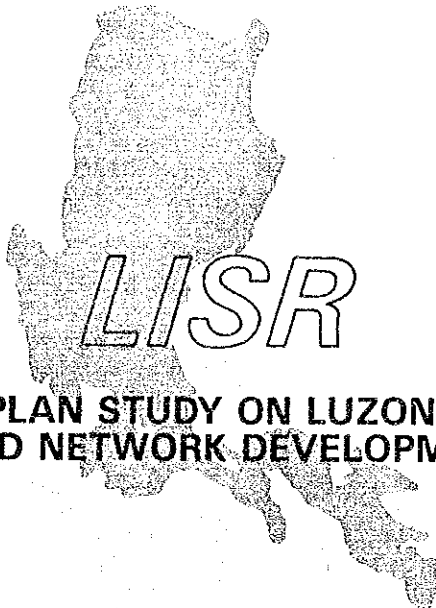


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**MASTER PLAN STUDY ON LUZON ISLAND
STRATEGIC ROAD NETWORK DEVELOPMENT PROJECT**

FINAL REPORT

APPENDIX

JULY 1993

**KATAHIRA & ENGINEERS INTERNATIONAL
NIPPON KOEI CO., LTD.**

MASTER PLAN STUDY ON LUZON ISLAND
STRATEGIC ROAD NETWORK DEVELOPMENT PROJECT
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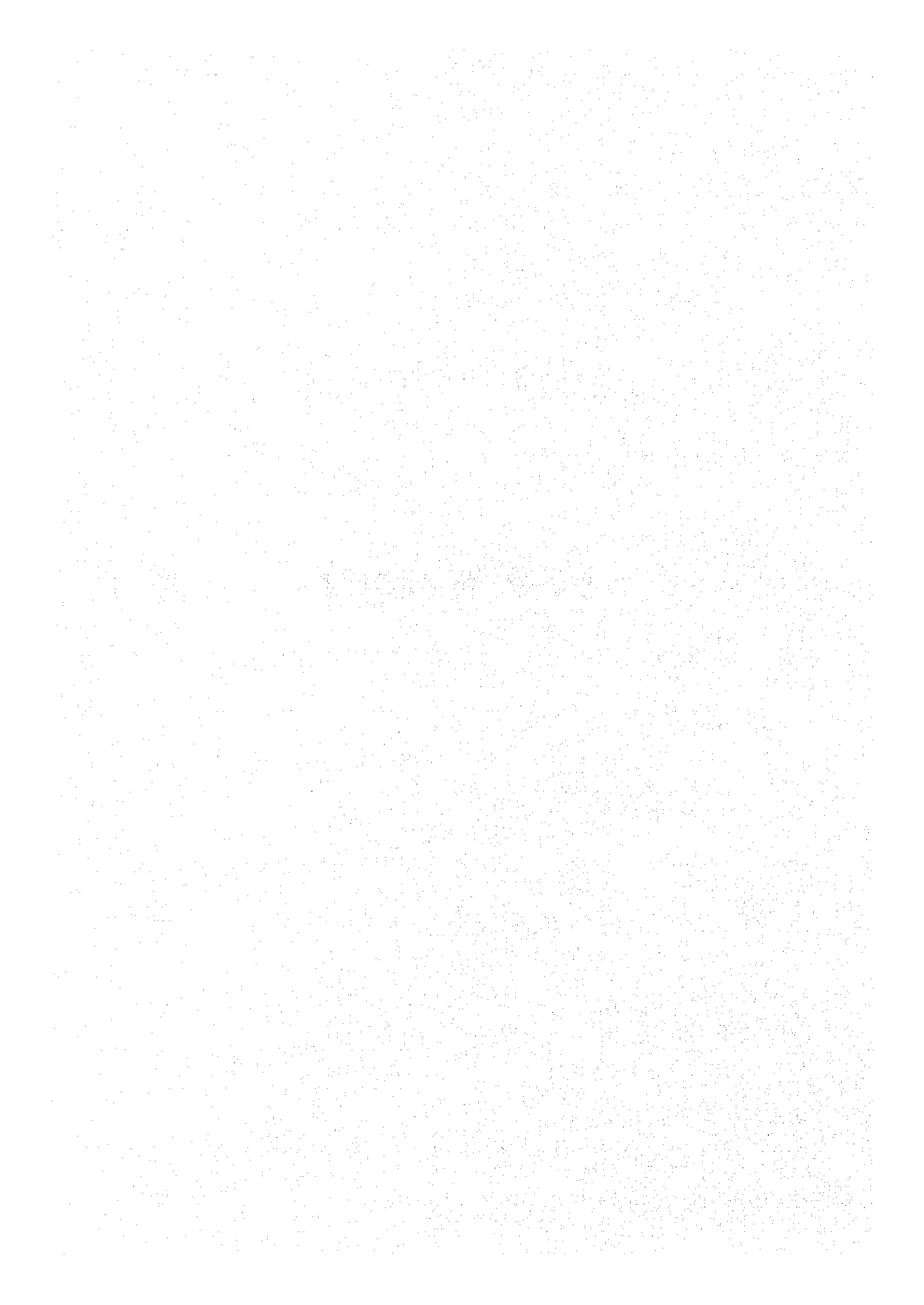
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APPENDIX FOR CHAPTER 2



Appendix 2.1.1 PRESENT AGRICULTURAL LAND USE

(Unit : ha)

Region/ Province	Agricultural Land										Forestry	Built-up & Others	Total Area	
	Paddy Field			Lowland			Upland			Total Agricultural Land				
	Irrigated	Rainfed	Total	Diversified Crop Land	Grassland (Idle)	Lowland Total	Permanent Crop Land	Pasture	Grassland (Idle)					Upland Total
CAR	30,590	13,720	44,310	70,260	7,650	122,220	254,230	536,990	173,580	964,800	1,087,020	694,280	48,080	1,829,380
Abra	7,580	3,330	10,910	21,580	1,110	33,600	28,910	110,550	41,190	180,650	214,250	164,750	18,570	397,570
Benguet	4,180	1,920	6,100	12,140	580	18,820	15,400	101,620	24,760	141,780	160,600	99,020	5,920	265,540
M. Province	3,490	1,510	5,000	7,810	1,210	14,020	38,300	50,680	20,020	109,000	123,020	80,100	6,610	209,730
Ifugao	4,110	1,750	5,860	7,290	2,250	15,400	59,020	122,110	9,650	190,780	206,180	38,590	7,010	251,780
K. Apayao	11,230	5,210	16,440	21,440	2,500	40,380	112,600	152,030	77,960	342,590	382,970	311,820	9,970	704,760
REGION I	109,930	180,500	290,430	69,710	7,750	367,890	25,520	572,960	65,440	663,920	1,031,810	177,800	74,410	1,284,020
Ilocos Norte	51,950	15,780	67,730	12,450	1,380	81,560	3,660	137,640	8,090	149,390	230,950	94,400	14,580	339,930
Ilocos Sur	5,760	27,690	33,450	21,990	2,440	57,880	2,190	132,050	20,250	154,490	212,370	28,270	17,320	257,960
La Union	5,940	8,300	14,240	14,260	1,590	30,090	3,070	77,160	16,740	96,970	127,060	12,420	9,830	149,310
Pangasinan	46,280	128,730	175,010	21,010	2,340	198,360	16,600	226,110	20,360	263,070	461,430	42,710	32,680	536,820
REGION II	133,720	52,670	186,390	194,240	19,140	399,770	248,290	119,460	76,050	443,800	843,570	1,418,320	400,930	2,662,820
Cagayan	17,280	7,250	24,530	53,080	5,030	82,640	82,510	48,720	29,420	160,650	243,290	440,440	216,520	900,250
Isabela	96,990	36,600	133,590	110,460	11,800	255,850	141,010	50,290	37,600	228,900	484,750	420,050	161,660	1,066,460
N. Viscaya	17,440	8,370	25,810	15,700	670	42,180	7,220	5,200	1,860	14,280	56,460	327,690	6,240	390,390
Quirino	2,010	450	2,460	15,000	1,640	19,100	17,550	15,250	7,170	39,970	59,070	230,140	16,510	305,720
REGION III	291,100	258,030	549,130	105,750	154,200	809,080	22,620	36,160	138,070	196,850	1,005,930	661,930	155,180	1,823,040
Bataan	16,220	8,770	24,990	7,550	17,470	50,010	3,730	1,810	10,380	15,920	65,930	57,070	14,300	137,300
Bulacan	40,440	37,360	77,800	8,330	19,980	106,110	8,480	950	43,940	53,370	159,480	64,650	38,370	262,500
N. Ecija	120,960	106,010	226,970	13,440	30,730	271,140	4,330	12,730	10,040	27,100	298,240	208,720	21,470	528,430
Pampanga	58,100	26,950	85,050	26,020	13,420	124,490	1,270	1,220	15,140	17,630	142,120	30,940	44,960	218,020
Tarlac	38,990	52,240	91,230	41,000	36,450	168,680	1,110	1,050	18,180	20,340	189,020	105,820	10,510	305,350
Zambales	16,390	26,700	43,090	9,410	36,150	88,650	3,700	18,400	40,390	62,490	151,140	194,730	25,570	371,440
REGION IV	57,940	92,290	150,230	87,730	82,980	320,940	674,140	61,460	127,810	863,410	1,184,350	659,670	102,820	1,946,840
Aurora	5,210	10,850	16,060	1,500	31,370	48,930	38,030	12,560	6,740	57,330	106,260	208,940	8,780	323,980
Batangas	2,300	37,560	39,860	30,570	400	70,830	143,030	17,410	39,010	199,450	270,280	33,150	13,150	316,580
Cavite	6,580	22,100	28,680	10,820	7,500	47,000	36,160	6,170	14,390	56,720	103,720	12,780	12,260	128,760
Laguna	18,400	1,040	19,440	13,800	16,060	49,300	59,540	6,140	13,270	78,950	128,250	34,590	13,130	175,970
Quezon	21,920	16,720	38,640	30,940	20,660	90,240	386,020	11,600	36,620	434,240	524,480	310,460	35,730	870,670
Rizal	3,530	4,020	7,550	100	6,990	14,640	11,360	7,580	17,780	36,720	51,360	59,750	19,770	130,880
REGION V	83,920	53,360	137,280	76,980	11,310	225,570	412,860	7,200	8,680	428,740	654,310	183,470	369,510	1,207,290
Albay	19,300	3,740	23,040	29,220	2,000	54,260	70,730	2,000	1,900	74,630	128,890	31,520	94,850	255,260
Camarines N.	6,710	9,070	15,780	6,210	1,500	23,490	79,820	1,000	1,210	82,030	105,520	37,130	68,560	211,210
Camarines S.	46,160	32,010	78,170	29,290	5,510	112,970	171,590	3,500	2,800	177,890	290,860	80,820	155,000	526,680
Sorsogon	11,750	8,540	20,290	12,260	2,300	34,850	90,720	700	2,770	94,190	129,040	34,000	51,100	214,140

