

2.3 Hydrological Conditions

Monthly runoffs of major rivers including the Kok, Ing, Nan, Yom, Wang, Ping Chao Phraya and Mekong rivers are tabulated and summarized as in the following tables;

- Monthly Runoff of Major River Related to the Project
- Runoff Characteristics of Major Rivers
- Monthly Runoff at Each Station (in total 23 stations)

Table 2.3.1 Monthly Runoff of Major River Related to the Project

River Basin & Gaging Station	Drainage Area (km ²)	Month												Specific Runoff Yield (mm)	Mean Discharge (m ³ /sec)
		4	5	6	7	8	9	10	11	12	1	2	3	Total	
(1) Kok: Ban Tha Don (GN3)	2,980	48.8	68.3	112.0	245.1	420.1	393.7	275.8	194.9	141.5	107.1	72.8	59.7	2,140	68
Kok Bridge (G2A)	6,053	62.5	100.3	173.6	381.8	707.9	787.0	496.4	345.8	227.7	144.8	90.7	68.6	3,588	114
Ban Tha kok (GN1)	10,300	84.3	155.2	265.1	557.7	1,020.0	1,061.2	788.5	515.9	310.7	209.1	123.1	93.6	5,190	165
(2) Lao: Ban Tha Sai (GN15)	3,080	9.4	35.5	45.8	80.8	156.3	196.4	141.3	94.6	51.3	27.3	11.0	7.3	855	27
(3) Ing: Khao Ing Red (IN2)	3,450	3.0	12.9	26.0	76.2	190.8	258.4	176.8	90.6	26.8	12.4	4.4	2.6	881	28
A. Thoeng (IN1)	5,700	9.7	34.7	63.0	178.6	460.2	547.5	327.6	151.5	58.5	27.3	11.3	7.7	1,882	60
Ban Pra Mong (IN3)	1,210	2.5	5.6	7.0	15.0	36.1	69.3	48.2	32.7	8.7	5.5	2.5	2.2	235	8
(4) Yao: Ban Wang Hit (N51)	774	5.8	13.4	23.2	69.0	88.0	81.7	39.6	21.8	14.6	10.4	6.8	5.5	380	12
(5) Nan: Ban Mon (N17)	1,166	20.0	31.5	47.8	115.6	172.2	129.1	70.6	42.2	31.6	26.2	20.0	19.6	726	23
Muang Nan (N1)	4,609	25.7	61.8	156.6	465.4	763.8	589.8	241.6	102.1	57.7	36.6	22.1	20.5	2,544	81
Ban Hat Phai (N12A)	15,718	563.4	472.7	371.0	508.6	733.3	611.9	338.8	345.5	219.1	266.9	390.8	573.5	6,375	171
Nam Khwai Noi	5,775	109.8	124.5	137.0	161.4	253.9	328.5	248.1	143.0	100.2	63.7	76.0	103.9	1,850	320
Muang Phitsanulok (N6A)	25,286	483.2	491.5	564.3	680.0	1,036.9	1,308.8	720.5	458.2	375.2	269.9	348.8	477.3	7,155	286
Muang Phieit (N7)	29,153	520.3	589.8	649.4	764.8	1,203.3	1,567.0	1,175.7	677.5	474.9	302.1	360.3	492.3	8,767	278
Chung Saeng (N14)	33,197	417.4	461.3	619.7	797.0	1,252.4	1,729.9	1,526.7	913.1	503.0	268.7	276.1	421.4	9,186	292
(6) Yom: Sukotai (Y14)	12,131	14.9	79.1	119.0	226.9	619.7	795.9	421.2	140.8	55.6	28.8	13.9	11.3	2,527	81
(7) Wang: TaK (W4A)	10,507	8.3	27.1	65.2	58.2	157.4	310.7	264.2	119.2	39.2	19.2	10.1	8.3	1,077	100
(8) Ping: Kamphaeng Phet (P7A)	42,700	721.9	664.2	595.5	593.7	695.2	836.9	962.3	673.4	400.8	362.6	510.4	741.9	7,759	35
(9) Chao Phraya: Nakhon Sawan (C ₂)	110,569	1,391.6	1,612.9	1,569.4	1,878.3	3,142.5	3,985.9	3,067.7	1,724.3	1,054.7	779.6	981.5	1,377.4	22,466	246
(10) Paak: Damat	12,925	14.9	40.4	74.9	92.8	206.0	549.8	757.7	153.6	48.8	24.7	13.7	13.3	1,991	713
Confluence of Chao Phraya	16,292	18.1	49.0	90.8	112.6	249.7	666.6	918.6	186.2	59.2	30.0	16.6	16.1	2,413	77
(11) Mekong: Chiang Saen	189,000	3,139.0	2,264.0	2,200.0	2,345.0	3,468.0	6,509.0	12,397.0	17,647.0	14,234.0	10,440.0	6,618.0	4,312.0	85,572	2,714
Chiang Khong	204,000	2,454.0	3,791.0	7,057.0	13,640.0	19,213.0	16,364.0	12,051.0	7,667.0	5,036.0	3,457.0	2,442.0	2,328.0	95,501	3,029

Table 2.3.2 Runoff Characteristics of Major Rivers

Basin and Gaging Station	Drainage Area (km ²)	Mean Annual Runoff			Specific Runoff Yield (mm)	Maximum Annual Runoff (MCM)	Minimum Annual Runoff (MCM)	Discharge	
		Wet Season (MCM)	Dry Season (MCM)	Total (MCM)				Mean (m ³ /sec)	Maximum (m ³ /sec)
1. Kok:									
(GN3) Myanmar Border	2,980	1,642	498	2,140	719	3,034	1,342	68	551
(G2A) Diversion Dam site	6,053	2,892	696	3,588	593	5,686	2,034	114	953
(GN1) River Mouth	10,300	4,208	982	5,190	504	7,266	3,430	165	874
2. Lao:									
(GN15) Confluence of Kok	3,080	715	140	855	278	1,338	424	27	-
3. Ing:									
(IN ₂) Existing Wair	3,450	819	62	881	256	1,383	435	28	596
(IN ₁) A. Thoeng	5,700	1,733	149	1,882	331	3,926	823	60	1,250
4. Yao:									
(N51) Confluence of Nan	774	323	57	380	491	606	199	12	380
5. Nan:									
(N17) Upper Nan	1,156	577	149	726	628	1,096	452	23	1,843
(N1) Nan City	4,609	2,320	224	2,544	552	4,748	1,342	81	2,800
Sirikit Inflow	13,100	4,419	705	5,124	391	8,574	3,119	163	3,378
Sirikit Outflow	13,100	2,131	2,721	4,852	370	7,284	2,405	154	1,963
(N12A) Uttaradit	15,718	2,891	2,466	5,375	342	10,270	2,436	171	3,300
(N5A) Phitsanulok	25,286	4,712	2,443	7,155	283	12,131	3,199	236	1,896
(N7) Phicit	29,153	6,027	2,740	8,767	301	14,288	3,850	278	1,563
(N14) Chung Saeng	33,197	6,838	2,348	9,186	277	15,874	3,562	292	1,448
6. Yom:									
(Y14) Sukothai	12,131	2,323	204	2,527	209	5,092	840	81	-
7. Wang:									
(W4A) Tak	10,507	965	412	1,077	147	2,104	408	100	445
8. Ping:									
Buhibol Inflow	26,386	4,559	686	5,245	199	8,804	2,562	167	-
Buhibol Outflow	26,386	1,917	3,021	4,938	188	7,620	2,790	157	-
(P7A) Kamphaeng Phet	42,700	4,357	3,402	7,759	103	12,221	4,184	35	2,452
9. Chao Phraya: (C ₂) Nakhon Sawan	110,569	15,367	7,099	22,466	182	36,917	11,541	246	4,712
(C ₃) Chainat Inflow	119,000	16,028	6,381	22,409	188	38,771	8,587	711	4,360
Chainat Outflow	119,000	8,595	2,196	10,791	91	26,055	2,650	343	-
Chainat Diversion	119,000	7,433	4,185	11,618	98	14,577	5,937	369	-
10. Pasak:									
Dam site	12,925	1,835	156	1,991	204	4,830	609	713	-
Confluence of Chao Phraya	16,292	2,224	189	2,413	149	5,855	738	77	-
11. Mekong:									
Chiang Saen	189,000	67,844	17,728	85,572	453	126,682	67,850	2,714	17,600
Chiang Khong	204,000	75,993	19,508	95,501	468	129,696	75,328	3,029	18,000

River Name : Nam Mae Kok
 Station Name : Ban Tha Don, Fang, Chiang Mai (GN3)
 Drainage Area : 2980.0 sq.km.
 Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	38.20	79.50	170.00	303.00	645.00	585.00	294.00	176.00	180.00	107.00	71.00	70.90	2719.60
1971	52.90	66.50	107.00	477.00	784.00	556.00	336.00	216.00	167.00	123.00	83.00	65.30	3033.70
1972	59.00	43.90	101.00	213.00	523.00	337.00	280.00	248.00	180.00	125.00	86.20	81.90	2283.00
1973	54.60	80.30	117.00	368.00	505.00	517.00	323.00	208.00	144.00	117.00	79.40	67.00	2580.30
1974	62.30	71.80	106.00	140.00	325.00	328.00	183.00	158.00	102.00	97.40	59.40	50.10	1683.00
1975	38.30	66.40	116.00	249.00	433.00	512.00	333.00	201.00	148.00	108.00	77.30	58.40	2340.40
1976	48.70	66.20	84.20	125.00	357.00	277.00	255.00	176.00	118.00	101.00	67.20	67.70	1733.00
1977	63.20	97.00	72.80	242.00	258.00	350.00	238.00	210.00	154.00	127.00	82.00	67.60	2011.60
1978	58.10	65.90	113.00	365.00	496.00	528.00	360.00	215.00	162.00	116.00	75.60	60.80	2615.40
1979	45.50	62.90	99.10	121.00	325.00	279.00	179.00	115.00	92.80	69.80	48.00	32.50	1469.60
1980	26.90	31.30	84.90	291.00	327.00	463.00	262.00	159.00	132.00	65.10	67.50	51.60	1961.30
1981	44.80	141.00	160.00	385.00	585.00	432.00	362.00	247.00	177.00	137.00	90.80	75.10	2836.70
1982	81.20	69.50	160.00	179.00	593.00	407.00	374.00	213.00	151.00	119.00	81.70	68.90	2497.30
1983	48.40	54.30	89.00	173.00	415.00	453.00	311.00	318.00	206.00	147.00	99.60	76.30	2390.60
1984	59.10	72.70	113.00	270.00	320.00	374.00	281.00	175.00	125.00	103.00	70.00	55.20	2018.00
1985	48.00	77.10	119.00	233.00	473.00	516.00	292.00	277.00	186.00	135.00	90.90	73.30	2520.30
1986	60.00	88.30	103.00	218.00	235.00	254.00	184.00	131.00	97.90	103.00	62.50	52.90	1589.60
1987	38.90	37.00	80.50	125.00	339.00	249.00	181.00	161.00	107.00	78.00	54.20	42.50	1493.10
1988	47.50	87.70	120.00	214.00	544.00	368.00	251.00	168.00	121.00	95.30	63.50	55.00	2135.00
1989	38.20	58.40	119.00	271.00	315.00	369.00	382.00	218.00	153.00	111.00	76.60	67.40	2178.60
1990	45.90	83.10	141.00	306.00	285.00	316.00	221.00	168.00	121.00	91.20	60.20	45.90	1884.30
1991	49.50	61.50	171.00	203.00	432.00	392.00	253.00	223.00	151.00	107.84	79.37	59.56	2182.76
1992	38.81	32.18	51.36	165.03	237.31	235.25	175.05	134.62	107.57	79.39	48.79	37.06	1342.41
1993	23.34	40.20	89.24	246.65	330.75	351.22	258.43	162.39	113.24	107.00	73.00	60.00	1855.46
TOTAL	1171.35	1639.67	2687.10	5882.69	10082.05	9448.47	6618.48	4678.00	3396.51	2570.03	1747.76	1432.91	51355.02
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	49.81	68.32	111.96	245.11	420.09	393.69	275.77	194.92	141.52	107.08	72.82	59.70	2139.79
MAX	81.20	141.00	171.00	477.00	784.00	585.00	382.00	318.00	206.00	147.00	99.60	81.90	3033.70
MIN	23.34	31.30	51.36	121.00	235.00	235.25	175.05	115.00	92.80	65.10	48.00	32.50	1342.41

River Name : Nam Mae Kok
Station Name : Mae Kok Bridge, Muang, Chiang Rai (G2A)
Drainage Area : 6053.0 sq.km.
Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	77.30	166.00	339.00	581.00	1077.00	1149.00	542.00	272.00	346.00	199.00	125.00	106.00	4979.30
1971	83.00	135.00	217.00	880.00	1346.00	1149.00	724.00	396.00	273.00	209.00	148.00	126.00	5686.00
1972	125.00	94.40	167.00	286.00	888.00	607.00	666.00	484.00	350.00	215.00	147.00	138.00	4065.40
1973	99.90	142.00	198.00	601.00	1041.00	1136.00	625.00	380.00	254.00	204.00	132.00	121.00	4933.90
1974	122.00	157.00	226.00	214.00	607.00	607.00	388.00	336.00	223.00	222.00	125.00	97.70	3324.70
1975	74.30	65.50	270.60	319.10	759.00	960.00	639.00	372.00	277.00	204.00	145.00	120.00	4204.90
1976	93.70	155.00	190.00	213.00	555.00	582.00	536.00	335.00	211.00	172.00	108.00	95.50	3252.20
1977	122.00	156.00	105.00	343.00	389.00	1126.10	589.00	391.00	229.00	208.00	104.00	81.60	3843.70
1978	60.60	124.00	147.00	635.00	814.00	854.00	618.00	302.00	204.00	140.00	78.60	53.70	4030.90
1979	45.50	76.90	140.00	160.00	513.00	450.00	316.00	138.00	90.40	54.40	32.90	16.60	2033.70
1980	15.60	23.30	101.00	328.00	264.00	1000.00	371.00	245.70	272.60	78.30	46.10	24.70	2770.30
1981	19.40	99.60	138.70	494.00	865.70	833.40	535.40	441.30	306.50	180.20	126.30	91.20	4130.70
1982	79.90	95.10	244.70	415.90	856.30	852.90	739.10	303.40	174.10	99.30	58.80	37.70	3956.20
1983	26.30	60.30	106.50	221.20	963.20	918.50	483.80	691.70	257.00	182.60	126.40	83.20	4120.70
1984	59.90	100.90	141.10	459.00	642.00	831.70	430.00	249.50	253.50	126.70	64.30	35.40	3394.00
1985	34.60	70.50	128.30	357.30	839.10	725.50	451.60	577.40	265.90	131.10	99.40	67.70	3748.40
1986	57.70	137.80	126.70	344.10	433.10	630.30	282.50	292.20	131.30	157.40	93.60	76.80	2763.50
1987	57.20	89.90	100.80	169.30	667.00	424.80	296.00	323.20	215.90	116.90	67.90	41.80	2569.70
1988	42.10	80.90	260.20	378.90	998.20	662.90	627.00	309.20	204.20	125.40	60.30	33.70	3783.00
1989	29.40	91.30	176.70	518.20	633.40	919.10	558.50	238.30	234.40	81.80	67.70	58.30	3607.10
1990	41.00	89.00	172.70	391.90	456.70	499.40	470.00	392.10	155.30	72.10	56.30	41.80	2848.30
1991	51.80	77.50	111.80	260.60	572.80	1135.90	503.80	267.60	156.20	62.10	39.30	32.60	3272.00
1992	34.50	29.70	175.00	272.30	434.30	368.50	241.30	283.30	264.10	165.60	84.90	56.20	2409.70
1993	41.00	91.50	184.10	320.40	378.40	464.00	379.90	277.30	106.80	69.00	40.10	32.80	2385.30
TOTAL	1499.70	2408.10	4167.30	9163.20	16990.20	18887.00	11912.90	8298.20	5454.20	3475.90	2176.90	1570.00	85113.60
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	62.49	100.34	173.64	381.80	707.93	786.96	496.37	345.76	227.68	144.83	90.70	69.58	3588.07
MAX	125.00	166.00	339.00	880.00	1346.00	1149.00	739.10	691.70	350.00	222.00	148.00	138.00	5686.00
MIN	15.60	23.30	100.80	160.00	264.00	368.50	241.30	138.00	90.40	54.40	32.90	16.60	2033.70

River Name : Nam Mae Kok
 Station Name : Ban Tha Kok, Mae Chan, Chiang Rai (GN1)
 Drainage Area : 10300.0 sq.km.
 Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	74.00	220.40	406.00	1008.30	1234.70	1460.70	923.40	414.20	378.90	222.00	140.00	111.00	6593.60
1971	86.80	165.00	281.00	1340.00	1540.00	1490.00	907.00	579.00	358.00	245.00	156.00	118.00	7265.80
1972	116.00	95.70	165.00	277.00	1170.00	836.00	772.00	652.00	456.00	272.00	171.00	184.00	5166.70
1973	114.00	152.00	239.00	816.00	1390.00	1520.00	883.00	529.00	363.00	240.00	149.00	120.00	6504.00
1974	116.00	162.00	255.00	203.00	936.00	945.00	575.00	581.00	282.00	272.00	129.00	91.50	4548.50
1975	66.10	87.00	375.00	666.00	1100.00	1390.00	971.00	503.00	345.00	197.00	135.00	102.00	5937.10
1976	80.10	132.00	170.00	169.00	751.00	786.00	926.00	525.00	256.00	228.00	110.00	88.20	4221.30
1977	129.00	185.00	93.60	465.00	596.00	1360.00	997.00	625.00	334.00	334.00	142.00	127.00	5387.60
1978	88.50	241.00	259.00	1150.00	1730.00	1380.00	950.00	471.00	303.00	190.00	114.00	88.50	6965.00
1979	59.00	121.00	271.00	365.00	861.00	801.00	690.00	255.00	173.00	111.00	73.90	56.00	3836.90
1980	51.10	83.00	378.00	681.00	1040.00	1360.00	749.00	388.00	293.00	158.00	99.20	74.90	5355.20
1981	58.80	314.00	430.00	986.00	1250.00	978.00	781.00	636.00	363.00	235.00	134.00	104.00	6269.80
1982	144.00	122.00	312.00	387.00	1050.00	988.00	927.00	430.00	281.00	200.00	126.00	93.30	5065.30
1983	64.00	83.20	122.00	269.00	1170.00	1270.00	902.00	958.00	454.00	282.00	176.00	120.00	5880.20
1984	94.30	138.00	222.00	499.00	873.00	1060.00	857.00	416.00	277.00	178.00	114.00	78.80	4807.10
1985	88.00	172.00	254.00	425.00	1080.00	1090.00	651.00	818.00	421.00	240.00	145.00	112.00	5496.00
1986	91.90	284.00	186.00	385.00	649.00	764.00	555.00	425.00	247.00	242.00	115.00	93.80	4037.70
1987	62.10	79.20	132.00	178.00	770.00	750.00	537.00	475.00	239.00	161.40	113.50	85.20	3582.40
1988	104.20	224.70	515.70	970.50	1376.50	884.70	795.70	476.80	323.90	199.50	103.50	89.50	6065.20
1989	55.10	94.60	208.00	710.00	1179.00	1016.20	973.60	421.70	249.90	169.90	90.60	92.50	5261.10
1990	67.70	202.40	439.50	429.20	598.40	692.70	696.60	553.00	297.80	198.70	109.90	92.00	4377.90
1991	98.80	128.30	190.60	258.20	931.90	1400.10	793.60	403.90	235.90	174.70	112.30	88.10	4816.40
1992	58.00	75.00	250.00	318.40	598.80	531.10	497.20	448.50	284.30	175.40	105.40	87.40	3429.50
1993	56.30	162.30	208.00	429.90	603.10	713.10	613.50	397.30	231.20	93.60	88.80	88.40	3685.50
TOTAL	2023.80	3723.80	6361.40	13385.50	24468.40	25467.60	18923.60	12381.40	7456.90	5019.20	2953.10	2391.10	124556.80
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	84.33	155.16	265.06	557.73	1019.52	1061.15	788.48	515.89	310.70	209.13	123.05	99.63	5189.83
MAX	144.00	314.00	515.70	1340.00	1730.00	1520.00	997.00	958.00	464.00	334.00	176.00	184.00	7265.80
MIN	51.10	75.00	93.60	169.00	596.00	531.10	497.20	255.00	173.00	93.60	73.90	56.00	3429.50

River Name : Nam Mao Leo

Station Name : Ban Tha Sai, Muang, Chiang Rai (GN15)

Drainage Area : 3060.0 sqkm.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	10.97	68.77	96.08	90.80	272.86	281.98	219.85	123.82	88.49	34.40	15.70	14.50	1318.22
1971	16.50	47.60	40.40	206.00	254.00	266.00	186.00	105.00	71.40	41.60	21.80	10.80	1266.10
1972	21.40	17.50	30.20	31.80	211.00	143.00	172.00	143.00	86.40	38.70	15.00	21.80	931.80
1973	9.65	24.30	46.20	141.00	349.00	359.00	176.00	96.40	64.00	35.20	21.10	15.70	1337.55
1974	14.50	32.10	44.60	23.20	177.00	180.00	102.00	124.00	44.00	58.30	16.20	8.27	824.17
1975	6.62	7.75	84.60	145.00	249.00	295.00	189.00	105.00	74.10	27.50	14.40	9.37	1207.34
1976	6.80	24.10	28.90	25.40	97.50	188.00	208.00	123.00	52.30	51.20	14.60	9.78	829.58
1977	23.80	38.30	7.06	63.50	91.40	244.00	212.00	129.00	61.30	75.10	22.70	14.60	982.76
1978	6.98	57.60	64.20	246.00	185.00	267.00	172.00	86.40	45.60	18.60	10.60	7.09	1167.07
1979	4.95	26.60	54.40	49.70	153.00	115.00	124.00	35.80	21.50	8.29	4.75	3.94	601.93
1980	5.05	11.70	48.90	121.00	139.00	367.00	115.00	59.10	44.70	12.10	5.72	2.96	932.23
1981	4.41	42.40	56.40	140.00	205.00	139.00	113.00	105.00	53.50	20.40	5.51	4.44	889.06
1982	21.80	19.30	53.10	51.20	94.30	179.00	125.00	59.20	29.00	16.40	6.86	4.71	662.87
1983	2.16	15.00	9.25	25.60	178.00	208.00	159.00	170.00	71.40	33.10	16.90	7.89	896.30
1984	6.78	23.30	36.70	44.60	128.00	198.00	155.00	57.50	37.90	14.60	7.55	2.87	712.80
1985	12.20	34.00	43.10	69.60	107.00	156.00	109.00	189.00	75.50	26.50	11.30	7.60	840.80
1986	11.20	91.70	38.50	71.30	125.00	166.00	119.00	78.90	47.60	45.70	13.30	6.91	815.11
1987	3.97	12.40	13.80	9.44	141.00	112.00	68.60	84.30	30.00	14.20	5.64	2.31	497.66
1988	14.40	129.00	141.00	138.00	195.00	157.00	163.00	88.90	53.00	17.30	7.22	5.00	1108.82
1989	2.75	21.70	69.40	98.10	116.00	146.00	134.00	59.20	41.20	11.50	7.94	4.81	712.60
1990	3.90	28.10	46.90	44.70	82.90	113.00	84.90	69.30	33.40	10.80	5.80	3.47	527.17
1991	9.74	11.70	27.30	17.40	108.00	223.00	77.00	68.80	28.80	10.29	3.92	3.18	589.13
1992	1.66	1.89	1.77	27.30	59.95	100.10	94.44	56.26	51.32	21.17	6.30	2.31	424.47
1993	2.84	16.91	15.73	55.52	33.05	110.70	113.91	52.57	25.31	11.62	3.09	1.18	442.43
TOTAL	225.03	803.72	1098.49	1938.16	3751.96	4713.78	3391.70	2269.45	1231.72	654.57	263.90	175.49	20517.97
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	9.38	33.49	45.77	80.76	156.33	196.41	141.32	94.56	51.32	27.27	11.00	7.31	854.92
MAX	23.80	129.00	141.00	246.00	349.00	367.00	219.85	189.00	88.49	75.10	22.70	21.80	1337.55
MIN	1.66	1.89	1.77	9.44	33.05	100.10	68.60	35.80	21.50	8.29	3.09	1.18	424.47

