	6.15	7.33	7.87	7.35	8.67	9.46	13.93	7.65	6.02
22	8.45	8.52	7.25	8.11	7.44	7.63	7.01	7.78	7.31	13.87	7.64	6.45
23	9.99	8.50	8.26	7.03	7.61	7.72	6.98	7.44	6.65	12.65	7.71	6.25
24	8.31	8.54	6.31	7.13	6.55	7.51	7.17	6.74	6.40	14.34	7.79	6.06
25	8.55	15.98	8.33	8.25	8.45	7.38	6.11	7.77	8.23	11.32	7.54	6.57
26	7.61	11.43	7.08	9.67	6.13	7.69	7.92	9.94	10.05	13.63	7.16	6.15
27	9.20	7.79	7.03	11.25	8.35	6.54	7.02	8.20	7.96	13.90	7.25	6.26
28	9.11	9.04	7.07	10.16	7.38	8.34	6.12	8.17	8.14	13.02	7.43	6.43
29	8.35	-	7.21	9.77	6.20	7.50	9.33	8.18	7.48	12.95	9.18	6.41
30	8.35	-	7.05	8.88	8.32	7.21	7.94	7.66	8.55	13.54	7.53	6.69
31	8.61	-	7.20	-	7.20	-	6.98	8.21	-	13.76	-	6.20
Total (mg)	259.07	258.36	242.08	229.55	240.34	223.45	235.63	237.97	280.48	389.71	257.18	206.99
Total (1000's m3)	1,178	1,175	1,100	1,044	1,093	1,016	1,071	1,082	1,275	1,772	1,169	941
Ave. (m3/d)	37,991	41,947	35,500	34,784	35,245	33,860	34,554	34,897	42,502	57,149	38,971	30,354
Max. (m3/d)	45,415	72,645	42,369	51,143	48,051	37,914	45,415	45,187	77,918	65,190	64,008	42,460
Min. (m3/d)	32,504	35,413	28,685	27,458	27,867	29,731	27,776	25,321	29,094	40,869	32,549	26,958

Source: NWSDB Labugama Water Treatment Plant

Water Production at Labugama Water Treatment Plant, 1991

(Unit : mgd)

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	5.53	6.19	15.10	16.70	17.10	11.31	6.03	6.33	7.81	14.49	16.03	7.61
2	6.05	8.11	14.81	15.71	15.81	8.33	5.78	8.11	7.78	15.44	14.25	7.57
3	6.31	6.67	13.60	15.71	16.44	9.09	6.58	6.87	7.74	15.81	14.56	8.12
4	6.67	8.39	15.88	17.69	15.49	8.24	6.00	6.46	7.86	13.96	15.02	7.45
5	8.66	7.89	14.17	15.90	16.79	7.25	5.98	7.19	7.90	14.06	14.71	8.01
6	6.98	7.14	15.43	17.27	15.97	7.95	5.99	7.39	7.90	14.86	14.48	7.59
7	7.13	7.80	13.52	15.19	15.73	7.13	7.21	7.73	7.91	14.90	9.17	7.64
8	5.64	7.35	14.82	16.55	17.08	6.98	7.17	8.27	7.81	14.92	8.25	6.94
9	6.01	8.31	14.67	16.34	15.46	7.20	7.01	7.33	8.04	14.58	8.47	7.93
10	5.96	7.10	14.67	16.45	16.28	7.06	6.64	7.63	7.38	14.80	8.25	7.28
11	5.61	6.63	16.28	16.37	16.32	7.07	5.02	8.16	9.35	15.84	8.31	7.59
12	5.77	6.96	17.12	16.36	16.35	6.76	6.20	7.33	7.46	16.54	8.49	7.53
13	5.52	7.44	14.25	16.85	15.07	6.92	6.25	7.95	11.49	16.11	7.69	8.44
14	5.33	6.81	16.92	16.38	12.73	6.89	6.46	7.88	14.41	15.88	8.18	7.90
15	5.39	7.17	16.00	15.68	12.94	6.78	6.60	7.98	15.22	16.89	8.51	7.82
16	5.46	8.72	16.03	16.56	13.51	6.69	6.68	7.89	15.88	16.61	8.04	6.15
17	5.48	8.63	16.32	16.34	12.58	6.72	5.24	7.92	15.25	16.27	8.62	6.73
18	5.45	8.37	17.27	17.22	12.96	7.30	7.92	7.89	14.98	16.68	7.98	7.79
19	5.70	6.30	15.13	15.45	13.21	7.30	7.30	8.10	15.01	16.34	7.93	8.22
20	5.43	6.85	16.23	16.11	12.24	6.70	5.11	7.87	15.19	17.11	7.86	8.65
21	5.99	7.00	16.55	15.81	12.73	6.89	6.43	7.46	14.68	16.54	8.30	7.60
22	6.20	6.75	16.22	16.78	12.28	6.55	6.34	7.58	14.98	16.69	7.26	8.45
23	6.01	7.16	16.22	15.68	12.33	6.91	7.66	5.69	15.00	15.90	7.63	7.76
24	6.05	12.86	16.26	15.46	11.52	6.91	6.35	6.78	15.06	18.17	13.19	7.66
25	6.18	14.33	16.01	17.90	13.64	7.02	5.68	7.08	14.48	17.86	14.30	8.16
26	5.80	15.88	17.58	14.88	12.99	6.85	7.28	8.22	14.62	15.55	14.09	7.53
27	6.25	14.23	15.42	16.00	12.81	7.18	7.88	8.03	14.97	16.76	11.26	8.41
28	6.04	15.56	16.27	15.71	11.81	6.76	7.66	7.65	15.54	16.37	8.26	7.74
29	6.35	-	14.81	15.58	10.67	6.21	7.95	7.10	15.00	17.53	7.96	8.76
30	6.05	-	17.62	14.81	10.32	7.14	7.62	6.77	13.86	14.24	7.50	7.45
31	6.11	-	15.06	-	8.16	-	8.10	7.36	-	13.72	-	8.49
Total (mg)	187.11	242.60	486.24	485.44	429.32	218.09	206.12	232.00	360.56	491.42	304.55	240.97
Total (1000's m3)	851	1,103	2,210	2,207	1,952	991	937	1,055	1,639	2,234	1,384	1,095
Ave. (m3/d)	27,439	39,388	71,305	73,560	62,958	33,048	30,227	34,022	54,637	72,064	46,149	35,337
Max. (m3/d)	39,368	72,190	80,101	81,373	77,737	51,415	36,823	37,595	72,190	82,601	72,872	39,823
Min. (m3/d)	24,230	28,140	61,462	67,326	37,095	28,231	22,821	25,867	33,549	62,371	33,004	27,958