Appendix 2.1.2 PERCENTAGE DISTRIBUTION OF PRESENT AGRICULTURAL LAND USE

(Unit : %)

Region/ Province	Agricultural Land										Forestry	Built-up & Others	Total Area
	Lowland					Upland							
	Paddy Field		Total	Diversified	Grassland	Total	Permanent Crop Land	Pasture	Grassland	Upland			
	Irrigated	Rainfed		Crop Land	(Idle)				(Idle)	Total			
CAR	1.67	0.75	2.42	3.84	0.42	6.68	13.90	29.35	9.49	52.74	37.95	2.63	100.00
Abm	1.91	0.84	2.74	5.43	0.28	8.45	7.27	27.81	10.36	45.44	41.44	4.67	100.00
Benguet	1.57	0.72	2.30	4.57	0.22	7.09	5.80	38.27	9.32	53.39	37.29	2.23	100.00
M. Province	1.66	0.72	2.38	3.72	0.58	6.68	18.26	24.16	9.55	51.97	38.19	3.15	100.00
Ifugao	1.63	0.70	2.33	2.90	0.89	6.12	23.44	48.50	3.83	75.77	15.33	2.78	100.00
K. Apayno	1.59	0.74	2.33	3.04	0.35	5.73	15.98	21.57	11.06	48.61	44.24	1.41	100.00
REGION I	8.56	14.06	22.62	5.43	0.60	28.65	1.99	44.62	5.10	51.71	13.85	5.80	100.00
Ilocos Norte	15.28	4.64	19.92	3.66	0.41	23.99	1.08	40.49	2.38	43.95	27.77	4.29	100.00
Ilocos Sur	2.23	10.73	12.97	8.52	0.95	22.44	0.85	51.19	7.85	59.89	10.96	6.71	100.00
La Union	3.98	5.56	9.54	9.55	1.06	20.15	2.06	51.68	11.21	64.95	8.32	6.58	100.00
Pangasinan	8.62	23.98	32.60	3.91	0.44	36.95	3.09	42.12	3.79	49.01	7.96	6.09	100.00
REGION II	5.02	1.98	7.00	7.29	0.72	15.01	9.32	4.49	2.86	16.67	53.26	15.06	100.00
Cagayan	1.92	0.81	2.72	5.90	0.56	9.18	9.17	5.41	3.27	17.85	48.92	24.05	100.00
Isabela	9.09	3.43	12.53	10.36	1.11	23.99	13.22	4.72	3.53	21.46	39.39	15.16	100.00
N. Viscaya	4.47	2.14	6.61	4.02	0.17	10.80	1.85	1.33	0.48	3.66	83.94	1.60	100.00
Quirino	0.66	0.15	0.80	4.91	0.54	6.25	5.74	4.99	2.35	13.07	75.28	5.40	100.00
REGION III	15.97	14.15	30.12	5.80	8.46	44.38	1.24	1.98	7.57	10.80	36.31	8.51	100.00
Botuan	11.81	6.39	18.20	5.50	12.72	36.42	2.72	1.32	7.56	11.60	41.57	10.42	100.00
Bulacan	15.41	14.23	29.64	3.17	7.61	40.42	3.23	0.36	16.74	20.33	24.63	14.62	100.00
N. Ecija	22.89	20.06	42.95	2.54	5.82	51.31	0.82	2.41	1.90	5.13	39.50	4.06	100.00
Pampanga	26.65	12.36	39.01	11.93	6.16	57.10	0.58	0.56	6.94	8.09	14.19	20.62	100.00
Tarlac	12.77	17.11	29.88	13.43	11.94	55.24	0.36	0.34	5.95	6.66	34.66	3.44	100.00
Zambales	4.41	7.19	11.60	2.53	9.73	23.87	1.00	4.95	10.87	16.82	52.43	6.88	100.00
REGION IV	2.98	4.74	7.72	4.51	4.26	16.49	34.63	3.16	6.56	44.35	33.88	5.28	100.00
Aurora	1.61	3.35	4.96	0.46	9.68	15.10	11.74	3.88	2.08	17.70	64.49	2.71	100.00
Batangas	0.73	11.86	12.59	9.66	0.13	22.37	45.18	5.50	12.32	63.00	10.47	4.15	100.00
Cavite	5.11	17.16	22.27	8.40	5.82	36.50	28.08	4.79	11.18	44.05	9.93	9.52	100.00
Laguna	10.46	0.59	11.05	7.84	9.13	28.02	33.84	3.49	7.54	44.87	19.66	7.46	100.00
Quezon	2.52	1.92	4.44	3.55	2.37	10.36	44.34	1.33	4.21	49.87	35.66	4.10	100.00
Rizal	2.70	3.07	5.77	0.08	5.34	11.19	8.68	5.79	13.58	28.06	45.65	15.11	100.00
REGION V	6.95	4.42	11.37	6.38	0.94	18.68	34.20	0.60	0.72	35.51	15.20	30.61	100.00
Albay	7.56	1.47	9.03	11.45	0.78	21.26	27.71	0.78	0.74	29.24	12.35	37.16	100.00
Camarines N.	3.18	4.29	7.47	2.94	0.71	11.12	37.79	0.47	0.57	38.84	17.58	32.46	100.00
Camarines S.	8.76	6.08	14.84	5.56	1.05	21.45	32.58	0.66	0.53	33.78	15.35	29.43	100.00
Sorsogon	5.49	3.99	9.48	5.73	1.07	16.27	42.36	0.33	1.29	43.99	15.88	23.86	100.00

Appendix 2.1.3 POTENTIAL AGRICULTURAL LAND USE

(Unit : ha)