River Name : Mae Nam Ing

Station Name : Khao Ing Rod , A.Chun , Phayao (IN2)

Drainage Area : 3450.0 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	1.00	23.60	71.70	136.00	245.00	377.00	203.00	54.70	55.60	20.30	9.03	7.11	1204.04
1971	5.81	5.71	6.89	74.60	239.00	318.00	193.00	83.50	27.10	10.30	5.56	4.53	979.00
1972	17.60	11.20	7.13	37.20	309.00	155.00	163.00	119.00	78.60	10.40	6.88	8.48	923.49
1973	6.09	5.85	22.00	122.00	337.31	245.05	197.00	54.90	18.00	11.00	5.44	3.36	1028.00
1974	2.24	7.56	21.30	17.30	245.00	232.00	122.00	149.00	27.40	54.50	13.20	4.97	896.47
1975	2.95	2.72	55.00	126.00	330.00	425.00	275.00	82.10	26.50	13.40	8.49	3.37	1350.53
1976	2.87	8.78	7.29	4.38	130.00	158.00	289.00	164.00	16.80	19.80	4.57	3.14	808.63
1977	7.32	17.50	3.33	69.30	188.00	493.00	315.00	148.00	22.50	29.90	9.80	3.74	1307.39
1978	2.22	23.90	29.00	309.00	292.00	422.00	225.00	33.80	10.50	4.34	1.23	0.84	1353.83
1979	0.69	1.89	58.90	68.60	109.00	109.00	112.00	17.80	6.85	3.00	1.53	1.89	491.15
1980	1.43	1.81	45.60	165.00	274.00	554.00	229.00	64.00	31.90	8.47	5.50	2.37	1383.08
1981	1.11	16.50	38.90	158.00	222.00	111.00	77.70	121.00	37.00	8.64	3.99	1.63	797.47
1982	8.51	5.66	15.20	24.10	58.20	129.00	173.00	24.30	4.38	2.50	1.81	1.36	448.02
1983	0.67	0.72	0.67	2.16	191.00	246.00	179.00	144.00	31.30	7.32	3.83	2.11	808.78
1984	1.07	4.51	11.10	47.00	205.00	316.00	175.00	72.80	15.80	3.30	2.48	1.24	855.30
1985	0.82	2.85	18.80	57.80	158.00	158.00	129.00	256.00	91.10	11.20	5.46	2.80	891.83
1986	1.82	31.50	6.36	31.80	165.00	222.00	110.00	64.20	20.00	18.20	5.48	3.11	679.47
1987	1.09	0.67	3.79	0.64	128.00	295.00	200.00	112.00	16.00	2.64	1.04	0.78	761.65
1988	1.04	125.00	127.00	135.00	211.00	150.00	86.20	49.70	20.00	5.54	1.44	0.79	911.71
1989	0.61	1.56	45.00	85.40	171.00	232.00	366.00	38.80	10.20	2.81	1.80	1.57	956.75
1990	1.07	7.31	21.20	92.70	194.00	186.00	80.80	106.00	18.20	3.55	1.89	1.38	714.10
1991	1.15	0.90	6.04	7.12	102.00	374.00	125.00	66.20	11.20	2.71	1.02	0.56	697.90
1992	0.19	0.39	0.48	0.46	46.15	127.61	119.47	77.03	39.75	42.54	2.85	1.57	458.49
1993	1.33	1.25	1.08	57.78	28.78	167.13	91.07	73.15	6.99	2.30	0.95	0.39	435.20
TOTAL	70.70	309.34	623.76	1829.34	4578.44	6201.79	4243.24	2174.98	643.67	298.66	105.27	63.09	21142.28
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	2.95	12.89	25.99	76.22	190.77	258.41	176.80	90.62	26.82	12.44	4.39	2.63	880.93
MAX	17.60	125.00	127.00	309.00	337.31	554.00	366.00	256.00	91.10	54.50	13.20	8.48	1383.08
MIN	0.19	0.39	0.48	0.46	28.78	109.00	77.70	17.80	4.38	2.30	0.95	0.39	435.20

River Name : Mae Nam Ing
Station Name : A.Thoeng, Chiang Rai (IN1)
Drainage Area : 5700.0 sqkm.
Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	5.40	111.00	347.00	516.00	618.00	901.00	408.00	98.80	86.80	37.30	12.80	8.10	3150.20
1971	5.90	9.90	28.60	192.00	460.00	684.00	360.00	127.00	51.70	19.30	11.10	7.50	1957.00
1972	18.50	28.10	32.40	75.90	971.00	418.00	269.00	179.00	118.00	43.80	20.60	25.70	2200.00
1973	12.70	28.90	94.20	277.00	1240.00	1430.00	530.00	156.00	96.00	33.60	17.80	9.60	3925.80
1974	11.50	23.40	52.60	45.90	539.00	593.00	291.00	238.00	61.50	74.30	27.00	11.40	1968.60
1975	5.10	10.70	148.00	278.00	796.00	831.00	457.00	133.00	57.40	28.30	19.60	7.70	2771.80
1976	6.80	24.50	21.60	23.40	231.00	261.00	550.00	227.00	41.90	41.70	11.20	7.50	1447.60
1977	20.90	38.90	12.90	126.00	404.00	835.00	632.00	262.00	62.00	65.10	20.80	10.80	2490.40
1978	10.00	40.60	88.90	569.00	632.00	784.00	358.00	87.00	32.70	16.10	7.20	4.50	2630.00
1979	4.10	28.70	121.00	123.00	243.00	221.00	147.00	37.30	17.50	7.90	4.10	3.30	957.90
1980	3.30	4.60	81.50	345.00	701.00	1150.00	478.70	116.00	61.00	21.60	11.00	4.70	2978.40
1981	7.60	43.60	62.80	412.00	496.00	302.00	133.00	182.00	77.80	21.90	10.30	5.70	1754.70
1982	30.90	18.60	39.40	51.90	155.00	279.00	343.00	68.80	21.50	10.70	6.40	4.60	1029.80
1983	2.20	7.80	5.30	25.80	372.00	516.00	356.00	215.00	67.50	21.80	10.90	5.80	1606.10
1984	6.10	30.80	43.40	151.00	482.00	697.00	245.00	149.00	40.30	12.60	7.10	3.90	1868.20
1985	8.30	22.60	45.40	118.00	539.00	340.00	184.00	363.00	190.00	27.80	13.00	7.70	1858.80
1986	9.00	61.40	17.70	117.00	313.00	362.00	201.00	120.00	41.20	34.30	12.00	7.40	1296.00
1987	4.90	8.70	10.50	10.90	233.00	476.00	413.00	166.00	39.70	12.40	6.90	3.40	1385.40
1988	6.40	196.00	168.00	185.00	441.00	279.00	157.00	88.10	37.30	12.00	4.80	2.60	1577.20
1989	1.60	15.50	85.10	219.00	268.00	414.00	573.00	95.10	30.00	12.80	9.00	6.50	1720.60
1990	4.50	13.60	38.10	168.00	463.00	265.00	142.00	160.00	41.00	11.20	5.90	3.70	1317.00
1991	5.40	19.40	41.30	54.10	243.00	630.00	273.00	134.00	33.40	12.40	7.10	4.90	1458.00
1992	2.60	1.50	1.70	16.40	103.50	200.10	207.30	123.30	68.50	67.70	8.90	21.40	822.80
1993	39.00	44.40	44.40	185.70	110.20	271.20	155.20	110.00	28.10	8.00	5.00	5.40	1006.60
TOTAL	232.60	833.20	1631.80	4286.00	11043.70	13140.30	7863.20	3636.40	1402.80	654.60	270.50	183.80	45178.90
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	9.69	34.72	67.99	178.58	460.15	547.51	327.63	151.52	58.45	27.28	11.27	7.65	1882.45
MAX	39.00	196.00	347.00	569.00	1240.00	1430.00	632.00	363.00	190.00	74.30	27.00	25.70	3925.80
MIN	1.60	1.50	1.70	10.90	103.50	200.10	133.00	37.30	17.50	7.90	4.10	2.60	822.80

River Name : Mae Nam Ing

Station Name : Ban Pra Mong , A.Muang , Phayao (IN3)

Drainage Area : 1210.0 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	2.66	2.51	6.01	24.78	37.72	99.99	71.95	20.38	8.42	8.32	1.71	1.53	285.98
1971	2.25	2.77	2.49	6.56	44.00	85.10	59.80	43.00	12.20	5.06	2.37	2.15	267.75
1972	2.09	1.91	1.27	1.19	36.50	53.20	49.00	44.20	27.60	7.81	4.55	5.00	234.32
1973	2.01	2.69	7.63	16.50	183.00	201.00	65.00	20.40	14.30	19.20	5.87	0.96	538.56
1974	0.90	4.14	26.20	13.30	53.20	55.50	37.70	56.30	14.70	14.30	6.01	3.69	285.94
1975	3.75	10.30	3.83	14.60	90.00	95.00	83.10	18.10	9.50	8.54	4.33	0.51	341.56
1976	1.91	5.33	7.95	3.16	16.50	30.00	75.10	52.80	4.02	3.27	1.21	1.00	202.25
1977	1.94	19.40	11.00	10.40	16.90	118.00	87.10	57.40	3.94	7.34	6.11	5.90	345.43
1978	5.72	8.60	12.40	66.90	68.10	97.80	57.90	10.70	1.68	1.71	1.07	0.88	333.46
1979	2.14	3.64	5.67	8.68	11.70	28.80	19.50	4.04	3.58	1.33	1.21	2.35	92.64
1980	2.86	4.87	13.00	33.10	44.40	160.00	55.80	19.00	4.77	4.51	1.78	0.83	344.92
1981	2.18	25.47	8.11	26.35	41.75	26.03	20.93	47.79	6.99	4.13	2.06	4.90	216.69
1982	4.77	1.77	7.73	13.98	5.94	35.61	27.55	8.23	1.96	2.74	2.78	2.40	115.46
1983	1.86	1.64	7.49	13.47	16.87	63.82	34.34	56.26	8.93	4.30	1.27	3.22	213.47
1984	2.38	3.38	1.50	4.03	23.09	90.64	55.04	34.64	10.52	3.83	1.02	1.31	231.38
1985	4.03	2.73	2.73	3.22	16.56	40.46	54.43	83.17	21.39	9.72	4.72	1.10	244.26
1986	1.51	1.89	7.25	13.00	19.18	53.69	17.81	22.85	6.21	2.64	1.73	2.60	150.36
1987	1.36	2.38	3.21	12.00	20.33	66.40	66.76	39.60	9.18	1.86	1.20	1.55	225.83
1988	3.80	8.48	10.28	14.09	31.94	31.53	35.85	17.77	10.10	4.19	1.71	0.39	170.13
1989	1.52	8.20	13.29	29.45	49.56	48.55	74.48	10.39	3.18	1.46	0.99	0.92	241.99
1990	1.43	5.40	3.06	5.42	19.35	38.66	8.91	39.37	5.40	3.56	1.46	3.08	135.10
1991	2.97	2.63	2.06	3.50	8.93	80.11	33.12	18.99	4.88	4.33	1.49	0.70	163.71
1992	2.32	1.47	2.70	17.00	5.92	19.46	24.83	35.26	12.74	7.06	1.89	1.84	132.49
1993	2.41	2.26	1.36	6.16	3.88	43.63	40.22	24.57	3.07	1.77	0.61	5.03	134.97
TOTAL	60.77	133.86	168.22	360.84	885.32	1662.98	1156.22	785.21	209.26	132.98	69.15	53.84	5648.65
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	2.53	5.58	7.01	15.04	36.06	69.29	48.18	32.72	8.72	5.54	2.46	2.24	235.36
MAX	5.72	25.47	26.20	66.90	183.00	201.00	87.10	83.17	27.60	19.20	6.11	5.90	538.56
MIN	0.90	1.47	1.27	1.19	3.88	19.46	8.91	4.04	1.68	1.33	0.61	0.39	92.64

River Name : Huai Nam Yao

Station Name : Ban Wang Hit, A.Tha Wang Pha, Nan (N51)

Drainage Area : 774.0 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	3.05	6.58	21.32	43.89	99.75	131.65	55.46	31.17	19.07	12.54	7.28	6.80	438.66
1971	3.55	16.31	37.11	123.79	111.05	100.68	47.21	20.31	14.39	10.29	6.85	4.65	496.19
1972	4.91	6.31	13.26	29.25	101.26	81.17	38.51	28.18	19.84	13.35	7.64	6.74	350.42
1973	10.15	27.14	21.04	56.50	65.91	26.39	27.57	15.52	9.86	6.97	5.42	5.71	278.18
1974	10.70	14.06	41.77	108.12	71.87	48.95	35.61	22.97	15.36	11.38	6.98	5.06	392.83
1975	4.68	8.32	13.49	64.36	64.70	71.26	26.75	22.34	15.31	12.45	8.02	6.73	318.42
1976	8.47	22.00	21.41	36.10	45.41	58.16	29.00	16.23	11.91	7.07	5.15	4.37	265.28
1977	4.08	9.63	20.29	91.35	119.37	62.88	37.34	21.14	13.42	10.67	8.11	5.47	403.75
1978	6.08	19.47	27.24	98.36	93.81	111.25	67.98	24.93	15.32	11.09	6.69	4.46	486.68
1979	3.54	9.89	30.90	26.30	104.00	53.80	25.30	13.90	9.62	5.82	4.16	3.60	290.83
1980	3.44	5.11	36.60	84.80	76.90	159.00	46.00	23.00	16.00	10.20	6.25	4.69	471.99
1981	6.10	25.80	36.00	132.00	108.00	106.00	41.80	28.40	19.70	15.50	9.83	7.25	536.38
1982	11.10	12.00	22.30	53.60	90.00	109.00	76.50	26.60	17.50	12.40	6.13	4.13	441.26
1983	2.20	10.40	11.80	46.50	101.00	150.00	76.50	34.60	19.70	14.00	10.20	6.58	483.48
1984	5.32	12.80	32.80	142.00	146.00	142.00	55.60	25.80	17.80	12.70	7.61	5.81	606.24
1985	11.20	9.70	15.23	55.48	151.03	59.35	23.78	21.03	13.47	8.79	5.18	3.48	377.72
1986	6.26	16.41	13.23	51.98	49.62	45.33	30.09	20.92	14.06	9.67	6.78	5.87	270.22
1987	4.72	6.59	14.09	16.57	42.41	27.90	22.02	23.49	16.10	12.08	7.49	5.37	198.83
1988	5.70	14.92	20.45	100.63	129.85	70.31	27.86	17.15	12.12	8.20	6.02	6.11	419.32
1989	4.23	9.54	17.68	50.23	50.68	78.21	33.59	16.43	11.72	9.22	7.22	7.59	296.34
1990	4.13	7.37	22.64	63.20	68.44	44.60	29.70	20.38	12.03	8.73	5.59	4.72	291.53
1991	6.17	21.62	25.45	40.89	63.72	72.72	30.19	16.52	12.18	8.65	6.88	5.58	310.57
1992	4.23	19.79	25.54	93.40	69.84	59.10	40.65	17.75	12.49	9.02	6.09	5.49	363.39
1993	6.23	9.10	15.00	46.89	86.50	92.15	25.03	13.90	10.36	8.20	5.15	5.93	324.44
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TOTAL	140.24	320.86	556.64	1656.19	2111.12	1961.86	950.04	522.66	349.33	249.00	162.72	132.19	9112.85
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	5.84	13.37	23.19	69.01	87.96	81.74	39.59	21.78	14.56	10.38	6.78	5.51	379.70
MAX	11.20	27.14	41.77	142.00	151.03	159.00	76.50	34.60	19.84	15.50	10.20	7.59	606.24
MIN	2.20	5.11	11.80	16.57	42.41	26.39	22.02	13.90	9.62	5.82	4.16	3.48	198.83

River Name : Mae Nam Nan

Station Name : Ban Mon, A.Thuang Chang, Nan (N17)

Drainage Area : 1156.0 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	5.11	12.00	128.00	116.00	213.00	168.00	45.60	18.80	13.70	8.01	5.56	5.38	739.16
1971	3.68	9.58	38.20	142.00	230.00	89.90	42.30	22.30	16.50	12.90	8.93	8.28	634.57
1972	10.40	11.20	16.30	37.50	266.00	84.00	54.29	45.20	32.90	25.00	18.00	23.90	624.69
1973	18.20	26.60	39.50	112.00	369.00	222.00	81.60	38.00	27.40	21.80	15.70	15.60	987.40
1974	20.10	29.30	56.70	61.50	169.00	113.00	54.20	21.72	24.90	26.80	19.28	18.50	615.00
1975	11.40	23.80	69.00	122.00	235.00	213.00	97.50	52.40	37.10	29.90	24.30	21.10	936.50
1976	22.00	25.80	45.70	80.00	143.00	133.00	86.90	44.00	27.70	27.00	16.10	16.30	667.50
1977	20.00	40.50	24.40	101.00	161.00	108.00	48.90	40.00	23.50	21.00	16.20	14.90	619.40
1978	15.10	26.30	40.10	272.00	160.00	178.00	77.10	33.50	24.80	19.50	14.50	12.20	873.10
1979	10.70	18.20	67.80	36.70	126.00	76.80	38.40	22.40	18.10	14.90	11.20	10.50	451.70
1980	11.60	12.40	50.50	144.00	147.00	216.00	72.30	38.60	30.70	23.80	17.10	15.40	779.40
1981	18.10	71.50	69.60	312.00	164.00	166.00	78.50	59.06	46.52	42.50	33.60	34.90	1096.28
1982	39.10	40.40	46.20	81.10	124.00	161.00	108.00	53.30	40.80	36.50	29.20	29.50	789.10
1983	30.00	36.50	38.80	69.30	146.00	136.00	105.00	62.90	42.90	35.30	28.80	26.90	757.40
1984	24.70	32.90	39.00	131.00	179.00	189.00	118.00	51.70	37.90	32.70	25.70	25.20	886.80
1985	32.00	35.60	46.10	102.00	192.00	124.00	63.40	61.90	41.50	32.10	24.90	23.20	778.70
1986	26.50	75.30	38.50	84.70	118.00	80.60	57.60	38.30	30.90	27.50	22.20	22.40	622.50
1987	20.70	22.90	30.00	32.80	77.80	66.90	54.90	58.90	32.70	24.60	20.30	18.70	461.20
1988	21.17	41.81	49.71	103.04	234.38	68.94	48.50	31.65	26.56	22.27	17.09	16.18	681.30
1989	23.52	24.30	45.60	96.49	132.19	107.32	73.52	39.88	31.12	29.61	23.24	24.59	651.38
1990	27.11	28.95	44.41	167.17	169.11	64.62	46.97	42.53	32.63	22.59	16.68	17.94	680.71
1991	25.40	53.00	63.34	83.25	154.32	149.02	110.19	37.50	37.14	30.47	22.73	21.46	787.82
1992	20.65	25.10	21.38	132.27	117.60	87.74	61.41	54.63	40.19	32.34	26.23	22.28	641.82
1993	23.40	30.77	37.38	155.10	105.55	84.95	68.49	42.98	40.19	28.84	21.71	26.66	666.02
TOTAL	490.64	754.71	1146.22	2774.92	4132.95	3097.79	1693.57	1012.15	758.35	627.93	479.25	470.97	17429.45
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	20.03	31.45	47.76	115.62	172.21	129.07	70.57	42.17	31.60	26.16	19.97	19.62	726.23
MAX	39.10	75.30	128.00	312.00	369.00	222.00	118.00	62.90	46.52	42.50	33.60	34.90	1096.28
MIN	3.68	9.58	16.30	32.80	77.80	64.62	38.40	18.80	13.70	8.01	5.56	5.38	451.70

River Name : Mae Nam Nan

Station Name : Forestry Office, A.Muang, Nan (N1)

Drainage Area : 4609.0 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	72.00	104.10	592.00	659.00	1130.00	1647.00	294.00	164.00	34.90	26.50	12.30	11.90	4747.70
1971	12.70	31.50	183.00	739.40	1247.00	377.00	176.00	40.30	32.30	17.50	10.60	8.70	2876.00
1972	15.20	21.60	43.90	197.00	1198.00	178.00	118.00	48.00	28.00	14.30	9.40	17.00	1883.40
1973	8.60	26.20	92.90	400.00	907.00	718.00	214.00	61.90	29.40	17.40	9.80	9.50	2494.70
1974	18.50	59.70	96.80	116.00	452.00	316.00	132.00	62.70	36.40	24.50	14.20	13.90	1341.70
1975	6.90	25.30	220.00	477.00	1064.00	720.00	270.90	77.40	38.80	26.40	14.40	10.40	2951.50
1976	11.50	17.80	116.00	211.00	649.00	538.00	274.00	66.40	41.50	30.10	12.60	11.00	1978.90
1977	16.10	49.40	25.40	244.00	522.90	311.00	120.00	68.20	36.70	20.30	12.40	10.60	1437.00
1978	13.10	25.20	174.00	372.00	694.00	570.00	193.00	41.70	27.50	13.40	9.70	8.00	2141.60
1979	34.40	62.60	240.00	185.00	633.00	270.00	139.00	87.30	64.10	60.80	38.90	44.90	1850.00
1980	54.70	84.00	404.00	918.00	712.00	1272.00	278.00	122.00	85.30	57.40	32.60	23.60	4043.60
1981	31.40	119.00	184.00	1404.00	908.00	675.00	290.00	134.00	77.30	53.60	32.90	24.70	3933.90
1982	52.50	51.80	102.00	453.00	666.00	843.00	506.00	132.00	83.40	59.60	31.20	24.20	3004.70
1983	17.80	61.80	92.40	444.00	941.00	859.00	569.00	222.00	102.00	54.80	30.80	18.00	3412.60
1984	22.10	110.00	186.00	870.00	1203.00	1134.00	391.00	133.00	76.50	40.10	23.20	15.50	4204.40
1985	40.70	44.00	108.40	394.90	1236.20	535.90	188.90	164.60	87.30	51.90	29.70	24.00	2906.50
1986	35.40	184.80	166.70	481.40	461.40	333.20	176.40	96.40	52.60	36.00	25.60	22.60	2072.50
1987	16.30	25.50	56.20	82.90	417.40	283.60	186.60	120.90	64.80	39.80	26.80	23.20	1344.00
1988	21.10	84.30	130.90	394.80	849.20	298.20	158.80	72.90	40.90	26.40	19.60	19.60	2116.70
1989	14.80	61.70	113.30	414.90	491.00	615.10	262.60	96.30	54.10	35.40	27.60	31.40	2218.20
1990	24.60	59.90	155.20	493.50	557.70	430.90	201.40	129.80	67.60	40.70	22.60	21.10	2205.00
1991	22.80	99.00	136.10	277.10	566.40	513.00	227.60	98.70	63.60	38.00	22.10	20.00	2084.40
1992	15.00	15.40	32.70	283.20	414.10	405.70	230.70	119.10	114.10	65.00	36.30	45.50	1776.80
1993	38.30	60.40	105.50	656.50	411.90	310.60	200.50	91.70	46.56	37.20	25.10	32.40	2016.66
TOTAL	616.50	1434.00	3757.40	11163.60	18332.20	14154.20	5793.40	2451.30	1385.66	877.10	530.40	491.70	61047.46
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	25.69	61.83	156.56	465.36	763.84	589.76	241.60	102.14	57.74	36.55	22.10	20.49	2543.64
MAX	72.00	184.80	592.00	1404.00	1247.00	1647.00	569.00	222.00	114.10	65.00	38.90	45.50	4747.70
MIN	6.90	15.40	25.40	82.90	411.90	178.00	118.00	40.30	27.50	13.40	9.40	8.00	1341.70