Source: NWSDB Labugama Water Treatment Plant

Water Production at Labugama Water Works, 1992

(Unit : mgd)

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	8.00	13.50	14.29	13.50	13.92	11.98	7.70	7.84	8.37	8.32	8.32	8.70
2	7.68	14.10	13.95	12.50	12.89	12.16	7.90	8.03	8.50	8.73	8.14	8.50
3	8.01	14.13	14.05	9.73	13.22	12.12	7.80	7.80	8.92	8.41	8.06	8.43
4	8.10	13.98	13.39	12.25	13.14	12.15	7.90	7.66	8.06	8.13	8.02	8.47
5	8.24	14.07	14.11	11.59	14.60	11.89	8.12	7.87	8.10	8.25	8.50	10.05
6	7.98	14.17	13.95	14.58	12.80	7.78	8.06	8.88	8.08	8.06	8.30	11.30
7	8.06	14.26	14.16	13.09	12.01	7.60	8.12	7.80	8.20	10.04	8.00	9.74
8	7.95	13.76	13.88	13.51	12.68	7.55	7.72	7.70	8.30	8.36	8.00	9.95
9	8.68	14.85	11.62	13.86	12.17	9.21	7.80	7.70	8.33	8.57	8.50	9.85
10	7.94	14.26	13.11	13.40	12.07	7.61	8.18	7.67	8.19	8.39	7.97	9.26
11	7.82	13.92	13.23	13.39	12.00	7.65	7.90	7.70	8.20	8.30	8.03	9.35
12	7.80	14.02	13.01	13.25	12.41	7.80	7.83	7.80	8.10	7.50	7.82	9.14
13	7.48	13.92	13.01	13.21	12.30	8.16	8.02	8.16	8.10	8.17	8.21	9.15
14	7.55	14.16	13.64	13.40	12.20	7.73	8.37	7.90	8.44	8.30	8.00	9.06
15	7.33	13.92	13.17	13.40	12.10	7.78	8.09	7.90	8.36	8.25	8.24	8.51
16	8.69	14.01	13.18	13.61	12.20	8.29	7.90	7.80	8.49	8.30	8.35	10.21
17	6.58	14.06	13.18	13.56	11.99	7.56	7.80	7.80	8.25	8.30	8.40	8.86
18	7.55	14.17	14.81	13.37	12.40	7.50	8.24	7.90	9.10	8.30	8.30	9.21
19	7.21	13.33	14.85	13.42	12.11	8.52	7.80	8.25	8.33	8.40	8.40	9.58
20	7.71	14.11	14.89	13.40	12.88	8.09	8.01	8.25	8.01	8.30	8.97	8.86
21	8.23	14.21	14.30	13.34	12.23	8.63	8.48	8.36	7.98	9.12	8.40	9.01
22	7.24	13.90	13.88	13.50	12.53	7.57	7.90	8.43	8.29	8.00	8.61	9.28
23	7.75	14.04	14.55	15.67	12.20	8.30	8.37	8.61	8.24	8.55	8.30	9.15
24	6.88	14.05	13.91	14.69	11.77	8.15	7.35	8.34	8.74	7.91	8.20	9.12
25	6.23	14.08	14.54	13.91	12.07	7.90	7.70	8.57	8.50	8.29	8.30	9.68
26	6.83	14.09	12.19	14.17	12.10	7.66	7.80	8.52	8.40	8.97	8.40	8.79
27	6.91	14.05	12.30	13.66	12.10	7.80	7.70	8.45	8.30	8.20	8.30	8.19
28	7.03	14.11	13.23	14.14	11.84	7.90	7.80	8.75	8.20	8.77	8.50	8.38
29	7.00	14.08	12.84	13.17	13.26	7.80	7.71	8.40	8.10	8.98	8.35	8.31
30	7.69	-	14.10	14.00	12.92	8.65	7.80	8.05	8.20	8.87	8.30	8.50
31	7.68	-	-	-	12.25	-	7.92	8.00	-	8.15	-	8.50
Total (MG)	235.83	407.31	409.32	402.27	387.36	259.49	245.79	250.89	249.38	261.19	248.19	283.09
Total (1000's m3)	1,072	1,852	1,861	1,829	1,761	1,180	1,117	1,141	1,134	1,187	1,128	1,287
Ave. (m3/d)	34,583	63,849	62,026	60,957	56,804	39,321	36,044	36,792	37,789	38,302	37,609	41,514
Max. (m3/d)	39,505	67,508	67,690	71,236	66,372	55,279	38,550	40,368	41,369	45,642	40,778	51,370
Min. (m3/d)	28,322	60,598	52,825	44,233	53,506	34,095	33,413	34,822	36,277	34,095	35,550	37,232

