

Figure 2.6.1 Mean Monthly Suspended Sediment – Kok Basin

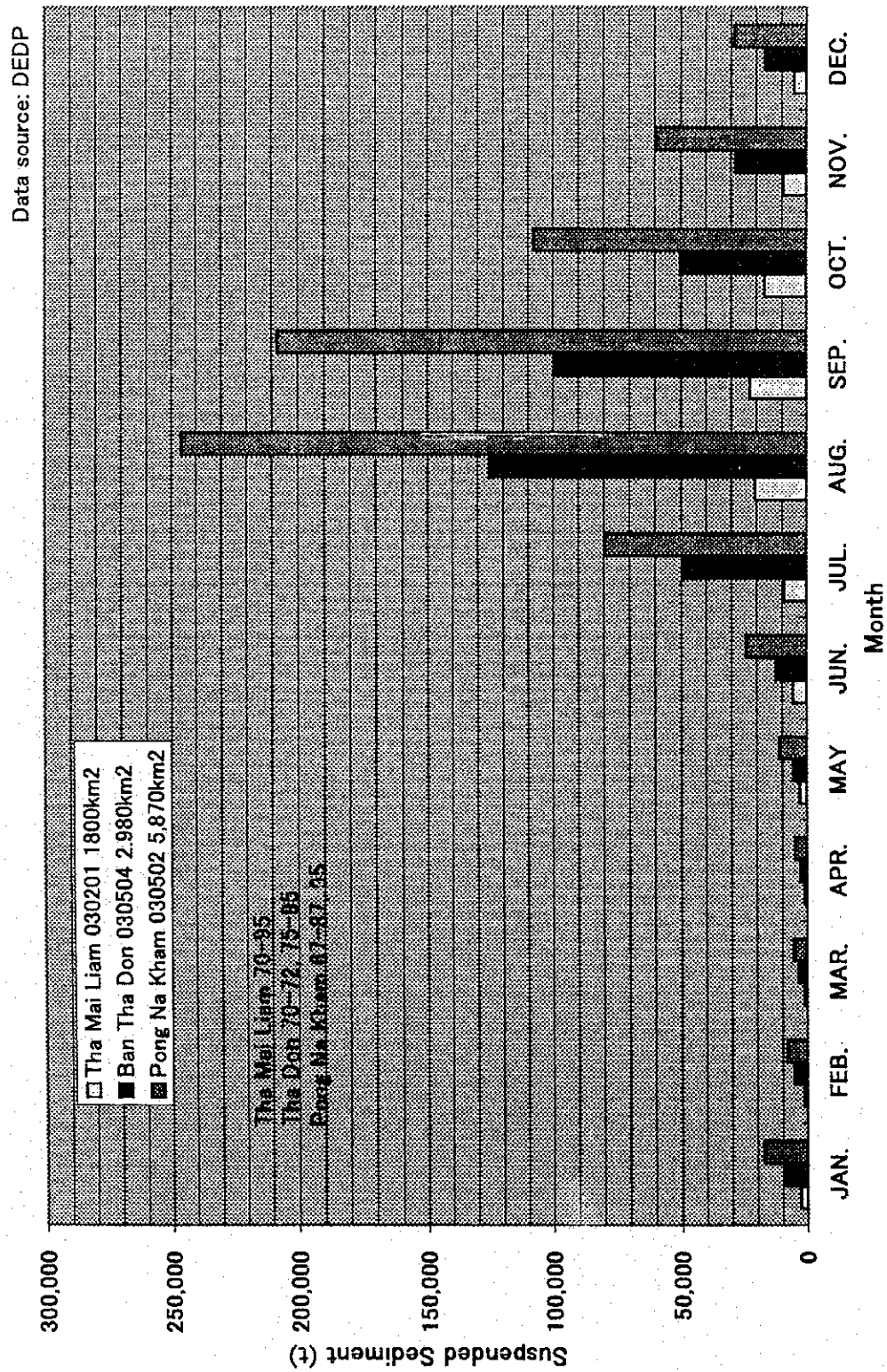


Figure 2.6.1 Mean Monthly Suspended Sediment – Kok Basin

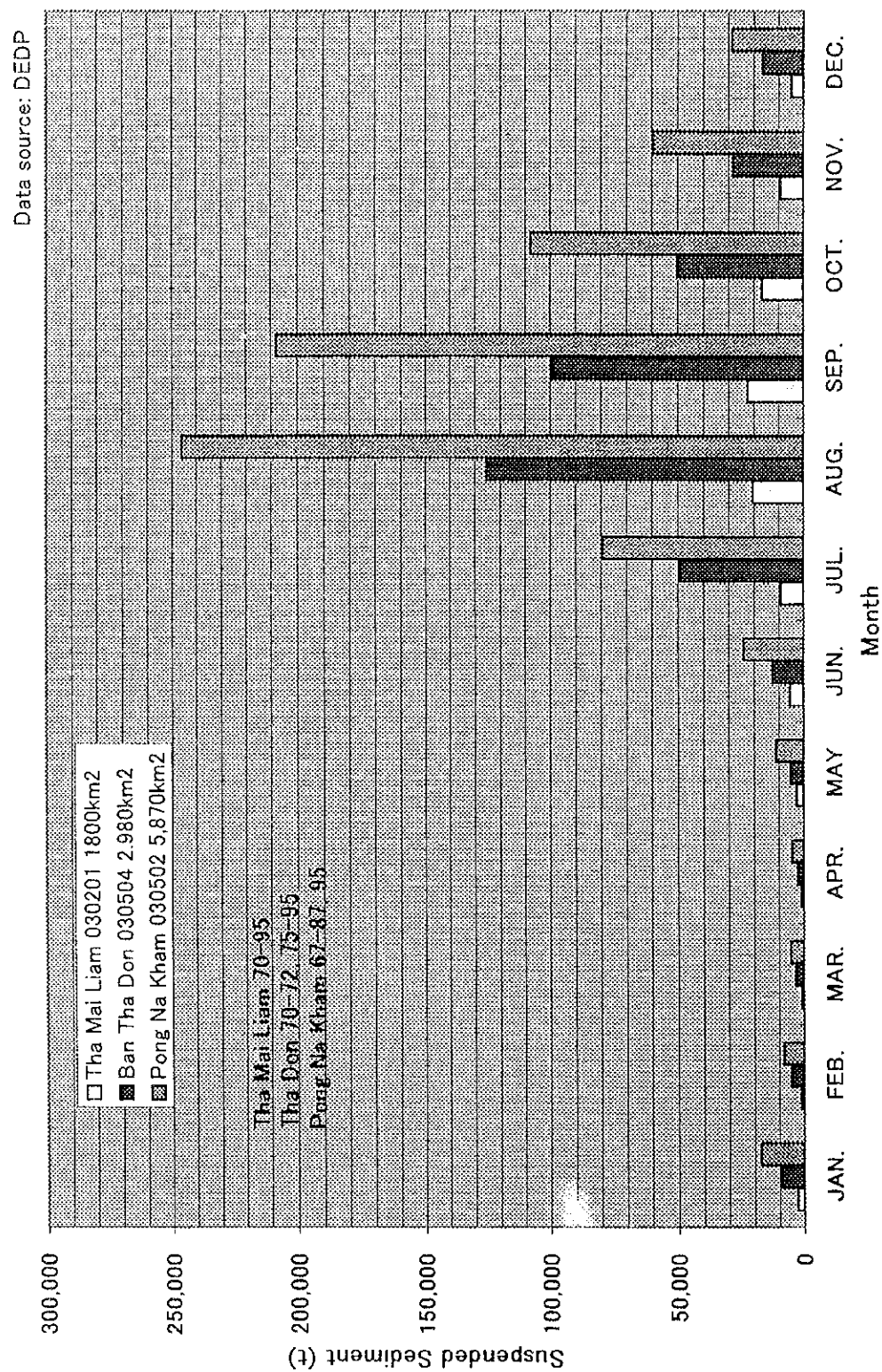


Figure 2.6.2 Mean Monthly Suspended Sediment in Ing Basin (1986-1995)

Data source: DEDP

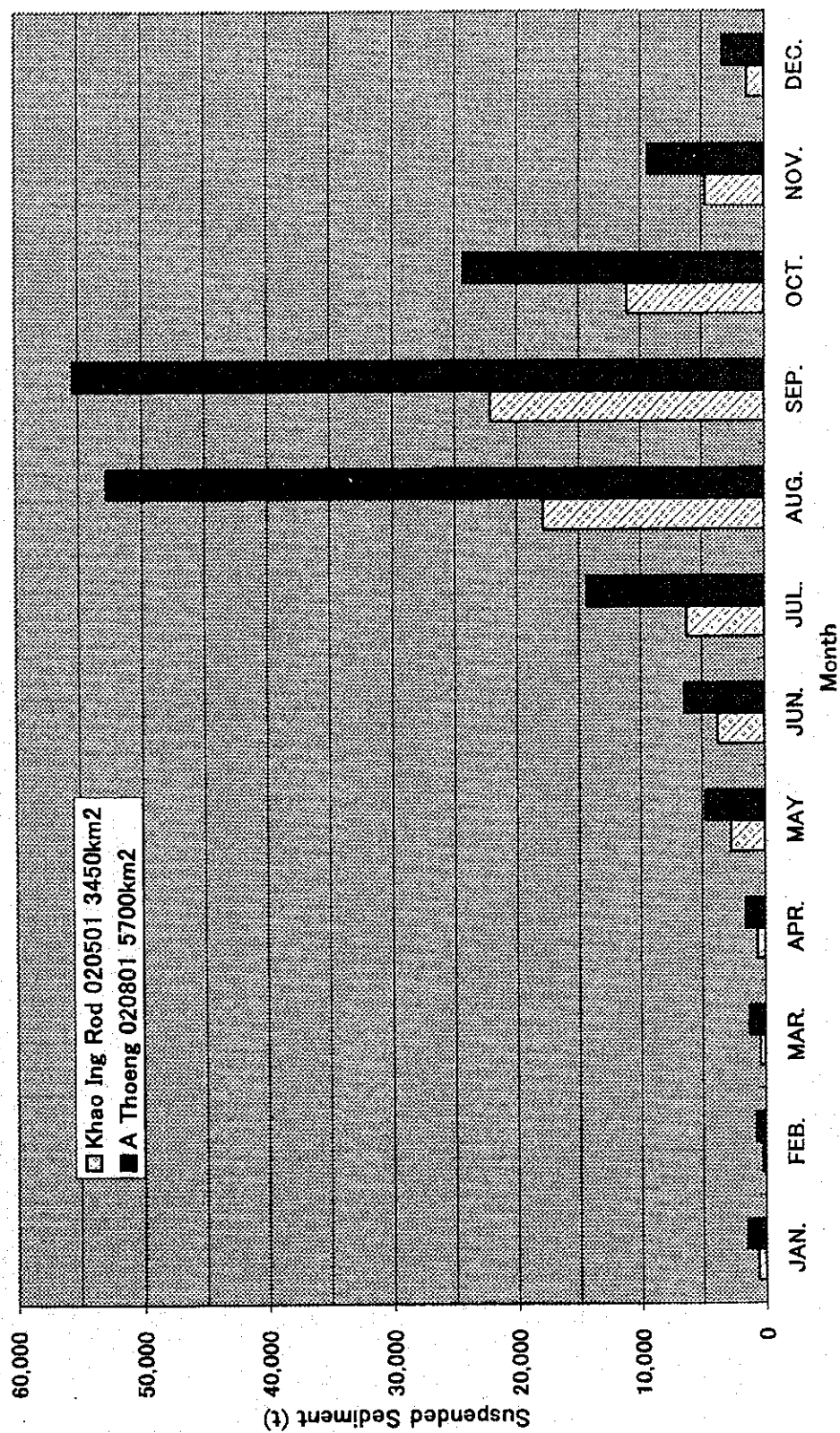


Figure 2.6.2 Mean Monthly Suspended Sediment in Ing Basin (1986–1995)