River Name : Mae Nam Nan
Station Name : Ban Hat Phai (NRA)
Drainage Area : 15,718 km²
Unit : MCM

YEAR	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1969	38.40	65.50	437.00	1,009.00	1,584.00	722.00	350.00	268.00	116.00	72.40	46.10	40.80	4,749.20
1970	73.60	280.00	697.00	1,520.00	3,293.00	3,006.00	699.00	262.00	177.00	115.00	74.90	72.30	10,269.80
1971	56.80	169.00	87.40	239.00	1,150.00	1,276.00	322.00	145.00	145.00	113.00	100.00	135.00	3,938.20
1972	121.00	265.00	371.00	684.00	822.00	414.00	327.00	250.00	66.80	49.40	141.00	249.00	3,760.20
1973	142.00	166.00	81.60	439.00	360.00	182.00	80.10	183.00	45.60	117.00	45.30	246.00	2,087.60
1974	532.00	491.00	435.00	690.00	877.00	626.00	469.00	309.00	273.00	276.00	304.00	499.00	5,781.00
1975	638.00	483.00	408.00	718.00	1,011.00	1,300.00	1,056.00	521.00	474.00	333.00	497.00	742.00	8,181.00
1976	922.00	935.00	895.00	675.00	710.00	754.00	603.00	539.00	624.00	606.00	617.00	777.00	8,657.00
1977	755.00	802.00	773.00	768.00	797.00	319.00	292.00	536.00	244.00	166.00	223.00	415.00	6,090.00
1978	453.00	228.00	277.00	477.00	514.00	578.00	452.00	353.00	457.00	480.00	565.00	952.00	5,786.00
1979	903.00	822.00	515.00	577.00	743.00	465.00	499.00	533.00	306.00	206.00	168.00	274.00	6,011.00
1980	278.00	319.0	244.00	229.00	206.00	792.00	492.00	324.00	352.00	474.00	584.00	734.00	5,028.00
1981	801.00	739.00	785.00	701.00	1,348.00	597.00	464.00	540.00	344.00	450.00	614.00	829.00	8,212.00
1982	944.00	636.00	299.00	504.00	688.00	321.00	292.00	345.00	282.00	475.00	587.00	696.00	6,069.00
1983	1,090.00	688.00	286.00	520.00	376.00	207.00	126.00	72.70	48.90	165.00	47.10	816.00	4,442.70
1984	792.00	500.00	293.00	357.00	682.00	888.00	311.00	522.00	151.00	441.00	712.00	1,093.00	6,742.00
1985	1,042.00	605.00	287.00	287.00	214.00	340.00	92.80	126.00	115.00	191.00	593.00	917.00	4,809.80
1986	780.00	759.00	727.00	608.00	405.00	362.00	442.00	735.00	237.00	332.00	776.00	762.00	6,925.00
1987	750.00	676.00	321.00	481.00	475.00	206.00	100.00	178.00	35.70	170.00	560.00	445.00	4,397.70
1988	234.00	190.00	98.60	209.00	169.00	218.00	207.00	139.00	60.40	182.00	355.00	424.00	2,486.00
1989	611.00	631.00	148.00	203.00	482.00	519.00	203.00	290.00	86.10	219.00	402.00	793.00	4,587.10
1990	770.00	663.00	516.00	443.00	490.00	617.00	354.00	339.00	176.00	210.00	530.00	729.00	5,837.00
1991	627.00	339.00	148.00	328.00	382.00	112.00	175.00	249.00	135.00	194.00	338.00	476.00	3,503.00
1992	432.00	286.00	60.40	75.90	83.40	181.00	57.80	276.00	267.00	187.00	440.00	630.00	2,976.50
1993	459.00	408.00	299.00	397.00	810.00	369.00	108.00	458.00	134.00	151.00	229.00	265.00	4,087.00
1994	143.00	144.00	157.00	85.20	393.00	538.00	235.00	489.00	345.00	304.00	611.00	901.00	4,345.20
Average	553.38	472.67	371.00	508.62	733.25	611.88	338.80	345.45	219.13	256.88	390.75	573.54	5,375.40

Station Name : Mae Nam Khwas Noi at Confluence with Mae Nam Nan

Drainage Area : 5775 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	15.36	59.93	151.50	435.09	716.78	816.80	454.71	183.78	67.31	30.81	16.25	18.78	2967.10
1971	16.08	43.68	78.28	133.57	333.60	457.88	279.37	105.92	64.57	34.18	27.64	38.40	1613.17
1972	48.32	60.35	107.61	140.32	211.85	146.86	167.54	91.58	37.56	12.49	26.38	49.53	1099.37
1973	39.25	38.19	62.46	106.77	190.96	278.74	201.72	83.56	52.12	32.92	14.03	36.29	1137.00
1974	104.24	115.63	98.96	141.37	296.04	266.50	179.56	181.67	105.50	78.92	69.63	109.09	1747.11
1975	117.11	126.18	166.69	229.99	351.11	712.98	556.63	218.18	163.11	96.43	120.69	155.72	3014.83
1976	164.58	205.94	193.70	165.22	286.54	465.48	491.64	257.64	164.37	130.61	117.11	146.44	2789.26
1977	152.34	190.11	164.58	181.89	234.43	440.37	221.98	152.34	103.60	68.79	59.71	88.20	2058.34
1978	100.86	80.60	82.50	286.12	406.18	411.88	538.69	179.56	143.06	109.93	115.00	182.94	2637.34
1979	184.00	181.46	207.63	161.42	246.82	242.65	171.55	144.96	100.02	55.92	36.71	53.60	1785.73
1980	61.61	89.04	138.84	205.94	347.10	661.92	392.89	124.49	119.22	85.25	101.91	132.93	2461.15
1981	156.99	214.38	228.73	308.70	598.20	309.12	194.55	182.10	147.91	110.99	127.02	172.18	2750.86
1982	190.96	150.23	99.80	119.01	178.09	319.67	282.96	166.90	120.43	113.94	125.97	130.40	1998.42
1983	207.63	168.17	99.38	126.18	169.86	258.06	246.87	174.29	97.06	63.72	98.75	159.73	1869.71
1984	150.45	116.26	178.93	129.98	181.25	335.50	298.78	190.54	109.72	104.66	128.92	191.38	2116.37
1985	207.14	152.80	110.50	170.07	195.13	250.55	294.85	327.07	175.46	67.72	97.94	161.03	2210.25
1986	140.44	205.71	247.64	197.86	176.01	204.45	86.16	140.81	110.01	59.27	132.80	124.91	1826.06
1987	115.20	119.61	90.50	70.17	151.72	198.12	207.82	83.73	77.10	44.98	88.43	76.74	1324.11
1988	33.99	149.37	77.06	105.38	120.32	89.85	135.25	67.09	70.43	42.03	38.52	33.10	962.39
1989	70.40	142.61	185.81	90.82	74.47	146.15	83.61	70.14	68.27	47.24	58.08	118.69	1156.28
1990	113.81	158.56	317.13	185.66	133.64	274.77	150.20	89.81	87.86	38.60	84.27	124.97	1759.28
1991	106.36	84.18	67.66	63.89	196.90	235.26	129.93	69.97	71.16	42.94	48.05	56.50	1172.86
1992	53.15	32.28	20.91	28.93	150.63	120.61	123.11	58.77	75.60	27.97	46.79	73.63	812.39
1993	84.63	101.43	111.75	88.77	146.92	240.42	63.32	86.20	73.37	29.46	44.02	58.79	1129.06
TOTAL	2634.88	2986.71	3288.57	3873.10	6093.55	7684.57	5953.75	3431.11	2404.86	1529.74	1824.63	2492.95	44398.42
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	109.79	124.45	137.02	161.38	253.90	328.52	248.07	142.96	100.20	63.74	76.03	103.87	1849.93
MAX	207.63	214.38	317.13	435.09	716.78	816.80	556.63	327.07	175.46	130.61	132.80	191.38	3014.83
MIN	15.36	32.28	20.91	28.93	74.47	89.85	63.32	58.77	37.56	12.49	14.03	18.78	812.39

River Name : Mae Nam Nan
Station Name : Muang Phitsanulok (N5A)
Drainage Area : 25,286 km²
Unit : MCM

YEAR	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1969	35.40	43.40	444.20	1,001.30	1,828.40	1,240.30	569.60	409.60	243.10	134.20	65.50	52.90	6,067.90
1970	74.70	278.50	692.60	2,015.70	1,935.90	4,450.40	-	-	-	145.90	93.50	79.80	9,767.00
1971	99.60	221.10	337.50	704.30	1,704.70	1,998.10	1,129.10	537.20	241.90	135.90	113.50	140.90	7,363.80
1972	158.50	246.00	467.00	643.40	915.10	592.30	603.30	329.80	118.80	65.70	134.90	259.00	4,533.80
1973	170.30	189.90	235.10	469.00	775.90	996.90	588.40	283.40	179.10	131.70	55.30	178.00	4,253.00
1974	492.30	530.30	434.70	665.60	1,395.60	1,129.30	695.00	601.00	407.90	338.80	306.00	509.00	7,505.50
1975	498.90	516.00	661.70	985.00	1,600.60	2,864.80	1,933.60	795.90	640.20	406.20	540.30	688.20	12,131.40
1976	825.60	50.30	907.00	698.60	1,178.60	1,770.20	1,517.60	821.20	679.20	569.60	546.50	690.80	10,255.20
1977	698.50	863.60	748.60	837.90	1,030.80	1,518.10	653.00	609.20	428.20	260.10	248.20	403.70	8,299.90
1978	472.80	325.20	345.10	1,118.70	1,725.40	1,658.30	1,611.50	530.40	587.40	454.40	518.70	850.10	10,198.00
1979	816.86	769.39	736.85	663.52	985.39	881.29	680.00	612.40	409.46	258.70	191.92	282.37	7,288.15
1980	287.80	387.70	500.70	660.20	1,269.10	2,571.80	1,067.60	370.10	451.30	375.70	472.10	598.00	9,012.10
1981	674.40	937.80	959.10	1,278.30	2,198.00	1,073.70	735.50	725.00	517.70	451.10	563.60	747.20	10,861.40
1982	890.46	631.30	393.59	507.75	747.60	1,095.80	718.93	498.39	460.16	491.06	564.78	609.98	7,659.80
1983	1,020.26	762.10	387.26	506.91	554.00	828.44	700.75	352.39	259.11	207.97	420.65	744.02	6,743.86
1984	738.61	507.89	652.55	463.20	759.81	1,373.00	993.14	657.47	391.82	470.53	617.54	946.05	8,581.61
1985	1,009.10	663.50	405.00	629.70	624.60	855.90	885.40	634.60	472.80	264.70	435.50	782.80	7,663.60
1986	678.53	905.80	1,090.02	835.93	701.36	793.78	339.75	645.41	456.27	317.97	671.38	609.12	8,045.32
1987	566.70	567.70	386.80	322.10	655.10	585.80	350.60	243.10	244.10	187.80	447.30	354.20	4,901.30
1988	152.18	596.41	302.77	401.13	356.10	226.72	309.54	112.74	253.68	187.79	169.44	130.02	3,198.52
1989	360.66	646.45	573.33	328.27	312.30	574.52	216.03	251.74	257.99	231.31	309.11	591.33	4,653.04
1990	516.80	699.50	1,180.80	637.00	457.30	1,049.00	452.10	331.70	336.20	191.90	403.60	567.90	6,823.80
1991	550.20	406.30	282.80	308.70	867.10	674.50	382.10	230.40	287.30	200.10	236.60	275.30	4,701.40
1992	268.30	206.02	155.68	144.36	560.37	457.95	277.27	115.36	303.68	122.56	247.84	361.34	3,223.73
1993	387.11	443.55	434.17	374.77	624.35	813.12	140.38	348.81	269.72	138.79	197.99	270.73	4,443.49
1994	127.70	333.50	945.50	479.40	1,194.50	1,955.30	463.00	408.50	481.60	277.60	495.80	687.40	7,849.80
Average	483.16	491.51	564.25	680.03	1,036.85	1,308.82	720.53	458.23	375.15	269.93	348.75	477.31	7,154.75

River Name : Mao Nam Nan
 Station Name : A.Muang, Phichit (N7)
 Drainage Area : 29153 sq.km.
 Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	72.80	284.00	718.00	2062.00	3397.00	3871.00	2155.00	871.00	319.00	146.00	77.00	89.00	14051.80
1971	76.20	207.00	371.00	633.00	1581.00	2170.00	1324.00	502.00	306.00	162.00	131.00	182.00	7645.20
1972	229.00	286.00	510.00	665.00	1004.00	696.00	794.00	434.00	178.00	59.20	125.00	230.00	5210.20
1973	186.00	181.00	296.00	506.00	905.00	1321.00	956.00	396.00	247.00	156.00	66.50	172.00	6328.50
1974	494.00	548.00	469.00	670.00	1403.00	1263.00	851.00	861.00	500.00	374.00	330.00	517.00	8290.00
1975	555.00	593.00	790.00	1090.00	1664.00	3379.00	2638.00	1034.00	773.00	457.00	572.00	738.00	14288.00
1976	780.00	976.00	918.00	783.00	1358.00	2206.00	2330.00	1221.00	779.00	619.00	555.00	694.00	13219.00
1977	722.00	901.00	780.00	862.00	1111.00	2087.00	1052.00	722.00	491.00	326.00	283.00	418.00	9756.00
1978	478.00	382.00	391.00	1356.00	1925.00	1952.00	2553.00	851.00	678.00	521.00	545.00	867.00	12499.00
1979	872.00	880.00	984.00	765.00	1165.00	1150.00	813.00	687.00	474.00	265.00	174.00	254.00	8463.00
1980	292.00	422.00	658.00	976.00	1645.00	3137.00	1862.00	590.00	565.00	404.00	483.00	630.00	11664.00
1981	744.00	1016.00	1084.00	1463.00	2835.00	1465.00	922.00	863.00	701.00	526.00	602.00	816.00	13037.00
1982	905.00	712.00	473.00	664.00	844.00	1515.00	1341.00	791.00	571.00	540.00	597.00	618.00	9471.00
1983	994.00	797.00	471.00	598.00	805.00	1223.00	1170.00	826.00	460.00	302.00	468.00	757.00	8961.00
1984	713.00	551.00	848.00	616.00	859.00	1590.00	1416.00	903.00	520.00	496.00	611.00	907.00	10030.00
1985	981.69	724.15	523.71	805.98	924.76	1187.40	1397.39	1550.07	831.53	320.92	464.16	763.14	10474.90
1986	665.57	974.89	1173.62	937.70	834.17	968.96	408.31	667.33	521.35	280.88	629.38	691.97	8564.13
1987	545.94	566.87	428.89	332.56	719.05	938.92	984.92	396.84	365.39	213.18	419.07	363.67	6275.29
1988	151.07	707.90	365.21	499.42	570.21	425.82	640.98	317.97	333.78	199.19	182.56	156.89	4560.99
1989	333.63	675.86	890.61	430.42	352.92	692.64	396.26	332.40	323.54	223.86	275.27	562.43	5479.89
1990	509.37	751.45	1502.94	879.91	633.36	1302.19	711.83	425.62	416.39	182.93	399.38	592.27	8337.64
1991	504.07	398.95	320.65	302.80	933.17	1114.94	616.03	331.61	337.24	203.52	227.70	267.77	5558.45
1992	251.89	153.00	99.09	137.10	713.87	571.62	583.45	278.54	358.31	132.56	221.77	348.94	3850.12
1993	401.10	490.70	529.60	420.70	696.30	1139.40	300.10	408.50	347.70	139.60	208.60	278.60	5350.90
TOTAL	12487.32	14154.77	15685.32	18355.58	28878.81	37366.89	28216.27	16260.88	11397.23	7249.83	6647.39	11814.72	210415.01
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	520.31	589.78	649.39	764.82	1203.28	1556.95	1175.68	677.54	474.88	302.08	360.31	492.28	8767.29
MAX	994.00	1016.00	1502.94	2062.00	3397.00	3871.00	2638.00	1550.07	831.53	619.00	629.38	907.00	14288.00
MIN	72.80	153.00	99.09	137.10	352.92	425.82	300.10	278.54	178.00	59.20	66.50	89.00	3850.12

River Name : Mae Nam Nan
 Station Name : Cham Saeng (N14)
 Drainage Area : 33,197 km²
 Unit : MCM

YEAR	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1969	73.40	75.00	282.00	759.00	1,409.00	2,141.00	1,760.00	854.00	255.00	135.00	67.30	40.70	7,851.40
1970	35.70	251.00	688.00	1,949.00	2,665.00	3,173.00	2,698.00	1,156.00	396.00	169.00	110.00	124.00	13,414.70
1971	117.00	139.00	312.00	456.00	1,530.00	2,324.00	1,775.00	765.00	579.00	248.00	177.00	204.00	8,262.00
1972	181.00	210.00	409.00	513.00	862.00	764.00	916.00	289.00	289.00	96.00	129.00	207.00	4,865.00
1973	194.00	196.00	327.00	464.00	912.00	1,445.00	1,180.00	323.00	217.00	126.00	101.00	182.00	5,667.00
1974	162.00	162.00	357.00	567.00	1,276.00	975.00	846.00	1,045.00	506.00	292.00	214.00	476.00	6,878.00
1975	432.00	473.00	705.00	1,072.00	1,849.00	3,521.00	3,484.00	1,937.00	901.00	390.00	472.00	638.00	15,874.00
1976	715.00	1,000.00	943.00	745.00	1,490.00	2,785.00	2,600.00	1,582.00	844.00	570.00	489.00	624.00	14,387.90
1977	730.00	952.00	800.00	837.00	1,203.00	2,689.00	1,160.00	1,035.00	616.00	332.00	272.00	410.00	11,036.00
1978	477.00	421.00	420.00	1,995.00	2,455.00	2,064.00	3,052.00	1,043.00	451.00	335.00	318.00	462.00	13,493.00
1979	775.00	793.00	1,124.00	830.00	1,124.00	1,167.00	954.00	698.00	524.00	269.00	181.00	236.00	8,675.00
1980	255.00	448.00	882.00	1,385.00	2,172.00	3,377.00	3,282.00	1,344.00	730.00	405.00	484.00	626.00	15,390.00
1981	535.00	602.00	1,089.00	1,696.00	2,845.00	1,862.00	882.00	919.00	620.00	407.00	316.00	758.00	12,495.00
1982	740.00	414.00	384.00	513.00	713.00	1,219.00	1,149.00	973.00	489.00	294.00	310.00	372.00	7,570.00
1983	395.00	492.00	450.00	540.00	737.00	1,739.00	1,567.00	1,063.00	567.00	326.00	319.00	679.00	8,874.00
1984	995.00	678.00	770.00	482.00	736.00	1,859.00	1,677.00	1,445.00	488.00	246.00	528.00	794.00	10,698.00
1985	659.00	579.00	592.00	636.00	937.00	1,305.00	1,832.00	1,734.00	1,163.00	263.00	503.00	861.00	11,064.00
1986	640.00	635.00	857.00	715.00	1,045.00	1,181.00	613.00	790.00	616.00	386.00	391.00	605.00	8,474.00
1987	494.00	294.00	377.00	310.00	749.00	915.00	1,230.00	549.00	262.00	146.00	227.00	300.00	5,853.00
1988	219.00	427.00	345.00	380.00	474.00	367.00	370.00	249.00	263.00	165.00	138.00	165.00	3,562.00
1989	148.00	458.00	777.00	388.00	298.00	910.00	572.00	327.00	198.00	165.00	244.00	399.00	4,884.00
1990	264.00	656.00	1,011.00	885.00	627.00	1,055.00	724.00	585.00	409.00	278.00	240.00	329.00	7,063.00
1991	363.00	254.00	353.00	214.00	696.00	986.00	767.00	297.00	187.00	138.00	119.00	200.00	4,574.00
Average	417.35	461.26	619.74	797.00	1,252.35	1,729.87	1,525.65	913.13	503.04	268.74	276.06	421.38	9,185.58

River Name : Mae Nam Yom

Station Name : Ban Don Rablang, A.Si Satchanalai, Sukho Thai (Y14)