Source: NWSDB Labugama Water Treatment Plant

Water Production at Labugama Water Treatment Plant, 1993

(Unit : mgd)

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	9.20	8.94	8.40	8.59	8.78	9.20	8.44	8.08	8.11	7.88	8.15	8.20
2	8.80	9.26	8.20	10.90	9.04	9.10	8.32	8.09	8.29	8.10	8.24	8.25
3	8.80	8.90	8.40	8.19	8.76	8.70	8.28	8.10	8.19	9.00	8.24	8.15
4	9.00	9.00	8.08	8.79	9.14	9.10	8.10	8.07	8.24	8.95	8.25	8.30
5	8.50	8.13	8.77	8.70	9.05	9.10	8.32	8.20	7.95	7.71	8.05	8.20
6	8.60	5.50	8.73	8.85	8.79	9.10	8.18	8.05	7.94	7.65	8.00	8.05
7	9.00	10.07	9.10	8.04	8.75	9.10	8.16	8.10	7.85	8.30	8.25	8.15
8	8.70	9.11	7.29	7.20	9.05	9.10	8.09	8.29	7.92	9.00	8.40	8.05
9	11.00	8.77	8.47	7.53	9.32	9.10	8.19	8.28	8.18	8.02	8.30	8.20
10	10.90	9.19	9.36	7.70	8.93	9.10	8.28	8.76	8.23	7.94	8.20	8.10
11	11.60	9.10	8.78	7.25	8.99	9.30	8.30	9.00	7.87	8.00	8.30	8.21
12	11.30	9.10	8.30	9.55	9.12	9.30	8.50	7.87	8.40	8.21	8.20	8.25
13	8.60	9.54	8.40	9.15	9.19	9.20	8.10	7.94	7.90	8.30	8.00	8.15
14	9.00	9.53	9.14	8.72	8.01	9.20	8.81	7.78	7.98	8.00	8.15	8.20
15	8.40	9.45	8.95	8.54	9.06	9.30	8.32	8.99	7.79	8.00	8.10	8.30
16	8.30	8.82	8.52	8.11	8.78	9.20	8.30	8.76	7.80	8.32	8.20	8.22
17	8.70	9.56	8.29	8.29	8.74	9.30	8.45	8.34	7.92	8.11	8.10	8.20
18	10.00	9.14	8.73	7.35	8.90	9.20	8.24	8.02	7.88	8.00	8.15	8.15
19	8.80	9.11	8.41	8.82	7.90	9.20	8.27	8.12	7.99	8.05	8.15	8.20
20	8.90	9.10	8.67	8.19	8.49	9.20	8.46	8.22	8.14	8.37	8.05	8.25
21	8.70	9.16	8.40	9.00	8.17	9.30	8.27	8.21	8.06	8.23	8.10	8.23
22	8.60	9.12	8.71	8.80	8.20	9.10	8.41	8.39	7.72	7.86	7.90	8.10
23	8.60	9.15	8.90	8.86	8.25	9.10	8.31	7.90	7.86	8.10	8.20	8.20
24	9.60	9.41	8.47	9.12	8.30	9.10	8.32	8.00	7.88	8.05	8.10	8.23
25	9.27	9.53	8.76	8.66	8.28	9.10	8.34	7.96	8.56	8.24	8.20	8.25
26	9.07	9.02	8.32	9.13	8.19	9.10	8.43	8.12	8.24	8.26	8.15	8.30
27	9.05	8.86	8.62	8.40	8.16	9.00	8.30	8.15	7.85	8.28	8.25	8.25
28	8.68	8.56	8.72	8.98	8.29	9.00	8.37	8.33	7.89	8.10	8.10	8.22
29	9.56	-	8.60	8.89	8.68	9.00	9.23	8.28	8.05	8.09	8.34	8.20
30	9.22	-	8.69	9.06	8.08	9.50	8.01	7.86	7.94	8.05	8.10	8.25
31	8.90	-	8.59	-	8.16	-	8.00	8.01	-	8.10	-	8.10
Total (MG)	285.35	252.13	265.77	257.36	267.55	274.40	258.10	254.27	240.62	253.27	244.92	254.11
Total (1000's m3)	1,297	1,146	1,208	1,170	1,216	1,247	1,173	1,156	1,094	1,151	1,113	1,155
Ave. (m3/d)	41,845	40,935	38,974	38,999	39,235	41,581	37,849	37,287	36,462	37,141	37,114	37,264
Max. (m3/d)	52,734	45,778	42,551	49,551	42,369	43,187	41,960	40,914	38,914	40,914	38,186	37,732
Min. (m3/d)	37,732	25,003	33,140	32,731	35,913	39,550	36,368	35,368	35,095	34,777	35,913	36,595