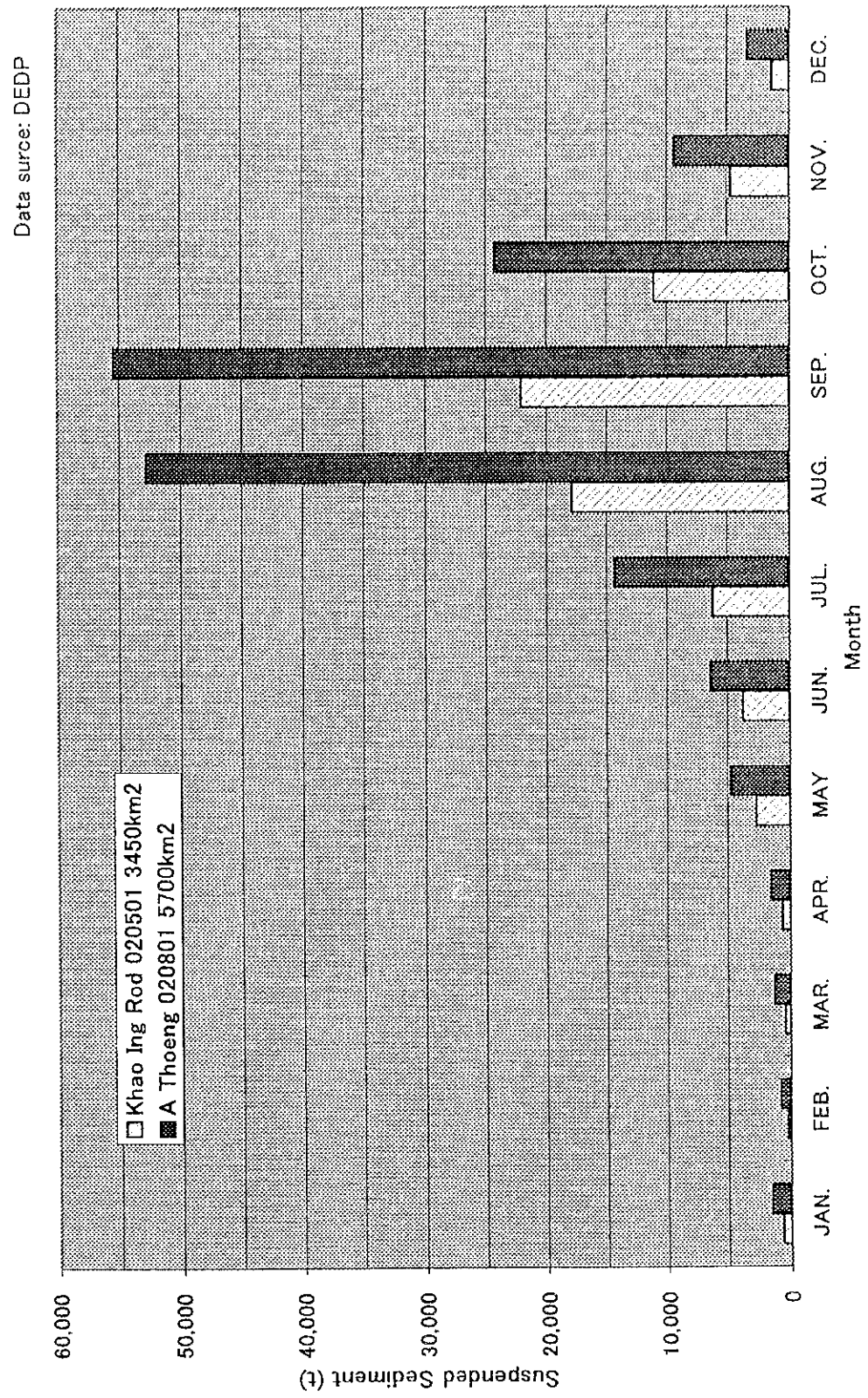
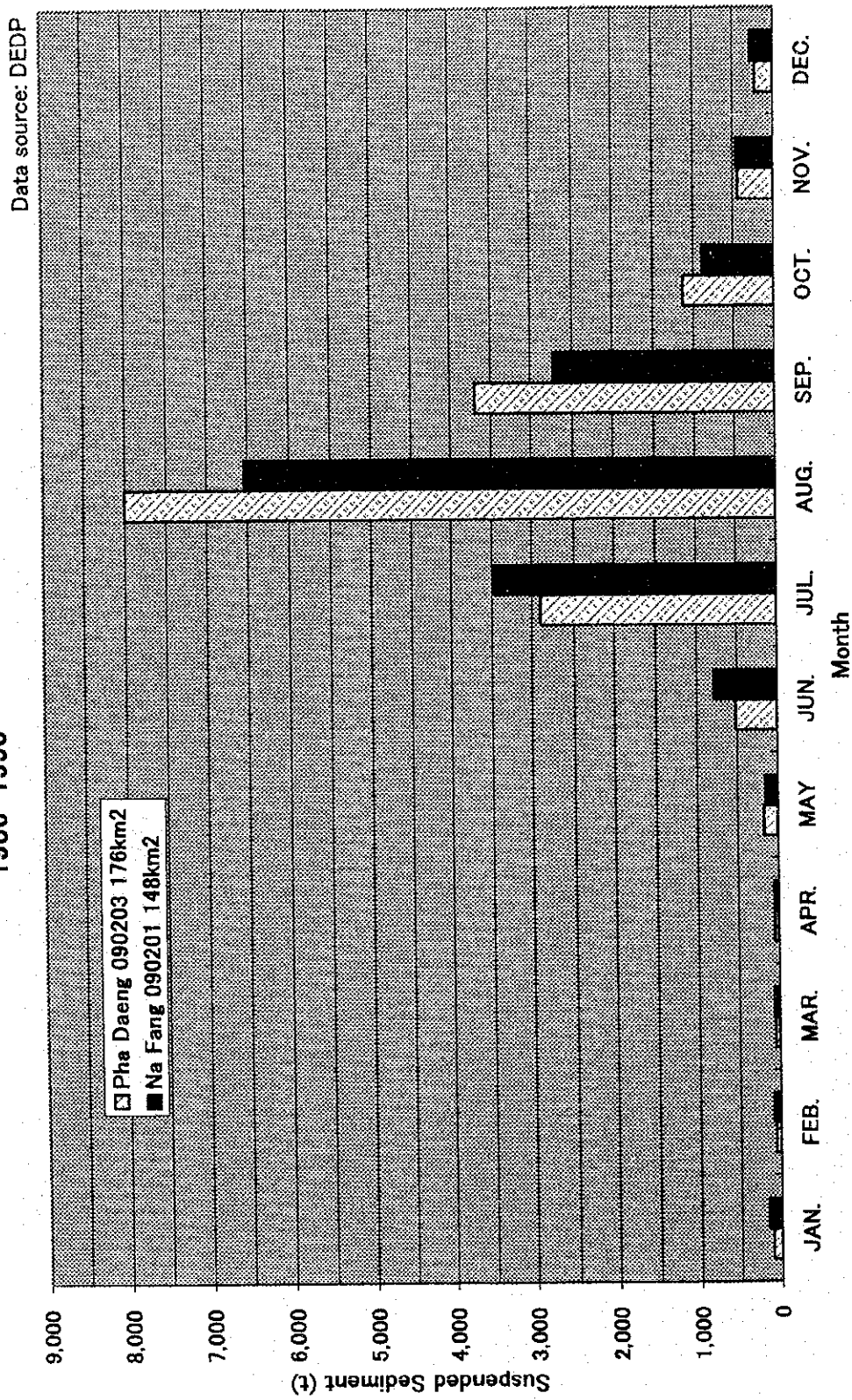


Figure 2.6.3 Mean Monthly Suspended Sediment in Upper Nan Basin  
1986-1995



***CHAPTER 3.***

***SOCIO-ECONOMIC CONDITIONS***



### Appendix 3.1.1 Rural Credit

Rural credit institutions play a pivotal role in upgrading the economic standard of the rural population. A majority of the population lack productive resources to adopt improved farm technologies and generate income and employment opportunities. The need for a strong rural credit system, which will help break the stranglehold of low income, saving and investment, and mono-cultural agriculture, is accordingly emphasized.

Rural credit facilities in the Study Area can be broadly divided into three categories, i.e. (1) institutional credit provided by the Bank of Agriculture and Agricultural Co-operatives (BAAC) and commercial banks, (2) non-institutional credit by traders, friends and relatives, etc., and (3) semi-institutional credit by agricultural or savings co-operatives.

BAAC and commercial banks are the major vehicle to provide institutional credit to farmers in the Study Area. BAAC has classified its loan operation according to various purposes such as agriculture for input procurement and hiring labour and machines, consumption, education and so forth, and in terms of loan period, i.e. short term for a period of 1 year, medium term for 3~5 years, and long term for 5~20 years. The current annual interest rate charged by BAAC ranges from 11.5% for a loan amounting up to 60,000 Baht to 17% for over 5 million Baht.

The farm household survey results show that the average loan amount for the Study Area was 73,000 Baht per farm (highest at 224,000 Baht for the Kok-Ing canal alignment area and lowest at 38,000 Baht for the Upper Nan Basin), of which 70% of the loan amount was from BAAC, 11% from agricultural and/or savings co-operatives, 16% mainly from commercial banks, and 3% from traders. Purpose-wise, agriculture accounted for 84.1% (highest at 87.1% for the Lower Nan Basin and lowest at 66.7% for the Upper Nan Basin), consumption for 8.3%, and others for 7.6% of the total loans disbursed, indicating that a majority of farmers in the Study Area are suffering inadequacy in agricultural management fund (see the Supporting Report for Details).

Eligibility requirements for loans are well-defined. BAAC generally makes loans against collateral security such as land and/or either on an individual or group guarantee basis. The most common collateral is land at 51.2% of the total number of collateral, being highest at 78.9% for the Kok-Ing canal alignment area, and lowest at 16.7% for the Upper Nan Basin.

## Appendix 3.1.2 Social Infrastructure

### (1) Water Supplies

Domestic water supply in the Study Area is by water service facilities in urban areas and by unprotected shallow wells and surface water sources in rural areas. Groundwater has been chosen because of its superior quality and relative security compared to surface water sources. Rural water supplies are now being improved as part of an infrastructure improvement program being carried out by the Accelerated Rural Development (ARD) of the Ministry of Interior.

As shown in Appen.3.1.2-1, domestic water supply coverage based on the provincial data in the Study Area is 47.4% on the average and is highest in the Upper Chao Phraya Delta at 52.5% and lowest in the Kok and Ing Basins at 40.2%.