Drainage Area : 12131 sqkm.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	16.80	204.00	252.00	433.00	1452.00	1681.00	466.00	125.00	77.80	32.60	17.90	13.50	4781.60
1971	17.20	134.00	138.00	645.00	1021.00	936.00	740.00	102.00	56.60	32.60	17.30	16.60	3856.30
1972	27.30	25.30	50.40	51.60	676.00	323.00	452.00	110.00	57.30	21.00	9.76	30.80	1834.46
1973	15.30	55.10	149.00	220.00	1716.00	1901.00	741.00	150.00	70.50	36.70	21.10	16.70	5092.40
1974	31.40	131.00	85.90	50.70	1097.00	885.00	305.00	422.00	63.90	62.60	23.10	16.00	3173.80
1975	10.30	23.50	191.00	418.00	1612.00	1061.00	559.00	227.00	97.40	49.50	28.10	18.90	4295.70
1976	11.20	69.60	117.00	42.00	588.00	879.00	624.00	197.00	67.20	66.10	17.60	15.60	2694.30
1977	29.40	69.70	34.20	24.10	244.00	1155.00	407.00	179.00	57.00	28.50	12.80	8.37	2249.07
1978	5.72	61.70	41.50	609.00	1129.00	1243.00	648.00	102.00	53.10	15.20	12.70	7.10	3828.02
1979	4.98	75.50	239.00	65.90	286.00	287.00	115.00	23.00	14.90	8.26	5.12	3.77	1128.43
1980	9.10	20.80	192.00	275.00	333.00	1446.00	296.00	111.00	67.30	37.90	23.30	16.50	2827.90
1981	16.20	262.00	168.00	1122.00	1044.00	440.00	462.00	207.00	75.80	39.20	19.60	12.50	3868.30
1982	70.30	36.60	45.30	52.60	105.00	485.00	366.00	76.20	36.10	18.00	9.50	4.54	1305.14
1983	2.74	37.60	53.60	89.50	328.00	898.00	516.00	184.00	63.90	32.50	16.50	8.41	2230.75
1984	9.76	73.10	121.00	131.00	205.00	686.00	568.00	104.00	48.00	18.80	7.65	3.66	1975.97
1985	6.57	65.00	76.30	122.00	282.00	575.00	389.00	340.00	97.20	33.80	15.70	8.09	2010.66
1986	12.40	106.00	73.00	64.20	316.00	678.00	167.00	70.10	37.90	18.10	11.00	12.40	1566.10
1987	9.23	20.70	33.60	19.10	613.00	779.00	381.00	144.00	47.00	23.00	14.40	8.74	2092.77
1988	4.37	167.59	311.56	536.22	661.03	305.01	323.78	85.64	40.20	13.30	5.40	2.20	2456.32
1989	6.29	126.97	206.15	230.42	303.81	575.42	431.92	88.00	42.08	19.82	11.11	13.26	2055.25
1990	17.00	63.00	130.00	129.00	243.00	684.00	239.00	107.00	37.70	19.00	8.24	2.37	1579.31
1991	10.32	40.97	99.94	24.25	308.93	582.33	312.95	99.68	36.44	22.77	9.79	16.49	1564.64
1992	4.01	2.75	11.87	7.58	263.38	316.28	534.06	73.55	69.25	35.21	11.44	11.22	1340.59
1993	10.42	25.04	34.85	83.95	36.60	401.21	164.60	51.08	19.83	6.98	4.06	2.31	840.93
TOTAL	368.31	1897.51	2855.16	5446.12	14873.75	19102.25	10108.31	3378.25	1334.40	691.63	333.17	270.04	60648.91
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	14.93	79.06	118.96	226.92	619.74	795.93	421.18	140.76	55.60	28.82	13.88	11.25	2527.04
MAX	70.30	262.00	311.56	1122.00	1716.00	1901.00	741.00	422.00	97.40	66.10	28.10	30.80	5092.40
MIN	2.74	2.75	11.87	7.58	36.60	287.00	115.00	23.00	14.90	6.98	4.06	2.20	840.93

River Name : Mae Nam Wang

Station Name : Ban Wang Man , A.Sam Ngao , Tak (W1A)

Drainage Area : 10507 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	7.19	79.39	206.28	107.67	503.11	465.88	242.50	87.24	83.92	26.26	14.09	8.28	1831.81
1971	0.00	0.00	0.06	39.75	450.00	574.00	468.00	112.00	42.00	20.30	6.09	2.57	1714.76
1972	17.00	9.50	12.10	3.59	91.90	185.00	283.00	155.00	66.60	13.70	6.45	10.10	853.94
1973	17.50	31.30	93.20	102.00	415.00	799.00	430.00	116.00	54.20	25.20	10.30	10.40	2104.10
1974	13.40	106.00	86.40	41.50	267.00	488.00	256.00	449.00	60.30	70.80	18.30	15.80	1872.50
1975	14.30	17.20	48.60	95.40	326.00	670.00	543.00	198.00	64.10	31.10	17.10	14.00	2038.80
1976	15.40	27.70	23.50	20.30	79.60	250.00	453.00	245.00	47.20	46.70	15.60	11.80	1235.80
1977	15.10	15.30	12.20	14.30	44.70	591.00	228.00	161.00	51.00	18.00	12.90	10.00	1173.50
1978	12.30	55.70	25.30	279.00	350.00	446.00	352.00	53.80	23.10	16.70	13.60	9.68	1637.18
1979	7.66	42.90	175.00	30.80	60.30	108.00	98.20	19.90	10.00	6.12	5.84	12.80	577.52
1980	3.81	16.10	60.80	54.60	77.30	453.00	229.00	64.20	25.90	10.10	6.64	5.70	1007.15
1981	4.67	70.80	37.10	255.00	400.00	200.00	153.00	111.00	52.10	19.90	13.00	10.40	1326.97
1982	14.40	23.90	21.90	10.10	13.20	110.00	172.00	33.40	11.10	9.09	6.94	5.10	431.13
1983	2.24	1.98	15.20	2.18	38.10	265.00	221.00	143.00	36.90	12.20	7.78	5.04	750.62
1984	4.69	14.70	22.10	11.00	40.30	136.00	221.00	53.80	19.90	9.24	5.69	4.09	542.51
1985	5.76	12.70	41.40	26.40	22.00	95.90	230.00	269.00	83.30	27.30	15.90	13.20	842.86
1986	10.20	33.50	15.70	18.30	100.00	263.00	101.00	35.00	12.80	7.25	5.82	5.01	607.58
1987	4.21	6.46	24.60	12.40	139.00	373.00	216.00	144.00	40.00	14.00	7.25	4.02	984.94
1988	4.59	41.92	239.29	221.49	152.27	176.71	368.43	97.27	38.42	14.49	9.31	7.37	1371.55
1989	5.29	14.18	139.66	33.10	124.25	142.14	368.85	76.55	25.74	8.41	4.28	5.91	948.35
1990	3.90	20.52	16.90	8.11	18.81	224.33	153.38	101.67	19.53	7.35	2.19	0.00	576.69
1991	5.32	2.61	3.64	1.30	32.28	187.13	137.22	48.09	15.80	10.77	8.43	8.48	461.08
1992	4.23	1.27	0.00	0.00	23.35	132.16	247.95	53.82	45.07	28.73	8.70	8.05	553.32
1993	6.36	4.83	4.66	8.18	8.85	121.50	168.95	33.01	12.83	6.33	21.00	11.61	408.11
TOTAL	199.53	650.46	1325.57	1336.46	3777.33	7456.75	6341.47	2860.74	941.81	450.05	243.20	199.41	25852.78
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	8.31	27.10	55.23	58.19	157.39	310.70	264.23	119.20	39.24	19.17	10.13	8.31	1077.20
MAX	17.50	106.00	239.29	279.00	503.11	799.00	543.00	449.00	83.92	70.80	21.00	15.80	2104.10
MIN	0.00	0.00	0.00	0.00	8.85	95.90	98.20	19.90	10.00	6.12	2.19	0.00	408.11

River Name : Mae Nam Ping
 Station Name : Ban Nakhon Chum, A.Muang, Kamphaeng Phet (P7A)
 Drainage Area : 42700 sq.km.
 Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	749.00	1001.00	1073.00	979.00	1451.00	1330.00	1387.00	984.00	957.00	721.00	684.00	783.00	12109.00
1971	763.00	809.00	757.00	891.00	1324.00	1470.00	1515.00	1038.00	824.00	698.00	624.00	740.00	11455.00
1972	611.00	734.00	685.00	714.00	724.00	821.00	1062.00	692.00	562.00	519.00	513.00	668.00	8305.00
1973	824.00	755.00	891.00	882.00	1272.00	2093.00	1540.00	774.00	709.00	670.00	828.00	983.00	12221.00
1974	702.00	841.00	729.00	730.00	877.00	1213.00	1330.00	1379.00	420.00	430.00	518.00	759.00	9928.00
1975	832.00	706.00	745.00	813.00	1020.00	1558.00	1897.00	1340.00	646.00	470.00	512.00	785.00	11334.00
1976	852.00	874.00	1023.00	1136.00	807.00	1083.00	1206.00	933.00	519.00	490.00	550.00	825.00	10298.00
1977	875.00	898.00	656.00	728.00	724.00	1110.00	780.00	893.00	490.00	271.00	496.00	633.00	8554.00
1978	677.00	621.00	637.00	976.00	825.00	1027.00	1150.00	378.00	455.00	383.00	476.00	819.00	8424.00
1979	866.00	816.00	824.00	733.00	747.00	853.00	746.00	914.00	597.00	312.00	267.00	327.00	8002.00
1980	340.00	580.00	575.00	433.00	394.00	741.00	800.00	182.00	196.00	207.00	396.00	572.00	5416.00
1981	776.00	749.00	678.00	416.00	616.00	477.00	514.00	857.00	275.00	263.00	514.00	795.00	6900.00
1982	629.00	616.00	620.00	866.00	916.00	504.00	471.00	330.00	250.00	366.00	694.00	1011.00	7272.00
1983	758.00	720.00	532.00	498.00	342.00	638.00	1271.00	871.00	133.00	150.00	567.00	782.00	7252.00
1984	674.00	500.00	284.00	280.00	476.00	433.00	536.00	322.00	199.00	287.00	439.00	664.00	5094.00
1985	539.00	473.00	334.00	275.00	341.00	432.00	708.00	517.00	263.00	254.00	582.00	775.00	5503.00
1986	488.00	664.00	612.00	626.00	545.00	719.00	801.00	716.00	286.00	264.00	565.00	910.00	7196.00
1987	816.00	591.00	532.00	716.00	836.00	806.00	493.00	506.00	177.00	252.00	348.00	1015.00	7077.00
1988	929.00	423.00	464.00	447.00	317.00	672.00	1489.00	174.00	105.00	307.00	705.00	1177.00	7109.00
1989	1054.52	636.89	391.63	246.22	804.65	556.28	897.83	592.57	324.33	360.54	546.89	978.32	7380.73
1990	874.35	713.65	555.74	346.95	324.83	609.36	729.61	611.14	378.60	337.10	368.48	504.52	6354.38
1991	465.30	184.13	123.10	147.26	293.77	320.17	503.86	355.47	347.35	379.43	527.06	623.56	4270.46
1992	626.90	492.62	96.84	89.58	284.71	221.72	792.36	307.71	379.37	258.04	447.12	554.81	4551.76
1993	604.58	542.26	472.99	278.59	413.30	497.29	486.59	436.43	125.66	63.04	81.51	122.22	4184.46
TOTAL	17325.65	15940.55	14291.36	14243.60	16685.30	20084.82	23096.25	16162.31	9618.31	8701.16	12249.06	17806.43	186210.79
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	721.90	664.19	595.47	593.73	695.22	836.87	962.34	673.43	400.76	362.56	510.38	741.93	7758.78
MAX	1054.52	1001.00	1073.00	1136.00	1461.00	2093.00	1897.00	1379.00	957.00	721.00	828.00	1177.00	12221.00
MIN	340.00	184.13	96.84	89.58	284.71	221.72	471.00	174.00	105.00	63.04	81.51	122.22	4184.46

River Name : Mae Nam Chao Phraya
 Station Name : A.Muang, Nakhon Si Thammarat (C2)
 Drainage Area : 110569 sqkm.
 Unit : MCM

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	942.95	1775.00	2405.79	4061.54	7815.16	8558.03	4673.86	2251.93	1545.59	1017.87	876.87	992.63	36917.22
1971	962.92	1356.94	1482.52	2792.40	4944.06	5594.60	4394.78	1874.90	1346.60	1009.45	867.08	1060.21	27676.47
1972	975.43	1170.59	1400.61	1602.01	3057.12	2223.65	2820.93	1429.51	917.66	878.99	723.77	1046.14	18046.40
1973	1145.97	1132.38	1570.20	1909.06	5368.62	7042.11	4027.95	1549.15	1178.77	978.64	1031.72	1310.67	28235.34
1974	1369.51	1754.81	1466.85	1623.69	4384.98	4242.70	2927.32	3194.89	1117.55	991.07	973.24	1431.26	25477.86
1975	1543.78	1472.36	2012.09	2803.31	5715.42	7211.18	6923.76	3000.66	1721.63	1102.13	1235.89	1703.36	35445.78
1976	1810.04	2146.63	2332.24	2183.28	3379.04	5103.22	4933.45	2696.48	1534.26	1327.64	1241.83	1694.88	30382.98
1977	1804.66	2092.77	1631.14	1782.35	2426.04	5451.97	2706.56	2083.19	1174.02	702.74	880.27	1170.68	23936.59
1978	1280.02	1210.84	1203.49	3601.68	4944.61	5395.98	4979.92	1514.66	1329.70	1014.77	1140.04	1859.87	29475.58
1979	1914.02	1967.16	2392.14	1755.64	2582.44	2686.25	1906.68	1799.40	1202.33	647.79	494.13	644.91	19992.88
1980	709.56	1137.64	1681.98	2009.56	2786.98	6704.27	3409.71	1030.40	943.68	731.61	1002.32	1345.27	23492.79
1981	1695.12	2382.69	2214.34	3978.57	5544.97	2870.51	2364.81	2243.31	1192.90	927.76	1256.76	1787.49	28458.23
1982	1798.05	1517.41	1279.43	1664.48	2112.43	3032.23	2602.38	1351.90	956.38	1019.99	1433.71	1801.37	20689.79
1983	1910.34	1726.72	1193.45	1354.36	1815.40	3580.66	3669.70	2179.33	754.32	648.82	1154.01	1702.36	21489.47
1984	1536.82	1277.63	1439.40	1202.28	1810.55	3381.09	3104.67	1511.67	865.11	856.97	1161.15	1724.12	19901.44
1985	1670.18	1420.05	1068.59	1385.82	1863.83	2764.48	2967.24	2834.01	1357.11	687.46	1187.53	1700.61	20896.90
1986	1282.80	1974.07	2073.14	1819.40	2062.53	3017.25	1621.90	1638.71	946.16	628.35	1327.29	1674.25	20056.85
1987	1514.33	1306.71	1113.53	1189.94	2766.24	3256.43	2258.08	1239.62	672.28	550.50	864.53	1539.10	18270.28
1988	1217.36	1524.01	1449.30	1963.06	2109.93	1623.75	2910.88	684.60	546.16	580.02	992.42	1485.75	17087.24
1989	1546.60	1657.90	1741.76	1136.44	1802.66	2360.84	2174.62	1171.14	783.04	666.42	925.79	1720.18	17687.38
1990	1585.76	1714.45	2463.64	1557.82	1464.54	3091.54	1993.64	1325.10	936.03	606.93	855.52	1204.93	18798.90
1991	1079.89	706.97	655.41	532.37	1866.72	2564.34	1766.36	925.98	813.73	681.84	850.14	1012.53	13455.28
1992	977.58	719.08	235.27	260.72	1541.68	1409.66	2435.09	770.37	928.82	491.47	757.43	1014.17	11541.25
1993	1124.51	1166.00	1158.36	909.02	1274.39	2475.35	1150.46	1082.09	649.01	232.77	322.66	440.46	11885.09
TOTAL	33398.19	36308.69	37664.66	45078.80	75420.25	95662.01	73624.74	41383.19	25312.74	18711.18	23565.12	33067.38	539176.97
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	1391.59	1512.86	1569.36	1878.28	3142.51	3985.92	3067.70	1724.30	1054.70	779.63	981.46	1377.39	22465.71
MAX	1914.02	2382.69	2463.64	4061.54	7815.16	8558.03	6923.76	3194.89	1721.63	1327.64	1433.71	1859.87	36917.22
MIN	709.56	706.97	235.27	260.72	1274.39	1409.66	1150.46	684.60	546.16	232.77	322.66	440.46	11541.25

Station Name : Pasak Dam

Drainage Area : 12925 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	30.21	35.70	76.89	69.57	238.92	248.07	176.67	76.89	28.38	8.24	5.49	8.24	1003.27
1971	10.07	27.46	72.32	86.96	152.87	430.23	808.29	264.55	55.84	22.68	10.98	12.82	1965.27
1972	7.32	25.63	17.39	10.07	129.99	324.96	598.66	92.45	32.04	12.82	7.32	6.41	1265.07
1973	10.07	17.39	14.65	21.97	43.94	346.02	464.10	21.97	10.98	6.41	3.66	6.41	967.67
1974	14.65	50.35	19.22	10.98	49.43	203.22	519.94	219.69	47.60	18.31	10.07	12.82	1176.27
1975	10.07	19.22	64.99	193.15	206.83	993.20	1206.43	129.07	55.84	27.46	16.48	15.66	2938.40
1976	15.66	46.68	41.19	64.08	241.66	724.99	996.86	372.56	71.40	34.78	16.48	15.66	2641.81
1977	18.31	50.35	34.78	14.65	50.35	610.56	411.92	31.12	21.05	16.48	9.15	7.32	1276.05
1978	15.66	35.70	44.85	398.19	745.13	898.91	2448.67	96.12	64.08	38.45	21.97	21.97	4829.69
1979	13.73	65.91	75.06	86.96	95.20	196.81	274.62	22.88	15.66	10.98	6.41	6.41	870.53
1980	12.82	16.48	77.81	200.47	270.96	640.77	1222.96	121.75	47.60	25.63	11.90	18.31	2667.44
1981	21.97	45.77	42.11	211.45	637.11	551.06	380.80	157.45	60.42	27.46	12.82	10.98	2159.40
1982	21.97	42.11	62.25	26.55	40.28	1068.26	1100.30	194.06	77.81	36.62	20.14	16.48	2706.80
1983	12.82	18.31	32.95	37.53	178.50	415.50	1265.98	301.16	97.03	58.58	32.95	29.29	2481.62
1984	30.21	36.62	96.12	154.77	145.55	611.48	1073.75	212.37	75.98	38.45	23.80	26.55	2535.63
1985	26.55	56.75	72.32	161.11	337.78	930.38	996.86	423.83	99.78	43.02	26.55	21.97	3246.83
1986	26.63	73.23	81.47	43.94	227.02	313.06	127.24	60.35	36.62	23.80	15.66	15.66	1033.47
1987	8.24	17.39	40.28	35.70	40.28	1267.81	1081.07	156.62	68.65	32.04	21.97	13.73	2782.78
1988	11.90	208.71	219.69	70.48	147.38	222.44	421.08	279.19	54.92	23.80	11.90	10.07	1681.57
1989	10.98	15.66	238.00	82.38	140.97	205.88	319.47	141.89	32.95	12.82	4.58	8.24	1214.72
1990	2.75	18.31	226.10	143.72	184.91	279.19	857.72	199.55	43.94	13.73	6.41	6.49	1981.82
1991	9.15	19.22	79.64	49.43	294.76	1184.51	843.99	51.26	32.04	38.45	16.49	10.07	2629.00
1992	7.32	10.07	39.36	25.63	288.35	208.71	425.66	55.84	31.12	13.73	7.32	6.41	1119.62
1993	10.07	17.39	28.38	18.31	54.92	267.29	161.11	13.73	10.07	8.24	7.32	11.90	608.73
TOTAL	357.92	970.31	1797.82	2228.06	4943.10	13195.33	18184.20	3685.36	1171.70	593.17	327.71	318.56	47773.23
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	14.91	40.43	74.91	92.84	205.96	549.81	757.67	153.56	48.82	24.72	13.65	13.27	1990.55
MAX	30.21	208.71	238.00	398.19	745.13	1267.81	2448.67	423.83	99.78	68.58	32.95	29.29	4829.59
MIN	2.75	10.07	14.65	10.07	40.28	196.81	127.24	13.73	10.07	6.41	3.66	5.49	608.73

Station Name : Mae Nam Pasak at Confluence with Mae Nam Chao Phraya

Drainage Area : 16292 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	36.62	43.28	93.23	84.35	289.67	300.77	214.20	93.23	34.40	9.99	6.66	9.95	1216.38
1971	12.21	33.30	87.68	105.43	185.34	521.62	979.98	320.74	67.70	27.75	13.32	15.54	2370.61
1972	8.88	31.08	21.09	12.21	157.60	393.99	725.83	112.09	38.84	15.54	8.88	7.77	1533.79
1973	12.21	21.09	17.76	26.64	53.27	419.62	562.69	26.64	13.32	7.77	4.44	7.77	1173.09
1974	17.76	61.04	23.31	13.32	69.93	246.38	630.39	266.36	67.71	22.20	12.21	15.54	1426.14
1975	12.21	23.31	78.80	234.18	250.82	1204.17	1462.76	166.49	67.70	33.30	19.98	18.87	3562.57
1976	18.87	56.60	49.94	77.69	293.00	878.99	1208.61	451.70	86.57	42.17	19.98	18.87	3202.98
1977	22.20	61.04	42.17	17.76	61.04	740.26	499.43	37.73	25.53	19.98	11.10	8.88	1547.11
1978	18.87	43.28	54.38	482.78	903.41	1089.86	2968.81	116.53	77.69	46.61	26.64	26.64	5855.49
1979	16.65	79.91	91.01	105.43	115.42	238.61	332.95	27.75	18.87	13.32	7.77	7.77	1055.45
1980	15.54	19.98	94.34	243.05	328.51	776.88	1482.74	147.61	57.71	31.08	14.43	22.20	3234.06
1981	26.64	55.49	51.05	255.37	772.44	668.12	461.69	190.89	73.25	33.30	15.54	13.32	2618.10
1982	26.64	51.05	75.47	32.19	48.83	1295.18	1334.02	235.28	94.34	44.39	24.42	19.98	3281.78
1983	15.54	22.20	39.95	45.50	216.42	504.97	1534.90	365.14	117.64	71.03	39.95	35.51	3008.76
1984	36.62	44.39	116.53	199.77	176.46	741.37	1301.84	257.43	92.12	45.61	28.86	32.19	3074.24
1985	32.19	68.81	87.68	195.33	409.53	1188.63	1208.61	513.85	120.97	52.16	32.19	26.64	3936.58
1986	31.08	88.79	98.78	53.27	275.24	379.56	154.27	61.04	44.39	28.86	18.87	18.87	1253.00
1987	9.99	21.09	48.83	43.28	48.83	1537.12	1310.71	188.67	83.24	38.84	26.64	16.65	3373.90
1988	14.43	253.04	266.36	85.46	178.68	269.69	510.52	338.50	66.59	28.86	14.43	12.21	2038.77
1989	13.32	18.87	283.56	99.89	170.91	250.82	387.33	172.02	39.95	15.54	5.55	9.99	1472.75
1990	3.33	22.20	274.13	174.24	224.19	338.50	1039.91	241.94	53.27	16.65	7.77	6.66	2402.79
1991	11.10	23.31	96.66	69.93	357.37	1436.13	1023.27	62.15	38.84	46.61	19.98	12.21	3187.44
1992	8.88	12.21	47.72	31.08	349.60	253.04	516.07	67.70	37.73	16.65	8.88	7.77	1357.33
1993	12.21	21.09	34.40	22.20	66.59	324.07	195.33	16.65	12.21	9.99	8.88	14.43	738.04
TOTAL	433.95	1176.42	2179.71	2701.34	5933.10	15993.26	22046.86	4468.19	1420.59	719.17	397.32	386.22	57921.14
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	18.08	49.02	90.82	112.56	249.71	666.59	918.62	186.17	59.19	29.97	16.56	16.09	2413.38
MAX	36.62	253.04	288.56	482.78	903.41	1537.12	2968.81	513.85	120.97	71.03	39.95	35.51	5855.49
MIN	3.33	12.21	17.76	12.21	48.83	238.61	154.27	16.65	12.21	7.77	4.44	6.66	738.04

River Name : Mekong
 Station Name : Chiang Saen
 Drainage Area : 189,000 km²
 Unit : MCM