Source: NWSDB Labugama Water Treatment Plant

Water Production at Labugama Water Treatment Works

Year	Month	Water Production			Max / Ave
		Monthly Ave.	Monthly Max.	Monthly Min.	
1990	Jan.	37,991	45,415	32,504	1.20
	Feb.	41,947	72,645	35,413	1.73
	Mar.	35,500	42,369	28,685	1.19
	Apr.	34,784	51,143	27,458	1.47
	May	35,245	48,051	27,867	1.36
	Jun.	33,860	37,914	29,731	1.12
	Jul.	34,554	45,415	27,776	1.31
	Aug.	34,897	45,187	25,321	1.29
	Sep.	42,502	77,918	29,094	1.83
	Oct.	57,149	65,190	40,869	1.14
	Nov.	38,971	64,008	32,549	1.64
	Dec.	30,354	42,460	26,958	1.40
1991	Jan.	27,439	39,368	24,230	1.43
	Feb.	39,388	72,190	28,140	1.83
	Mar.	71,305	80,101	61,462	1.12
	Apr.	73,560	81,373	67,326	1.11
	May	62,958	77,737	37,095	1.23
	Jun.	33,048	51,415	28,231	1.56
	Jul.	30,227	36,823	22,821	1.22
	Aug.	34,022	37,959	25,867	1.12
	Sep.	54,637	72,190	33,549	1.32
	Oct.	72,064	82,601	62,371	1.15
	Nov.	46,149	72,872	33,004	1.58
	Dec.	35,337	39,823	27,958	1.13
1992	Jan.	34,583	39,505	28,322	1.14
	Feb.	63,849	67,508	60,598	1.06
	Mar.	62,026	67,690	52,825	1.09
	Apr.	60,957	71,236	44,233	1.17
	May	56,804	66,372	53,506	1.17
	Jun.	39,321	55,279	34,095	1.41
	Jul.	36,044	38,550	33,413	1.07
	Aug.	36,792	40,368	34,822	1.10
	Sep.	37,789	41,369	36,277	1.09
	Oct.	38,302	45,642	34,095	1.19
	Nov.	37,609	40,778	35,550	1.08
	Dec.	41,514	51,370	37,232	1.24
1993	Jan.	41,845	52,734	37,732	1.26
	Feb.	40,935	45,778	25,003	1.12
	Mar.	38,974	42,551	33,140	1.09
	Apr.	38,999	49,551	32,731	1.27
	May	39,235	42,369	35,913	1.08
	Jun.	41,581	43,187	35,550	1.04
	Jul.	37,849	41,960	36,368	1.11
	Aug.	37,287	40,914	35,368	1.10
	Sep.	36,462	38,914	35,095	1.07
	Oct.	37,141	40,914	34,777	1.10
	Nov.	37,114	38,186	35,913	1.03
	Dec.	37,264	37,732	36,959	1.01
Average (m3/d)		**42,670**	-	-	-
Maximum (m3/d)		-	**82,601**	-	-
Minimum (m3/d)		-	-	**22,821**	-
Peak Factor		-	-	-	**1.24**