**Appen.3.1.2-1 Domestic Water Supply Coverage (1996)**

Basin/Area	Domestic Water Supply Coverage (%)
1. Kok and Ing Basins	40.2
2. Upper Nan Basin	40.5
3. Lower Nan Basin	47.4
4. Upper Chao Phraya Delta	52.5
Study Area	47.4

Source: Ministry of Interior, 1996.

Basin-wise piped water consumption per customer is summarized in Appen.3.1.2-2 (see the Supporting Report for details).

**Appen.3.1.2-2 Per Custom Piped Water Consumption (1995)**

Basin	Water Production (1,000 m <sup>3</sup> )	Customers (1,000)	Water Consumption (m <sup>3</sup> /customer)
1. Upper Chao Phraya Basin	112,633.9	294.7	382
1.1 Nan Basin	25,188.7	81.1	311
(1) Upper Nan Basin	3,650.2	12.6	290
(2) Lower Nan Basin	21,538.5	68.5	314
1.2 Yom Basin	22,162.2	64.6	343
1.3 Wang Basin	8,032.6	22.2	362
1.4 Ping Basin	26,268.5	61.3	429
1.5 Sakae Krang Basin	5,751.7	14.3	402
1.6 Pasak Basin	25,230.2	51.2	493
2. Lower Chao Phraya Basin	1,549,442.8	1,380.4	1,122
3. Kok and Ing Basins	12,982.0	27.7	469
3.1 Kok Basin	7,309.4	14.2	515
3.2 Ing Basin	5,672.6	13.5	420
Study Area	1675,058.7	1,702.8	984

Note: Samut Prakan has been excluded due to data unavailability.

Source: "Statistical Yearbook Thailand, 1996", National Statistical Office.

As indicated in the above table, per customer piped water consumption was highest in the Lower Chao Phraya Basin at 1,122 m<sup>3</sup> due to large quantities of industrial water use in the Bangkok Metropolitan Region and its environs. In contrast, water consumption in the Nan Basin is less than one-third the average value for the Study Area as a whole, and this basin continues to rely heavily on unsanitary water sources.

## (2) Electrification

Electrification rates in the Study Area at the provincial level averaged 94.8%, being highest at 96.3% for the Upper Chao Phraya Delta, and lowest at 90.7% for the Upper Nan Basin as shown in Appen.3.1.2-3.

**Appen.3.1.2-3 Electrification Rate (1996/97)**

Basin/Area	Electrification Rate (%)
1. Kok and Ing Basins	94.3
2. Upper Nan Basin	90.7
3. Lower Nan Basin	94.0
4. Upper Chao Phraya Delta	96.3
Study Area	94.8

Source: Ministry of Interior, 1996.

Basin-wise electricity consumption per customer is summarized in Appen.3.1.2-4 (see the Supporting Report for details).

**Appen.3.1.2-4 Per Custom Electricity Consumption (1995)**

Basin	Electricity Use (Gwh)	Customers (1,000)	Electricity Consumption (Kwh/customer)
1. Upper Chao Phraya Basin	7,265.2	1,728.2	4,204
1.1 Nan Basin	1,549.2	373.2	4,151
(1) Upper Nan Basin	378.6	107.7	3,515
(2) Lower Nan Basin	1,170.6	265.5	4,409
1.2 Yom Basin	542.9	380.7	1,426
1.3 Wang Basin	247.5	143.3	1,727
1.4 Ping Basin	1,277.9	481.0	2,657
1.5 Sakae Krang Basin	140.1	69.4	2,019
1.6 Pasak Basin	3,507.6	280.6	12,500
2. Lower Chao Phraya Basin	40,956.1	3,622.5	11,306
3. Kok and Ing Basins	450.0	297.0	1,515
3.1 Kok Basin	279.4	158.3	1,765
3.2 Ing Basin	170.6	138.7	1,230
Study Area	48,671.3	5,647.7	8,618

Note: Bangkok has been excluded due to data unavailability.

Source: "Statistical Yearbook Thailand, 1996", National Statistical Office.

As shown in the above table, per customer electricity consumption in 1995 was highest for the Lower Chao Phraya Basin at 11,305 kWh, due to the fact that it contains the Bangkok Metropolitan Region. In contrast, consumption in the Kok and Ing Basins is only 17.6% of the average for the Study Area as a whole, highlighting the skewed level of economic development among regions.

### (3) Telecommunications

As shown in Appen.3.1.2-5, telephone diffusion rates in the Study Area averaged 12.5%, ranging from a high of 21.5% in the Upper Chao Phraya Delta to a low of 6.0% in the Ing and the Upper Nan Basins.

**Appen.3.1.2-5 Telephone Proliferation Rate (1996/97)**

Basin/Area	Sample Households (No.)	Privately-owned Telephone (No.)	Diffusion Rate (%)
1. Kok-Ing-Nan Canal Alignment	253	39	15.4
2. Ing and Upper Nan Basins	50	3	6.0
3. Lower Nan Basin	815	55	6.7
4. Upper Chao Phraya Delta	480	103	21.5
Study Area	1,598	200	12.5

Source: Farm household survey.

### (4) Education

In rural areas, failure of children to enroll for compulsory education (10 years from age 5) is a serious problem. Causes for this are use of children for agricultural labour, low incomes and poor access to schools. As shown in Appen.3.1.2-6 (see the Supporting Report for details), unenrolled rate averages 7.9% for the Study Area, being highest at 13.3% for the Upper Nan Basin, and lowest at 4.7% for the Upper Chao Phraya Delta. On the other hand, of enrolled family members, 63.5%, 5.8% and 5.9% achieved the elementary, secondary and higher education, respectively. In case of the higher education, the Upper Chao Phraya Delta exhibits the highest rate at 11.3% which indicates a strong awareness of the importance of education among farmers, and the Ing and Upper Nan Basins the lowest at 0.4% due to prevalence of subsistence agriculture or unavailability of employment opportunities.

**Appen.3.1.2-6 School Enrollment (1995/96)**

Basin/Area	No Schooling (%)	Elementary (%)	Secondary (%)	Higher (%)
1. Kok-Ing-Nan Canal Alignment	9.6	61.9	16.4	5.3
2. Ing and Upper Nan Basins	12.7	64.8	19.1	0.4
3. Lower Nan Basin	4.8	69.6	14.7	4.8
4. Upper Chao Phraya Delta	4.7	59.7	17.2	11.3
Study Area	7.9	63.5	16.1	5.9

Source: Farm household survey.

(5) Medical Services

The higher disease rate in rural areas compared with urban areas is the central most pressing issue under the Government's medical service policy. The current administration is pushing for increased fiscal investment in the medical services sector aimed at reduction of the outbreak rate for preventable diseases and establishment of a base level of medical service throughout rural areas.

As shown in Appen.3.1.2-7 (see the Supporting Report for details), 48.2%, 31.9%, and 8.4% of the total households in the Study Area made access to health stations located in every Tambon, hospitals and dispensary clinics, respectively, when being sick or ill. The Ing and Upper Nan Basins have the highest level at 82% in terms of frequent visits to the health stations and the Upper Chao Phraya Delta the lowest at 41%. Average incidence of illness is 18% for the Study Area, being highest at 26.9% for the Upper Chao Phraya Delta, and lowest at 4% for the Ing and Upper Nan Basins.

**Appen.3.1.2-7 Medical Services (1996/97)**

Basin/Area	Clinic (%)	Health Station (%)	Hospital (%)	Incidence of Illness (%)
1. Kok-Ing-Nan Canal Alignment	3.2	70.0	21.7	14.2
2. Ing and Upper Nan Basins	2.0	82.0	8.0	4.0
3. Lower Nan Basin	8.3	43.6	35.1	14.7
4. Upper Chao Phraya Delta	12.1	41.0	34.4	26.9
Study Area	8.4	48.2	31.9	18.0

Source: Farm household survey.

Table 3.1.1 No. of Population, Population Density and Growth Rate (1)

Basin and Province	Area Rate (%)	No. of Population										Basin Area Km <sup>2</sup>	1,995 Density No./Km <sup>2</sup>	Growth Rate (%)		
		Provincial Area Level														
		Basin Area Level														
		1991	1992	1993	1994	1995	1991	1992	1993	1994	1995					
1. Upper Chao Phraya Basin																
1.1 Nan Basin (21,460)																
(1) Upper Nan (8,110)																
Nan	94	455.2	457.6	459.9	465.0	473.1	428	430	432	437	445	10,783.7	41	0.98		
Uthairit	28	463.2	475.6	474.9	476.9	477.0	338	363	363	371	378	2,352.0	57	0.74		
Subtotal	-	-	-	-	-	-	-	-	-	-	-	13,136	44	0.93		
(2) Lower Nan (13,350)																
Uthairit	72	463.2	475.6	474.9	476.9	477.0	334	342	342	343	343	5,488.0	63	0.74		
Phitsanulok	84	786.5	793.2	842.0	848.9	846.6	692	700	741	747	745	9,518.1	78	1.91		
Phichit	57	560.3	587.4	589.9	592.2	592.1	319	335	336	338	337	2,535.7	33	1.42		
Phetchabun	17	963.9	996.3	997.3	1,042.1	1,026.1	164	169	170	177	174	2,407.7	72	1.61		
Nakhon Sawan	15	1,091.8	1,094.0	1,109.5	1,117.2	1,116.8	164	164	166	168	168	1,440.0	116	0.57		
Subtotal	-	-	-	-	-	-	1,073	1,210	1,235	1,273	1,268	21,389	83	1.42		
Total	-	-	-	-	-	-	2,230	2,274	2,320	2,344	2,346	34,535	68	1.30		
1.2 Yom Basin (14,760)																
Nan	6	455.2	457.6	459.9	465.0	473.1	27	27	28	28	28	688.3	41	0.98		
Phayao	42	507.0	512.4	510.8	513.5	517.3	213	215	215	216	217	2,661.1	82	0.51		
Lampang	21	777.8	776.2	797.8	803.7	803.2	163	163	168	169	169	2,630.9	64	0.82		
Phrae	100	494.1	493.5	491.2	494.4	493.5	494	494	491	494	494	6,544.0	75	-0.03		
Subtotal	100	595.9	606.8	613.1	617.1	613.3	596	607	613	617	613	6,592.0	93	0.73		
Phitsanulok	12	786.5	793.2	842.0	848.9	846.6	94	95	101	102	102	1,297.9	78	1.91		
Phichit	43	560.3	567.4	589.9	592.2	592.1	241	253	254	255	255	1,992.3	128	1.42		
Komphaeng Phet	15	676.9	731.4	755.8	759.4	742.4	102	110	113	114	111	1,377.3	81	2.42		
Total	-	-	-	-	-	-	1,930	1,964	1,982	1,995	1,989	23,784	84	0.75		
1.3 Wang Basin (6,740)																
Lampang	79	777.8	776.2	797.8	803.7	803.2	614	613	630	635	635	9,897.1	64	0.82		
Tak	6	358.5	425.7	427.6	440.2	430.2	22	26	26	26	27	984.0	27	6.39		
Total	-	-	-	-	-	-	636	639	656	661	662	10,881	61	1.01		
1.4 Ping Basin (21,190)																
Chiang Mai	77	1,386.0	1,330.8	1,534.1	1,547.1	1,552.8	1,067	1,179	1,181	1,191	1,196	15,687.4	76	3.01		
Lamphun	100	418.0	397.7	402.8	403.7	405.0	418	398	403	406	405	4,512.0	90	-0.78		
Tak	46	338.5	425.7	427.6	440.2	430.2	165	196	197	202	207	2,544.0	27	6.39		
Komphaeng Phet	70	676.9	731.4	755.8	759.4	742.4	474	512	529	532	520	6,025.6	86	2.82		
Nakhon Sawan	4	1,091.8	1,094.0	1,109.5	1,117.2	1,116.8	44	44	44	45	45	384.0	116	0.57		
Total	-	-	-	-	-	-	2,168	2,328	2,354	2,376	2,372	34,153	69	2.36		
1.5 Sakae Krang Basin (3,240)																
Komphaeng Phet	8	676.9	731.4	755.8	759.4	742.4	54	59	60	61	59	688.6	86	2.42		
Nakhon Sawan	24	1,091.8	1,094.0	1,109.5	1,117.2	1,116.8	262	263	266	268	268	2,304.0	116	0.57		
Uthai Thani	33	307.8	318.6	319.1	322.7	324.7	102	105	105	106	107	2,722.9	48	1.37		
Total	-	-	-	-	-	-	418	426	432	435	435	5,216	83	1.01		
1.6 Paak Basin (10,180)																
Loei	10	559.0	595.4	614.6	617.9	621.5	56	60	61	62	62	1,142.4	54	2.80		
Phetchabun	72	963.9	996.3	997.3	1,042.1	1,026.1	694	717	718	750	739	9,123.8	81	1.61		
Lopburi	50	733.6	738.4	733.4	738.1	740.8	377	369	367	369	370	3,096.0	32	-0.42		
Samutburi	77	540.0	546.0	538.1	565.1	570.7	416	420	430	435	439	2,759.7	139	1.42		
Ayutthaya	7	691.1	695.2	691.6	699.4	706.5	48	49	48	49	49	1,792.0	276	0.56		
Total	-	-	-	-	-	-	1,591	1,615	1,624	1,691	1,660	16,301	102	1.09		
Grandtotal	-	-	-	-	-	-	8,973	9,245	9,369	9,476	9,463	124,860	76	1.37		