YEAR	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	Total	Yield (mm)
1961	2,474	3,345	6,902	11,191	21,563	15,387	11,207	6,244	4,276	2,506	1,935	2,048	89,078	470
1962	2,063	3,267	8,749	11,035	23,532	14,608	9,210	5,079	3,204	2,963	2,224	1,953	87,887	465
1963	1,664	2,071	5,294	14,317	20,555	11,904	10,700	8,569	4,075	2,425	1,765	1,751	85,090	450
1964	2,391	3,714	5,545	16,923	19,711	17,216	12,017	6,276	4,163	2,870	2,119	2,165	95,110	500
1965	1,881	2,435	7,528	13,990	17,758	14,976	13,751	11,497	5,572	3,026	2,267	1,955	96,636	510
1966	2,173	3,083	8,153	16,471	29,437	29,998	16,179	7,773	4,826	3,821	2,541	2,227	126,682	670
1967	2,392	2,924	4,753	10,805	15,781	12,712	10,787	6,877	4,324	3,543	2,474	2,557	79,929	430
1968	2,427	4,247	6,316	11,712	17,542	15,783	14,395	8,567	4,320	3,515	2,624	2,548	93,996	500
1969	1,814	2,000	5,370	11,382	24,139	12,576	8,243	5,275	3,497	2,968	1,989	1,650	80,903	430
1970	2,426	4,774	7,537	18,597	24,738	13,360	8,922	6,591	6,924	2,630	1,878	1,925	100,302	530
1971	2,462	3,617	8,209	20,315	29,448	17,576	10,370	6,329	4,438	3,719	2,593	2,391	111,467	590
1972	2,477	2,962	4,141	7,778	12,915	9,170	7,175	5,978	5,792	3,484	2,545	2,328	66,745	350
1973	2,603	3,532	6,699	11,989	17,854	16,311	8,202	7,881	4,643	4,093	2,374	2,664	88,845	470
1974	2,529	3,297	5,958	11,166	18,809	17,042	9,206	6,294	4,010	3,034	2,211	2,163	85,719	450
1975	2,321	3,252	5,998	10,087	11,252	10,977	7,375	5,372	3,429	3,394	2,285	2,108	67,850	360
1976	2,416	3,604	6,855	10,129	17,113	11,709	9,308	5,829	3,969	2,662	2,172	2,156	77,922	410
1977	2,561	3,207	5,215	10,242	13,498	11,411	9,211	6,141	3,941	2,831	2,154	2,206	72,618	380
1978	2,193	4,634	7,680	13,800	18,510	13,387	9,811	4,835	3,346	3,282	2,244	2,111	85,833	450
1979	2,149	2,917	4,027	7,442	13,685	16,348	12,061	5,171	3,891	2,531	1,867	1,832	73,921	390
1980	2,598	3,340	6,389	13,079	19,176	14,764	12,939	5,906	3,954	2,818	2,150	2,159	89,272	470
1981	2,260	5,650	9,553	14,531	15,876	12,892	8,256	7,489	4,706	2,963	2,195	2,256	88,627	470
1982	2,458	2,661	6,454	10,752	16,762	10,299	10,204	5,111	3,506	3,303	2,401	2,065	75,976	400
1983	2,451	3,249	5,321	8,940	14,464	15,108	8,884	9,604	5,195	2,579	1,924	2,313	80,032	420
1984	2,373	2,893	5,888	15,949	12,166	11,740	8,784	5,174	3,605	4,037	2,687	2,211	77,507	410
1985	2,382	3,570	9,113	14,005	16,273	19,970	10,756	8,496	5,038	2,822	2,090	1,990	96,505	510
1986	2,466	3,849	4,990	11,815	12,262	10,406	11,393	6,160	4,324	3,516	2,458	2,316	75,955	400
1987	2,622	2,917	4,848	7,855	14,122	15,178	10,472	6,739	4,287	3,591	2,749	2,604	77,984	410
1988	2,619	4,558	5,772	8,720	14,475	12,359	8,667	4,926	3,782	3,154	2,311	2,509	73,852	390
1989	2,102	3,202	5,381	9,690	12,763	10,696	13,570	6,481	4,338	2,814	2,106	2,150	75,293	400
1990	2,594	5,270	10,624	17,217	13,231	11,155	11,132	5,870	3,988	3,282	2,573	2,696	89,632	470
1991	2,724	3,748	7,796	14,351	21,618	14,991	11,891	8,195	4,934	3,038	2,245	2,266	97,797	520
Average	2,345	3,468	6,509	12,397	17,647	14,234	10,440	6,618	4,312	3,139	2,264	2,200	85,572	452

Station Name : A.Chlang Khong , Chlang Rai (KHN3)

Drainage Area : 204000 sq.km.

Unit : MCM.

YEAR	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	ANNUAL
1970	2430	5010	7820	18900	28100	16600	11000	7350	7560	4140	2860	2690	114460
1971	2600	3700	8420	21200	35000	23400	12600	8200	5300	3968	2821	2487	129696
1972	2558	3055	4273	8170	14615	10860	8718	7094	6648	3674	2700	2964	75328
1973	2801	3755	7074	13397	19893	18776	9743	8941	5491	3613	2558	2344	98387
1974	2740	3501	6567	12585	21922	19893	10657	7196	4395	3877	2517	2233	98082
1975	2436	3481	7023	11976	14818	13904	9632	6688	3897	2821	2344	2202	81224
1976	2314	3532	7490	11976	19284	14513	11570	7389	4801	3299	2324	2294	90785
1977	2690	3370	5541	12078	16006	14513	11875	7866	4567	3755	2365	2304	86959
1978	2192	4780	8434	16340	20806	16746	12078	5937	4141	2893	1949	1756	98052
1979	2162	3055	4516	8444	15833	18675	14716	6293	4425	2984	2152	1908	85162
1980	2405	3167	6780	14919	21618	17761	15630	7186	4821	3420	2334	2284	102325
1981	2202	6323	11367	17152	18776	15731	10119	9033	5623	3654	2507	2101	104588
1982	2497	2629	7145	12484	19182	12991	12687	6333	4445	3146	2192	2517	88248
1983	2537	3390	5826	10251	17051	17863	11367	11875	6201	4303	2811	2304	95779
1984	2385	2984	6729	17964	15224	14412	10251	6140	3918	3075	2385	2497	87964
1985	2619	3755	10149	16137	19284	22024	13194	10555	6272	4080	2629	2273	112971
1986	2456	4405	5602	12788	15224	13093	13904	7348	4790	3765	2761	2416	88552
1987	2426	2700	4821	8008	16137	17863	12484	7196	4527	3238	2334	2426	84158
1988	2547	4912	6282	9764	16848	14615	10251	5633	4110	2811	2030	2091	81894
1989	1949	3075	5389	10555	14818	12788	15833	7561	4638	3258	2517	2578	84959
1990	2476	5430	11875	20096	15833	12788	13093	7044	4354	3238	2233	2202	100660
1991	2679	3826	8353	16239	25576	17558	13499	9500	5968	3481	2470	2350	111499
1992	2470	3776	6979	13464	19555	16398	12151	7738	5039	3014	2365	2314	95263
1993	2314	3370	4922	12484	19690	18979	12179	7916	4943	3457	2442	2328	95022
TOTAL	58886	90981	169379	327371	461120	392744	289229	184012	120873	82966	58599	55860	2292019
N	24	24	24	24	24	24	24	24	24	24	24	24	24
MEAN	2454	3791	7057	13640	19213	16364	12051	7667	5036	3457	2442	2328	95501
MAX	2801	6323	11875	21200	35000	23400	15833	11875	7560	4303	2860	2964	129696
MIN	1949	2629	4273	8008	14615	10860	8718	5633	3897	2811	1949	1756	75328

2.4 Land Use and Capability

The back-up data for this paragraph contains the following tables;

- Land use for forest and farm land (1/3 to 3/3)
- Farm land use (1/3 to 3/3)
- Cropping capability classified by soil units in Kok river basin (1/2 and 2/2)
- Cropping capability classified by soil units in Ing river basin (1/2 and 2/2)
- Cropping capability classified by soil units in Nan river basin

Table 2.4.1 Land use for Forest and Farm Land

1/3

Basin & Province	Area Rate (%)	Total Area (103 Rai)		Forest Area (103 Rai)						Farm Area (103 Rai)						Other Area (103 Rai)						Irrigation Area (103 Rai)			Irrigation Intensity (%)		
		A B		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992					
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B						
1. Chao Phraya Basin																											
(1) Nan Basin																											
(3,430,000ha)																											
Nan	95	7,170	6,812	3,730	3,544	3,050	2,898	600	570	880	836	2,840	2,698	3,240	3,078	233	221										
Uttaradit	100	4,900	4,900	2,230	2,230	1,910	1,910	1,100	1,100	1,220	1,220	1,570	1,570	1,770	1,770	102	102									26	
Phitsanulok	90	6,760	6,084	2,040	1,836	1,540	1,386	2,440	2,196	2,610	2,349	2,280	2,052	2,610	2,349	441	397									8	
Phichit	60	2,830	1,698	0	0	0	0	2,480	1,488	2,150	1,290	350	210	680	408	906	544									17	
Phechabun	15	7,920	1,188	2,400	360	1,660	249	3,410	512	4,170	626	2,110	317	2,080	314	213	32									42	
Nakhon Sawan	10	6,000	600	660	66	440	44	4,160	416	4,070	407	1,180	118	1,490	149	901	90									5	
SUB TOTAL (103 Rai)			21,282		8,036		6,487		6,282		6,728		6,965		8,068		1,386									22	
- Do - (103ha)			3,405		1,286		1,038		1,005		1,076		1,114		1,291		222										21
(2) Yom Basin																											
(2,360,000ha)																											
Nan	5	7,170	359	3,730	187	3,050	153	600	30	880	44	2,840	142	3,240	162	233	12									26	
Phayao	45	3,960	1,782	2,080	936	1,580	711	870	392	960	432	1,010	455	1,420	639	226	102									24	
Lampang	20	7,830	1,566	5,960	1,192	5,130	1,026	960	172	1,120	224	1,010	202	1,580	316	363	73									32	
Phrae	100	4,090	4,090	1,750	1,750	1,540	1,540	500	500	630	630	1,840	1,840	1,920	1,920	391	391									62	
Sukhothai	100	4,120	4,120	1,870	1,870	1,420	1,420	2,020	2,020	1,870	1,870	230	230	830	830	265	265									14	
Phitsanulok	10	6,760	676	2,040	204	1,540	154	2,440	244	2,610	261	2,280	228	2,610	261	41	44									17	
Khamphaeng Phet	15	5,380	807	1,770	266	1,320	198	2,580	387	2,870	431	1,030	155	1,190	179	449	67									16	
Phichit	40	2,830	1,132	0	0	0	0	2,480	992	2,150	860	350	140	680	272	906	362									42	
SUB TOTAL (103 Rai)			14,532		6,404		5,202		4,737		4,752		3,391		4,579		1,316										
- Do - (103ha)			2,325		1,025		832		758		760		543		733		211										28
(3) Wang Basin																											
(1,080,000ha)																											
Lampang	80	7,830	6,264	5,960	4,768	5,130	4,104	860	688	1,120	896	1,010	808	1,580	1,264	363	290									32	
Tak	5	10,250	513	8,120	406	7,580	379	550	28	950	48	1,580	79	1,720	86	154	8									16	
SUB TOTAL (103 Rai)			6,777		5,174		4,483		716		944		887		1,350		298										
- Do - (103ha)			1,084		828		717		114		151		142		216		48									32	
(4) Ping Basin																											
(3,390,000ha)																											
Khamphaeng Phet	70	5,380	3,766	1,770	1,239	1,320	924	2,580	1,806	2,870	2,009	1,030	721	1,190	833	449	314									16	
Tak	40	10,250	4,100	8,120	3,248	7,580	3,032	550	220	950	380	1,580	632	1,720	688	154	62									16	
Lamphun	100	2,820	2,820	1,720	1,720	1,410	1,410	380	380	540	540	720	720	870	870	311	311									58	
Chiang Mai	85	12,570	10,635	10,560	8,976	9,100	7,735	1,270	1,080	1,310	1,114	740	629	2,160	1,836	1,214	1,032									93	
SUB TOTAL (103 Rai)			21,371		15,183		13,101		3,486		4,043		2,702		4,227		1,719										
- Do - (103ha)			3,419		2,429		2,096		558		647		432		676		275										43

Basin & Province	Area Rate (%)	Total Area (103 Rai)		Forest Area (103 Rai)				Farm Area (103 Rai)				Other Area (103 Rai)				Irrigation Area (103 Rai)		Irrigation Intensity (%)
		A	B	1981	A	B	1992	1981	A	B	1992	1981	A	B	1992	A	B	
(5) Pasak Basin (1,630,000ha)																		(*)/(**)
Phechabun	80	7,920	6,336	2,400	1,920	1,660	1,328	3,410	2,728	4,170	3,336	2,110	1,688	2,090	1,672	213	170	5
Lop Buri	60	3,870	2,322	190	114	130	78	2,870	1,722	2,510	1,506	810	486	1,230	738	643	386	26
Saraburi	70	2,240	1,568	60	42	40	28	1,540	1,078	1,190	833	640	448	1,010	707	365	256	31
SUB TOTAL (103 Rai)			10,226		2,076		1,434	5,528			5,875		2,622		3,117		812	
-Do- (103ha)			1,636		332		229	884			908		420		499		130	14
(6) Sakae Krang Basin (520,000ha)																		
Khamphaeng Phet	15	5,380	807	1,770	266	1,320	198	2,580	387	2,870	431	1,030	155	1,190	179	449	67	16
Nakhon Sawan	20	6,000	1,200	660	132	440	88	4,160	832	4,070	814	1,180	236	1,490	298	901	180	22
Uthai Thani	30	4,210	1,263	1,820	546	1,660	498	1,250	375	1,340	402	1,140	342	1,210	363	578	173	43
SUB TOTAL (103 Rai)			3,270		944		784	1,594			1,647		733		840		421	
-Do- (103ha)			523		151		125	265			263		117		134		67	26
(7) Chao Phraya Delta / Tha Tin (3,380,000ha)																		
Nakhon Sawan	70	6,000	4,200	660	462	440	308	4,160	2,912	4,070	2,849	1,180	826	1,490	1,043	901	631	22
Lop Buri	40	3,870	1,548	190	76	130	52	2,870	1,148	2,510	1,004	810	324	1,230	492	643	257	26
Uthai Thani	35	4,210	1,474	1,820	637	1,660	581	1,250	438	1,340	469	1,140	399	1,210	424	578	202	43
Chai Nat	100	1,540	1,540	10	10	0	0	1,130	1,130	1,130	1,130	400	400	410	410	362	362	76
Ang Thong	100	610	610	0	0	0	0	540	540	500	500	70	70	110	110	507	507	101
Saraburi	20	2,240	448	60	12	40	8	1,540	308	1,190	238	640	128	1,010	202	365	73	31
Sing Buri	100	510	510	0	0	0	0	440	440	460	460	70	70	50	50	424	424	92
Ayutthaya	100	1,600	1,600	0	0	0	0	1,400	1,400	1,180	1,180	200	200	420	420	1,235	1,235	105
Pathum Thani	100	950	950	0	0	0	0	790	790	690	690	160	160	260	260	693	693	100
Nonthaburi	100	390	390	0	0	0	0	210	210	170	170	180	180	220	220	230	230	135
Bangkok Metropolis	100	980	980	0	0	0	0	440	440	260	260	540	540	720	720	468	468	180
Samut Prakan	100	630	630	0	0	0	0	280	280	210	210	350	350	420	420	378	378	180
Samut Sakhon	90	550	495	0	0	0	0	270	243	230	207	280	252	320	288	236	212	103
Chachoeng Sae	10	3,340	334	910	91	750	75	1,610	161	1,870	187	820	82	720	72	926	93	50
Nakhon Pathom	100	1,360	1,360	0	0	0	0	1,000	1,000	870	870	360	360	490	490	871	871	100
Suphan Buri	100	3,350	3,350	430	430	370	370	2,510	2,510	2,320	2,320	410	410	660	660	1,688	1,688	73
Kanchanaburi	10	12,180	1,218	7,900	790	6,740	674	1,730	173	2,050	205	2,550	255	3,390	339	486	49	24
SUB TOTAL (103 Rai)			21,637		2,508		2,068		14,123		12,949		5,006		6,620		8,873	
-Do- (103ha)			3,462		401		331		2,260		2,072		801		1,059		1,420	69
TOTAL (103ha)			15,854		6,492		5,368		5,834		5,877		3,569		4,608		2,373	

Basin & Province	Area Rate (%)	Total Area (103 Rai)		Forest Area (103 Rai)						Farm Area (103 Rai)						Other Area (103 Rai)						Irrigation Area (103 Rai)		Irrigation Intensity (%)
				1981		1992		1981		1992		1981		1992		1981		1992						
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B					
2. Project Area																								
(1) Kok & Ing Basin																								
Chiang Mai	15	12,570	1,886	10,560	1,584	9,100	1,365	1,270	191	1,310	197	740	111	2,160	324	1,214	182							
Chiang Rai	70	7,300	5,110	3,130	2,191	2,530	1,771	2,050	1,435	2,210	1,547	0	1,484	0	1,792	400	280							
Phayao	55	3,960	2,178	2,080	1,144	1,580	869	870	479	960	528	1,010	556	1,420	781	226	124							
SUB TOTAL (103 Rai)			9,174		4,919		4,005		2,104		2,272		2,151		2,897		586							
- Do - (103 ha)			1,468		787		641		337		363		344		464		94							
(2) Upper Nan																								
Nan	95	7,170	6,812	3,730	3,544	3,050	2,898	600	570	880	836	2,840	2,698	3,240	3,078	233	221							
SUB TOTAL (103 Rai)			6,812		3,544		2,898		570		836		2,698		3,078		221							
- Do - (103 ha)			1,090		567		464		91		134		432		492		35							
TOTAL (103 ha)			2,558		1,354		1,105		428		497		776		956		129							
(3) Whole Country																								
TOTAL (103 Rai)			51,311				13,495				21,128				16,688		4,590							
TOTAL (103 ha)																								

Remark; A; Area on Provincial Level
B; A X Area Rate (%)

Table 2.4.2 Farm Land use

Basin & Province	Area Rate (%)	Total Farm Area (103 Rai)				Paddy Area (103 Rai)				Field Crop Area (103 Rai)				Fruit & Tree Crop Area (103 Rai)				Vegetable Area (103 Rai)				Other Area (103 Rai)			
		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1. Chao Phraya Basin																									
(1) Nan Basin (3,430,000ha)																									
Nan	95	600	570	880	836	250	238	240	228	260	247	490	466	30	29	85	81	0	0	6	6	60	57	59	56
Uttaradit	100	1,100	1,100	1,220	1,220	600	600	530	530	400	400	460	460	40	40	160	160	1	1	11	11	59	59	59	59
Phitsanulok	90	2,440	2,196	2,610	2,349	1,600	1,440	1,590	1,431	690	621	790	711	70	63	60	54	4	4	6	5	76	68	164	148
Phichit	60	2,480	1,488	2,150	1,290	2,080	1,248	1,760	1,056	290	174	270	162	40	24	60	36	1	1	10	6	69	41	50	30
Phetchabun	15	3,410	512	4,170	626	1,590	239	1,500	225	1,570	236	2,150	323	60	9	300	45	12	2	22	3	178	27	198	30
Nakhon Sawan	10	4,160	416	4,070	407	2,790	279	2,400	240	1,180	118	1,400	140	50	5	120	12	10	1	22	2	130	13	128	13
SUB TOTAL (103 Rai)			6,282		6,728		4,043		3,710		1,796		2,261		170		388		8		34		266		338
-Do- (103ha)			1,005		1,076		647		594		287		362		27		62		1		5		42		54
(2) Yom Basin (2,360,000ha)																									
Nan	5	600	30	880	44	250	13	240	12	260	13	490	25	30	2	86	4	0	0	6	0	60	3	59	3
Phayao	45	870	392	960	432	650	293	570	257	140	63	250	113	16	7	70	32	1	0	21	9	63	28	49	22
Lampang	20	860	172	1,120	224	540	108	570	114	220	44	340	68	24	5	70	14	3	1	13	3	73	15	127	23
Phrae	100	500	500	630	630	290	290	280	280	150	150	260	260	24	24	57	57	3	3	1	1	33	33	32	32
Sukhothai	100	2,020	2,020	1,870	1,870	1,330	1,330	1,000	1,000	520	520	670	670	86	86	90	90	3	3	9	9	81	81	101	101
Phitsanulok	10	2,440	244	2,610	261	1,600	160	1,590	159	690	69	790	79	70	7	100	10	4	0	6	1	76	8	124	12
Khamphaeng Phet	15	2,680	387	2,870	431	1,280	192	1,340	201	1,120	168	1,290	194	73	11	100	15	0	0	7	1	107	16	133	20
Phichit	40	2,480	992	2,150	860	2,080	832	1,760	704	290	116	270	108	40	16	60	24	1	0	10	4	69	28	50	20
SUB TOTAL (103 Rai)			4,737		4,752		3,217		2,727		1,143		1,516		157		246		8		28		211		236
-Do- (103ha)			758		760		515		436		183		242		25		39		1		4		34		38
(3) Wang Basin (1,080,000ha)																									
Lampang	80	860	688	1,120	896	540	432	570	456	220	176	340	272	24	19	70	56	3	2	13	10	73	58	127	102
Tak	5	550	28	960	48	260	13	270	14	190	10	540	27	26	1	80	4	1	0	8	0	73	4	52	3
SUB TOTAL (103 Rai)			716		944		445		470		186		299		21		60		2		11		62		104
-Do- (103ha)			114		151		71		75		30		48		3		10		0		2		10		17
(4) Ping Basin (3,390,000ha)																									
Khamphaeng Phet	70	2,580	1,806	2,870	2,009	1,280	896	1,340	938	1,120	784	1,290	903	73	51	100	70	0	0	7	5	107	75	133	93
Tak	40	550	220	950	380	260	104	270	108	190	76	540	216	26	10	80	32	1	0	8	3	73	29	52	21
Lamphun	100	380	380	540	540	290	290	280	280	30	30	40	40	35	35	157	157	3	3	27	27	22	22	36	36
Chiang Mai	85	1,270	1,080	1,310	1,114	870	740	680	578	200	170	220	187	105	89	250	213	17	14	81	69	78	66	79	67
SUB TOTAL (103 Rai)			3,486		4,043		2,030		1,904		1,060		1,346		186		472		18		104		192		217
-Do- (103ha)			568		647		325		305		170		215		30		75		3		17		31		35