Region/ Province	Agricultural Land										Forestry	Built-up & Others	Total Area	
	Lowland					Upland								Total Agricultural Land Use
	Paddy Field		Total	Diversified Crop Land	Grassland (Idle)	Lowland Total	Permanent Crop Land	Pasture	Grassland (Idle)	Upland Total				
	Irrigated	Rainfed												
CAR	32,880	15,110	47,990	73,560	770	122,320	402,460	268,510	34,710	705,680	828,000	952,630	48,750	1,829,380
Abu	8,000	3,720	11,720	22,230	110	34,060	84,940	55,280	8,240	148,460	182,520	196,340	18,710	397,570
Benguet	4,750	2,000	6,750	12,450	60	19,260	70,130	50,810	4,950	125,890	145,150	114,390	6,000	265,540
M. Province	3,890	1,740	5,630	8,780	120	14,530	41,130	25,340	4,000	70,470	85,000	117,890	6,840	209,730
Ifugao	4,690	1,980	6,670	8,070	230	14,970	68,510	61,060	1,930	131,500	146,470	98,110	7,200	251,780
K. Apayno	11,550	5,670	17,220	22,030	250	39,500	137,750	76,020	15,590	229,360	268,860	425,900	10,000	704,760
REGION I	274,770	71,290	346,060	127,910	660	474,630	112,840	412,260	9,040	534,140	1,008,770	198,610	76,640	1,284,020
Ilocos Norte	55,540	13,910	69,450	26,640	140	96,230	20,160	121,140	1,620	142,920	239,150	85,760	15,020	339,930
Ilocos Sur	44,230	18,520	62,750	41,060	240	104,050	13,400	86,960	2,030	102,390	206,440	33,680	17,840	257,960
La Union	34,030	5,040	39,070	27,760	160	66,990	21,100	32,530	3,350	56,980	123,970	15,220	10,120	149,310
Pangasinan	140,970	33,820	174,790	32,450	120	207,360	58,180	171,630	2,040	231,850	439,210	63,950	33,660	536,820
REGION II	158,580	5,240	163,820	228,970	1,910	394,700	297,180	130,810	15,210	443,200	837,900	1,418,320	406,600	2,662,820
Cagayan	23,390	700	24,090	65,190	500	89,780	97,850	49,240	5,880	152,970	242,750	440,440	217,060	900,250
Isabela	114,420	3,660	118,080	125,890	1,180	245,150	172,770	58,220	7,520	238,510	483,660	420,050	162,750	1,066,460
N. Viscaya	18,740	840	19,580	19,780	70	39,430	8,730	6,380	370	15,480	54,910	327,690	7,790	390,390
Quirino	2,030	40	2,070	18,110	160	20,340	17,830	16,970	1,440	36,240	56,580	230,140	19,000	305,720
REGION III	395,620	194,800	590,420	139,760	42,160	772,340	105,480	63,740	27,630	196,850	969,190	661,930	191,920	1,823,040
Bataan	21,220	2,770	23,990	14,490	8,760	47,240	9,960	3,880	2,080	15,920	63,160	57,070	17,070	137,300
Bulacan	54,190	41,160	95,350	5,420	400	101,170	34,840	9,740	8,790	53,370	154,540	64,650	43,310	262,500
N. Ecija	170,960	66,010	236,970	23,970	7,320	268,260	10,360	14,730	2,010	27,100	295,360	208,720	24,350	528,430
Pampanga	65,100	15,770	80,870	34,080	2,430	117,380	10,360	4,240	3,030	17,630	135,010	30,940	52,070	218,020
Tarlac	64,480	37,050	101,530	48,400	1,280	151,210	12,020	4,680	3,640	20,340	171,550	105,820	27,980	305,350
Zambales	19,670	32,040	51,710	13,400	21,970	87,080	27,940	26,470	8,080	62,490	149,570	194,730	27,140	371,440
REGION IV	94,690	51,830	146,520	157,890	8,310	312,720	768,500	53,020	40,470	861,990	1,174,710	659,670	112,460	1,946,840
Aurora	13,240	3,900	17,140	28,730	3,140	49,010	45,640	8,710	2,020	56,370	105,380	208,940	9,660	323,980
Batangas	12,530	22,540	35,070	31,470	40	66,580	171,640	19,240	11,500	202,380	268,960	33,150	14,470	316,580
Cavite	20,340	7,740	28,080	13,520	750	42,350	49,520	6,300	4,320	60,140	102,490	12,780	13,490	128,760
Laguna	19,880	360	20,240	28,250	1,610	50,100	71,130	3,710	2,650	77,490	127,590	34,590	13,790	175,970
Quezon	22,830	15,880	38,710	49,530	2,070	90,310	405,320	10,630	14,650	430,600	520,910	310,460	39,300	870,670
Rizal	5,870	1,410	7,280	6,390	700	14,370	25,250	4,430	5,330	35,010	49,380	59,750	21,750	130,880
REGION V	112,560	23,990	136,550	86,920	2,580	226,050	420,020	3,700	4,300	428,020	654,070	183,470	369,750	1,207,290
Albay	23,000	800	23,800	30,210	200	54,210	71,930	1,000	1,600	74,530	128,740	31,520	95,000	255,260
Camarines N.	13,250	2,600	15,850	7,300	150	23,300	80,980	600	600	82,180	105,480	37,130	68,600	211,210
Camarines S.	60,170	16,260	76,430	35,110	2,000	113,540	174,380	1,800	1,100	177,280	290,820	80,820	155,040	526,680
Sorsogon	16,140	4,330	20,470	14,300	230	35,000	92,730	300	1,000	94,030	129,030	34,000	51,110	214,140

Appendix 2.1.4 PERCENTAGE DISTRIBUTION OF POTENTIAL AGRICULTURAL LAND USE

(Unit : %)

Region/ Province	Agricultural Land										Forestry	Built-up & Others	Total Area
	Lowland					Upland							
	Paddy Field			Diversified	Grassland	Lowland	Permanent	Pasture	Grassland	Upland			
	Irrigated	Rainfed	Total	Crop Land	(Idle)	Total	Crop Land	(Idle)	Total				
CAR	1.80	0.83	2.62	4.02	0.04	6.69	22.00	14.68	1.90	38.57	52.07	2.66	100.00
Abra	2.01	0.94	2.95	5.59	0.03	8.57	21.36	13.90	2.07	37.34	49.39	4.71	100.00
Benguet	1.79	0.75	2.54	4.69	0.02	7.25	26.41	19.13	1.86	47.41	43.08	2.26	100.00
M. Province	1.85	0.83	2.68	4.19	0.06	6.93	19.61	12.08	1.91	33.60	56.21	3.26	100.00
Ifugao	1.86	0.79	2.65	3.21	0.09	5.95	27.21	24.25	0.77	52.23	38.97	2.86	100.00
K. Apayao	1.64	0.80	2.44	3.13	0.04	5.60	19.55	10.79	2.21	32.54	60.43	1.42	100.00
REGION I	21.40	5.55	26.95	9.96	0.05	36.96	8.79	32.11	0.70	41.60	15.47	5.97	100.00
Ilocos Norte	16.34	4.09	20.43	7.84	0.04	28.31	5.93	35.64	0.48	42.04	25.23	4.42	100.00
Ilocos Sur	17.15	7.18	24.33	15.92	0.09	40.34	5.19	33.71	0.79	39.69	13.06	6.92	100.00
La Union	22.79	3.38	26.17	18.59	0.11	44.87	14.13	21.79	2.24	38.16	10.19	6.78	100.00
Pangasinan	26.26	6.30	32.56	6.04	0.02	38.63	10.84	31.97	0.38	43.19	11.91	6.27	100.00
REGION II	5.96	0.20	6.15	8.60	0.07	14.82	11.16	4.91	0.57	16.64	53.26	15.27	100.00
Cagayan	2.60	0.08	2.68	7.24	0.06	9.97	10.87	5.47	0.65	16.99	48.92	24.11	100.00
Isabela	10.73	0.34	11.07	11.80	0.11	22.99	16.20	5.46	0.71	22.36	39.39	15.26	100.00
N. Viscaya	4.80	0.22	5.02	5.07	0.02	10.10	2.24	1.63	0.09	3.97	83.94	2.00	100.00
Quirino	0.66	0.01	0.68	5.92	0.05	6.65	5.83	5.55	0.47	11.85	75.28	6.21	100.00
REGION III	21.70	10.69	32.39	7.67	2.31	42.37	5.79	3.50	1.52	10.80	36.31	10.53	100.00
Batuan	15.46	2.02	17.47	10.55	6.38	34.41	7.25	2.83	1.51	11.60	41.57	12.43	100.00
Bulacan	20.64	15.68	36.32	2.06	0.15	38.54	13.27	3.71	3.35	20.33	24.63	16.50	100.00
N. Ecija	32.35	12.49	44.84	4.54	1.39	50.77	1.96	2.79	0.38	5.13	39.50	4.61	100.00
Pampanga	29.86	7.23	37.09	15.63	1.11	53.84	4.75	1.94	1.39	8.09	14.19	23.88	100.00
Tarlac	21.12	12.13	33.25	15.85	0.42	49.52	3.94	1.53	1.19	6.66	34.66	9.16	100.00
Zambales	5.30	8.63	13.92	3.61	5.91	23.44	7.52	7.13	2.18	16.82	52.43	7.31	100.00
REGION IV	4.86	2.66	7.53	8.11	0.43	16.06	39.47	2.72	2.08	44.28	33.88	5.78	100.00
Aurora	4.09	1.20	5.29	8.87	0.97	15.13	14.09	2.69	0.62	17.40	64.49	2.98	100.00
Batangas	3.96	7.12	11.08	9.94	0.01	21.03	54.22	6.08	3.63	63.93	10.47	4.57	100.00
Cavite	15.80	6.01	21.81	10.50	0.58	32.89	38.46	4.89	3.36	46.71	9.93	10.48	100.00
Laguna	11.30	0.20	11.50	16.05	0.91	28.47	40.42	2.11	1.51	44.04	19.66	7.84	100.00
Quezon	2.62	1.82	4.45	5.69	0.24	10.37	46.55	1.22	1.68	49.46	35.66	4.51	100.00
Rizal	4.49	1.08	5.56	4.88	0.53	10.98	19.29	3.38	4.07	26.75	45.65	16.62	100.00
REGION V	9.32	1.99	11.31	7.20	0.21	18.72	34.79	0.31	0.36	35.45	15.20	30.63	100.00
Albay	9.01	0.31	9.32	11.83	0.08	21.24	28.18	0.39	0.63	29.20	12.35	37.22	100.00
Camarines N.	6.27	1.23	7.50	3.46	0.07	11.03	38.34	0.28	0.28	38.91	17.58	32.48	100.00
Camarines S.	11.42	3.09	14.51	6.67	0.38	21.56	33.11	0.34	0.21	33.66	15.35	29.44	100.00
Sorsogon	7.54	2.02	9.56	6.68	0.11	16.34	43.30	0.14	0.47	43.91	15.88	23.87	100.00

Appendix 2.1.5 PROTECTION AREA IN THE STUDY AREA (1/2)