Table 3.1.1 No. of Population, Population Density and Growth Rate (2)

2. Lower Chao Phraya Basin (21,120)	7	676.9	731.4	755.8	759.4	742.4	47	51	53
Kamphaeng Phet									
Nakhon Sawan	57	1,091.8	1,094.0	1,109.5	1,117.2	1,116.8	622	624	632
Uthai Thani	34	307.8	318.6	319.1	322.7	324.7	105	108	108
Chant	100	357.7	339.3	348.3	348.3	350.3	358	339	348
Phetchabun	3	963.9	996.3	997.3	1,042.1	1,026.1	29	30	30
Lopburi	50	753.6	738.4	733.4	738.1	740.8	377	369	367
Saraburi	23	540.0	546.0	558.1	565.1	570.7	124	126	128
Singburi	100	231.4	221.4	221.3	222.0	222.7	231	221	221
Ang Thong	100	280.6	284.1	283.1	284.4	286.4	281	284	283
Suphanburi	89	833.6	825.5	842.1	834.6	840.5	742	735	749
Ayuthaya	93	691.1	693.2	691.6	699.4	706.5	643	645	643
Pathum Thani	100	446.0	484.6	500.1	511.4	524.2	446	485	500
Nakhon Pathom	92	664.2	671.4	710.3	719.3	730.1	611	618	653
Nonhaburi	100	703.2	698.7	717.4	704.6	754.6	703	699	717
Bangkok	100	5,620.6	5,562.1	5,572.7	5,584.2	5,570.7	5,621	5,562	5,573
Samut Prakan	100	882.2	871.8	895.4	914.4	926.1	882	872	895
Samut Sakhon	83	365.3	372.6	373.5	318.3	390.7	303	309	310
Chachoengsao	6	589.8	593.2	597.3	605.3	609.2	35	36	36
Kanchanaburi	10	708.5	724.4	724.7	737.0	744.9	71	72	72
Grandtotal	-	-	-	-	-	-	12,231	12,184	12,322
3. Kok and Ing Basin (9,390)									
3.1 Kok Basin (4,940)									
Chiang Mai	10	1,386.0	1,530.8	1,534.1	1,547.1	1,552.8	139	153	153
Chiang Rai	50	1,048.3	1,229.4	1,241.9	1,251.6	1,249.3	524	615	621
Total	-	-	-	-	-	-	663	768	774
3.2 Ing Basin (4,450)									
Chiang Rai	30	1,048.3	1,229.4	1,241.9	1,251.6	1,249.3	314	369	373
Phayao	58	507.0	512.4	510.8	513.5	517.3	294	297	296
Total	-	-	-	-	-	-	609	666	669
Grandtotal	-	-	-	-	-	-	1,271	1,434	1,443

(unit: 10<sup>3</sup> Persons)

Table 3.1.2 No. of Municipal and Non-Municipal Population as well as No. of Employed Population in 1995 (1)

Basin and Province	Area Rate (%)	No. of Population				No. of Employed Population				No. of Population				No. of Employed Population				No. of Population				No. of Employed Population			
		Municipal Area		Non-Municipal Area		Municipal Area		Non-Municipal Area		Municipal Area		Non-Municipal Area		Municipal Area		Non-Municipal Area		Municipal Area		Non-Municipal Area		Municipal Area		Non-Municipal Area	
		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total	
		No. (1)	% (1)	No. (2)	% (2)	No. (3)	% (3)	No. (4)	% (4)	No. (5)	% (5)	No. (6)	% (6)	No. (7)	% (7)	No. (8)	% (8)	No. (9)	% (9)	No. (10)	% (10)	No. (11)	% (11)	No. (12)	% (12)
1. Upper Chao Phraya Basin																									
1.1 Nan Basin																									
(1) Upper Nan	94	473.1	22.8	450.3		229.4	114.9	114.5		445		423	95	216		48	108	24		108		24		108	24
Nakhon Phanom	28	477.0	43.1	433.9		240.0	92.9	147.1		134		121	91	67		50	41	31		26		19		26	19
Subtotal																									
(2) Lower Nan	72	477.0	43.1	433.9		240.0	92.9	147.1		343		312	91	173		50	106	31		67		19		67	19
Uttaradit	88	846.6	88.4	738.2		378.2	204.4	173.8		745		667	90	333		45	153	21		180		24		180	24
Phitsanulok	57	392.1	57.9	334.2		292.1	125.4	166.7		337		304	90	166		39	50	28		71		21		71	21
Phichit	17	1,026.1	42.7	983.4		395.6	183.6	216.0		174		167	96	68		39	57	31		31		18		31	18
Phetchabun	15	1,116.8	143.6	973.2		622.5	228.9	393.6		108		146	87	93		56	59	35		34		20		34	20
Nakhon Sawan																									
Subtotal										1,768		1,597	90	833		47	450	25		384		22		384	22
Total										2,346		2,192	91	1,116		48	598	26		518		22		518	22
1.2 Yom Basin																									
Nan	6	473.1	22.8	450.3		229.4	114.9	114.5		28		27	95	14		48	7	24		7		24		7	24
Phayao	42	517.3	21.8	495.4		255.8	125.5	112.5		217		208	96	107		49	47	22		60		28		60	28
Lampang	21	803.2	69.3	733.9		416.5	215.3	141.0		169		154	91	87		52	30	18		58		34		58	34
Phue	100	493.5	21.1	472.4		289.7	126.5	83.2		494		472	96	290		59	83	17		207		42		207	42
Subtotal																									
Phitsanulok	12	846.6	88.4	738.2		378.2	204.4	173.8		102		91	90	45		45	21	21		25		20		25	20
Phichit	43	592.1	57.9	534.2		292.1	125.4	166.7		255		230	96	126		49	72	28		54		21		54	21
Kamphaeng Phet	15	742.4	28.3	714.1		387.0	131.3	255.5		111		107	96	58		32	38	34		20		18		20	18
Total										1,989		1,864	94	1,034		52	484	24		549		28		549	28
1.3 Wang Basin																									
Lampang	79	803.2	69.3	733.9		416.5	215.5	141.0		635		580	91	329		52	111	18		218		34		218	34
Tak	6	450.2	47.9	402.2		184.4	75.6	112.8		27		24	89	11		42	7	25		5		17		5	17
Total										662		604	91	340		51	118	18		222		34		222	34
1.4 Ping Basin																									
Chiang Mai	77	1,552.8	167.9	1,384.8		823.6	512.3	311.3		1,196		1,066	89	634		53	240	20		394		33		394	33
Lampang	100	405.0	14.2	390.8		264.8	176.1	88.7		403		391	96	265		63	89	22		176		43		176	43
Tak	46	450.2	47.9	402.2		184.4	75.6	112.8		207		185	89	87		42	52	25		35		17		35	17
Kamphaeng Phet	70	742.4	28.3	714.1		387.0	131.3	255.5		520		500	96	271		52	179	34		92		18		92	18
Nakhon Sawan	4	1,116.8	143.6	973.2		622.5	228.9	393.6		43		39	87	25		36	16	35		9		20		9	20
Total										2,372		2,181	92	1,281		54	575	24		707		30		707	30
1.5 Sakae Krang Basin																									
Kamphaeng Phet	8	742.4	28.3	714.1		387.0	131.3	255.5		59		57	96	31		52	20	34		11		18		11	18
Nakhon Sawan	24	1,116.8	143.6	973.2		622.5	228.9	393.6		268		234	87	149		56	94	35		55		20		55	20
Uthai Thani	33	324.7	19.5	305.2		155.9	70.2	85.7		107		101	94	51		48	28	26		23		22		23	22
Total										435		391	90	232		53	143	33		89		20		89	20
1.6 Puaik Basin																									
Loei	10	631.5	23.6	597.9		251.6	99.2	154.4		62		60	96	25		41	15	25		10		16		10	16
Phetchabun	72	1,026.1	42.7	983.4		395.6	183.6	216.0		739		708	96	288		38	156	21		132		18		132	18
Lopburi	50	740.8	44.5	696.3		358.5	218.9	139.6		370		348	94	179		48	70	19		109		30		109	30
Saraburi	77	570.7	127.1	443.6		279.7	197.9	81.8		439		342	78	215		49	63	14		152		35		152	35
Ayutthaya	7	706.5	71.4	635.1		383.0	338.9	44.1		49		44	90	27		54	3	6		24		48		24	48
Total										1,660		1,502	90	735		44	307	18		438		26		438	26
Grandtotal										9,463		8,684	92	4,738		303	2,226	24		2,512		27		2,512	27

Table 3.1.2 No. of Municipal and Non-Municipal Population as well as No. of Employed Population in 1995 (2)