Basin & Province	Area Rate (%)	Total Farm Area (103 Rai)				Paddy Area (103 Rai)				Field Crop Area (103 Rai)				Fruit & Tree Crop Area (103 Rai)				Vegetable Area (103 Rai)				Other Area (103 Rai)			
		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
(5) Pasak Basin (1,630,000ha)																									
Phechabun	80	3,410	2,728	4,170	3,336	1,590	1,272	1,500	1,200	1,570	1,256	2,160	1,720	60	49	300	240	12	10	22	18	178	142	198	158
Lop Buri	60	2,870	1,722	2,510	1,566	1,200	720	970	582	1,860	936	1,380	828	30	18	53	32	0	0	7	4	80	48	100	60
Saraburi	70	1,540	1,078	1,190	833	770	539	540	378	620	434	440	308	46	32	78	55	1	1	2	1	103	72	130	91
SUB TOTAL (103Rai)			5,528		5,675		2,531		2,160		2,626		2,856		98		326		10		23		263		309
-Do- (103ha)			884		908		405		346		420		457		16		52		2		4		42		50
(6) Sakae Krang Basin (320,000ha)																									
Khamphaeng Phet	15	2,580	387	2,870	431	1,280	192	1,340	201	1,120	168	1,290	194	73	11	100	15	0	0	7	1	107	16	133	20
Nakhon Sawan	20	4,160	832	4,070	814	2,790	558	2,400	430	0	0	1,400	280	0	0	120	24	10	2	40	8	1,360	272	110	22
Uthai Thani	30	1,250	375	1,340	402	740	222	630	189	380	114	550	165	50	15	70	21	1	0	12	4	79	24	78	23
SUB TOTAL (103Rai)			1,594		1,647		972		870		282		639		26		60		2		13		312		63
-Do- (103ha)			255		263		156		139		45		102		4		10		0		2		50		10
(7) Chao Phraya Delta/ The Tin																									
Nakhon Sawan	70	4,160	2,912	4,070	2,849	2,790	1,953	2,400	1,680	1,180	826	1,400	980	50	35	120	84	10	7	22	15	130	91	128	90
Lop Buri	40	2,870	1,148	2,510	1,004	1,200	480	970	388	1,560	624	1,380	852	30	12	53	21	0	0	7	3	80	32	100	40
Uthai Thani	35	1,250	438	1,340	469	740	259	630	221	380	133	550	193	50	18	70	25	1	0	12	4	79	28	78	27
Chai Nat	100	1,130	1,130	1,130	1,130	930	930	950	950	136	136	110	110	31	31	32	32	1	1	1	1	32	32	37	37
Ang Thong	100	540	540	500	500	500	500	400	400	0	0	10	10	16	16	16	16	42	42	2	2	10	10	22	22
Saraburi	20	1,540	308	1,190	238	770	164	540	108	620	124	440	88	46	9	78	16	1	0	2	0	103	21	130	26
Siang Buri	100	440	440	460	460	410	410	390	390	7	7	37	37	12	12	23	23	1	1	1	1	10	10	9	9
Ayutthaya	100	1,400	1,400	1,180	1,180	1,340	1,340	1,090	1,090	9	9	0	0	22	22	34	34	3	3	1	1	26	26	55	55
Pathum Thani	100	790	790	690	690	700	700	460	460	2	2	0	0	41	41	180	180	12	12	6	6	35	35	44	44
Nonthaburi	100	210	210	170	170	160	160	125	125	0	0	0	0	47	47	30	30	2	2	6	6	11	11	9	9
Bangkok Metropolis	100	440	440	260	260	400	400	170	170	0	0	2	2	21	21	50	50	8	8	21	21	11	11	17	17
Samut Prakan	100	280	280	210	210	210	210	100	100	0	0	0	0	47	47	55	55	0	0	0	0	23	23	55	55
Samut Sakhon	90	270	243	230	207	140	126	110	99	4	4	0	0	79	71	90	81	11	10	10	9	36	32	20	18
Chachoeng Sae	10	1,610	161	1,870	187	1,120	112	990	99	140	14	620	62	130	13	143	14	3	0	8	1	217	22	109	11
Nakhon Pathom	100	1,000	1,000	870	870	560	560	490	490	290	290	170	170	64	64	90	90	26	26	38	38	60	60	82	82
Suphan Buri	100	2,510	2,510	2,320	2,320	1,680	1,680	1,370	1,370	700	700	740	740	38	38	73	73	9	9	15	15	83	83	122	122
Kanchanaburi	10	1,730	173	2,050	205	480	48	410	41	1,030	109	1,400	140	56	6	95	10	8	1	45	5	96	10	100	10
SUB TOTAL (103Rai)			14,123		12,949		10,012		8,181		2,978		3,084		502		859		83		136		548		690
-Do- (103ha)			2,260		2,072		1,602		1,309		476		493		80		137		13		22		88		110
TOTAL (103ha)			5,834		5,877		3,721		3,204		1,611		1,919		185		386		20		56		297		314

Basin & Province	Area Rate (%)	Total Farm Area (103 Rai)				Paddy Area (103 Rai)				Field Crop Area (103 Rai)				Fruit & Tree Crop Area (103 Rai)				Vegetable Area (103 Rai)				Other Area (103 Rai)			
		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992		1981		1992	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
2. Project Area																									
(1) Kok & Ing Basin																									
Chiang Mai	15	1,270	191	1,310	197	870	131	680	102	200	30	220	33	105	16	250	38	17	3	81	12	78	12	79	12
Chiang Rai	70	2,050	1,435	2,210	1,547	1,550	1,085	1,410	987	350	245	520	364	59	41	135	96	8	6	20	14	83	58	125	88
Phayao	55	870	479	960	528	650	358	570	314	140	77	250	138	16	9	70	39	1	1	21	12	63	35	49	27
SUB TOTAL (103 Rai)		2,104		2,272			1,573		1,403	352	352		535		66		171		9		38		104		126
-00- (103ha)		337		363			252		224	56	56		86		11		27		1		6		17		20
(2) Upper Nan																									
Nan	95	600	570	880	836	250	238	240	228	260	247	490	466	30	29	85	81	0	0	6	6	60	57	59	56
SUB TOTAL (103 Rai)						870	836		228		247		466		29		81		0		6		57		56
-00- (103ha)				91	134		38		36		40		74		5		13		0		1		9		9
TOTAL (103ha)				428	497		290		260		96		160		16		40		1		7		26		28
(3) Whole Country						21,128			11,104				5,247				3,336				141				1,300
TOTAL (103 Rai)																									
TOTAL (103ha)																									

Remark: A; Area on Provincial Level
B; A X Area Rate (%)

Table 2.4.3 Cropping capability classified by soil units in KOK river basin

No.	Soil Units	Cropping Capability	Lowland Irrigation Practice	Area Covered		Irrigation Classes
				%	ha	
1	Loamy Ustifluvents	Poorly suitable for paddy. Suitable for field crops, fruit crops and grassland. May have problem will limited root zone.	Unsuitable due to topography	8.3	24,300	U2s/R4t
3	Clayey Tropaquents	Suitable for paddy. Unsuitable for field crops. Moderately suitable for fruit crops due to shallow soil surface suitable for grassland.	Suitable	11.0	32,200	U5f/R2s
6	Clayey Calcistolls	Unsuitable for paddy. Suitable for field crops. Moderately suitable for fruit crops due to shallow soil surface suitable for grassland.	Unsuitable due to topography	1.1	3,300	U2s/R2t
8	Clayey Tropaqualfs	Very suitable for paddy. Others are poorly suitable due to flood risk.	Suitable	18.1	53,000	U4f/R1
13	Skeletal Haplustalfs/ Skeletal Ustorthents	Unsuitable for paddy due to unfavorable topography. Moderately to poorly suitable for field crops. Moderately suitable for fruit crops. May have problem with shallow soil surface. Suitable for grassland.	Unsuitable due to topography	1.1	3,300	U3s/R5t
15	Clayey Paleaquults	Suitable for paddy. Poorly suitable for field crops and grassland. Moderately suitable for fruit crops.	Suitable	2.8	8,200	U4f/R1s
16	Loamy Paleaquults	Suitable for paddy. Moderately suitable for field and fruit crops due to poor drainage. Poorly suitable for grassland due to flood risk.	Suitable	1.5	4,400	U3d/R2s
18	Clayey Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	28.3	83,000	U2s/R5t
19	Skeletal Paleustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	6.8	20,000	U3s/R5t
20	Loamy Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	8.6	25,000	U2s/R5t
22	Skeletal Haplustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	0.4	1,000	U3s/R5t
23	Skeletal Haplustults/ Seletal Ustorthents	Unsuitable for paddy due to unfavorable topography. Moderately to poorly suitable for field crops. Moderately suitable for fruit crops due to shallow soil surface. Suitable for grassland.	Unsuitable due to topography	8.3	24,200	U3s/R5t
25	Clayey Palchumults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	13.7	10,700	U2s/R5t
	Total			100.0	292,600	

Source : Land Development Department

Table 2.4.4 Cropping capability classified by soil units in ING river basin

No.	Soil Units	Cropping Capability	Lowland Irrigation Practice	Area Covered		Irrigation Classes
				%	ha	
1	Loamy Ustifluvents	Poorly suitable for paddy. Suitable for field crops, fruit crops and grassland. May have problem with limited root zone.	Unsuitable due to topography	1.6	6,500	U2s/R4t
3	Clayey Tropaquents	Suitable for paddy. Unsuitable for field crops. Moderately suitable for fruit crops due to shallow soil surface suitable for grassland.	Suitable	0.7	2,900	U5f/R2s
4	Clayey Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	3.5	14,500	U3s/R5t
8	Clayey Tropaqualls	Very suitable for paddy. Others are poorly suitable due to flood risk.	Suitable	31.0	127,000	U4f/R1
12	Loamy Haplustalfs	Unsuitable for paddy due to unfavorable topography. Very suitable for field crops and well suitable for fruit crops. Also suitable for grassland.	Unsuitable due to topography	6.1	25,200	U1/R5t
15	Clayey Paleaquults	Suitable for paddy. Poorly suitable for field crops and grassland. Moderately suitable for fruit crops.	Suitable	17.1	70,000	U4f/R1s
16	Loamy Paleaquults	Suitable for paddy. Moderately suitable for field and fruit crops due to poor drainage. Poorly suitable for grassland due to flood risk.	Suitable	0.8	3,200	U3d/R2s
18	Clayey Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	8.6	35,300	U2s/R5t
19	Skeletal Paleustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	1.7	7,200	U3s/R5t
20	Loamy Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	6.7	27,300	U2s/R5t
22	Skeletal Haplustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	4.5	18,300	U3s/R5t
23	Skeletal Haplustults/ Skeletal Ustorthents	Unsuitable for paddy due to unfavorable topography. Moderately to poorly suitable for field crops. Moderately suitable for fruit crops due to shallow soil surface. Suitable for grassland.	Unsuitable due to topography	16.1	66,000	U3s/R5t
	Total	-	-	100.0	409,900	

Source : Land Development Department

Table 2.4.5 Cropping capability classified by soil units in NAN river basin

No.	Soil Units	Cropping Capability	Lowland Irrigation Practice	Area Covered		Irrigation Classes
				%	ha	
1	Loamy Ustifluvents	Poorly suitable for paddy. Suitable for field crops, fruit crops and grassland. May have problem with limited root zone.	Unsuitable due to topography	1.6	6,500	U2s/R4t
2	Skeletal Ustorthents	Unsuitable for paddy due to unfavorable topography. Poorly suitable for field crops. Moderately suitable for fruit crops and grassland.	Unsuitable due to topography	7.3	14,600	U4s/R5t
19	Skeletal Paleustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	1.7	7,200	U3s/R5t
20	Loamy Paleustults	Unsuitable for paddy due to unfavorable topography. Well suitable for field and fruit crops. Suitable for grassland.	Unsuitable due to topography	6.7	27,300	U2s/R5t
24	Skeletal Haplustults/ Skeletal Paleustults	Unsuitable for paddy due to unfavorable topography. Moderately suitable for field and fruit crops. May have problem with limited root zone. Suitable for grassland.	Poorly suitable	27.4	54,600	U3s/R5t
	Total			100.0	199,400	

Source : Land Development Department

2.5 Agricultural Condition

This part of the main report is supported by the following back-up data;

- Harvested area and production of major crops in Chao Phraya basin and project area
- Number of livestock (1993)
- Fish culture by basins and provinces

Table 2.5.1 Harvested Area and Production of Major Crops in Chao Phrayan Basin and Project Area

1/3

Basin & Province	Area Rate (%)	Major Rice			Second Rice			Maize			Cassava			Sugar Cane			Soybean		
		Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)
		A	B		A	B		A	B		A	B		A	B		A	B	
1. Chao Phraye Basin																			
(1) Nan Basin																			
Nan	95	169	161	79	76	1	1	247	235	124	118	3	7	7	-	-	28	24	4
Uttaradit	100	443	443	214	214	51	30	101	101	46	46	4	10	10	90	90	169	169	33
Phitsanulok	90	1,112	1,001	486	437	251	226	222	200	104	94	242	218	534	51	46	419	215	194
Phichit	60	1,229	737	483	290	254	152	89	53	29	17	8	5	20	12	23	14	19	11
Phetchabun	15	1,087	163	520	78	-	-	1,160	174	690	89	24	4	56	8	27	4	254	38
Nakhon Sawan	10	1,809	181	740	74	125	13	94	57	255	26	130	13	299	30	331	33	3,099	310
SUB TOTAL (103 Rai)	-	5,849	2,586	2,522	1,168	682	443	499	315	2,389	820	411	247	926	548	522	187	4,683	1,553
-Do- (103ha)	-	936	430	2,522	1,168	109	71	499	315	382	131	1,148	390	66	40	926	548	30	4,683
(2) Yom Basin																			
(2,360,000ha)																			
Nan	5	169	8	79	4	1	1	247	12	124	6	3	7	-	-	-	25	1	4
Phayao	45	455	205	209	94	5	2	178	80	84	38	1	3	1	-	-	7	3	4
Lampang	20	428	86	208	42	3	1	22	4	10	2	2	4	1	42	8	290	58	7
Phrao	100	218	218	104	104	-	-	86	86	33	33	2	2	5	25	25	185	185	88
Sukhothai	100	726	726	268	268	58	58	39	77	26	26	1	1	2	156	156	1,440	1,440	383
Phitsanulok	10	1,112	111	466	49	251	25	169	17	222	22	104	10	242	24	534	53	466	47
Khamphaeng Phet	15	1,165	175	563	84	154	23	102	15	297	45	137	21	363	54	803	120	431	65
Phichit	40	1,229	492	483	193	254	102	205	82	89	36	29	12	8	23	9	194	78	19
SUB TOTAL (103 Rai)	-	5,502	2,021	2,400	838	726	211	521	154	1,218	362	547	148	84	1,378	190	728	268	6,652
-Do- (103ha)	-	880	323	2,400	838	116	34	521	154	196	58	547	148	100	13	1,378	190	116	43
(3) Wang Basin																			
(1,080,000ha)																			
Lampang	80	428	342	208	166	3	2	22	18	10	8	2	2	4	3	42	34	290	232
Tak	5	219	11	91	5	-	-	338	17	166	8	1	3	-	7	-	62	3	137
SUB TOTAL (103 Rai)	-	647	353	299	171	3	2	2	360	35	176	3	2	7	3	49	34	352	235
-Do- (103ha)	-	104	56	299	171	-	-	2	58	6	176	16	-	7	3	8	5	352	235
(4) Ping Basin																			
(3,390,000ha)																			
Khamphaeng Phet	70	1,165	816	563	394	154	108	102	71	297	208	137	96	363	254	803	562	431	302
Tak	40	219	88	91	36	-	-	338	135	166	66	1	3	1	7	3	62	25	137
Lamphun	100	428	428	208	208	3	3	2	2	9	9	4	4	-	-	-	-	-	-
Chiang Mai	85	518	441	277	235	11	9	5	4	29	25	8	7	-	3	29	25	163	139
SUB TOTAL (103 Rai)	-	2,381	1,773	1,139	873	168	120	109	77	673	377	315	173	364	254	806	563	441	308
-Do- (103ha)	-	373	284	1,139	873	27	19	109	77	108	60	315	173	58	41	806	563	71	49

Basin & Province	Major Rice				Second Rice				Maize				Cassava				Sugar Cane				Soybean			
	Harvest Area (103 Rai)		Product (103 Ton)		Harvest Area (103 Rai)		Product (103 Ton)		Harvest Area (103 Rai)		Product (103 Ton)		Harvest Area (103 Rai)		Product (103 Ton)		Harvest Area (103 Rai)		Product (103 Ton)		Harvest Area (103 Rai)		Product (103 Ton)	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
(5) Paeak Basin (1,630,000ha)																								
Phetchabun	80	1,037	870	520	416	-	-	-	1,160	923	590	472	24	19	56	45	27	22	264	203	172	138	38	30
Lop Buri	60	898	639	309	185	66	34	36	22	800	480	382	229	96	67	220	136	246	147	1,864	1,118	96	58	24
Saraburi	70	391	274	164	115	25	18	15	11	297	208	173	121	11	8	28	20	39	27	319	223	15	11	4
SUB TOTAL (103 Rai)	-	2,376	1,683	993	716	81	52	51	33	2,257	1,616	1,145	822	130	84	310	201	311	196	2,437	1,544	283	207	66
-Do- (103ha)	-	390	269	993	716	13	8	51	33	361	239	1,145	822	21	13	310	201	50	31	2,437	1,544	45	33	66
(6) Sakae Krang Basin (620,000ha)																								
Khamphaeng Phet	16	1,165	176	663	34	154	23	102	15	297	45	137	21	363	54	803	120	431	65	4,077	612	211	32	45
Nakhon Sawan	20	1,809	362	740	148	125	25	94	19	570	114	253	51	130	26	299	60	331	66	3,099	620	124	25	29
Uthai Thani	30	458	137	163	49	11	3	7	2	256	77	130	39	163	50	398	119	110	33	953	286	70	21	16
SUB TOTAL (103 Rai)	-	3,432	674	1,466	281	290	51	203	36	1,123	236	522	111	658	130	1,600	299	872	164	8,129	1,518	405	78	90
-Do- (103ha)	-	459	108	1,466	281	46	8	203	36	180	38	522	111	105	21	1,500	299	140	26	8,129	1,518	65	12	90
(7) Chao Phraya Delta / Tha Tin																								
Nakhon Sawan	70	1,809	1,266	740	518	125	88	94	66	670	399	255	179	130	91	209	209	331	232	3,099	2,169	124	87	29
Lop Buri	40	898	359	309	124	56	22	36	14	800	320	382	153	95	38	226	90	245	98	1,864	746	96	38	24
Uthai Thani	35	458	160	163	57	11	4	7	2	256	90	130	46	165	58	398	139	110	39	953	334	70	25	16
Chai Nat	100	814	814	474	474	318	318	227	227	20	20	7	7	78	78	174	174	37	37	326	326	3	3	-
Ang Thong	100	345	345	153	153	74	74	67	67	-	-	-	-	-	-	-	-	20	20	271	271	1	1	-
Saraburi	20	391	78	164	93	25	5	15	3	297	59	173	35	11	2	28	6	39	8	319	64	16	3	4
Sing Buri	100	324	324	183	183	80	80	61	61	-	-	-	-	-	-	-	-	35	35	474	474	1	1	-
Ayutthaya	100	876	876	352	352	216	216	157	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pathum Thani	100	296	269	200	200	234	234	176	176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonthaburi	100	113	113	89	89	128	128	106	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangkok Metropolis	100	143	143	82	82	73	73	63	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Samut Prakan	100	59	59	35	35	29	29	18	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Samut Sakhon	90	37	33	20	18	12	12	9	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chachoeng Sao	10	789	79	353	39	306	31	198	20	18	2	8	1	431	43	943	94	68	7	546	56	28	3	6
Nakhon Pathom	100	324	324	231	231	306	306	245	245	-	-	-	-	38	38	77	77	111	111	1,116	1,116	-	-	-
Suphan Buri	100	890	890	530	530	697	697	527	527	88	88	31	31	32	32	77	77	579	579	5,383	5,383	1	1	-
Kanchanaburi	10	326	33	113	11	118	12	76	8	159	16	53	5	201	20	489	49	776	78	6,683	668	10	1	2
SUB TOTAL (103 Rai)	-	8,892	6,192	4,231	3,129	2,809	2,329	2,061	1,747	2,208	994	1,039	457	1,181	400	2,711	915	2,351	1,244	21,034	11,606	349	163	81
-Do- (103ha)	-	1,423	991	4,231	3,129	449	273	2,061	1,747	353	159	1,039	457	189	64	2,711	915	376	199	21,034	11,606	56	26	81
TOTAL	-	4,645	2,461	13,050	7,176	760	513	3,446	2,364	1,637	711	4,892	2,117	539	192	7,638	2,719	584	277	32,721	15,814	551	290	735

Basin & Province	Major Rice			Second Rice			Maize			Cassava			Sugar Cane			Soybean																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)	Harvest Area (103 Rai)		Product (103 Ton)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Remark: A; Area on Provincial Level
B; A X Area Rate (%)

Table 2.5.2 No. of Livestock (1993)

1/2

	Area Rate (%)	Buffalo		Cattle		Swine	
		A	B	A	B	A	B
1. Chao Phraya Basin							
(1) Nan Basin							
Nan	95	52.0	49.4	59.9	56.9	68.2	64.8
Uttaradit	100	25.3	25.3	89.0	89.0	52.9	52.9
Phitsanulok	90	35.6	32.0	106.4	95.8	70.8	63.7
Phichit	60	16.1	9.7	55.8	33.5	63.0	37.8
Pechabun	15	52.7	7.9	192.6	28.9	77.3	11.6
Nakhon Sawan	10	45.5	4.6	198.5	19.9	52.8	5.3
SUB TOTAL	-	227.2	128.9	702.2	324.0	385.0	236.1
(2) Yom Basin							
Nan	5	52.0	2.6	59.9	3.0	68.2	3.4
Phayao	45	43.9	19.8	95.2	42.8	57.1	25.7
Lampang	20	74.0	14.8	149.2	29.8	85.6	17.1
Phrae	100	37.7	37.7	67.3	67.3	71.0	71.0
Sukhothai	100	16.8	16.8	106.9	106.9	61.2	61.2
Phitsanulok	10	35.6	3.6	106.4	10.6	70.8	7.1
Khamphaeng Phet	15	22.7	3.4	70.4	10.6	64.2	9.6
Phichit	40	16.1	6.4	55.8	22.3	63.0	25.2
SUB TOTAL	-	298.8	105.1	711.1	293.3	541.1	220.3
(3) Wang Basin							
Lampang	80	74.0	59.2	149.2	119.4	85.6	68.5
Tak	5	27.4	1.4	125.2	6.3	37.1	1.9
SUB TOTAL	-	101.4	60.6	274.4	125.7	122.7	70.4
(4) Ping Basin							
Khamphaeng Phet	70	22.7	15.9	70.4	49.3	64.2	44.9
Tak	40	27.4	11.0	125.2	50.1	37.1	14.8
Lamphun	100	16.0	16.0	52.3	52.3	47.0	47.0
Chiang Mai	85	84.2	71.6	137.6	117.0	228.5	194.2
SUB TOTAL	-	150.3	114.5	385.5	268.7	376.8	300.9
(5) Pasak Basin							
Pechabun	80	52.7	42.2	192.6	154.1	77.3	61.8
Lop Buri	60	19.2	11.5	211.2	126.7	80.8	48.5
Saraburi	70	22.9	16.0	78.0	54.6	58.8	41.2
SUB TOTAL	-	94.8	69.7	481.8	335.4	216.9	151.5
(6) Sakae Krang Basin							
Khamphaeng Phet	15	22.7	3.4	70.4	10.6	64.2	9.6
Nakhon Sawan	20	45.5	9.1	198.5	39.7	52.8	10.6
Uthai Thani	30	45.0	13.5	53.2	16.0	54.3	16.3
SUB TOTAL	-	113.2	26.0	322.1	66.3	171.3	36.5