Region / Province	Reforestation and Forest Conservation Area		National Parks, Game Refuge and Bird Sanctuaries	
	Location/ Municipality	Area (Ha.)	Location/ Municipality	Area (Ha.)
CAR		515,650		15,670
Abra		124,240	Bangued	60
Benguet	Baguio, Tuba, Sablan	96,466	Buguias, Kabayan	11,550
Ifugao	Lagawe, Mayayao	125,541	-	-
K. Apayao	Conner, Kabugao	122,671	Balbalan	1,340
Mt. Province	Natonin, Bontoc, Tanudan	46,732	Halsema Rd.	2,720
REGION I		135,210		2,260
Ilocos Norte	Nueva Era, Spiritu, Batac, Paoay, Marcos, Solsona, Carasi, Adams, Pasu- quin, Burgos	54,830	Paoay	340
Ilocos Sur	Suyo, Cervantes, Santa, Sto. Domingo	30,520	Cervantes, Santa	1,620
La Union	Pugo, Santol	16,540	Agoos, Rosario, Sto. Tomas	210
Pangasinan	San Nicolas, Mabini, Mangatarem	33,320	Mangatarem	90
REGION II		203,730		8,230
Batanes	-	-	-	-
Cagayan	Lal-lo, Gonzaga	47,820	Peña Blanca	4,750
Isabela	Tumauini, Sta. Maria, Quezon	27,140	Ilagan	820
N. Vizcaya	Alfonso Castañeda, Ambaguio	128,770	Sta. Fe	2,660
Quirino	-	-	-	-
REGION III		266,670		32,902
Bataan	Mariveles, Limay, Bagac, Pilar	19,160	Hermosa, Orani, Samal, Balanga, Dinahupihan	25,020
Bulacan	Doña Trinidad, Angat	17,690	San Miguel, Doña Trinidad	660
N. Ecija	Pantabangan, Rizal, Bongabon, Caranga- lan, Laur	127,320	Gen. Tinio, Gapan, Bongabon	3,500
Pampanga	Florida Blanca, Porac	14,720	Arayat, Magalang	3,720
Tarlac	San Jose, Capas, Mayantoc	46,040	Capas	1.5
Zambales	Botolan	41,740	-	-
REGION IV		376,590		4
Batangas	Nasugbu, Lemery	17,300	-	-
Cavite	-	-	-	-
Laguna	Bay	29,720	-	-
Quezon	Tagcauayan, Sampaloc, Gen. Nakar, Infanta, Tayabas	269,820	Real, Polilio Island	4
Aurora	San Luis, Dingalan, Casiguran, Baler, Dipaculao, Dinalogan, Dilasag	59,750	-	-
Rizal	-	-	-	-
REGION V		242,954		24,810
Albay	Manito, Tiwi, Pio Duran	49,317	Daraga, Camalig, Guinobatan, Tabaco	5,460
Camarines N.	Sta. Elena, San Vicente, San Lorenzo Ruiz, Del Gallego	14,794	Basud, Daet	5,200
Camarines S.	Garchitorena, Libon, Pamplona, Cara- moan, Balatan	56,747	Libmanan, Coramoan	10,480
Catanduanes	Sn. Andres, Birac, Viga, Panganiban, Pagimanoc	43,755	-	-
Masbate	Milagros, Mindaon, Aroroy, Mobo	57,601	-	-
Sorsogon	Matnog, Bacon, Magallanes, Pilar	20,740	Casiguran, Barcelona, Bulusan, Irosin	3,670

Appendix 2.1.5 PROTECTION AREA IN THE STUDY AREA (2/2)

Region / Province	Watershed Preservation		Others (Mangrove/Swamplands Military Reservation, Others)		Total	
	Location/ Municipality	Area (Ha.)	Location/ Municipality	Location (Ha.)	Number of Location	Area (Ha.)
CAR		161,250		102,850	25	795,420
Abra	-	-	-	-	1	124,300
Benguet	Tuba, Itogon, Baguio City, San Nicolas, La Trinidad, San Manuel	85,190		83,030	11	276,236
Ifugao	-	2,710	-	-	2	128,251
K. Apayao	-	-	-	-	3	124,011
Mt. Province	Atok, Bokod, La Trinidad, Tublay	73,350	-	19,820	8	142,622
REGION I		4,820		17,010	43	159,300
Ilocos Norte	Burgos, Batac, Pasuquin, Sinaet	3,170	Burgos, Sn Nicolas, Espiritu, Paoay	540	19	58,880
Ilocos Sur	Narvacan, Santa, Lidlidda, Naguilian	1,560	Caoayan, Vigan, Sugpan	860	13	34,560
La Union	-	90	San Fernando	1,150	7	17,990
Pangasinan	-	-	-	14,460	4	47,870
REGION II		101,290		41,230	18	354,480
Batanes	-	-	-	-	-	-
Cagayan	Gonzaga, Lal-lo	15,650	Ballesteros, Calamaniugan	11,300	7	79,520
Isabela	-	-	Divilacan, Maconacon	29,930	6	57,890
N. Vizcaya	Alfonso Castañeda, Ambaguio	85,640	-	-	5	217,070
Quirino	-	-	-	-	-	-
REGION III		211,620		18,400	49	529,592
Bataan	Mariveles	330	Morong	7,400	11	51,910
Bulacan	Montalban, Angat, Norzagaray, Sn. Rafael, San Jose, Infanta, Pasonanca	62,310	-	-	11	80,660
N. Ecija	Pantabangan, Sta. Fe, Lupao, Gen. Tinio, Carangalan	142,560	-	-	13	273,380
Pampanga	-	-	Angeles, Mabalacat	2,400	6	20,840
Tarlac	-	-	-	-	4	46,041.5
Zambales	Olongapo	6,420	Olongapo, Subic	8,600	4	56,760
REGION IV		37,700		3,253	25	417,547
Batangas	-	-	-	-	-	17,300
Cavite	-	-	Sangley Cavite	2.80	1	2.80
Laguna	-	-	-	-	-	29,720
Quezon	Baler, Mulanay, Lopez, Infanta, Guinabatan, Guinayanagan, Pokko	3,240	Lucena	3,250	12	276,314
Aurora	Dilasag, Casiguran, Dipaculao, Dinalogan	11,880	-	-	11	71,630
Rizal	Antipolo	22,580	-	-	1	22,580
REGION V		29,170		33,490	68	330,424
Albay	Oas, Ligao, Polangui	810	Jovellar, Sto. Domingo	1,020	12	56,607
Camarines N.	Capalonga, Mambulao, Labo, San Vicente	1,880	Sta. Elena, Labo, Paracele	5,450	13	27,324
Camarines S.	Lagonoy	470	Libmanan, San Fernando	6,880	12	74,577
Catanduanes	Virac, Buto, San Miguel, Pandan, Calolbon, Baras	26,010	Fernando, Camaligan	1,280	13	71,045
Masbate	-	-	Cataingan, Placer, Aroroy	13,210	7	70,811
Sorsogon	-	-	Pilar, Magallanes, Castilla	5,650	11	30,060