2. Lower Chao Phraya Basin		7	742.4	28.3	714.1	387.0	255.5	131.5	52	2	50	96	27	52	18	34	9	18
Kamphaeng Phet		57	1,116.8	143.6	973.2	622.5	393.6	228.9	637	82	555	87	355	56	224	35	130	20
Nakhon Sawan		34	324.7	19.5	305.2	155.9	85.7	70.2	110	7	104	94	53	48	20	26	24	22
Uthai Thani		100	350.3	20.2	330.2	207.6	123.5	84.1	350	20	330	94	208	59	124	35	84	24
Chaiyathani		3	1,026.1	42.7	983.4	392.6	210.0	183.6	31	1	30	96	12	39	6	21	6	18
Phetchaburi		50	740.8	44.5	696.3	338.5	139.6	218.9	370	22	348	94	179	48	70	19	109	50
Lopburi		23	570.7	127.1	443.6	275.7	81.8	197.9	131	29	102	78	64	49	19	14	46	35
Sukhothai		100	222.7	21.5	201.3	121.7	47.2	75.5	223	22	201	90	123	55	47	21	76	34
Ang Thong		100	286.4	21.1	265.3	141.2	55.2	88.0	286	23	263	92	141	49	53	19	88	31
Suphanburi		89	840.5	41.8	798.7	469.8	299.8	170.2	748	37	711	95	418	56	267	36	151	20
Ayutthaya		93	706.5	71.4	635.1	383.0	44.1	338.9	657	66	591	90	356	54	41	6	315	48
Pathum Thani		100	524.2	70.5	453.8	273.2	36.6	236.6	524	71	454	87	273	52	37	7	237	45
Nakhon Pathom		92	750.1	92.0	658.1	449.9	124.5	315.4	672	85	587	87	414	62	124	18	290	43
Nonthaburi		100	754.6	454.5	300.1	380.4	94.6	350.8	755	455	900	40	385	51	35	5	351	46
Bangkok		100	5,570.7	5,570.7	-	3,671.0	-	-	5,571	5,571	-	-	3,671	-	-	-	-	-
Samut Prakan		100	926.1	154.7	771.4	558.3	26.4	531.9	926	155	771	83	558	60	26	3	532	57
Samut Sakhon		83	390.7	105.0	285.7	236.1	27.0	209.1	324	87	237	73	196	60	22	7	174	54
Chachoengsao		6	609.2	51.8	557.4	305.8	133.5	172.3	37	3	33	91	18	30	8	22	10	28
Kanchanaburi		10	744.9	54.4	690.5	362.0	170.4	191.6	74	5	69	93	36	48	17	23	19	26
Grandtotal		-	-	-	-	-	-	-	12,478	6,742	-	-	7,469	-	-	-	-	-
3. Kolk and Ing Basin																		
3.1 Kolk Basin																		
Chiang Mai		10	1,552.8	167.9	1,384.8	825.6	311.3	512.3	155	17	138	89	82	53	31	20	51	33
Chiang Rai		50	1,249.3	45.5	1,203.8	579.6	268.4	311.2	625	23	602	96	250	46	134	21	156	25
Total		-	-	-	-	-	-	-	780	40	740	95	372	48	165	21	207	27
3.2 Ing Basin																		
Chiang Rai		30	1,240.3	45.5	1,194.8	579.6	268.4	311.2	375	14	361	96	174	46	81	21	93	25
Phayao		54	517.9	21.8	496.1	252.8	112.5	143.3	300	13	287	96	148	49	65	22	83	28
Total		-	-	-	-	-	-	-	675	26	648	96	322	48	146	22	176	26
Grandtotal		-	-	-	-	-	-	-	1,455	66	1,389	95	694	48	311	21	383	26

Table 3.1.3 Estimated Agriculture Population During the 5<sup>th</sup> Plan

Table 3.3.3 Estimated Agricultural Population During the 8 <sup>th</sup> Plan																
Sex		Regional Area Level										Variations (%)		Which Top cities in 1977		% of Agr. Pop
(%)		1987	1990	1999	2000	2001	1997	1998	1999	2000	2001	2002/1997	2003/1997	Percentage	Rank	
1. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
2. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
3. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
4. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
5. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
6. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
7. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
8. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
9. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
10. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
11. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
12. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
13. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
14. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
15. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
16. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
17. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
18. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
19. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
20. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
21. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
22. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
23. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
24. Lower Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.79	-	481.5	335	64.28
Subtotal																
72	309.6	306.5	301.0	298.8	298.8	293.7	287	282	280	284	279	-5.99	-	484.1	335	64.28
25. Upper Chao Phraya Basin																
24	22.2	219.3	216.2	216.2	216.2	208.9	209	205	203	200	194	-5.99	-	484.1	433	45.90
25	30.9	306.5	301.0	298.8	298.8	293.7	287	282	280							

Table 3.1.4 Household and Average Family Size (1995)

Basin/Province	Region	Area Rate (%)	Population			Household (No.)	Average Family Size (No.)
			Total (No.)	Male (No.)	Female (No.)		
1. Upper Chao Phraya Basin							
1.1 Nan Basin							
(1) Upper Nan Basin							
Nan	Northern	94	444,728	225,655	219,074	109,020	4.1
Uttaradit	Northern	28	133,559	66,510	67,049	32,882	4.1
Sub-total			578,287	292,165	286,123	141,902	4.1
(2) Lower Nan Basin							
Uttaradit	Northern	72	343,438	171,026	172,412	84,553	4.1
Phitsanulok	Northern	88	745,034	371,579	39,055	191,059	3.9
Phichit	Northern	57	337,511	165,871	171,641	77,706	4.3
Phetchabun	Northern	17	174,443	87,811	86,632	41,553	4.2
Nakhon Sawan	Northern	15	167,520	82,819	84,701	42,906	3.9
Sub-total			1,767,947	879,106	554,441	437,778	4.0
Total			2,346,234	1,171,271	840,564	579,680	4.0
1.2 Yom Basin							
Nan	Northern	6	28,387	14,403	13,983	6,959	4.1
Phayao	Northern	42	217,248	108,805	108,443	60,619	3.6
Lampang	Northern	21	168,670	84,618	84,052	45,801	3.7
Phrae	Northern	100	493,505	245,161	248,344	134,355	3.7
Sukhothai	Northern	100	613,317	300,473	312,844	154,514	4.0
Phitsanulok	Northern	12	101,596	50,670	5,326	26,054	3.9
Phichit	Northern	43	254,614	125,130	129,483	58,621	4.3
Kamphaeng Phet	Northern	15	111,357	55,465	55,892	27,504	4.0
Total			1,988,694	984,726	958,367	514,427	3.9
1.3 Wang Basin							
Lampang	Northern	79	634,521	318,326	316,195	172,299	3.7
Tak	Northern	6	27,009	13,747	13,262	6,996	3.9
Total			661,530	332,073	329,458	179,295	3.7
1.4 Ping Basin							
Chiang Mai	Northern	77	1,195,630	599,658	595,972	373,199	3.2
Lamphun	Northern	100	405,191	203,276	201,915	110,026	3.7
Tak	Northern	46	207,070	105,392	101,678	53,640	3.9
Kamphaeng Phet	Northern	70	519,668	258,838	260,831	128,353	4.0
Nakhon Sawan	Northern	4	44,672	22,085	22,587	11,442	3.9
Total			2,372,231	1,189,248	1,182,983	676,659	3.5
1.5 Sakae Krang Basin							
Kamphaeng Phet	Northern	8	59,391	29,581	29,809	14,669	4.0
Nakhon Sawan	Northern	24	268,033	132,511	135,522	68,650	3.9
Uthai Thani	Northern	33	107,161	53,034	54,127	28,039	3.8
Total			434,584	215,126	219,458	111,358	3.9
1.6 Pasak Basin							
Loei	Northeastern	10	62,154	31,722	30,433	13,957	4.5
Phetchabun	Northern	72	738,819	371,907	366,912	175,988	4.2
Lopburi	Central	50	370,413	187,987	182,426	97,157	3.8
Saraburi	Central	77	439,426	220,409	219,016	116,847	3.8
Ayutthaya	Central	7	49,455	24,129	25,326	12,323	4.0
Total			1,660,267	836,154	824,113	416,272	4.0
Grand Total			9,463,541	4,728,598	4,354,943	2,477,690	3.8
2. Lower Chao Phraya Basin							
Kamphaeng Phet	Northern	7	51,967	25,884	26,083	12,835	4.0
Nakhon Sawan	Northern	57	636,578	314,713	321,865	163,043	3.9
Uthai Thani	Northern	34	110,408	54,641	55,767	28,889	3.8
Chainat	Central	100	350,318	170,118	180,200	86,031	4.1
Phetchabun	Northern	3	30,784	15,496	15,288	7,333	4.2
Lopburi	Central	50	370,413	187,987	182,426	97,157	3.8
Saraburi	Central	23	131,257	65,837	65,421	45,525	2.9
Singburi	Central	100	222,740	107,804	114,936	54,719	4.1
Ang Thong	Central	100	286,389	138,864	147,525	66,416	4.3
Suphanburi	Western	89	748,056	365,662	382,394	171,459	4.4
Ayutthaya	Central	93	657,047	320,578	336,469	163,718	4.0
Pathum Thani	BKK Vicinity	100	524,251	258,898	265,353	217,223	2.4
Nakhon Pathom	BKK Vicinity	92	671,670	330,637	341,033	173,862	3.9
Nonthaburi	BKK Vicinity	100	754,627	368,295	386,332	284,207	2.7
Bangkok	BKK Metropolis	100	5,570,743	2,745,431	2,825,312	1,661,311	3.4
Samut Prakan	BKK Vicinity	100	926,110	456,003	470,107	308,545	3.0
Samut Sakhon	BKK Vicinity	83	324,280	160,458	163,822	109,606	3.0
Chachoengsao	Eastern	6	36,554	18,148	18,406	9,237	4.0
Kanchanaburi	Western	10	74,493	37,945	36,548	19,586	3.8
Total			12,478,685	6,143,398	6,335,287	3,680,701	3.4
3. Kok and Ing Basin							
3.1 Kok Basin							
Chiang Mai	Northern	10	155,277	77,878	77,399	48,467	3.2
Chiang Rai	Northern	50	624,664	314,664	310,000	174,504	3.6
Sub-total			779,941	392,542	387,399	222,971	3.5
3.2 Ing Basin							
Chiang Rai	Northern	30	374,798	188,798	186,000	104,702	3.6
Phayao	Northern	58	300,009	150,255	149,754	83,713	3.6
Sub-total			674,807	339,053	335,754	188,415	3.6
Total			1,454,748	731,595	723,153	411,386	3.5
Study Area			23,396,974	11,603,591	11,413,383	6,569,778	3.6
Whole Kingdom			59,460,382	29,678,600	29,781,782	14,697,085	4.0

Source: "Statistical Yearbook Thailand", 1996, National Statistical Office, Office of the Prime Minister.