	Area Rate (%)	Buffalo		Cattle		Swine	
		A	B	A	B	A	B
(7) Chao Phraya Delta							
Nakhon Sawan	70	45.5	31.9	198.5	139.0	52.8	37.0
Lop Buri	40	19.2	7.7	211.2	84.5	80.8	32.3
Uthai Thani	35	45.0	15.8	53.2	18.6	54.3	19.0
Chai Nat	100	16.5	16.5	80.0	80.0	40.4	40.4
Ang Thong	100	6.0	6.0	50.3	50.3	31.1	31.1
Saraburi	20	22.9	4.6	78.0	15.6	58.8	11.8
Sing Buri	100	3.9	3.9	24.7	24.7	38.0	38.0
Ayuttaya	100	21.7	21.7	44.3	44.3	35.3	35.3
Pathum Thani	100	4.0	4.0	7.6	7.6	14.0	14.0
Nonthaburi	100	0.9	0.9	3.2	3.2	2.8	2.8
Bangkok Metropolis	100	1.4	1.4	6.8	6.8	6.9	6.9
Samut Prakan	100	0.1	0.1	1.1	1.1	10.8	10.8
Samut Sakhon	90	0.1	0.1	1.2	1.1	5.0	4.5
Chachoeng Sao	10	14.0	1.4	51.6	5.2	185.9	18.6
Nakhon Pathom	100	3.0	3.0	46.0	46.0	365.7	365.7
Suphan Buri	100	26.0	26.0	146.0	146.0	150.5	150.5
Kanchanaburi	10	-	-	-	-	-	-
SUB TOTAL	-	230.2	145.0	1,003.7	674.0	1,133.1	818.7
TOTAL	-	1,215.9	649.8	3,880.8	2,087.4	2,946.9	1,834.4
2. Project Area							
(1) Kok & Ing Basin							
Chiang Mai	15	84.2	12.6	137.6	20.6	228.5	34.3
Chiang Rai	70	86.8	60.8	92.7	64.9	132.0	92.4
Phayao	55	43.9	24.1	95.2	52.4	57.1	31.4
SUB TOTAL	-	214.9	97.5	325.5	137.9	417.6	158.1
(2) Upper Nan							
Nan	95	52.0	49.4	59.9	56.9	68.2	64.8
SUB TOTAL	-	52.0	49.4	59.9	56.9	68.2	64.8
TOTAL	-	266.9	146.9	385.4	194.8	485.8	222.9
(3) Whole Country							
TOTAL	100		4,754		6,360		4,985

Table 2.5.3 Fish Culture by Basins and Provinces

Basins and Provinces	No. of farms	Units	Area (ha)	Production (ton)	Value (10 ³ baht)
1. Whole Country					
North East	41,244	53,691	8,302	9,597	261,830
North	29,409	40,058	4,581	22,073	485,374
Central	21,730	40,606	18,385	74,790	1,958,442
South	15,973	23,391	1,000	4,486	128,010
Total	108,356	158,016	32,268	110,946	2,833,656
2. Kok, Ing and Nan Basins					
Chiang Rai	3,201	5,101	642	840	22,966
Phayao	2,315	3,285	313	204	6,324
Nan	919	1,072	81	117	3,327
Total	6,435	9,458	1,036	1,161	32,617
3. Lower Nan Basin					
Uttaradit	1,267	1,516	140	179	4,032
Phitsanulok	1,906	2,688	268	1,625	35,023
Phichit	1,190	1,508	156	1,064	20,987
Total	4,363	5,712	564	2,868	60,042
4. Ping, Wang and Yom Basins					
Chiang Mai	2,478	3,117	267	353	11,568
Mae Hong Son	1,164	1,271	32	47	1,464
Lampang	1,297	1,479	131	136	2,513
Lamphun	715	824	104	90	2,448
Sukhothai	1,582	2,442	341	899	16,771
Tak	1,016	1,294	129	125	3,216
Phrae	995	1,339	135	359	10,530
Kamphaeng Phet	735	1,063	128	746	15,623
Pechabun	6,819	9,198	1,416	9,961	231,551
Uthai Thani	688	752	44	1,410	30,603
Nakhon Sawan	1,122	2,109	253	3,917	66,428
Total	18,611	24,888	2,980	18,043	392,715
5. Pasak Basin					
Lop Buri	869	1,172	232	3,015	57,813
Sara Buri	639	1,016	190	572	11,185
Total	1,508	2,188	422	3,587	68,998
6. Chao Phraya Delta and The Chin					
Chai Nat	1,198	1,590	199	515	11,785
Sing Buri	540	821	86	365	7,609
Ang Thong	395	552	122	1,355	28,066
Ayuthaya	2,129	3,106	1,160	2,323	50,817
Suphan Buri	2,851	6,080	3,803	10,712	487,520
Nonthaburi	229	489	190	1,034	18,876
Pathum Thani	1,144	2,042	940	3,537	53,576
Bangkok Metro	821	2,023	2,069	12,370	180,823
Samut Prakarn	505	577	1,384	6,082	77,889
Samut Sakhon	453	1,006	989	4,993	103,102
Nakhon Pathom	1,640	4,458	2,638	10,993	541,063
Kanchanaburi	647	1,217	118	640	17,196
Chachoeng Sao	673	1,164	540	3,126	80,567
Total	13,225	15,125	14,238	58,045	1,658,889

Source: 1992 Freshwater Fishfarm Production Statistic Fishery Economics Division
Department of Fisheries.

2.6 Water Resources Development in Chao Phraya Basin

This paragraph contains the following back-up data;

Tables

- Existing irrigation projects in Chao Phraya river basin
- Staged development of irrigated area in the Ping river basin
- Agricultural Water Demand in Ping Basin (1/3 to 3/3)
- Staged development of irrigated area in the Wang river basin
- Agricultural Water Demand in Wang Basin
- Staged development of irrigated area in the Yom river basin
- Agricultural Water Demand in Yom Basin (1/2 to 2/2)
- Staged development of irrigated area in the Nan river basin
- Agricultural Water Demand in Nan Basin (1/2 to 2/2)

Figures

- Staged Development of Irrigated Area
- Staged Development of Irrigated Area in Ping Basin
- Staged Development of Irrigated Area in Wang Basin
- Staged Development of Irrigated Area in Yom Basin
- Staged Development of Irrigated Area in Nan Basin

Table 2.6.1 Existing Irrigation Projects in Chao Phraya River Basin

Basin	Large/Medium Scale Project			Small Scale Project			Pump Irrigation Area (ha)	Total Irrigable Area (ha)	Total Cropland Area (ha)	Rate of Irrigation (%)
	Nos. of Project	Active Storage (MCM)	Irrigable Area (ha)	Nos. of Project	Active Storage (MCM)	Irrigable Area (ha)				
Ping	8	10,191	112,600	392	32	135,000	12,800	260,000	650,000	40
Wang	4	123	19,100	135	60	42,100	7,200	68,000	150,000	45
Yom	4	32	33,900	244	57	91,600	6,700	132,000	760,000	17
Nan	11	6,735	112,300	260	32	117,700	48,400	278,000	1,080,000	26
Sakae Krung	8	152	38,700	96	3	56,500	-	92,000	260,000	35
Pasak	19	108	79,400	186	19	38,900	4,400	121,000	910,000	13
Chao Phraya Delta	39	227	1,221,700	316	28	134,000	-	1,281,000	2,070,000	62
Total	93	17,568	1,617,700	1,629	231	615,800	79,500	2,232,000	5,880,000	38

Note: Active storage capacity for large/medium scale project includes those for Bhumibol and Sirikit reservoirs both under EGAT.

Table 2.6.2 Staged Development of Irrigated Area in the Ping River Basin

Year	Large Medium	Accumu-lated	Small Scale	Accumu-lated	DEDP Pump	Accumu-lated	Others	Accumu-lated	Total	Accumu-lated
1936-41	114900	114900	0	0	0	0	0	0	114900	114900
1952-49	0	114900	0	0	0	0	0	0	0	114900
1950-54	99250	214150	0	0	0	0	0	0	99250	214150
1955	0	214150	0	0	0	0	0	0	0	214150
1956-70	36000	250150	0	0	0	0	0	0	36000	250150
1971-72	237500	487650	0	0	0	0	1200	1200	238700	488850
1973-74	3300	490950	0	0	0	0	0	1200	3300	492150
1975-76	9400	500350	0	0	0	0	4886	6086	14286	506436
1977	107000	607350	11100	11100	0	0	827	6913	118927	625363
1978-79	29450	636800	83450	94550	0	0	7458	14371	120358	745721
1980	16700	653500	36150	130700	0	0	3000	17371	55850	801571
1981	272350	925850	46870	177570	0	0	5683	23054	324903	1126474
1982	23900	949750	58094	235664	0	0	4100	27154	86094	1212568
1983	8500	958250	37919	273583	11420	11420	6700	33854	64539	1277107
1984	22500	980750	44396	317979	3720	15140	3000	36854	73616	1350723
1985	152000	1132750	65878	383857	0	15140	460	37314	218338	1569061
1986	3500	1136250	32668	416525	9270	24410	0	37314	45438	1614499
1987	31700	1167950	33170	449695	1490	25900	6389	43703	72749	1687248
1988	4250	1172200	25753	475448	10010	35910	4500	48203	44513	1731761
1989	0	1172200	30085	505533	3100	39010	400	48603	33585	1765346
1990	0	1172200	25257	530790	7100	46110	3000	51603	35357	1800703
1991	100250	1272450	45507	576297	21410	67520	1354	52957	168521	1969224
1992	0	1272450	14350	590647	12210	79730	1610	54567	28170	1997394
1993	0	1272450	0	590647	78000	157730	200	54767	78200	2075594

Note: Unit is given in rai (1 rai = 0.16 ha)

Table 2.6.3(1) Agricultural Water Demand in Ping Basin (1/3) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity
Bhumiphol Dam																		
Mae Ngat Dam	30000	30000	150	108.24	2255	30000	30000	150	108.24	2255	30000	30000	150	76.43	1592			
Mae Kuang Dam	175000	102000	122	168.36	1032	175000	102000	122	168.36	1032	175000	102000	122	168.36	1032			
Mae Khan Dam											20000	20000	150	47.7	1491			
Mae Fak Weir	70000	70000	150	252.55	2255	70000	70000	150	252.55	2255	70000	70000	150	178.32	1592			
Mat Taeng Weir	148000	135000	127	226.21	1047	148000	125000	129	214.89	1074	148000	123000	119	247.72	1239			
Mae Ping Kao Weir	88000	88000	134	312.71	2221	88000	88000	125	286.57	2035	88000	88000	150	254.78	1810			
Lower Ping Project	275000	270000	131	551.45	1277	410000	410000	103	822.17	1253	545000	545000	130	1373.99	1576			
Kam Phaeng Phet Weir											165000	165000	130	415.98	1576			
Mae Tub Res.	26000	8500	130	22.3	1640	26000	8500	130	22.3	1640	26000	8500	130	22.3	1640			
Huai Mae Khon Res.						5000	4000	130	8.45		5000	4000	130	8.45	1320			
Huai Mae Kon Res.						10600	4400	130	9.30	1321	10600	4400	130	9.30	1321			
Khlong Khayang Res.											3600	2600	130	5.39	1296			
Khlong Prai Res.											4000	4000	130	8.30	1297			
Nam Lai Res. (1)											9800	7900	150	18.57	1469			
Khlong Khlong Res.											11000	10000	150	23.51	1469			
Mae Tacy Weir						1600	1600	145	13.26	5180	1600	1600	150	3.82	1492			

Table 2.6.3(2) Agricultural Water Demand in Ping Basin (2/3) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	
Hin Changok Weir							18000	18000	150	4232	1469		18000	18000	150	42.31	1469	
Nong Saleak Weir													6000	6000	150	14.31	1491	
Khlong Suan Mak Weir													37000	5000	116	11.1	1388	
Khlong Wang Sai Weir													30000	15000	150	44.28	1845	
Small/Medium Ping-1	55434	55434	110	44.76	505		65050	65050	110	47.01	452		88950	88950	110	52.64	370	
Small/Medium Ping-2	22157	22157	110	14.36	405		26700	26700	110	15.42	361		38100	38100	110	18.1	297	
Small/Medium Ping-3	31247	31247	110	11.42	228		39500	39500	110	13.36	211		60100	60100	110	18.19	189	
Small/Medium Ping-4	6640	6640	110	1.56	147		8600	8600	110	2.02	147		15400	15400	110	3.15	128	
Small/Medium Ping-5	34924	34924	110	11.66	209		45700	45700	110	13.99	191		70200	70200	110	19.72	176	
Small/Medium Ping-6	115380	115380	110	90.11	488		135950	135950	110	94.93	436		187350	187350	110	107	357	
Small/Medium Ping-7	35084	35084	110	11.75	209		44600	44600	110	13.99	196		68300	68300	110	19.55	179	
Small/Medium Ping-8	93066	93066	110	33.11	222		117800	117800	110	38.92	206		179800	179800	110	53.47	186	
Small/Medium Ping-9	29585	29585	110	24.33	514		34650	34650	110	25.52	460		47150	47150	110	28.46	377	
Small/Medium Ping-10	29887	29887	110	21.1	441		35700	35700	110	22.46	393		50200	50200	110	25.86	322	
Small/Medium Ping-11	31493	31493	110	10.91	217		39900	39900	110	12.89	202		61000	61000	110	17.84	183	
Small/Medium Ping-12	9100	9100	110	2.14	147		11800	11800	110	2.77	147		18400	18400	110	4.31	146	
Small/Medium Ping-13	62200	62200	110	84.36	848		66700	66700	110	85.48	801		78000	78000	110	88.26	707	

Table 2.6.3(3) Agricultural Water Demand in Ping Basin (3/3) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	
Small/Medium Ping-14	29000	29000	110	7.14	154		37400	37400	110	9.22	154		58600	58600	110	14.44	154	
Small/Medium Ping-15	19000	19000	110	26.11	859		20300	20300	110	26.44	814		23600	23600	110	27.25	722	
Small/Medium Ping-16	240100	240100	110	174.47	454		287300	287300	110	186.10	405		405300	405300	110	180.67	279	
Pump Irrigation	79730	79730	130	217.09	1702		207330	207330	130	568.64	1714		331330	331330	130	690.56	1303	
Total (rai)	1736027	1627527		2428.2	930		2207180	2086480		3127.57	930		3185380	3013780		4344.39	900	
Total (ha)	277,800	260,400					353,100	333,800					509,700	482,200				
Large/Medium (ha)		112,600						137,800						197,100				
Small (ha)		135,000						162,800						232,100				
Pump (ha)		12,800						33,200						53,000				

Table 2.6.4 Staged Development of Irrigated Area in the Wang River Basin

Year	Large Medium	Accumu- lated	Small Scale	Accumu- lated	DEDP Pump	Accumu- lated	Others	Accumu- lated	Total	Accumu- lated
1949	97000	97000	0	0	0	0	0	0	97000	97000
1950-70	0	97000	0	0	0	0	0	0	0	97000
1971	3000	100000	0	0	0	0	0	0	3000	100000
1972	53000	153000	0	0	0	0	0	0	53000	153000
1973-75	0	153000	0	0	0	0	0	0	0	153000
1976	2500	155500	0	0	0	0	0	0	2500	155500
1977	0	155500	1500	1500	0	0	0	0	1500	157000
1978	0	155500	8900	10400	0	0	0	0	8900	165900
1979	0	155500	15500	25900	0	0	0	0	15500	181400
1980	0	155500	19800	45700	0	0	0	0	19800	201200
1981	0	155500	18800	64500	0	0	0	0	18800	220000
1982	0	155500	13100	77600	0	0	0	0	13100	233100
1983	0	155500	16000	93600	11420	11420	4000	4000	31420	264520
1984	2200	157700	13750	107350	2710	14130	0	4000	18660	283180
1985	4000	161700	32200	139550	5010	19140	0	4000	41210	324390
1986	0	161700	39000	178550	6440	25580	0	4000	45440	369830
1987	0	161700	20800	199350	2780	28360	0	4000	23580	393410
1988	0	161700	7800	207150	600	28960	0	4000	8400	401810
1989	0	161700	13850	221000	2300	31260	0	4000	16150	417960
1990	6000	167700	18800	239800	4350	35610	1500	5500	30650	448610
1991	0	167700	5550	245350	7400	43010	1500	7000	14450	463060
1992	3890	171590	10100	255450	2300	45310	0	7000	16290	479350
1993	0	171590	0	255450	5025	50335	0	7000	5025	484375

Note: Unit is given in rai (1 rai = 0.16 ha)

Table 2.6.5 Agricultural Water Demand in Wang Basin (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity
Kiew Lom Dam	130000	115000	149	296.42	1611	130000	115000	139	275.92	1500	160000	160000	128	288.72	1128			
Kiew Kho Mha Dam																		
Mae Yao Res.	6000	1200	130	3.16	1646	6000	1200	130	3.16	1646	6000	1200	130	3.16	1646			
Mae Arb Res.	4000	1400	130	3.68	1643	4000	1400	130	3.68	1643	4000	1400	130	3.68	1643			
Mae Prik Res.	3890	1700	130	4.47	1643	3890	1700	130	4.47	1643	3890	1700	130	4.47	1643			
Ban Lu Res.																		
Small/Medium Wang-1	31200	31200	110	7.38	148	41000	41000	110	9.70	148	65400	65400	110	15.47	148			
Small/Medium Wang-2	9000	9000	110	2.13	148	11800	11800	110	2.79	148	18900	18900	110	4.47	148			
Small/Medium Wang-3	20500	20500	110	4.85	148	26900	26900	110	6.36	148	43000	43000	110	10.17	148			
Small/Medium Wang-4	76300	76300	110	18.05	148	100200	100200	110	23.70	148	159900	159900	110	37.82	148			
Small/Medium Wang-5	40700	40700	110	8.33	128	51700	51700	110	11.73	142	79300	79300	110	25.26	199			
Small/Medium Wang-6	19600	19600	110	4.64	148	25700	25700	110	6.08	148	41100	41100	110	9.72	148			
Small/Medium Wang-7	65850	65850	110	15.06	143	85800	85800	110	19.77	144	135600	135600	110	31.55	145			
Pump Irrigation	45310	45310	130	119.25	1645	63300	63300	130	155.38	1534	110900	110900	130	291.88	1645			
Total (rai)	452350	427760		487.42	710	550290	525700		522.74	620	872605	863015		813.14	590			
Total (ha)	72,400	68,400				88,000	84,100				139,600	138,100						
Large/Medium (ha)		19,100					19,100					33,400						
Small (ha)		42,100					54,900					87,000						
Pump (ha)		7,200					10,100					17,700						

Table 2.6.6 Staged Development of Irrigated Area in the Yom River Basin

Year	Large Medium	Accumu-lated	Small Scale	Accumu-lated	DEDP Pump	Accumu-lated	Others	Accumu-lated	Total	Accumu-lated
1959	12000	12000	0	0	0	0	0	0	12000	12000
1960-69	0	12000	0	0	0	0	0	0	0	12000
1970	15000	27000	0	0	0	0	0	0	15000	27000
1971-72	0	27000	0	0	0	0	0	0	0	27000
1973	224000	251000	0	0	0	0	0	0	224000	251000
1974-76	13500	264500	0	0	0	0	0	0	13500	264500
1977	24000	288500	2500	2500	0	0	350	350	26850	291350
1978	0	288500	9600	12100	0	0	0	350	9600	300950
1979	0	288500	15900	28000	0	0	400	750	16300	317250
1980	0	288500	28510	56510	0	0	4000	4750	32510	349760
1981	0	288500	33420	89930	0	0	1000	5750	34420	384180
1982	0	288500	24400	114330	3820	3820	0	5750	28220	412400
1983	3500	292000	64900	179230	15520	19340	1762	7512	85682	498082
1984	6000	298000	38840	218070	0	19340	0	7512	44840	542922
1985	187500	485500	74600	292670	0	19340	87	7599	262187	805109
1986	0	485500	22100	314770	3690	23030	0	7599	25790	830899
1987	15000	500500	32700	347470	5180	28210	0	7599	52880	883779
1988	15000	515500	43920	391390	1500	29710	1000	8599	61420	945199
1989	0	515500	40700	432090	0	29710	0	8599	40700	985899
1990	0	515500	27200	459290	2000	31710	2175	10774	31375	1017274
1991	129665	645165	17600	476890	6400	38110	1700	12474	155365	1172639
1992	5980	651145	9400	486290	3660	41770	1200	13674	20240	1192879
1993	0	651145	1000	487290	14175	55945	0	13674	15175	1208054

Note: Unit is given in rai (1 rai = 0.16 ha)

Table 2.6.7(1) Agricultural Water Demand in Yom Basin (1/2) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity
Kaeng Sua Taeng Dam																		
Mac Yom Weir	224000	139000	108	259.97	1169	224000	139000	108	259.97	1169	224000	224000	150	530.52	1480			
Mac Kam Pong Res.	5980	4000	143	11.79	1842	5980	4000	143	11.80	1844	5980	4000	143	11.80	1844			
Mac Man Res.	14500	8500	122	22.61	1663	14500	8500	122	22.47	1652	14500	8500	122	22.47	1652			
Khlong Khang Nai Res.	2000	1200	142	3.54	1844	2000	1000	150	3.06	1913	2000	1000	150	3.06	1913			
Mac Song Res.						51000	38000	114	74.17	1220	51000	38000	114	74.17	1220			
Mac Tang Res.						22000	15000	118	30.21	1259	22000	15000	118	30.21	1259			
Huai Mae Song Res.						8000	2700	134	6.07	1405	8000	2700	134	6.07	1405			
Huai Ta Pac Res.						20000	13500	133	30.21	1399	20000	13500	133	30.21	1399			
Mac Mok Res.						53000	31300	132	69.47	1387	53000	31300	132	69.47	1387			
Wang Daeng Res.											8000	8000	138	18.35	1434			
Mac Sai Res.											23000	19000	129	41.24	1357			
Huai Suang Res.											4500	2000	150	4.93	1541			
Mac Khong Kai Res.											7000	3000	130	6.58	1371			
Phichit Rubber Weir	59125	59125	150	180.86	1912	59125	59125	150	180.86	1912	59125	59125	150	180.86	1912			