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

CAR

Province Code	Zone Number	Municipality Code	Municipality Name	Population				Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classification		
				1980		1990				1980	1990			
				Urban	Total	Urban	Total							
01	Abra	2	0101	Bangued	26,888	160,094	44,020	184,743	1.44	3,975.7	40	46	4TH	
			0103	Bucay	11,613	28,648	13,980	34,184	1.78	105.7	271	323	4TH	
			0106	Danglas	1,355	12,367	2,667	13,346	0.76	127.6	97	105	6TH	
			0107	Dokres	747	2,655	1,432	3,042	1.37	172.9	15	18	6TH	
			0108	La Paz	1,737	7,610	1,722	8,577	1.20	36.5	208	235	6TH	
			0110	Lagangilang	2,198	9,199	3,037	11,240	2.02	80.7	114	139	6TH	
			0111	Lagayan	1,368	9,460	2,244	11,248	1.75	66.7	142	169	6TH	
			0112	Langiden	800	3,825	835	3,771	-0.14	100.5	38	38	6TH	
			0114	Luba	330	2,255	343	2,452	0.84	105.2	21	23	6TH	
			0116	Manabo	0	4,908	999	5,563	1.26	137.9	36	40	6TH	
			0117	Pennrubia	0	6,586	3,603	7,797	1.70	316.1	21	25	6TH	
			0118	Pidigan	0	4,093	942	4,893	1.80	37.5	109	130	6TH	
			0119	Pilar	2,037	7,157	2,423	8,807	2.10	50.1	143	176	6TH	
			0121	San Isidro	0	7,513	1,250	8,451	1.18	93.2	81	91	6TH	
			0122	San Juan	402	3,085	492	3,744	1.95	35.9	86	104	6TH	
	0123	San Quintin	1,052	7,228	1,226	8,445	1.57	72.9	99	116	6TH			
	0124	Tayum	0	3,572	652	4,293	1.86	69.3	52	62	6TH			
	0127	Villaviciosa	2,003	9,615	2,167	11,045	1.40	42.7	225	259	6TH			
				714	3,930	762	4,612	1.61	87.0	45	53	6TH		
				26,356	133,706	40,776	155,510	1.52	1,738.1	77	89	6TH		
	01	Abra	3	0102	Boliney	0	3,058	730	3,773	2.12	136.4	22	28	6TH
				0104	Bucloc	0	1,604	0	1,932	1.88	50.0	32	39	6TH
				0105	Daguionan	0	1,253	0	1,413	1.21	101.0	12	14	6TH
				0109	Lacub	532	2,037	617	2,326	1.34	295.3	7	8	6TH
				0113	Licuan Baay	0	3,092	635	3,697	1.80	266.9	12	14	6TH
				0115	Malibcong	0	3,106	0	3,494	1.18	81.1	38	43	6TH
				0120	Sal-Lapadan	0	4,271	1,262	4,941	1.47	89.0	48	56	6TH
0125				Tineg	0	2,986	0	3,068	0.27	793.7	4	4	5TH	
0126				Tubo	0	4,981	0	4,589	-0.82	423.9	12	11	5TH	
						532	26,388	3,244	29,233	1.03	2,237.3	12	13	
						122,812	357,312	256,300	485,546	3.11	2,655.4	135	183	2ND
02				Benguet	4	0203	Bakun	0	8,942	0	10,817	1.92	237.4	38
	0205	Buguias	0			17,635	0	25,236	3.65	193.1	91	131	5TH	
	0211	Mankayan	0			25,869	12,423	32,889	2.43	131.7	196	250	5TH	
					0	52,446	12,423	68,942	2.77	562.2	93	123		
	5	0201	Atok		0	14,570	0	13,853	-0.50	137.0	106	101	5TH	
		0204	Bokod		0	11,985	0	11,474	-0.43	423.3	28	27	5TH	
		0207	Kabayan		0	9,138	0	10,306	1.21	177.5	51	58	5TH	
		0208	Kapangan		0	13,478	0	15,537	1.43	136.4	99	114	5TH	
		0209	Kibungan		0	10,576	4,571	12,753	1.89	192.1	55	66	5TH	
					0	59,747	4,571	63,923	0.68	1,068.3	56	60		
	6	0202	Baguio City		119,868	119,868	179,898	183,102	4.33	48.9	2,451	3,744	1ST	
		0206	Itoyon		0	47,949	5,507	61,773	2.57	423.7	113	146	3RD	
		0210	La Trinidad		2,944	28,920	30,953	48,252	5.25	61.4	471	786	4TH	
		0212	Sablan		0	7,957	1,931	8,440	0.59	91.6	87	92	6TH	
		0213	Tuba		0	30,669	21,017	39,635	2.60	314.4	98	126	4TH	
0214		Tublay	0	9,756	0	11,479	1.64	84.9	115	135	5TH			
			122,812	245,119	239,306	352,681	3.71	1,024.9	239	344				
03	Mountain Province	7	0302	Bauko	3,897	103,152	10,506	116,535	1.23	2,097.3	49	56	5TH	
			0303	Besno	0	16,704	480	21,126	2.38	153.0	109	138	5TH	
			0304	Bontoc	0	9,102	630	8,473	-0.71	107.8	34	79	6TH	
			0307	Sabangan	3,897	17,109	2,952	17,716	0.35	396.1	43	45	5TH	
			0308	Sadanga	0	8,202	1,043	8,083	-0.15	127.5	64	63	6TH	
			0308	Sadanga	0	6,656	0	7,302	0.93	83.3	80	88	6TH	
			0309	Sugada	0	9,469	2,554	10,353	0.90	60.4	157	171	6TH	
			0310	Tadian	0	13,594	2,084	14,369	0.56	145.2	94	99	5TH	
						3,897	80,836	9,743	87,422	0.79	1,073.3	75	81	
			8	0301	Barlig	0	5,246	763	6,273	1.80	85.4	61	73	6TH
				0305	Natonin	0	7,332	0	9,813	2.96	490.5	15	20	5TH
0306	Paracelis	0		9,738	0	13,027	2.95	448.1	22	29	5TH			
			0	22,316	763	29,113	2.69	1,024.0	22	28				

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

CAR

Province Code	Zone Number	Municipality Name	Population 1980		Population 1990		Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classification				
			Urban	Total	Urban	Total			1980	1990					
04	Ifugao	9	0401	Aguinaldo	10,155	111,575	15,871	147,281	2.82	2,517.8	44	58	5TH		
			0402	Alfonso Lista	0	10,035	0	19,830	7.49	260.4	39	76	6TH		
			0403	Banaue	0	11,036	2,888	14,816	2.99	410.2	27	36	5TH		
			0404	Hingyon	2,739	22,943	2,639	16,943	-2.99	326.4	70	52	5TH		
			0405	Hungduan	0	6,029	0	8,373	3.06	106.5	57	79	6TH		
			0406	Kiangun	0	5,001	0	7,254	3.79	260.3	19	28	6TH		
			0407	Kiangun	1,251	17,513	1,572	21,329	1.99	247.5	71	86	5TH		
			0408	Lagawe	3,396	9,074	4,987	12,437	3.20	325.6	28	38	5TH		
			0409	Lanut	1,959	11,037	2,581	14,101	2.48	104.6	106	135	5TH		
			0410	Mayoyao	810	14,032	1,204	23,942	5.49	280.5	50	85	5TH		
			0410	Tinoc	0	4,875	0	8,256	5.41	195.8	25	42	6TH		
				10,155	111,575	15,871	147,281	2.82	2,517.8	44	58				
05	Kalinga Apayao	10	0502	Calanasan	19,453	186,054	30,629	211,775	1.30	7,047.6	26	30	5TH		
			0503	Conner	0	5,586	0	10,699	6.71	1,138.2	5	9	5TH		
			0504	Flora	0	14,272	0	16,220	1.29	694.2	21	23	5TH		
			0505	Flora	0	12,361	3,688	10,810	-1.33	324.4	38	33	5TH		
			0505	Kabugao	1,044	9,651	1,713	11,198	1.50	806.3	12	14	5TH		
			0507	Luna	1,267	13,741	955	10,550	-2.61	655.4	21	16	6TH		
			0510	Pudtol	0	7,639	1,074	7,621	-0.02	238.9	32	32	6TH		
			0512	Santa Marcela	0	7,810	0	7,622	-0.24	388.6	20	20	6TH		
							2,311	71,060	7,430	74,720	0.50	4,246.0	17	18	
			11		0501	Belbalan	0	9,217	978	10,147	0.97	357.1	26	28	5TH
					0506	Lubugan	2,819	8,591	1,928	9,189	0.68	329.5	25	28	5TH
		0508	Pasil	0	6,909	0	7,572	0.92	188.0	37	40	5TH			
		0514	Tanudan	0	6,361	0	9,323	3.90	349.1	18	27	6TH			
		0515	Tinglayan	0	11,766	762	12,637	0.72	189.5	62	67	6TH			
				2,819	42,844	3,668	48,868	1.32	1,413.2	30	35				
12		0509	Pirakpuk	0	17,455	0	20,102	1.42	569.2	31	35	6TH			
		0511	Rizal	0	11,699	2,980	10,885	-0.72	177.5	66	61	6TH			
		0513	Tabuk	14,323	42,996	16,551	57,200	2.90	641.7	67	89	4TH			
				14,323	72,150	19,531	88,187	2.03	1,388.4	52	64				