Source: NWSDB Labugama Water Treatment Works

Vater Production at Kalatuwawa Water Treatment Plant

Year	Month	Monthly Water Production			Max / Ave
		Average	Maximum	Minimum	
1986	Jan.	-	-	-	-
	Feb.	-	-	-	-
	Mar.	-	-	-	-
	Apr.	-	-	-	-
	May	63,968	78,000	41,000	1.22
	Jun.	81,608	91,000	50,000	1.12
	Jul.	89,335	90,000	80,000	1.01
	Aug.	75,558	90,000	28,300	1.19
	Sep.	27,067	45,000	23,000	1.66
	Oct.	37,584	71,700	25,000	1.91
	Nov.	27,067	45,000	23,000	1.66
	Dec.	37,584	71,700	25,000	1.91
1987	Jan.	80,000	80,000	80,000	1.00
	Feb.	77,214	80,000	60,000	1.04
	Mar.	18,568	80,000	10,000	4.31
	Apr.	24,200	36,000	12,000	1.49
	May	56,750	65,000	32,000	1.15
	Jun.	43,667	45,000	30,000	1.03
	Jul.	52,267	70,000	44,000	1.34
	Aug.	50,467	96,000	46,000	1.90
	Sep.	46,000	46,000	46,000	1.00
	Oct.	54,800	85,000	46,000	1.55
	Nov.	31,871	85,000	60,000	2.67
	Dec.	84,323	91,000	62,000	1.08
1988	Jan.	91,000	91,000	91,000	1.00
	Feb.	82,233	91,000	70,000	1.11
	Mar.	70,000	70,000	70,000	1.00
	Apr.	69,267	70,000	48,000	1.01
	May	66,067	70,000	62,000	1.06
	Jun.	61,900	62,000	59,000	1.00
	Jul.	62,000	62,000	62,000	1.00
	Aug.	62,000	62,000	62,000	1.00
	Sep.	81,333	91,000	62,000	1.12
	Oct.	59,724	91,000	30,000	1.52
	Nov.	53,033	70,000	35,000	1.32
	Dec.	71,000	78,000	62,000	1.10
1989	Jan.	73,533	82,000	52,000	1.12
	Feb.	76,000	78,000	70,000	1.03
	Mar.	75,375	86,000	65,000	1.14
	Apr.	80,333	86,000	70,000	1.07
	May	75,333	82,000	64,000	1.09
	Jun.	72,333	80,000	60,000	1.11
	Jul.	73,800	80,000	50,000	1.08
	Aug.	75,600	82,000	70,000	1.08
	Sep.	34,877	80,000	20,000	2.29
	Oct.	76,774	80,000	60,000	1.04
	Nov.	80,000	80,000	80,000	1.00
	Dec.	80,000	80,000	80,000	1.00
1990	Jan.	80,000	80,000	80,000	1.00
	Feb.	77,036	80,000	77,000	1.04
	Mar.	80,000	80,000	80,000	1.00
	Apr.	80,000	80,000	80,000	1.00
	May	80,000	80,000	80,000	1.00
	Jun.	80,000	80,000	80,000	1.00
	Jul.	80,000	80,000	80,000	1.00
	Aug.	80,000	80,000	80,000	1.00
	Sep.	53,200	80,000	38,000	1.50
	Oct.	34,900	38,000	10,000	1.09
	Nov.	56,000	82,000	60,000	1.46
	Dec.	79,400	82,000	60,000	1.03
1991	Jan.	82,000	82,000	82,000	1.00
	Feb.	64,357	82,000	40,000	1.27
	Mar.	40,000	40,000	40,000	1.00
	Apr.	40,000	40,000	40,000	1.00
	May	62,333	91,000	60,000	1.46
	Jun.	71,000	91,000	60,000	1.28
	Jul.	60,000	60,000	60,000	1.00
	Aug.	40,000	60,000	60,000	1.50
	Sep.	40,000	40,000	40,000	1.00
	Oct.	64,138	80,000	40,000	1.25
	Nov.	80,000	80,000	80,000	1.00
	Dec.	80,000	80,000	80,000	1.00
1992	Jan.	80,000	80,000	80,000	1.00
	Feb.	41,207	50,000	30,000	1.21
	Mar.	26,290	30,000	20,000	1.14
	Apr.	46,000	46,000	46,000	1.00
	May	53,133	65,000	46,000	1.22
	Jun.	83,800	91,000	50,000	1.09
	Jul.	91,000	91,000	91,000	1.00
	Aug.	91,000	91,000	91,000	1.00
	Sep.	91,000	91,000	91,000	1.00
	Oct.	91,000	91,000	91,000	1.00
	Nov.	91,000	91,000	91,000	1.00
	Dec.	91,000	91,000	91,000	1.00
1993	Jan.	90,000	90,000	90,000	1.00
	Feb.	90,000	90,000	90,000	1.00
	Mar.	90,000	90,000	90,000	1.00
	Apr.	90,000	90,000	90,000	1.00
	May	90,000	90,000	90,000	1.00
	Jun.	90,000	90,000	90,000	1.00
	Jul.	90,000	90,000	90,000	1.00
	Aug.	90,000	90,000	90,000	1.00
	Sep.	90,000	90,000	90,000	1.00
	Oct.	90,000	90,000	90,000	1.00
	Nov.	90,000	90,000	90,000	1.00
	Dec.	90,000	90,000	90,000	1.00
Monthly Ave. (m3/d		53,156	-	-	-
Monthly Max. (m3/d		-	96,000	-	-
Monthly Min. (m3/d		-	-	1	-
Peak Factor		-	-	-	45,177.56

Source: NWSDB Labugama Water Treatment Works

Water Production at Ambatale Water Treatment Plant

(Unit : mgd)