Table 2.6.7(2) Agricultural Water Demand in Yom Basin (2/2) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten-sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten-sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten-sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten-sity
Khlong Kra Jong Reg.											10000	10000	150	24.61	1538			
Add. Irrigation Area											158800	158800	100	262.1	1032			
Small/Medium Yom-1	19060	19060	110	4.73	155	24200	24200	110	6.01	155	37200	37200	110	9.24	155			
Small/Medium Yom-2	13200	13200	110	8.49	402	15800	15800	110	9.14	362	22400	22400	110	10.78	301			
Small/Medium Yom-3	8500	8500	110	2.15	158	10800	10800	110	2.74	159	16600	16600	110	4.12	155			
Small/Medium Yom-4	118420	118420	110	65.91	348	143900	143900	110	72.24	314	207600	207600	110	88.06	265			
Small/Medium Yom-5	13400	13400	110	8.55	399	16100	16100	110	9.21	358	22800	22800	110	10.88	298			
Small/Medium Yom-6	2800	2800	110	0.7	156	3600	3600	110	0.89	155	5500	5500	110	1.37	156			
Small/Medium Yom-7	162300	162300	110	87.9	338	197900	197900	110	96.88	306	287000	287000	110	142.84	311			
Small/Medium Yom-8	189800	189800	110	84.24	277	234800	234800	110	95.59	254	347300	347300	110	123.98	223			
Small/Medium Yom-9	45310	45310	110	11.44	158	57600	57600	110	14.54	158	88300	88300	110	22.28	158			
Pump Irrigation	41770	41770	130	106.25	1590	91120	91120	130	200.90	1378	147120	147120	130	334.86	1423			
Total (rai)	920165	826385		859.13	650	1255425	1107945		1196.43	670	1852725	1779745		2065.06	730			
Total (ha)	147,200	132,200				200,900	177,300				296,400	284,800						
Large/Medium (ha)		33,900					49,900					95,700						
Small (ha)		91,600					112,800					165,600						
Pump (ha)		6,700					14,600					23,500						

Table 2.6.8 Staged Development of Irrigated Area in the Nan River Basin

Year	Large Medium	Accumu-lated	Small Scale	Accumu-lated	DEDP Pump	Accumu-lated	Others	Accumu-lated	Total	Accumu-lated
1949-52	8000	8000	0	0	0	0	0	0	8000	8000
1953-55	154200	162200	0	0	0	0	0	0	154200	162200
1956-60	0	162200	0	0	0	0	0	0	0	162200
1961-66	51000	213200	0	0	0	0	0	0	51000	213200
1967-69	128000	341200	0	0	0	0	17750	17750	145750	358950
1970-72	30000	371200	0	0	0	0	6400	24150	36400	395350
1973-75	69200	440400	0	0	0	0	9030	33180	78230	473580
1976-78	21750	462150	45440	45440	0	0	14860	48040	82050	555630
1979-80	0	462150	65650	111090	14360	14360	4675	52715	84685	640315
1981	7700	469850	27860	138950	17040	31400	6276	58991	58876	699191
1982	0	469850	20550	159500	21440	52840	8300	67291	50290	749481
1983	0	469850	13150	172650	37610	90450	0	67291	50760	800241
1984	6600	476450	29530	202180	43770	134220	1400	68691	81300	881541
1985	572800	1049250	49477	251657	7150	141370	6000	74691	635427	1516968
1986	2030	1051280	38900	290557	6900	148270	2500	77191	50330	1567298
1987	0	1051280	18000	308557	31550	179820	0	77191	49550	1616848
1988	0	1051280	15850	324407	11190	191010	0	77191	27040	1643888
1989	0	1051280	28700	353107	10680	201690	0	77191	39380	1683268
1990	23400	1074680	18950	372057	9350	211040	1000	78191	52700	1735968
1991	6000	1080680	21100	393157	48850	259890	3000	81191	78950	1814918
1992	0	1080680	4200	397357	42710	302600	12700	93891	59610	1874528
1993	0	1080680	0	397357	36415	339015	0	93891	36415	1910943

Note: Unit is given in rai (1 rai = 0.16 ha)

Table 2.6.9(1) Agricultural Water Demand in Nan Basin (1/2) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)			
Phitsanulok Project	667100	667100	130	1157.24	1084	667100	667100	130	1157.24	1084	667100	667100	130	1157.24	1084			
Khwae Noi Dam											467400	155890	150	363.55	1458			
Huai Head Res.	7700	2000	127.5	5.15	1609	7700	2000	127.5	5.15	1609	7700	2000	127.5	5.15	1609			
Nam Hang Res.	6000	6000	130	15.64	1629	6000	6000	130	15.64	1629	6000	6000	130	15.64	1629			
Khlong Tron Res.						23400	2200	210.5	40.13		23400	2200	210.5	40.13				
Mac Khaning Res.											15000	12800	130	35.19	1718			
Huai Nam Klung Res.											28000	24500	115.7	46.18	1178			
Khlong Chomphu Res.											37000	3000	233.3	63.53				
Mac Chaey Res.											3500	3380	124.6	6.76	1250			
Nam Kon Weir	3000	3000	130	7.82	1629	3000	3000	130	7.82	1629	3000	3000	130	7.82	1629			
Nam Pua Weir	11200	8700	130	22.67	1629	11200	8700	130	22.68	1629	11200	8700	130	22.68	1629			
Nam Yang Weir	1650	1100	120	2.73	1551	1650	1100	120	2.73	1551	1650	1100	120	2.73	1551			
Nam Samun Weir	10000	3430	130	8.94	1629	10000	3430	130	8.94	1629	10000	3430	130	8.94	1629			
Nam Sa Weir	11000	7230	130.4	18.88	1632	11000	7230	130.4	18.71	1617	11000	7230	130.4	18.71	1617			
Nam Pat Weir	1750	1750	130.3	4.61	1646	1750	1750	130.3	4.61	1646	1750	1750	130.3	4.61	1646			
Khlong Tron Weir	23400	1840	110	4.21	1430													
Ban Thong Noi Weir											8220	8220	150	40.16	3054			
Ban Nong Nok Weir											43160	43160	150	98.86	1432			
Huai Aom Sinh											10000	7500	116	14.17	1181			

Table 2.6.9(2) Agricultural Water Demand in Nan Basin (2/2) (Summarized from the 25 Basin Study)

Development Stage	1993						1996						2006					
	Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)		Project Area (rai)	Irrigated Area (rai)	Inten -sity	Water Demand (MCM)	Spec. Dem. (mm)	
Small/Medium Nan-3	10630	10630	110	2.5	147		13776	13776	110	3.25	147		21641	21641	110	5.11	148	
Small/Medium Nan-4	14900	14900	110	3.52	148		19310	19310	110	4.54	147		30334	30334	110	5.62	116	
Small/Medium Nan-5	11950	11950	110	2.8	146		15487	15487	110	3.65	147		24328	24328	110	5.74	147	
Small/Medium Nan-6	2250	2250	110	0.52	144		2916	2916	110	0.68	146		4581	4581	110	1.09	149	
Small/Medium Nan-7	7350	7350	110	1.74	148		9525	9525	110	2.25	148		14963	14963	110	3.53	147	
Small/Medium Nan-8	7350	7350	110	1.74	148		9525	9525	110	2.25	148		14963	14963	110	8.76	366	
Small/Medium Nan-9	15350	15350	110	6.1	248		19553	19553	110	7.07	226		30059	30059	110	3.53	73	
Small/Medium Nan-10	108990	108990	110	169.26	971		121349	121349	110	172.17	887		152247	152247	110	131.71	541	
Small/Medium Nan-11	500	500	110	0.15	188		648	648	110	0.06	58		1018	1018	110	0.24	147	
Small/Medium Nan-12	3000	3000	110	0.71	148		3888	3888	110	0.92	148		6108	6108	110	1.45	148	
Small/Medium Nan-13	45200	45200	110	10.71	148		58577	58577	110	13.86	148		92020	92020	110	21.81	148	
Small/Medium Nan-14	19150	19150	110	25.13	820		21740	21740	110	25.70	739		28214	28214	110	20.2	447	
Small/Medium Nan-15	462027	462027	110	611.54	827		522084	522084	110	624.92	748		672228	672228	110	658.39	612	
Pump Irrigation	302600	302600	130	780.21	1611		423575	423575	130	1108.90	1636		621575	621575	130	1493.35	1502	
Total (rai)	1780637	1739987		2870.8	1,030		2019213	1978923		3262.00	1,030		3123493	2729373		4325.15	990	
Total (ha)	284,900	278,400					323,100	316,600					499,800	436,800				
Large/Medium (ha)		112,300						112,400						153,800				
Small (ha)		117,700						136,400						184,000				
Pump (ha)		48,400						67,800						99,000				

Figure 2.6.1 Staged Development of Irrigated Area

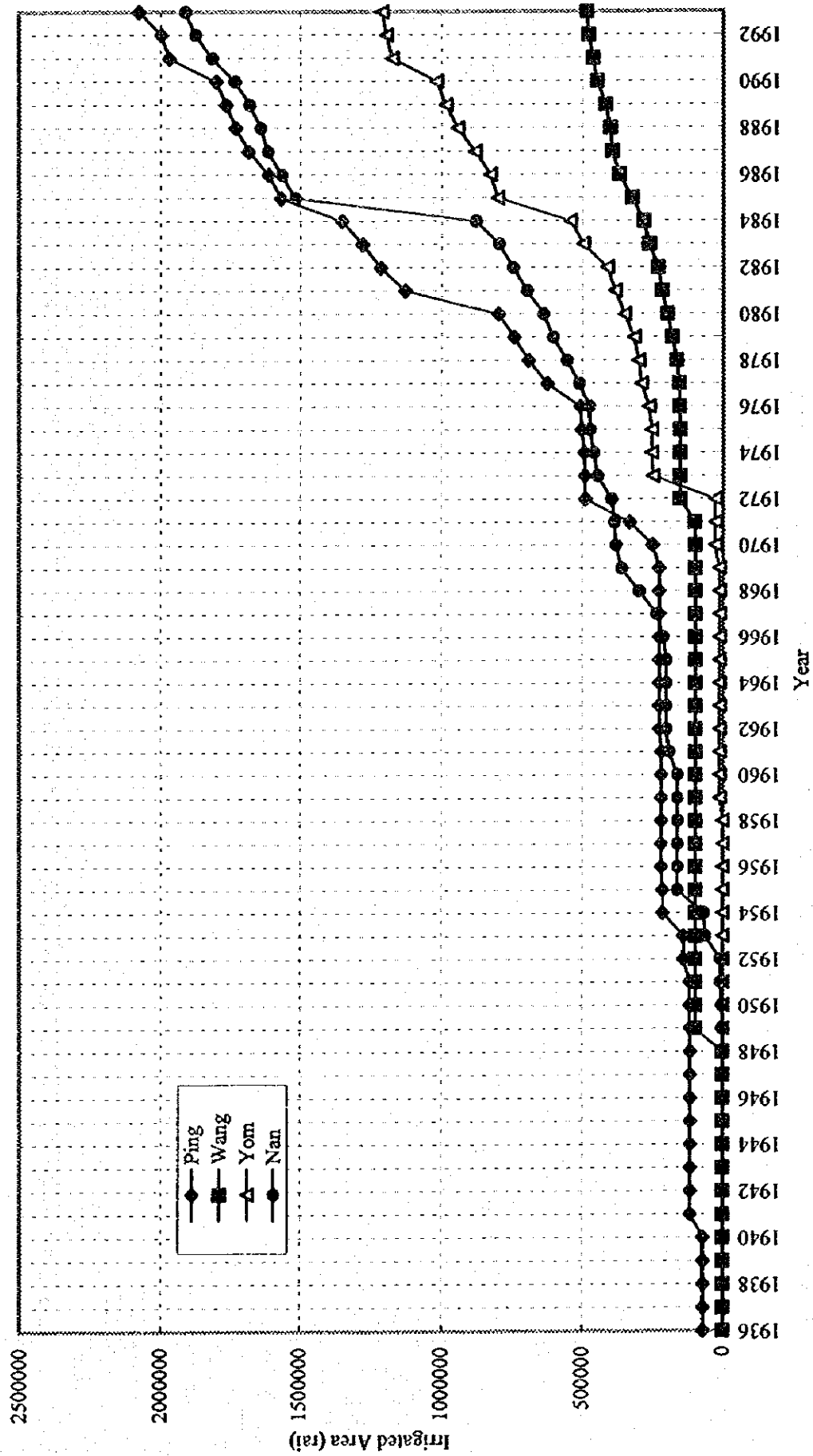


Figure 2.6.2 Staged Development of Irrigated Area in Ping Basin

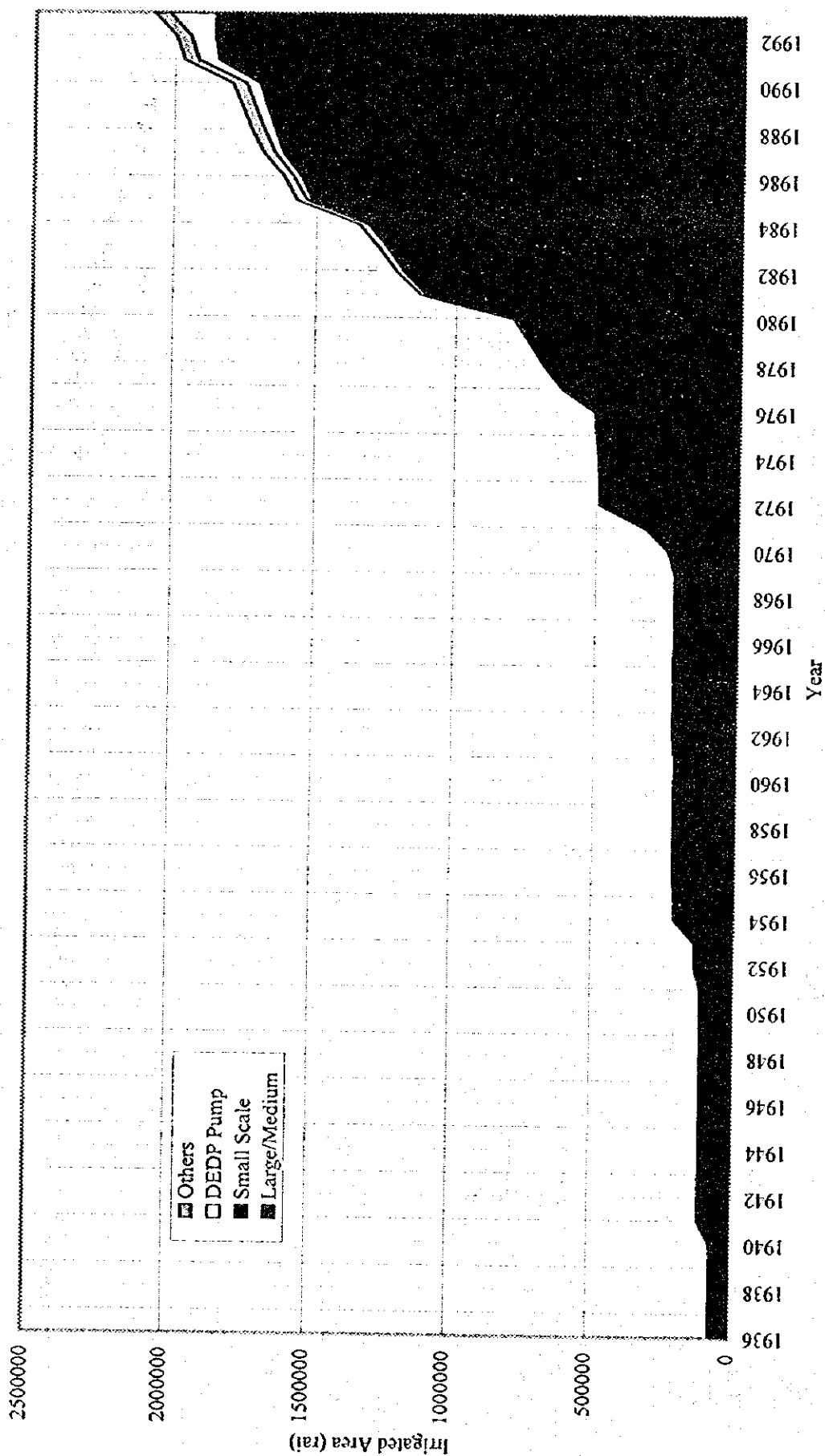


Figure 2.6.3 Staged Development of Irrigated Area in Wang Basin

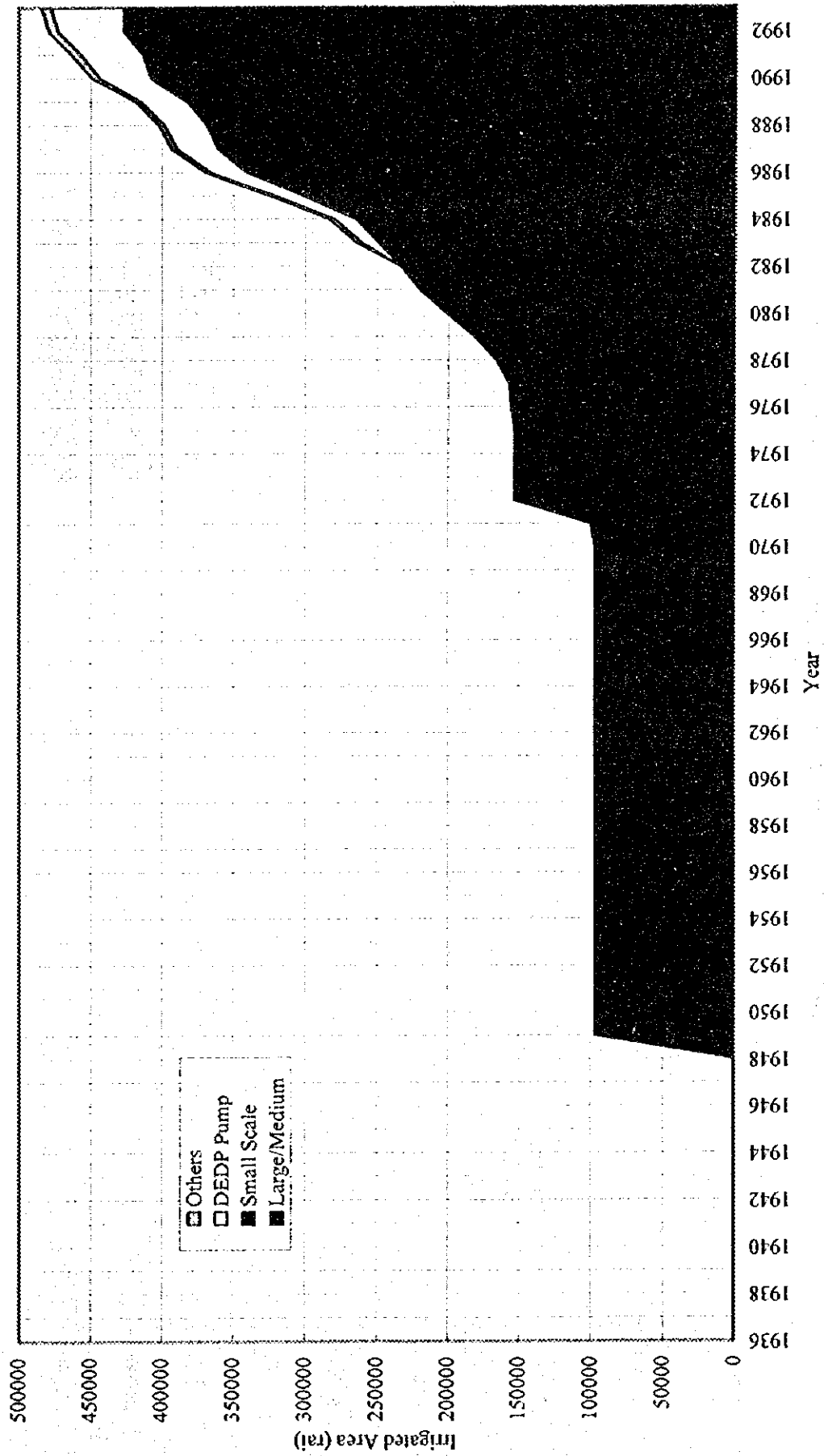


Figure 2.6.4 Staged Development of Irrigated Area in Yom Basin

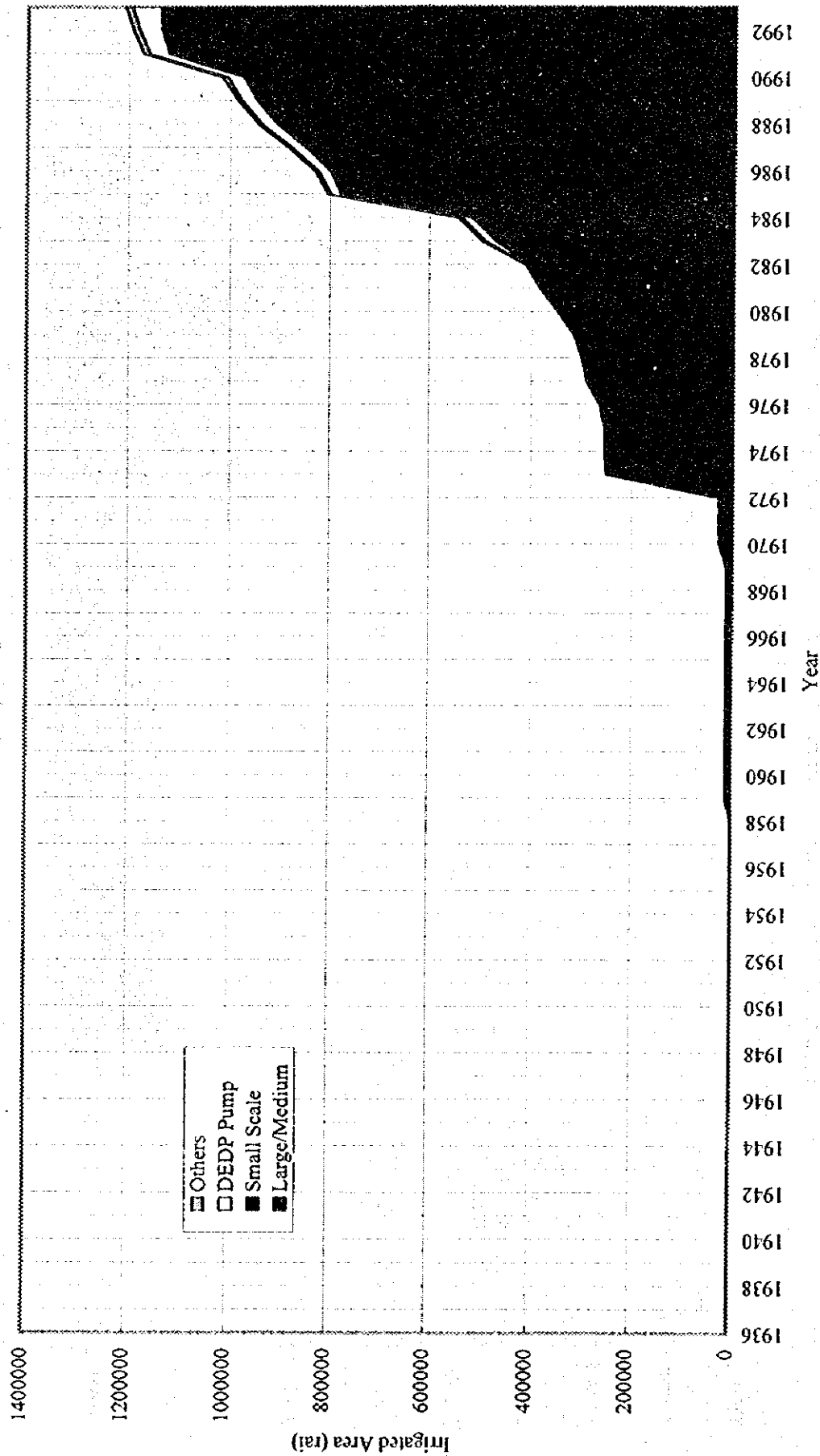


Figure 2.6.5 Staged Development of Irrigated Area in Nan Basin