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION 1

Province Code	Zone Name	Municipality Code	Municipality Name	Population 1980		Population 1990		Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classification				
				Urban	Total	Urban	Total			1980	1990					
11	Ilocos Norte	13	1101	Adams	103,964	389,428	130,586	461,661	1.72	3,399.3	115	136	2ND			
					0	1,209	1,116	1,119	-0.77	97.2	12	12	6TH			
			1104	Bangui	1,913	11,087	3,801	12,921	1.54	81.0	137	160	5TH			
			1106	Burgos	886	5,852	1,233	7,643	2.71	160.8	36	48	5TH			
			1110	Dumalneg	0	600	828	828	3.27	50.9	12	16	6TH			
			1115	Pagudpud	3,328	13,632	3,849	16,558	1.96	182.0	75	91	5TH			
			1117	Pasunquin	4,852	17,757	5,366	21,410	1.89	130.1	136	165	5TH			
			Sub-total			10,979	50,137	16,193	60,479	1.89	702.0	71	86			
			14	1102	Bacarra	8,028	23,297	8,407	26,940	1.46	41.6	560	648	5TH		
		1112		Laog City	32,456	69,428	38,377	83,756	1.89	97.5	712	859	2ND			
		1120		San Nicolas	14,492	23,310	18,770	27,632	1.72	41.0	569	674	5TH			
			Sub-total			54,976	116,035	65,554	138,328	1.77	180.1	644	768			
			15	1107	Carasi	0	420	0	632	4.17	101.9	4	6	6TH		
	1109	Dingras		5,445	26,427	5,801	30,519	1.45	90.2	293	338	5TH				
	1111	Espirito Banna		2,658	12,846	3,033	15,342	1.79	541.0	24	28	5TH				
	1113	Marcos		0	10,273	2,571	12,990	2.37	78.0	132	167	5TH				
	1118	Piddig		2,749	14,727	3,052	17,078	1.49	136.8	108	125	5TH				
	1121	Sarrat		4,743	18,738	6,940	21,272	1.28	70.7	265	301	5TH				
	1122	Solsona		2,416	14,684	2,995	18,883	2.55	143.5	102	132	5TH				
	1123	Vintar		4,230	23,282	4,495	27,084	1.52	460.9	51	59	5TH				
		Sub-total				22,241	121,397	28,887	143,800	1.71	1,623.0	75	89			
		16		1103	Badoc	1,843	22,259	1,728	25,627	1.42	56.6	393	453	5TH		
	1105		Batac	10,137	37,460	12,842	43,092	1.41	120.1	312	359	-				
	1108		Curriniao	1,010	7,785	1,046	9,467	1.98	20.8	374	455	5TH				
	1114		Nueva Era	763	3,915	1,143	5,238	2.95	564.7	7	9	5TH				
	1116		Paoay	0	16,962	1,171	20,680	2.00	62.0	274	334	5TH				
	1119		Pinili	2,015	13,478	2,022	14,950	1.04	70.0	193	214	5TH				
			Sub-total			15,768	101,859	19,952	119,054	1.57	894.2	114	133			
	12	Ilocos Sur	17	1203	Bantay	78,668	442,250	125,162	519,930	1.63	2,579.6	171	202	3RD		
						0	22,215	6,212	26,024	1.60	76.6	290	340	5TH		
				1205	Cabugao	5,840	24,350	7,546	27,997	1.41	60.7	401	461	5TH		
				1207	Caoyan	2,698	14,027	6,503	15,637	1.09	26.0	540	601	6TH		
				1212	Magsingal	4,384	19,119	4,237	22,271	1.54	85.1	225	262	5TH		
				1213	Nagbukel	0	3,528	0	3,806	0.76	34.9	101	109	6TH		
				1214	Narvacan	2,643	30,589	2,750	35,153	1.40	98.4	311	357	6TH		
				1219	San Ildefonso	0	3,629	1,004	4,528	2.24	17.2	211	263	6TH		
				1220	San Juan	3,215	17,390	3,323	20,328	1.57	52.1	334	390	5TH		
				1221	San Vicente	957	8,462	1,097	9,989	1.67	15.1	560	662	6TH		
				1222	Santa	1,690	11,325	1,712	12,570	1.05	51.6	219	244	5TH		
				1223	Sta. Catalina	1,198	9,731	8,184	11,388	1.58	13.5	721	844	6TH		
				1226	Sta. Maria	3,154	21,244	3,464	23,821	1.15	49.6	428	480	5TH		
				1228	Sto. Domingo	0	17,674	2,702	20,720	1.60	57.8	306	358	5TH		
				1230	Sinait	2,632	18,992	2,789	21,779	1.38	80.7	235	270	5TH		
				1234	Vigan	33,382	33,382	38,373	38,574	1.46	27.5	1,214	1,403	3RD		
					Sub-total			61,793	255,657	89,896	294,585	1.43	746.8	342	394	
					18	1202	Banayoyo	0	5,022	778	5,864	1.56	31.2	161	188	6TH
				1204		Burgos	0	8,339	1,206	9,601	1.42	44.3	188	217	6TH	
1206				Candon		5,339	36,692	6,903	43,473	1.71	76.9	477	565	4TH		
1209				Gahimuyod		0	6,556	412	7,941	1.94	34.4	191	231	6TH		
1211				Lidlidda		0	2,728	1,127	3,515	2.57	29.7	92	118	6TH		
1217				San Emilio		0	4,385	1,970	5,649	2.57	132.8	33	43	6TH		
1218				San Esteban		660	5,487	712	6,327	1.43	23.4	234	270	6TH		
1227		Santiago	840	11,807		2,234	14,427	2.02	74.5	158	194	5TH				
		Sub-total				6,839	81,016	15,342	96,797	1.80	447.2	181	216			
		19	1201	Alilem		0	4,585	1,251	5,314	1.49	156.2	29	34	6TH		
1208			Cervantes	1,848	9,588	2,303	12,476	2.67	230.7	42	54	5TH				
1210			Gregorio del Pilar	0	3,071	570	3,417	1.07	104.2	29	33	6TH				
1215			Quirino	0	5,267	1,234	6,623	2.32	240.2	22	28	5TH				
1216	Sakdo		1,190	8,277	1,269	9,397	1.28	23.4	354	402	6TH					

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION 1

Province Code	Zone Name	Municipality Number	Municipality Code	Municipality Name	Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density		Revenue Classi- fication
					1980		1990				1980	1990	
					Urban	Total	Urban	Total					
			1224	Sta. Cruz	1,820	22,957	4,113	28,764	2.28	101.6	226	283	5TH
			1225	Sta. Lucia	2,003	17,292	2,140	20,504	1.72	49.6	349	413	5TH
			1229	Sigay	0	1,736		1,964	1.24	114.6	15	17	6TH
			1231	Sugpon	0	3,069	889	2,844	-0.56	182.8	16	16	6TH
			1232	Suyo	0	6,434	1,510	7,950	2.14	124.0	52	64	6TH
			1233	Tagudin	3,175	23,361	4,645	29,295	2.29	58.3	401	502	5TH
				Sub-total	10,036	105,577	19,924	128,548	1.99	1,385.6	76	93	
13	La Union				72,776	453,031	157,429	548,742	1.94	1,493.1	303	368	2ND
		20	1303	Bacnotan	2,962	24,825	4,229	29,568	1.76	76.6	324	386	5TH
			1304	Baguio	0	7,016	1,117	9,418	2.99	49.5	142	190	6TH
			1305	Balacan	4,377	25,222	5,909	30,042	1.76	60.4	418	497	5TH
			1306	Bangar	2,890	23,739	2,992	25,966	0.90	47.4	501	548	5TH
			1310	Luna	3,532	25,106	4,035	28,308	1.21	52.6	477	538	5TH
			1314	San Fernando	26,324	68,478	43,955	84,949	2.18	120.8	567	703	2ND
			1315	San Gabriel	1,601	10,258	1,953	12,532	2.02	178.1	58	70	5TH
			1316	San Juan	2,667	20,382	3,384	25,046	2.08	55.7	366	450	5TH
			1318	Santol	0	7,844	1,105	9,544	1.98	93.7	84	102	6TH
			1319	Sudipen	767	10,807	1,827	13,043	1.90	84.4	128	155	6TH
				Sub-total	45,120	223,677	70,506	268,416	1.84	819.2	273	328	
		21	1301	Agoo	5,013	34,884	42,658	42,698	2.04	39.1	892	1,092	4TH
			1302	Aringay	4,525	27,552	6,758	33,258	1.90	109.5	252	304	5TH
			1307	Bauang	5,986	41,901	10,474	51,573	2.10	72.9	575	707	4TH
			1308	Burgos	0	4,153	1,127	5,410	2.63	70.8	59	76	6TH
			1309	Caba	1,639	14,128	2,015	16,620	1.64	66.7	212	249	5TH
			1311	Naguilian	3,627	29,333	6,831	36,328	2.16	78.1	376	465	5TH
			1312	Fugo	1,173	7,788	2,483	10,939	3.46	43.2	180	253	5TH
			1313	Rosario	3,411	29,360	10,523	35,010	1.78	72.8	403	481	3RD
			1317	Sto. Tomas	1,508	22,633	1,802	27,352	1.91	64.0	354	427	5TH
			1320	Tubao	774	17,622	2,252	21,138	1.84	56.8	310	372	6TH
				Sub-total	27,656	229,354	86,923	280,326	2.03	673.9	340	416	
14	Pangasinan				435,140	1,637,510	925,963	2,020,273	2.12	5,368.2	305	376	1ST
		22	1401	Agno	2,005	17,256	2,112	21,197	2.08	165.2	104	128	5TH
			1405	Anda	1,935	20,472	2,400	26,856	2.75	90.8	225	296	5TH
			1408	Bani	3,830	29,128	4,253	37,180	2.47	152.7	191	243	5TH
			1414	Bolinao	3,857	39,370	10,615	49,202	2.25	235.8	167	209	4TH
				Sub-total	11,627	106,226	19,380	134,435	2.38	644.5	165	209	
		23	1402	Aguilar	2,505	22,100	11,375	27,303	2.14	147.5	150	185	5TH
			1403	Alaminos	6,558	47,757	17,046	59,363	2.20	166.8	286	356	3RD
			1413	Binaluey	9,669	47,374	25,459	59,601	2.32	50.3	942	1,185	4TH
			1415	Bugallon	10,049	39,107	11,465	47,412	1.94	167.3	234	283	5TH
			1416	Burgos	1,886	12,828	2,548	14,774	1.42	130.3	98	113	5TH
			1419	Dasul	2,086	16,972	3,768	19,671	1.49	227.3	75	87	5TH
			1420	Infanta	1,966	12,334	2,490	16,149	2.73	228.4	54	71	5TH
			1421	Labrador	1,543	12,131	1,739	15,229	2.30	183.0	66	83	5TH
			1423	Lingayen	19,467	65,245	77,693	77,837	1.78	47.3	1,379	1,646	4TH
			1424	Mabini	1,921	15,993	2,290	17,628	0.98	222.1	72	79	5TH
			1428	Mangatarem	7,639	40,618	8,435	47,714	1.62	314.3	129	152	5TH
			1433	San Carlos City	12,582	101,333	33,569	124,529	2.08	170.9	593	729	2ND
			1443	Sual	2,873	15,810	5,129	19,594	2.17	159.0	99	123	5TH
			1446	Urbiztondo	6,848	27,372	10,394	33,102	1.92	49.4	554	670	5TH
				Sub-total	87,592	476,974	213,400	579,906	1.97	2,263.9	211	256	
		24	1412	Binalonan	6,925	35,606	9,617	43,839	2.10	75.7	470	579	4TH
			1417	Calasiao	10,267	48,144	62,966	62,966	2.72	42.4	1,135	1,485	4TH
			1418	Dagupan City	98,431	98,431	121,820	122,247	2.19	43.6	2,258	2,804	1ST
			1422	Laocac	0	19,269	1,543	22,864	1.73	27.2	708	841	5TH
			1426	Manaoag	36,775	36,775	32,144	45,339	2.12	45.0	817	1,008	5TH
			1427	Mangaldan	50,479	50,479	65,588	65,947	2.71	41.0	1,231	1,608	4TH
			1429	Mapandan	2,940	20,112	4,084	25,622	2.45	19.4	1,037	1,321	5TH
			1431	Pozzorobio	5,396	38,291	22,023	48,460	2.38	137.4	279	353	4TH
			1434	San Fabian	3,007	42,055	26,715	51,904	2.13	81.3	517	638	4TH
			1435	San Jacinto	3,456	20,630	5,493	25,722	2.23	31.6	653	814	5TH