Year	Month	Monthly Ave.	Year	Month	Monthly Ave.
1986	Jan.	43.0	1990	Jan.	58.0
	Feb.	43.0		Feb.	58.2
	Mar.	44.0		Mar.	58.2
	Apr.	43.0		Apr.	58.2
	May	42.0		May	58.2
	Jun.	43.0		Jun.	58.2
	Jul.	44.0		Jul.	58.2
	Aug.	44.0		Aug.	58.0
	Sep.	43.0		Sep.	61.5
	Oct.	43.0		Oct.	60.0
	Nov.	43.0		Nov.	61.0
	Dec.	43.0		Dec.	61.5
1987	Jan.	43.0	1991	Jan.	61.5
	Feb.	43.0		Feb.	61.5
	Mar.	43.0		Mar.	61.5
	Apr.	55.0		Apr.	60.5
	May	55.0		May	61.3
	Jun.	58.0		Jun.	61.3
	Jul.	61.0		Jul.	61.3
	Aug.	61.0		Aug.	61.3
	Sep.	48.0		Sep.	61.3
	Oct.	53.0		Oct.	61.3
	Nov.	60.0		Nov.	61.3
	Dec.	59.0		Dec.	61.3
1988	Jan.	59.0	1992	Jan.	61.3
	Feb.	60.0		Feb.	61.3
	Mar.	59.0		Mar.	61.3
	Apr.	58.0		Apr.	61.3
	May	51.0		May	61.3
	Jun.	58.0		Jun.	61.3
	Jul.	53.0		Jul.	61.3
	Aug.	58.0		Aug.	61.3
	Sep.	54.0		Sep.	61.3
	Oct.	55.0		Oct.	61.3
	Nov.	58.0		Nov.	64.3
	Dec.	55.0		Dec.	61.4
1989	Jan.	59.0	1993	Jan.	64.3
	Feb.	58.0		Feb.	64.3
	Mar.	58.0		Mar.	64.3
	Apr.	58.0		Apr.	64.3
	May	57.0		May	68.0
	Jun.	58.0		Jun.	68.0
	Jul.	58.0		Jul.	68.0
	Aug.	58.0		Aug.	68.0
	Sep.	58.0		Sep.	68.0
	Oct.	58.0		Oct.	68.0
	Nov.	58.0		Nov.	68.0
	Dec.	58.0		Dec.	68.0
Ave. (m3/d)			239,707		
Max. (m3/d)			277,306		
Min. (m3/d)			190,932		
Peak Factor			1.16		

Source: NWSDB Ambatale Water Treatment Plant

CHAPTER 6

Basin Rainfall Data at Putupaula and Ellagawa

Mean Monthly Discharge at Putupaula, Ellagawa and Millakanda

Daily Rainfall and Flow Data

Extent of Salinity Intrusion

Safe Yield

Water Quality Data of the Kalu Ganga

Basin Rainfalls at Putupaula and Ellagawa (1/2)

Putupaula

unit : mm

Putupaula	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1965/66	487	429	365	184	85	309	502	167	218	180	264	812
1966/67	574	306	239	196	127	285	260	354	458	331	288	289
1967/68	795	461	245	189	82	228	291	374	673	472	184	448
1968/69	408	268	264	79	133	133	368	1036	351	326	307	257
1969/70	518	314	473	186	184	315	425	366	437	374	281	292
1970/71	554	383	177	209	156	226	450	439	397	312	424	717
1971/72	499	393	244	102	49	177	332	697	419	235	208	556
1972/73	531	420	158	59	116	395	327	344	499	319	254	132
1973/74	458	329	256	62	185	199	557	508	443	561	214	619
1974/75	161	109	294	99	158	261	383	614	455	167	353	338
1975/76	521	666	257	68	96	39	421	257	172	228	267	93
1976/77	397	463	415	32	149	265	347	703	421	83	211	216
1977/78	546	389	266	184	164	232	250	821	257	213	255	362
1978/79	372	555	212	73	178	134	293	401	431	315	71	654
1979/80	-	-	-	-	-	-	-	-	-	-	-	-
1980/81	-	513	234	135	104	197	295	381	353	186	159	220
1981/82	290	482	164	44	31	273	472	551	765	1035	252	228
1982/83	546	597	122	48	44	55	121	306	297	208	299	447
1983/84	-	-	-	-	-	-	-	-	-	-	-	-
1984/85	264	435	127	212	170	250	161	494	678	197	198	265
1985/86	531	340	347	130	176	185	406	227	164	113	269	454
1986/87	478	231	217	135	26	106	249	277	234	10	468	334
1987/88	535	369	121	99	237	275	337	415	386	316	464	538
1988/89	105	341	182	57	10	115	244	485	532	488	213	368
1989/90	529	339	146	92	108	234	299	530	297	211	68	46
1990/91	366	428	159	288	101	199	301	464	630	375	278	168
1991/92	477	344	148	90	10	21	307	486	405	399	286	490
1992/93	468	554	144	28	92	153	336	726	617	253	159	262

source : The Dapartment of Irrigation

Basin Rainfalls at Putupaula and Ellagawa (2/2)