Table 3.1.5 Labour Force and Unemployment (1995)

Basin/Province	Area Rate (%)	Population (1,000)	Total (1,000)	Employment (%)	Labour Force		Unemployment (%)	Seasonal Employment (%)	Unemployment (1,000)	Seasonal Employment (%)
					(1,000)	(%)				
1. Upper Chao Phraya Basin										
1.1 Nan Basin										
(1) Upper Nan Basin										
Nan	94	444.7	217.4		215.7		1.6		0.1	
Uttaradit	28	133.6	67.6		67.2		0.3		0.1	
Sub-total		578.3	285.0	49.3	282.9	99.3	1.9	0.7	0.2	0
(2) Lower Nan Basin										
Uttaradit	72	343.4	173.8		172.8		0.6		0.4	
Phitsanulok	88	745.0	389.4		382.8		6.6		0	
Phichit	57	337.5	171.0		156.3		14.6		0.1	
Phetchabun	17	174.4	85.3		84.9		0.4		0	
Nakhon Sawan	15	167.5	99.8		99.4		0.3		0.1	
Sub-total		1,767.9	919.3	52.0	896.2	97.5	22.5	2.4	0.6	0.1
Total		2,346.2	1,204.3	51.3	1,179.1	97.9	24.4	2.0	0.8	0.1
1.2 Yom Basin										
Nan	6	28.4	13.9		13.8		0.1		0	
Phayao	42	217.3	122.3		120.8		0.7		0.8	
Lampang	21	168.7	94.2		93.7		0.5		0	
Phrae	100	493.5	302.6		301.5		0.4		0.7	
Sukhothai	100	613.3	347.2		344.9		2.3		0	
Phitsanulok	12	101.6	53.1		52.2		0.9		0	
Phichit	43	254.6	129.0		117.9		11.1		0	
Kamphaeng Phet	15	111.4	59.9		58.1		1.6		0.2	
Total		1,988.7	1,122.2	56.4	1,102.9	98.3	17.6	1.6	1.7	0.1
1.3 Wang Basin										
Lampang	79	634.5	354.4		352.5		1.7		0.2	
Tak	6	27.0	11.5		11.3		0.2		0	
Total		661.5	365.9	55.3	363.8	99.4	1.9	0.5	0.2	0.1
1.4 Ping Basin										
Chiang Mai	77	1,195.7	662.0		658.7		3.2		0.1	
Lamphun	100	405.2	272.0		271.8		0.2		0	
Tak	46	207.1	88.5		86.7		1.8		0	
Kamphaeng Phet	70	519.7	279.4		270.9		7.3		1.2	
Nakhon Sawan	4	44.7	26.6		26.5		0.1		0	
Total		2,372.3	1,328.5	56.0	1,314.6	99.0	12.6	0.9	1.3	0.1
1.5 Sakae Krang Basin										
Kamphaeng Phet	8	59.4	31.9		31.0		0.8		0.1	
Nakhon Sawan	24	268.0	159.7		159.0		0.5		0.2	
Uthai Thani	33	107.2	54.6		54.5		0.1		0	
Total		434.6	246.2	56.7	244.5	99.3	1.4	0.6	0.3	0.1
1.6 Pasak Basin										
Loei	10	62.2	31.0		30.1		0.7		0.2	
Phetchabun	72	738.8	361.4		359.7		1.6		0.1	
Lopburi	50	370.4	202.5		201.7		0.8		0	
Saraburi	77	439.4	218.8		215.3		2.3		1.2	
Ayutthaya	7	49.5	26.2		25.7		0.5		0	
Total		1,660.2	839.9	50.6	832.5	99.1	5.9	0.7	1.5	0.2
Grand Total		9,463.5	5,107.0	54.0	5,037.4	98.6	63.7	1.2	5.9	0.1
2. Lower Chao Phraya Basin										
Kamphaeng Phet	7	52.0	27.9		27.1		0.7		0.1	
Nakhon Sawan	57	636.6	379.3		377.6		1.1		0.6	
Uthai Thani	34	110.4	56.2		56.2		0		0	
Chainat	100	350.3	208.5		207.6		0.9		0	
Phetchabun	3	30.8	15.1		15.0		0.1		0	
Lopburi	50	370.4	202.5		201.7		0.8		0	
Saraburi	23	131.3	65.3		64.3		0.7		0.3	
Singburi	100	222.7	123.7		122.6		1.1		0	
Ang Thong	100	286.4	143.1		136.2		6.9		0	
Suphanburi	89	748.0	408.8		403.4		5.4		0	
Ayutthaya	93	657.0	348.7		340.9		7.8		0	
Pathum Thani	100	524.3	293.6		289.2		4.4		0	
Nakhon Pathom	92	671.7	389.4		379.4		3.1		6.9	
Nonthaburi	100	754.6	380.9		377.8		3.1		0	
Bangkok	100	5,570.7	3,698.4		3,671.3		27.1		0	
Samut Prakan	100	926.1	515.8		509.2		6.6		0	
Samut Sakhon	83	324.3	198.4		196.0		2.2		0.2	
Chachoengsao	6	36.6	19.1		18.8		0.1		0.2	
Kanchanaburi	10	74.5	37.0		36.8		0.2		0	
Total		12,478.6	7,511.7	60.2	7,431.1	98.9	72.3	1.0	8.3	0.1
3. Kok and Ing Basin										
3.1 Kok Basin										
Chiang Mai	10	155.3	86.0		85.6		0.4		0	
Chiang Rai	50	624.7	315.0		311.7		2.6		0.7	
Sub-total		780.0	401.0	51.4	397.3	99.1	3.0	0.7	0.7	0.2
3.2 Ing Basin										
Chiang Rai	30	374.8	189.0		187.0		1.6		0.4	
Phayao	58	300.0	169.0		166.8		1.0		1.2	
Sub-total		674.8	358.0	53.1	353.8	98.8	2.6	0.7	1.6	0.5
Total		1,454.8	759.0	52.2	751.1	99.0	5.6	0.7	2.3	0.3
Study Area		23,396.9	13,377.7	57.2	13,219.6	98.8	141.6	1.1	16.5	0.1
Whole Kingdom		59,460.4	33,001.8	55.5	32,575.0	98.7	375.1	1.1	51.6	0.2

Source: "Statistical Yearbook Thailand", 1996, National Statistical Office, Office of the Prime Minister.

Table 3.1.6 Sector-wise Contribution to GBP (1994) (1/2)

Basin	Agriculture Manufacturing Construction Transportation & Wholesale & Banking, Insurance Communication Retail Trade & Real Estate							Service	Others	GBP
	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)	(10 <sup>6</sup> Baht)
1. Upper Chao Phraya Basin	44,066.01	47,665.19	16,493.02	12,653.83	34,528.22	11,413.13	23,966.09	46,694.23	237,479.72	
1.1 Nan Basin	11,255.09	4,375.63	3,977.18	2,254.09	8,267.59	2,009.59	4,800.21	6,093.13	43,032.51	
(1) Upper Nan Basin	2,330.71	598.03	906.44	406.66	1,986.33	350.78	1,132.40	1,426.05	9,137.40	
(2) Lower Nan Basin	8,924.38	3,777.60	3,070.74	1,847.43	6,281.26	1,658.81	3,667.81	4,667.08	33,895.11	
1.2 Yom Basin	8,807.07	2,616.57	2,856.15	1,972.27	5,655.81	1,984.91	4,297.15	8,384.34	36,574.27	
1.3 Wang Basin	1,867.41	610.96	1,567.32	1,393.82	3,050.37	1,207.88	1,557.41	7,204.35	18,459.52	
1.4 Ping Basin	11,270.61	17,789.63	4,714.66	4,134.35	8,627.14	3,852.61	8,796.97	11,034.69	70,220.66	
1.5 Sakae Krang Basin	2,503.88	1,548.93	548.65	461.74	1,611.68	423.54	1,166.17	1,358.18	9,622.77	
1.6 Pasak Basin	8,361.95	20,723.47	2,829.06	2,437.56	7,315.63	1,934.60	3,348.18	12,619.54	59,569.99	
2. Lower Chao Phraya Basin	47,564.32	573,254.17	92,942.73	145,251.93	255,329.48	159,866.10	133,921.32	96,846.75	1,504,976.80	
3. Kok and Ing Basins	4,957.11	2,219.13	3,081.97	1,838.38	4,755.47	1,648.94	3,336.48	3,486.59	25,324.07	
3.1 Kok Basin	2,506.25	1,284.84	1,865.40	1,158.61	2,602.26	1,034.96	2,029.95	1,912.73	14,395.00	
3.2 Ing Basin	2,450.86	934.29	1,216.57	679.77	2,153.21	613.98	1,306.53	1,573.86	10,929.07	
Study Area	96,587.4	623,138.5	112,517.7	159,744.1	294,613.2	172,928.2	161,223.9	147,027.6	1,767,780.6	
Whole Kingdom	308,321.0	815,857.4	172,815.0	208,676.0	439,463.0	214,488.0	270,841.0	255,516.0	2,685,977.4	

Note : 1) Based on 1988 constant prices.

2) Others include mining and quarrying, electricity and water supply, ownership of dwellings, and public administration and defence.

Source: "Statistical Reports of Changwat", National Statistical Office, Office of the Prime Minister, 1996.

Table 3.1.6 Sector-wise Contribution to GBP (1994) (2/2)

Basin	Agriculture Manufacturing Construction Transportation & Wholesale & Banking, Insurance Service Others								GBP
	(%)	(%)	(%)	(%)	Communication	Retail Trade	& Real Estate	(%)	
1. Upper Chao Phraya Basin	18.6	20.1	6.9	5.3	14.5	4.8	10.1	19.7	237,479.72
1.1 Nan Basin	26.2	10.2	9.2	5.2	19.2	4.7	11.1	14.2	43,032.51
(1) Upper Nan Basin	25.5	6.6	9.9	4.5	21.7	3.8	12.4	15.6	9,137.40
(2) Lower Nan Basin	26.3	11.1	9.1	5.5	18.5	4.9	10.8	13.8	33,895.11
1.2 Yom Basin	24.1	7.2	7.8	5.4	15.5	5.4	11.7	22.9	36,574.27
1.3 Wang Basin	10.1	3.3	8.5	7.6	16.5	6.6	8.4	39.0	18,459.52
1.4 Ping Basin	16.1	25.3	6.7	5.9	12.3	5.5	12.5	15.7	70,220.66
1.5 Sakae Krang Basin	26.0	16.1	5.7	4.8	16.8	4.4	12.1	14.1	9,622.77
1.6 Pasak Basin	14.0	34.8	4.8	4.1	12.3	3.2	5.6	21.2	59,569.99
2. Lower Chao Phraya Basin	3.2	38.1	6.2	9.7	17.0	10.6	8.9	6.4	1,504,976.80
3. Kok and Ing Basins	19.6	8.7	12.2	7.2	18.8	6.5	13.2	13.8	25,324.07
3.1 Kok Basin	17.4	8.9	13.0	8.0	18.1	7.2	14.1	13.3	14,395.00
3.2 Ing Basin	22.4	8.6	11.1	6.2	19.7	5.6	12.0	14.4	10,929.07
Study Area	41.3	66.9	25.3	22.2	50.3	21.9	32.2	39.9	1,767,780.59
Whole Kingdom	11.5	30.4	6.4	7.8	16.3	8.0	10.1	9.5	2,685,977.42

Note : 1) Based on 1988 constant prices.

2) Others include mining and quarrying, electricity and water supply, ownership of dwellings, and public administration and defence.

Source: "Statistical Reports of Changwat", National Statistical Office, Office of the Prime Minister, 1996.