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION 1

Province		Zone Number	Municipality		Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classi- fication
Code	Name		Code	Name	1980		1990				1980	1990	
			1439	Sta. Barbara	2,400	37,034	41,358	47,746	2.57	78.7	471	607	5TH
			1442	Sison	3,030	25,075	8,604	32,892	2.75	93.3	269	353	5TH
			Sub-total		223,106	471,901	401,955	595,548	2.35	716.6	659	831	
		25	1404	Alcala	2,684	25,015	19,190	30,684	2.06	33.4	749	919	5TH
			1409	Basista	17,206	17,206	22,360	22,360	2.65	15.6	1,103	1,433	5TH
			1410	Baufista	2,322	18,088	6,905	21,280	1.64	59.2	306	359	5TH
			1411	Bayambang	4,710	64,094	79,027	79,027	2.12	175.6	365	450	4TH
			1425	Malasiqui	6,052	70,968	10,439	92,053	2.64	127.5	557	722	4TH
			1432	Rosales	7,583	36,614	12,276	45,275	2.15	71.2	514	636	4TH
			1441	Sto. Tomas	8,954	8,954	10,229	10,253	1.36	8.5	1,053	1,206	6TH
			1447	Urdaneta	25,386	71,860	47,687	90,694	2.36	121.5	591	746	2ND
			1448	Villasis	6,044	39,161	19,272	47,475	1.94	75.8	517	626	4TH
			Sub-total		80,941	351,960	227,385	439,101	2.24	688.3	511	638	
		26	1406	Asingan	3,597	37,334	11,044	43,704	1.59	66.7	560	655	5TH
			1407	Bahugao	1,437	17,357	6,273	21,473	2.15	75.3	231	285	5TH
			1430	Natividad	2,836	15,260	3,002	17,010	1.09	78.3	195	217	5TH
			1436	San Manuel	6,720	29,648	11,300	34,017	1.38	136.5	217	249	5TH
			1437	San Nicolas	2,752	23,264	3,194	27,415	1.66	215.4	108	127	5TH
			1438	San Quintin	1,928	20,854	1,677	24,293	1.54	118.2	176	206	5TH
			1440	Sta. Maria	1,907	19,035	3,841	23,793	2.26	55.1	345	432	5TH
			1444	Tayug	6,629	26,296	15,505	31,575	1.85	60.0	438	526	4TH
			1445	Umingan	4,068	41,401	8,007	48,003	1.49	249.4	166	192	4TH
			Sub-total		31,874	230,449	63,843	271,283	1.64	1,054.9	218	257	

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION II

Province Code	Zone Name	Municipality Number	Municipality Name	Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classification
				1980		1990				1980	1990	
21	Cagayan			103,679	713,485	195,434	829,974	1.52	9,002.5	79	92	1ST
	27	2101	Abulog	1,970	23,984	4,526	24,562	0.24	172.9	139	142	5TH
		2105	Aparri	4,024	45,197	14,729	51,635	1.34	274.9	164	188	3RD
		2107	Ballesteros	4,418	22,317	4,977	24,849	1.08	130.4	171	191	5TH
		2109	Calsayan	0	8,994	709	11,222	2.24	517.2	17	22	5TH
		2110	Calamanyugan	3,540	15,121	4,327	17,276	1.34	87.9	172	197	5TH
		2111	Claveria	5,627	24,578	10,197	24,252	-0.13	205.2	120	118	5TH
		2118	Pamplona	860	17,653	3,567	16,775	-0.51	183.7	96	91	5TH
		2122	Sanchez - Mira	4,293	18,236	8,003	17,873	-0.20	209.2	87	85	5TH
		2124	Santa Praxedes	0	2,217	1,152	2,514	1.27	120.4	18	21	6TH
			Sub-total	24,732	178,297	52,187	190,958	0.69	1,901.7	94	100	
	28	2103	Allacapan	1,550	19,327	2,998	21,916	1.27	317.1	61	69	5TH
		2117	Lasam	3,140	23,117	4,852	27,376	1.50	224.1	103	122	5TH
		2120	Piat	2,338	14,086	2,151	17,771	2.35	150.0	94	118	5TH
		2121	Rizal	0	11,481	436	12,478	0.84	134.8	85	93	6TH
		2126	Santo Nino (Faire)	3,193	19,548	4,049	18,608	-0.49	523.3	37	36	5TH
		2128	Tuzo	1,885	36,357	5,715	43,926	1.91	225.9	161	194	5TH
			Sub-total	12,106	123,916	20,201	142,075	1.38	1,575.2	79	90	
	29	2102	Alicala	3,720	24,574	3,985	29,161	1.73	197.6	124	148	5TH
		2104	Amulung	1,407	29,161	1,932	35,116	1.88	252.5	115	139	5TH
		2112	Enrile	7,815	23,469	8,471	25,608	0.88	194.9	120	131	5TH
		2115	Iguig	2,181	15,804	2,506	18,598	1.64	118.5	133	157	5TH
		2127	Solana	3,390	46,194	7,078	56,366	2.01	211.2	219	267	5TH
		2129	Tuguegarao	30,199	73,718	61,746	94,767	2.54	155.2	475	611	2ND
			Sub-total	48,712	212,920	85,718	259,616	2.00	1,129.9	188	230	
	30	2108	Buguey	2,042	21,297	5,023	22,889	0.72	148.6	143	154	5TH
		2114	Gonzaga	4,762	22,530	5,882	26,536	1.65	496.6	45	53	5TH
		2123	Santa Ana	1,388	12,586	5,936	17,614	3.42	151.7	83	116	5TH
		2125	Santa Teresita	1,650	10,176	2,037	11,557	1.28	35.4	288	327	5TH
			Sub-total	9,842	66,589	18,878	78,596	1.67	832.2	80	94	
	31	2106	Baggao	4,571	44,205	8,175	55,264	2.26	930.7	47	59	4TH
		2113	Gattaran	2,478	35,577	4,503	41,565	1.57	717.7	50	58	4TH
		2116	Lallo	1,238	27,023	3,451	31,373	1.50	713.0	38	44	5TH
		2119	Penablanca	0	24,958	2,321	30,527	2.03	1,202.1	21	25	5TH
			Sub-total	8,287	131,763	18,450	158,729	1.88	3,563.6	37	45	
22	Isabela			146,623	877,178	247,051	1,080,341	2.11	10,664.6	82	101	1ST
	32	2203	Aurora	2,907	20,475	3,788	24,903	1.98	49.3	415	505	5TH
		2207	Cabatuan	1,353	21,561	2,125	26,380	2.04	71.6	301	368	5TH
		2219	Mallig	5,271	17,311	3,427	22,060	2.45	133.0	130	166	5TH
		2222	Quezon	3,627	9,894	5,938	16,280	5.11	189.5	52	86	5TH
		2226	Roxas	11,054	33,295	15,510	40,230	1.91	124.4	268	323	4TH
		2230	San Manuel (Callang)	6,288	18,104	8,703	24,620	3.12	76.1	238	324	5TH
			Sub-total	30,500	120,640	39,491	154,473	2.50	643.9	187	240	
	33	2205	Burgos	0	15,252	5,506	17,485	1.38	74.6	204	234	5TH
		2206	Cabagan	1,563	29,126	7,523	34,999	1.85	430.0	58	81	5TH
		2210	Magsaysay	1,094	17,859	3,860	20,410	1.34	188.6	95	108	5TH
		2212	Divilican	0	1,873	0	2,479	2.84	197.4	9	13	6TH
		2214	Gamu	4,409	17,050	4,623	19,141	1.16	185.5	92	103	5TH
		2215	Ilgan	12,205	79,935	22,057	99,120	2.17	1,392.6	57	71	3RD
		2217	Luna (Antatet)	2,029	9,819	2,334	12,335	2.31	45.7	215	270	6TH
		2218	Maconacon	0	4,555	1,153	7,259	4.77	135.0	34	54	6TH
		2220	Naguilian	6,437	20,274	6,908	24,131	1.76	89.4	227	270	5TH
		2223	Quirino	0	14,481	1,371	17,070	1.66	125.8	115	136	5TH
		2225	Reina Mercedes	4,439	14,497	5,200	17,139	1.69	36.3	399	472	6TH
		2233	San Pablo	0	13,868	1,637	16,680	1.86	637.5	22	26	5TH
		2235	Santa Maria	0	13,669	3,122	16,767	2.06	139.6	98	120	5TH
		2236	Sto. Tomas	1,671	16,035	2,149	18,063	1.20	60.7	264	298	6TH
		2237	Tumauini	2,385	32,208	4,714	40,664	2.36	466.9	69	87	5TH
			Sub-total	36,232	300,501	72,157	363,742	1.93	4,205.6	71	86	
	34	2201	Alicia	8,561	36,911	10,101	47,674	2.59	153.7	240	310	4TH
		2202	Angadanan	3,824	27,915	5,498	32,548	1.55	204.0	137	160	5TH
		2208	Cauayan	14,444	62,694	24,682	83,591	2.92	379.8	163	220	3RD