Ellagawa

unit : cumecs

Ellagawa	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1965/66	475	406	330	183	88	318	497	157	234	189	271	803
1966/67	505	358	260	163	118	249	276	357	529	313	281	730
1967/68	760	510	239	183	64	227	301	386	712	505	260	460
1968/69	439	290	287	82	134	116	383	489	403	113	271	291
1969/70	686	265	252	140	180	304	423	303	419	385	328	283
1970/71	584	383	175	183	164	217	438	433	412	347	436	770
1971/72	423	357	238	87	48	153	320	677	363	300	226	586
1972/73	580	442	147	67	122	351	324	300	461	248	284	123
1973/74	369	303	314	132	165	185	529	533	495	700	234	647
1974/75	170	126	302	85	157	276	393	574	504	153	390	316
1975/76	455	607	209	60	51	204	406	203	153	224	249	142
1976/77	497	485	472	29	139	251	391	571	415	123	212	199
1977/78	572	404	259	152	184	216	247	802	226	238	265	359
1978/79	367	510	182	67	188	135	289	353	411	309	81	587
1979/80	469	467	256	25	34	204	425	373	271	274	253	244
1980/81	324	467	224	125	99	216	294	319	363	242	146	410
1981/82	287	449	147	41	276	261	663	624	663	971	226	219
1982/83	535	610	150	52	51	72	122	334	262	202	259	393
1983/84	243	344	580	341	285	376	469	394	273	359	574	248
1984/85	637	430	148	221	164	284	169	543	703	187	205	270
1985/86	557	332	335	142	186	175	390	220	208	158	308	553
1986/87	411	223	202	133	31	134	270	316	220	13	450	262
1987/88	507	416	147	123	279	310	419	408	404	344	464	519
1988/89	144	355	193	57	7	140	223	513	576	536	212	356
1989/90	552	317	159	108	129	238	326	601	360	346	80	116
1990/91	327	522	172	219	82	225	371	433	776	420	420	341
1991/92	417	418	170	123	17	26	193	411	342	373	354	397
1992/93	392	459	123	35	109	153	312	644	577	236	130	194

source : The Dapartment of Irrigation

Mean Monthly Discharges at Putupaula, Ellagawa and Millakanda (1/3)

Putupaula — unit : cumecs

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1949/50	445	262	130	81	108	93	124	-	203	125	160	283
1950/51	450	158	79	185	87	106	189	240	876	442	71	225
1951/52	382	415	96	170	114	118	269	569	423	117	115	115
1952/53	498	282	179	134	79	214	220	82	110	489	174	155
1953/54	498	252	162	166	133	233	336	677	324	109	173	151
1954/55	529	219	291	159	222	222	210	810	598	339	93	332
1955/56	453	458	169	114	84	163	171	404	588	99	149	291
1956/57	469	420	205	90	114	111	171	160	707	357	109	67
1957/58	175	502	513	232	188	227	202	533	457	160	220	104
1958/59	384	291	248	103	127	83	245	40	866	313	207	524
1959/60	248	328	215	138	199	102	207	260	203	378	88	220
1960/61	149	284	112	82	62	84	153	293	212	244	353	334
1961/62	309	307	203	114	99	116	168	466	205	151	164	298
1962/63	335	258	147	146	142	145	247	355	254	385	288	434
1963/64	545	416	264	119	98	152	173	452	233	415	227	341
1964/65	275	296	107	96	94	102	159	488	207	93	348	274
1965/66	461	309	241	133	107	141	259	198	121	132	152	301
1966/67	529	327	161	110	95	140	128	-	339	219	210	210
1967/68	490	374	194	140	88	113	180	240	479	465	158	285
1968/69	268	268	182	103	94	93	173	660	421	103	123	257
1969/70	338	205	299	206	117	135	265	269	284	285	233	140
1970/71	435	229	173	139	120	133	263	340	255	280	352	399
1971/72	455	347	227	94	124	127	94	370	228	125	160	280
1972/73	263	272	111	142	121	174	272	138	367	238	246	85
1973/74	264	308	200	103	106	123	348	468	426	468	296	441
1974/75	262	85	146	104	96	171	268	516	475	134	204	337
1975/76	422	737	235	75	48	60	210	136	93	169	184	86
1976/77	258	332	337	58	48	109	156	510	447	82	99	80
1977/78	409	267	181	122	88	93	95	519	193	178	160	110
1978/79	309	455	109	52	70	46	120	222	242	227	35	391
1979/80	335	382	266	-	-	-	-	-	-	-	-	-
1980/81	-	357	123	124	44	51	172	324	381	123	70	297
1981/82	174	312	159	43	31	70	166	297	589	216	190	71
1982/83	408	490	186	34	29	29	30	138	198	119	130	356
1983/84	98	-	-	-	-	-	-	-	346	399	44	100
1984/85	207	345	98	121	104	117	114	326	692	201	232	100
1985/86	409	335	261	95	103	104						

The source : MASTERPLAN FOR THE ELECTRICITY SUPPLY OF SRI LANKA July 1987

Mean Monthly Discharges at Putupaula, Ellagawa and Millakanda (2/3)