Table 3.1.7 Average Monthly Income and Expenditure Per Household at Basin Level 1994 (1)

(unit : Baht)

Basin and Province	Area Rate (%)	Provincial Area Level			Basin Area Level				
		Income		Total Expenditure	Income		Total (1)	From Farming (2)	From Others
		Total	From Farming		From Farming	From Others			
1. Upper Chao Phraya Basin									
1.1 Nan Basin (21,460)									
(1) Upper Nan (8,110)	94	4,782	511	4,271	5,434		4,495	480	4,015
Nan	28	6,338	1,040	5,298	5,517		1,775	291	1,483
Subtotal							6,270	772	5,498
(2) Lower Nan (13,350)	72	6,338	1,040	5,298	5,517		4,563	749	3,815
Uttaradit	88	5,451	725	4,726	5,172		4,797	638	4,159
Phitsnulok	57	7,350	1,194	6,156	6,435		4,190	681	3,509
Phichit	17	5,175	1,125	4,050	5,031		880	191	689
Phichai	15	7,087	1,061	6,026	7,210		1,063	159	904
Nakhon Sawan							15,493	2,418	13,075
Subtotal							21,762	3,189	18,573
Total							287	31	256
1.2 Yom Basin (14,760)	6	4,782	511	4,271	5,434		1,612	178	1,434
Nan	42	3,838	423	3,415	4,949		1,571	77	1,494
Phayao	21	7,482	369	7,113	6,001		6,358	338	6,000
Lampang	100	6,358	358	6,000	6,231		5,044	1,135	5,298
Phrae	100	5,044	1,135	5,298	4,962		654	87	567
Subtotal	32	5,451	725	4,726	5,172		3,161	513	2,657
Phitsnulok	43	7,350	1,194	6,156	6,435		779	129	649
Phichit	15	5,191	862	4,329	4,551		19,465	2,509	18,346
Kamphaeng Phet							5,911	292	5,619
Total							378	36	342
1.3 Wang Basin (6,740)	79	7,482	369	7,113	6,001		6,289	327	5,962
Lampang	6	6,298	594	5,704	5,792				
Tak									
Total									
1.4 Ping Basin (21,190)	77	7,755	657	7,098	7,284		5,971	506	5,465
Chiang Mai	100	7,104	1,458	5,646	6,049		7,104	1,458	5,646
Lamphun	46	6,298	594	5,704	5,792		2,897	273	2,624
Tak	70	5,191	862	4,329	4,551		3,634	603	3,030
Kamphaeng Phet	4	7,087	1,061	6,026	7,210		283	42	241
Nakhon Sawan							19,890	2,683	17,007
Total							415	69	346
1.5 Sakae Krang Basin (3,240)	8	5,191	862	4,329	4,551		1,701	255	1,446
Kamphaeng Phet	24	7,087	1,061	6,026	7,210		1,641	343	1,298
Nakhon Sawan	33	4,972	1,039	3,933	5,578		3,757	666	3,090
Uthai Thani									
Total									

Table 3.1.7: Average Monthly Income and Expenditure Per Household at Basin Level 1994 (2)

(unit : Baht)

Basin and Province	Area Rate (%)	Provincial Area Level				Basin Area Level			
		Income		Total Expenditure	Total	Income		Rate (%) (2)/(1)	From Others
		Total	From Farming			Total (1)	From Farming (2)		
1.6 Paak Basin (10,180)									
Loei	10	4,393	894	5,101	439	89	20	350	510
Phetchabun	72	5,175	1,125	5,031	3,726	810	22	2,916	3,622
Lopburi	50	6,612	1,179	5,036	3,306	590	18	2,717	2,518
Saraburi	77	10,954	2,087	8,133	8,435	1,607	19	6,828	6,264
Ayuthaya	7	9,933	489	7,942	697	34	5	662	556
Total					16,603	3,130	19	13,472	13,470
2. Lower Chao Phraya Basin (21,120)									
Kanchanae Phet	7	5,191	862	4,329	4,551	363	60	303	319
Nakhon Sawan	57	7,087	1,061	6,026	4,040	605	15	3,435	4,110
Uthai Thani	34	8,729	1,157	7,572	2,968	393	13	2,574	2,591
Chaiwat	100	5,175	1,125	4,050	5,031	1,125	22	4,050	5,031
Phetchabun	3	6,612	1,179	5,433	5,036	35	18	163	151
Lopburi	50	10,954	2,087	8,667	8,133	5,477	19	4,434	4,068
Saraburi	23	7,200	319	6,881	1,656	73	4	1,583	1,465
Singburi	100	10,309	482	9,827	10,309	482	5	9,827	10,985
Ang Thong	100	9,953	489	9,464	9,953	489	5	9,464	7,942
Suphanburi	89	13,932	1,184	12,748	11,308	1,054	8	11,346	10,064
Ayuthaya	93	16,275	284	15,991	15,136	264	2	14,872	12,091
Pathum Thani	100	16,918	34	16,884	14,125	34	0	16,884	14,125
Nakhon Pathom	92	14,146	704	13,442	12,111	13,014	5	12,367	11,142
Nonthaburi	100	10,629	666	9,963	10,998	666	6	9,963	10,998
Bangkok	100	11,201	2,035	9,146	11,201	2,035	18	9,146	10,854
Samut Prakan	100	154,311	13,688	140,623	135,275	119,437	8	110,409	105,934
Samut Sakhon	83				298	62	21	236	335
Chachoengsao	6	4,972	1,039	3,933	7,620	873	13	757	762
Kanchanaburi	10	8,729	1,157	7,572	240,045	18,239	199	221,812	212,966
Total									
3. Kok and Ing Basin (9,300)									
Kok Basin (4,940)									
Chiang Mai	10	7,979	1,521	6,458	6,261	152	19	646	626
Chiang Rai	50	10,096	1,751	8,345	10,019	5,048	17	4,173	5,010
Total						5,846	36	4,818	5,636
Ing Basin (4,360)									
Chiang Rai	30	31,776	5,468	26,308	29,478	252,908	8	232,442	225,333
Phayao	56	186,087	19,156	166,931	164,753	460,110	9	419,301	411,011
Total						713,018	17	651,743	636,345
Grand Total									

Table 3.1.8 Number of Households in Non-Municipal Area by Income Class Per Annum at Provincial Level, 1995 (1)

Basin and Province		No. of Household	Income Per Annum					Unknown
			< 6,000	6,000-9,999	10,000-19,999	20,000-29,999	30,000-49,999	
(unit: 10 <sup>3</sup> )								
TABLE 3.1.0 NUMBER OF HOUSEHOLDS IN NON-METROPOLITAN AREA BY INCOME CLASS PER ANNUM AND PROVINCE (%)								
1. Upper Chao Phraya Basin								
Nan Basin								
(1) Upper Nan								
Nan								
(2) Lower Nan								
Uttaradit								
Phitsanulok								
Phichit								
Yom Basin								
Phrae								
Sukhothai								
Wang Basin								
Lampang								
Phang Basin								
Chiang Mai								
Lamphun								
Tak								
Kamphaeng Phet								
Paak Basin								
Loei								
Phetchabun								
Lopburi								
Saraburi								
2. Lower Chao Phraya Basin								
Nakhon Sawan								
Uthai Thani								
Chaiwat								
Singburi								
Ang Thong								
Suphanburi								
Ayuthaya								
Pathum Thani								
Nakhon Pathom								
Nonthaburi								
Bangkok								
Samut Prakan								
Samut Sakhon								
Chachoengsao								
Kanchanaburi								
3. Kok and Ing Basin								
Kok Basin								
Chiang Rai								
Ing Basin								
Phayao								

(unit : 10<sup>3</sup>)

Remark: Data are available in 1996 (Ayutthaya, Kanchanaburi)

\*\* Data are not available (Samut Prakan)

\*\*\* Not mentioned in the statistical report (Uppaburi, Suphanburi)

Table 3.1.8: Number of Households in Non-Municipal Area by Income Class Per Annum at Basin Level, 1995 (2)

(unit: 103)

Basin and Province	Area Rate (%)	No. of Household	Income Per Annum					Unknown
			< 6,000	6,000-9,999	10,000-19,999	20,000-29,999	30,000-49,999	>=50,000
<b>1. Upper Chao Phraya Basin</b>								
1.1 Nan Basin (21,460)								
(1) Upper Nan (8,110)								
Nan	94	90.4	39.5	19.6	13.2	6.3	3.9	3.1
Subtotal	28	27.2	6.2	6.0	5.4	3.5	2.0	1.6
		117.6	45.6	25.5	18.5	9.8	5.9	4.7
<b>(2) Lower Nan (13,350)</b>								
Uttaradit	72	63.4	14.4	13.9	12.5	8.3	4.6	3.6
Phitsanulok	88	119.9	25.2	22.4	23.1	19.7	12.8	7.8
Phichit	57	50.5	8.1	9.6	10.0	8.6	6.3	4.0
Phetchabun	17	31.1	4.7	5.2	6.9	6.2	4.1	2.3
Nakhon Sawan	15	25.1	2.9	4.9	5.7	4.8	3.6	2.7
Subtotal		290.0	55.2	58.2	58.2	47.7	31.3	20.5
Total		407.6	100.8	81.5	76.7	57.5	37.2	25.2
<b>1.2 Yom Basin (14,760)</b>								
Nan	6	5.8	2.5	1.2	0.8	0.4	0.3	0.2
Phayao	42	45.9	13.2	11.5	9.8	4.7	2.2	1.8
Lampang	21	34.1	9.7	7.4	5.4	2.9	1.9	0.7
Phrae	100	108.6	25.7	23.1	21.2	13.7	8.9	6.2
Subtotal		113.3	19.5	20.2	23.1	16.9	11.5	6.6
Sukhothai	12	16.4	3.4	3.0	3.1	2.7	1.7	1.1
Phitsanulok	43	39.7	6.4	7.5	7.9	6.8	4.9	3.2
Phichit	15	19.8	2.8	3.3	4.2	3.4	2.5	1.6
Kamphaeng Phet		383.5	83.2	77.4	75.6	51.5	33.9	21.3
Total		128.1	36.5	27.9	20.3	11.1	7.0	2.7
<b>1.3 Wang Basin (6,740)</b>								
Lampang	6	4.6	1.6	0.7	0.7	0.5	0.2	0.2
Tak		132.8	38.1	28.6	21.0	11.5	7.3	2.9
Total		238.1	53.4	48.1	38.8	26.6	15.9	8.5
<b>1.4 Ping Basin (21,190)</b>								
Chiang Mai	100	96.3	19.5	18.1	17.1	12.7	7.6	4.4
Lamphun	46	35.6	12.3	5.4	5.2	3.5	1.9	1.5
Tak	70	86.5	12.3	14.6	18.4	14.9	10.9	7.0
Kamphaeng Phet	4	6.7	0.8	1.3	1.5	1.3	1.0	0.7
Nakhon Sawan		463.1	98.3	87.5	81.1	59.0	37.3	22.1
Total								

Table 3.1.8 Number of Households in Non-Municipal Area by Income Class Per Annum at Basin Level, 1995 (3)

(Unit: 103)