Ellagawa	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1949/50	219	154	83	43	40	44	65	166	131	92	95	156
1950/51	209	105	53	65	36	48	96	165	356	184	43	135
1951/52	214	202	59	52	34	42	133	275	238	94	77	67
1952/53	215	152	90	48	30	70	104	71	98	186	84	97
1953/54	237	136	94	62	51	102	265	174	157	81	114	82
1954/55	275	140	137	76	98	90	124	345	357	186	55	156
1955/56	200	208	86	42	28	61	86	109	270	65	86	172
1956/57	172	187	75	28	42	51	74	62	231	141	58	29
1957/58	75	194	186	86	75	90	74	180	240	63	102	48
1958/59	180	130	87	38	52	27	94	131	307	168	117	191
1959/60	127	137	96	62	84	51	97	121	119	137	46	126
1960/61	83	122	41	32	28	40	65	156	111	123	183	157
1961/62	153	146	97	48	38	46	84	216	111	85	74	139
1962/63	160	128	79	64	64	70	120	125	135	170	148	184
1963/64	216	172	124	49	34	76	90	197	123	197	114	164
1964/65	126	147	43	29	28	41	86	224	128	40	174	141
1965/66	197	157	116	69	43	64	132	86	59	62	66	156
1966/67	244	154	77	47	33	61	47	81	168	116	108	80
1967/68	225	199	109	74	28	45	81	103	224	204	99	142
1968/69	140	129	76	32	19	29	86	275	204	59	57	113
1969/70	170	96	150	101	58	59	128	110	140	148	131	98
1970/71	260	133	71	61	45	66	149	188	172	160	232	309
1971/72	259	189	116	39	22	19	85	332	165	118	109	223
1972/73	236	212	54	20		63	156	107	189	116	135	43
1973/74	133	138	110	31	28	47	202	210	239	307	161	258
1974/75	188	46	89	38	31	70	102	342	303	91	137	212
1975/76	271	402	121	43	27	27	123	111	53	100	91	43
1976/77	121	152	146	31	23	42	78	215	230	53	56	43
1977/78	217	151	100	62	58	43	48	396	114	115	104	98
1978/79	174	240	70	27	36	18	55	122	130	123	32	243
1979/80	215	231	137	31	17	20	98	92	160	126	98	66
1980/81	149	181	83	76	30	33	86	133	243	99	58	239
1981/82	112	238	96	32	16	47	113	239		174	149	53
1982/83	250	330	102	22	13	18	14	81	142	80	94	216
1983/84	59	144	182	146	90	130	332	263	247	374	40	86
1984/85	120	199	65	66	51	73	64	232	610	160	118	53
1985/86	346	199	161	72	82	53	121	148	64			

The source : MASTERPLAN FOR THE ELECTRICITY SUPPLY OF SRI LANKA July 1987

Mean Monthly Discharges at Putupaula, Ellagawa and Millakanda (3/3)

Millakanda	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1950/51	115	45	11	42	19	20		61	207	103	16	58
1951/52	86	96	26	34	24	23	66	128	93	20	19	15
1952/53	110	75	44	33	20	61	62	18	21	134	45	37
1953/54	141	65	40	48	35	55	78	194	75	39	42	42
1954/55	134	48	73	33	53	67	50	217	155	88	17	72
1955/56	100	111	40	21	11	35		105	144	28	41	75
1956/57	105	108	54	15	21	20	41	53	148	77	24	13
1957/58	46	134	123	52	48	57	56	139	126	42	57	21
1958/59	123	77	87	24	22	14	64	74	179	71	74	159
1959/60	81	85	64	38	62	35	52	70	43	82	24	57
1960/61	49	92	32	24	13	38	37	85	68	69	96	104
1961/62	105	100	56	30	18	29	41	160	51	45	43	85
1962/63	98	74	41	50	41	34	59	106	80	106	85	146
1963/64	174	143	83	43	18	36	44	157	76	139	62	118
1964/65	74	92	29	19	14	21	47	160	71	19	98	102
1965/66	142	93	77	43	30	40	82	64	30	34	45	120
1966/67	148	92	46	35	21	45	41	70	97	67	69	65
1967/68	180	112	58	34	13	22	66	88	136	157		95
1968/69	71	75	50	26	10	14	39	256	120	26	30	74
1969/70	91	66	128	81	29	33	79	72	88	89	77	54
1970/71	131	68	51	42	23	37	81	100	82	107	93	138
1971/72	173	114	74	26	18	31	52	161	129	53	60	119
1972/73	113	139	26	14	20	48	83	68	127	82	76	21
1973/74	101	103	90	20	17	36	125	168	146	172	83	143
1974/75	75	22	38	21	22	53	95	202	121	36	64	101
1975/76	137	235	84	30	11	21	87	93	40	59	64	31
1976/77	98	115	119	34	27	47	56	210	157	39	47	32
1977/78	151	108	81	50	46	49	54	215	81	55	36	44
1978/79	122	189	41	36	42	25	55	92	102	97	24	168

The source : MASTERPLAN FOR THE ELECTRICITY SUPPLY OF SRI LANKA July 1987