Basin and Province	Area Rate (%)	No. of Household	Income Per Annum						Unknow
			<6,000	6,000-9,999	10,000-19,999	20,000-29,999	30,000-49,999	>=50,000	
<b>1.5 Sakae Kraue Basin (3,240)</b>									
Kamphaeng Phet	8	9.9	1.4	1.7	2.1	1.7	1.2	0.8	1.0
Nakhon Sawan	24	40.1	4.6	7.8	9.1	7.8	5.8	4.4	0.7
Uthai Thani	33	19.2	3.0	3.6	4.5	3.1	2.1	1.2	1.7
Total		69.2	9.0	13.1	15.7	12.5	9.2	6.3	3.4
<b>1.6 Panak Basin (10,180)</b>									
Loei	10	10.9	2.9	2.5	2.1	1.2	0.6	0.4	1.3
Phetchabun	72	117.9	17.7	19.7	26.0	23.5	15.6	8.7	6.8
Lopburi	50	-	-	-	-	-	-	-	-
Saraburi	77	64.7	7.4	8.9	9.7	9.1	10.3	8.2	11.0
Ayutthaya	7	8.3	0.7	0.9	1.2	1.2	1.3	1.6	1.4
Total		201.7	28.7	31.9	38.9	35.0	27.8	19.0	20.4
<b>2. Lower Chao Phraya Basin (21,120)</b>									
Kamphaeng Phet	7	8.6	1.2	1.5	1.8	1.5	1.1	0.7	0.8
Nakhon Sawan	57	95.3	10.9	18.6	21.7	18.4	13.7	10.4	1.6
Uthai Thani	34	19.8	3.1	3.7	4.7	3.2	2.2	1.2	1.8
Chainat	100	163.7	24.6	27.3	36.1	32.7	21.6	12.1	9.4
Phetchabun	3	4.9	0.7	0.8	1.1	1.0	0.6	0.4	0.3
Lopburi	50	-	-	-	-	-	-	-	-
Saraburi	23	19.3	2.2	2.6	2.9	2.7	3.1	2.5	3.3
Singburi	100	37.8	5.0	6.3	7.3	7.3	5.0	4.5	2.4
Ang Thong	100	30.6	5.3	6.2	8.3	7.7	8.2	10.2	4.7
Suphanburi	89	-	-	-	-	-	-	-	-
Ayutthaya	93	105.9	10.9	12.5	15.7	15.7	16.7	21.4	18.0
Pathum Thani	100	75.7	5.7	8.1	13.4	15.5	7.6	7.4	18.0
Nakhon Pathom	92	106.6	2.5	5.7	12.0	19.6	28.0	37.9	-
Nonthaburi	100	51.6	2.6	5.0	6.1	7.4	7.6	15.2	8.8
Bangkok	100	-	-	-	-	-	-	-	-
Samut Prakan	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Samut Sakhon	83	51.8	1.4	2.0	4.0	9.6	16.9	13.2	4.6
Chachoengsao	6	5.7	0.6	0.7	1.0	1.0	0.8	0.6	1.0
Kanchanaburi	10	12.0	1.3	1.5	1.8	2.0	2.1	2.1	1.2
Total		814.408	77.086	102.47	137.801	145.338	136.198	139.778	76.021

Table 3.1.8 Number of Households in Non-Municipal Area by Income Class Per Annum at Basin Level, 1995 (4)

(unit : 103)

Basin and Province	Area Rate (%)	No. of Household	Income Per Annum					Unknown
			< 6,000	6,000-9,999	10,000-19,999	20,000-29,999	30,000-49,999	>=50,000
3. Kok and Ing Basin(9,390)								
Kok Basin (4,940)	10	30.5						
Chiang Mai			6.9					
Chiang Rai	50	117.5	33.9	27.3	5.0	3.4	2.0	1.1
Total		148.0	40.8	33.5	27.4	17.4	10.8	4.8
Ing Basin(4,450)								
Chiang Rai	30	70.5	20.3	16.4	13.4	8.4	5.3	2.9
Phayao	58	63.5	18.2	15.9	13.6	6.5	3.0	2.4
Total		133.9	38.6	32.3	27.0	14.9	8.3	5.3
Grand Total		2,754.2	514.5	488.1	501.2	404.6	307.8	247.7
								250.4

Remark: Data are available in 1996 (Ayutthaya, Kanphana buri)

\*\* Data are not available (Samut Prakan)

\*\*\* Not mentioned in the statistical report (Lopburi, Suphanburi)

Table 3.1.9 Annual Average Income and Expenditure in Kok-Ing-Nan Canal Alignment Area (1996/97)

Item	Kok-Ing Route		Ing-Nan Route						Average	
	(Baht/year)	(%)	Ing-Inlet (Baht/year)	(%)	Disposal Area (Baht/year)	(%)	Nam Yao Dam Site (Baht/year)	(%)	River Training Area (Baht/year)	(%)
Average Land Size (Rai)	15.4	-	14.8	-	17.5	-	17.1	-	11.9	-
Average Family Size (No.)	4	-	4	-	5	-	4	-	4	-
Income										
- Agriculture	110,712	77.3	90,049	66.2	48,068	62.4	42,705	54.9	61,869	55.2
Crop <sup>1)</sup>	104,525	72.9	86,256	63.4	46,886	60.9	35,045	45.1	56,683	50.6
Livestock	4,194	2.9	3,793	2.8	1,182	1.5	7,413	9.5	5,053	4.5
Fisheries	1,993	1.4	0	0	0	0	247	0.3	133	0.1
- Non-agriculture	32,589	22.7	45,914	33.8	28,958	37.6	35,017	45.1	50,269	44.8
Trade, Service, etc.										
Total	143,301	100.0	135,963	100.0	77,026	100.0	77,722	100.0	112,138	100.0
Expenditure										
- Agriculture	22,177	21.1	17,315	19.7	9,696	15.8	9,448	15.3	16,049	21.4
Crop <sup>1)</sup>	19,784	18.8	16,487	18.8	9,351	15.2	7,610	12.3	13,589	18.1
Livestock	1,747	1.7	828	0.9	345	0.6	1,762	2.9	2,426	3.2
Fisheries	646	0.6	0	0	0	0	76	0.1	34	0.1
- Household	83,066	78.9	70,515	80.3	51,740	84.2	52,479	84.7	58,930	78.6
Total	105,243	100.0	87,830	100.0	61,436	100.0	61,927	100.0	74,979	100.0
Agricultural Income	-	77.3	-	66.2	-	62.4	-	54.9	-	55.2
Non-agricultural Income	-	22.7	-	33.8	-	37.6	-	45.1	-	44.8
Net Agricultural Income	88,535	100.0	72,734	100.0	38,372	100.0	33,257	100.0	45,820	100.0
Net Crop Income	84,741	95.7	69,769	95.9	37,535	97.8	27,435	82.5	43,094	94.1
Net Livestock Income	2,447	2.8	2,965	4.1	837	2.2	5,651	17.0	2,627	6.1
Net Fishery Income	1,347	1.5	0	0	0	0	171	0.5	99	3.8
Per Capita Net Agricultural Income	9,515	-	12,033	-	3,118	-	3,949	-	9,290	-
Net Farm Income	38,058	-	48,133	-	15,590	-	15,795	-	37,159	-
Per Capita Farm Income	35,825	-	33,991	-	15,405	-	19,431	-	28,035	-
Per Rai Agricultural Income	7,189	-	6,084	-	2,747	-	2,497	-	5,199	-

Note : 1) includes fruits and vegetables.

Source: Farm household survey.

Table 3.1.10 Annual Average Income and Expenditure in Ing and Upper Nan Basins (1996/97)

Item	Ing Basin				Upper Nan Basin				Average
	Hae 2 (Baht/year)	Don Kao (Baht/year)	Wang Muang (Baht/year)	Average (Baht/year)	Wang Thong (Baht/year)	Wang Thong (Baht/year)	Wang Thong (Baht/year)	Wang Thong (Baht/year)	
Average Land Size (Rai)	17.3	-	8.0	-	4.2	-	6.1	-	15.7
Average Family Size (No.)	5	-	6	-	4	-	5	-	5
Income									
- Agriculture	50,115	62.4	36,561	60.1	26,696	39.6	31,629	49.3	28,483
Crop <sup>1)</sup>	34,035	42.4	36,411	59.9	17,696	26.3	27,054	42.2	22,133
Livestock	16,000	19.9	150	0.2	9,000	13.3	4,575	7.1	6,350
Fisheries	80	0.1	0	0	0	0	0	0	0
- Non-agriculture	30,150	37.6	24,260	39.9	40,690	60.4	32,475	50.7	25,430
Trade, Service, etc.									
Total	80,265	100.0	60,821	100.0	67,386	100.0	64,104	100.0	53,913
Expenditure									
- Agriculture	26,779	39.8	4,980	12.5	11,489	20.3	8,234	17.1	9,544
Crop	15,759	23.4	4,980	12.5	3,929	7.0	4,454	9.2	6,889
Livestock	11,000	16.4	0	0	7,560	13.3	3,780	7.9	2,655
Fisheries	20	0	0	0	0	0	0	0	0
- Household	40,466	60.2	34,995	87.5	45,032	79.7	40,014	82.9	31,436
Total	67,245	100.0	39,975	100.0	56,521	100.0	48,248	100.0	40,980
Agricultural Income	-	62.4	-	60.1	-	39.6	-	49.3	-
Non-agricultural Income	-	37.6	-	39.9	-	60.4	-	50.7	-
Net Agricultural Income	23,336	100.0	31,581	100.0	15,207	100.0	23,395	100.0	18,939
Net Crop Income	18,276	78.3	31,431	99.5	13,767	90.5	22,600	96.6	15,244
Net Livestock Income	5,000	21.4	150	0.5	1,440	9.5	795	3.4	3,695
Net Fishery Income	60	0.3	0	0	0	0	0	0	0
Per Capita Net Agricultural Income	2,604	-	3,474	-	2,716	-	3,171	-	2,587
Net Farm Income	13,020	-	20,846	-	10,865	-	15,856	-	12,933
Per Capita Farm Income	16,053	-	10,137	-	16,847	-	12,821	-	10,783
Per Rai Agricultural Income	2,897	-	4,570	-	6,356	-	5,185	-	1,163

Note : 1) includes fruits and vegetables.

Source: Farm household survey.

Table 3.1.11 Annual Average Income and Expenditure in Lower Nan Basin (1996/97)

Item	Uttaradit (Baht/year)	Phitsanulok (Baht/year)	Phichit (Baht/year)	Nakhon Sawan (Baht/year)	Average (Baht/year)
Average Land Size (Rai)	16.1	33.0	30.8	32.8	28.2
Average Family Size (No.)	4	4	4	4	4
Income					
- Agriculture	40,423	42,264	61,510	58,159	50,589
Crop <sup>1)</sup>	33,220	37,476	61,449	44,899	44,261
Livestock	6,604	4,717	61	11,252	5,658
Fisheries	599	71	0	2,008	670
- Non-agriculture	39,162	43,882	40,207	35,135	39,596
Trade, Service, etc.					
Total	79,585	86,146	101,717	93,294	90,185
Expenditure					
- Agriculture	14,322	13,219	28,266	24,537	20,086
Crop <sup>1)</sup>	10,501	9,690	28,239	16,517	16,237
Livestock	3,698	3,528	27	7,606	3,715
Fisheries	123	1	0	414	134
- Household	55,262	56,698	61,641	58,088	57,922
Total	69,584	69,917	89,907	82,625	78,008
Agricultural Income	-	-	-	-	-
Non-agricultural Income	-	-	-	-	-
Net Agricultural Income	26,101	29,045	33,244	33,622	30,503
Net Crop Income	22,719	27,786	33,210	28,382	28,024
Net Livestock Income	2,906	1,189	34	3,646	1,943
Net Fishery Income	476	70	0	1,594	536
Per Capita Net Agricultural Income	2,500	4,057	2,953	2,667	3,044
Net Farm Income	10,001	16,229	11,810	10,669	12,177
Per Capita Farm Income	19,896	21,537	25,429	23,324	22,546
Per Rai Agricultural Income	2,511	1,281	1,997	1,773	1,794

Note : 1) includes fruits and vegetables.

Source: Farm household survey.