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION II

Province Code	Zone Name	Zone Number	Municipality Code	Municipality Name	Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classifi- cation
					1980		1990				1980	1990	
					Urban	Total	Urban	Total					
			2209	Cordon	783	21,153	1,424	27,544	2.68	143.6	147	192	5TH
			2213	Echague	5,788	41,703	8,870	51,916	2.21	680.4	61	76	4TH
			2216	Jones	3,528	29,046	4,278	34,373	1.70	352.5	82	98	5TH
			2224	Ramon (Aguinaldo)	4,577	31,048	8,425	33,444	0.75	74.6	416	448	5TH
			2227	San Agustin	1,233	14,992	1,401	16,577	1.01	276.0	54	60	5TH
			2228	San Guillermo	2,368	7,038	3,141	10,700	4.28	167.7	42	64	6TH
			2229	San Isidro	0	11,614	3,363	14,444	2.20	71.9	162	201	6TH
			2232	San Mateo	7,526	41,463	7,912	48,461	1.57	99.8	415	486	4TH
			2234	Santiago	17,370	70,402	41,724	90,787	2.58	255.1	276	356	2ND
				Sub-total	70,002	395,979	120,819	492,059	2.20	2,859.1	138	172	
		35	2204	Benito Soliven	3,608	16,836	4,356	20,236	1.86	166.4	101	122	5TH
			2211	Dimapigui	0	770	643	2,105	10.58	574.0	1	4	6TH
			2221	Palanan	0	10,373	2,194	11,431	0.98	747.1	14	15	5TH
			2231	San Mariano	6,281	32,079	7,391	36,295	1.24	1,468.5	22	25	4TH
				Sub-total	9,889	60,058	14,584	70,067	1.55	2,956.0	20	24	
23	Nueva Vizcaya				45,411	242,946	71,919	301,179	2.17	3,903.9	62	77	4TH
		36	2302	Ambaguio	0	3,876	0	7,241	6.45	158.5	24	46	6TH
			2304	Bagabag	4,881	20,963	6,247	26,028	2.19	258.5	81	101	5TH
			2305	Bambang	8,366	26,340	11,805	33,663	2.48	302.2	87	111	5TH
			2306	Bayombong	15,471	32,234	13,518	39,886	2.15	160.5	201	249	5TH
			2307	Diadi	1,204	8,650	1,635	11,351	2.75	104.1	83	109	6TH
			2311	Kayapa	0	20,597	660	18,685	-0.97	481.4	43	39	5TH
			2312	Quezon	0	9,766	0	12,206	2.26	186.2	52	66	6TH
			2314	Solano	8,292	36,901	22,965	44,246	1.83	97.6	378	454	4TH
			2315	Villaverde (Ibug)	0	10,699	3,731	13,594	2.42	111.1	96	122	6TH
				Sub-total	38,214	170,026	60,561	206,900	1.98	1,860.0	91	111	
		37	2301	Alfonso Castaneda	0	2,812	0	3,751	2.92	373.9	8	10	6TH
			2303	Ariteo	3,669	22,118	4,093	25,942	1.61	402.6	55	64	5TH
			2308	Dupax del Norte	2,352	16,830	2,736	20,904	2.19	351.8	48	59	5TH
			2309	Dupax del Sur	0	9,682	3,231	12,297	2.42	387.1	25	32	5TH
			2310	Kasibu	0	15,107	0	21,425	3.56	358.5	42	60	5TH
			2313	Sia. Fe	1,176	6,371	1,298	9,960	4.57	169.9	37	59	6TH
				Sub-total	7,197	72,920	11,358	94,279	2.60	2,043.9	36	46	
24	Quirino				16,170	84,018	29,086	114,132	3.11	3,057.2	27	37	5TH
		38	2401	Aglipay	723	12,452	2,802	16,427	2.81	340.6	37	48	5TH
			2402	Cabarroguis	4,236	17,615	11,230	21,793	2.15	240.0	73	91	5TH
			2403	Diffun	5,283	23,305	7,344	31,266	2.98	161.3	144	194	5TH
			2406	Saguday	2,818	6,736	3,817	9,918	3.94	55.5	121	179	6TH
				Sub-total	13,060	60,108	25,193	79,404	2.82	797.5	75	100	
		39	2404	Madella	3,110	17,397	3,893	25,268	3.80	637.7	27	40	4TH
			2405	Nagtipunan	0	6,513	0	9,460	3.80	1,622.1	4	6	5TH
				Sub-total	3,110	23,910	3,893	34,728	3.80	2,259.7	11	15	

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION III

Province Code	Zone Name	Municipality Number Code Name	Population		Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classifi- cation						
			1980 Urban Total	1990 Urban Total			1980	1990							
31	Bataan	40	3101	Abucay	143,952	326,074	317,528	425,803	2.70	1,373.0	237	310	2ND		
			3102	Bagac	8,299	22,890	20,024	26,708	1.55	79.7	287	335	5TH		
			3103	Balanga	3,191	13,223	8,950	18,241	3.27	231.2	57	79	5TH		
			3104	Dinalupihan	13,572	39,473	37,348	51,512	2.70	165.6	238	311	3RD		
			3105	Hermosa	10,535	41,776	58,158	58,172	3.37	44.6	937	1,304	4TH		
			3108	Morong	6,543	25,896	19,952	34,633	2.95	157.0	165	221	5TH		
			3109	Orani	3,206	10,730	4,715	17,155	4.80	219.1	49	78	5TH		
			3111	Pilar	18,647	33,372	28,250	43,494	2.68	59.0	566	737	4TH		
			3112	Samal	4,720	18,711	19,580	25,244	3.04	37.6	498	671	5TH		
							10,584	18,198	17,062	21,991	1.91	56.3	323	391	5TH
					79,297	224,269	214,039	297,150	2.85	1,050.1	214	283			
		41	3106	Limay	8,456	24,493	27,287	32,629	2.91	103.6	236	315	3RD		
	3107		Mariveles	41,243	49,018	46,737	60,761	2.17	153.9	319	395	3RD			
	3110		Orion	14,956	28,294	29,465	35,263	2.23	65.4	433	539	5TH			
					64,655	101,805	103,489	128,653	2.37	322.9	315	398			
32	Bulacan	42	3202	Bigaa (Balagtas)	579,350	1,103,198	1,189,802	1,505,219	3.16	2,625.0	420	573	1ST		
			3203	Baliuag	28,841	28,841	42,592	42,658	3.99	28.0	1,030	1,524	4TH		
			3204	Bocaue	71,015	71,015	89,622	89,719	2.37	45.1	1,575	1,989	3RD		
			3205	Bulacan	50,017	50,017	67,046	67,243	3.00	80.8	619	832	3RD		
			3206	Bustos	1,818	35,148	43,036	48,770	3.33	73.0	482	668	4TH		
			3207	Calumpit	3,467	25,907	20,487	34,965	3.04	47.5	545	736	5TH		
			3209	Guiguinto	45,751	45,751	59,002	59,042	2.58	44.7	1,024	1,321	4TH		
			3210	Hagonoy	27,932	27,932	44,382	44,532	4.77	25.0	1,118	1,783	4TH		
			3211	Malolos	23,510	73,654	77,310	90,212	2.05	182.6	403	494	3RD		
			3212	Marilao	96,324	96,324	124,634	125,178	2.65	83.9	1,148	1,492	3RD		
			3213	Meycauayan	12,982	35,298	56,117	56,361	4.79	24.0	1,471	2,348	3RD		
			3215	Obando	84,124	84,124	123,816	123,982	3.95	23.9	3,520	5,188	2ND		
			3216	Pandi	34,419	39,877	25,611	46,346	1.51	13.6	2,932	3,408	4TH		
			3217	Paombong	3,280	22,827	32,630	32,648	3.64	32.9	694	992	5TH		
			3218	Plaridel	551	26,438	17,385	32,052	1.94	40.7	650	788	4TH		
			3219	Pulilan	6,012	39,376	52,927	52,954	3.01	43.5	905	1,217	4TH		
			3224	Santa Maria	38,359	38,359	48,184	48,199	2.31	29.1	1,318	1,656	5TH		
							16,186	59,131	91,295	91,468	4.46	78.8	750	1,161	3RD
							544,588	800,019	1,016,076	1,086,329	3.11	897.1	892	1,211	
				43	3201	Angat	7,447	25,006	17,600	34,494	3.27	69.0	362	500	5TH
			3208		Dona R. Trinidad	0	4,790	0	8,614	6.04	330.3	15	26	6TH	
			3214		Norzagaray	10,061	26,202	23,997	33,485	2.48	276.0	95	121	4TH	
			3220		San Ildefonso	1,820	45,224	14,776	59,598	2.80	127.8	354	466	4TH	
			3221		San Jose del Monte	2,592	91,324	92,150	142,047	4.52	85.0	1,074	1,671	3RD	
			3222		San Miguel	11,844	73,590	17,978	91,124	2.16	741.0	99	123	3RD	
3223	San Rafael	998	37,043		7,225	49,528	2.95	98.8	375	501	4TH				
					34,762	303,179	173,726	418,890	3.29	1,727.9	175	242			
33	Nueva Ecija	44	3305	Carrangalan	278,846	1,074,028	511,569	1,312,610	2.03	5,284.3	203	248	1ST		
			3306	Cuyapo	3,367	19,977	8,734	26,064	2.70	751.2	27	35	5TH		
			3311	Guimba	7,314	39,825	6,735	43,163	0.79	167.5	238	257	4TH		
			3314	Licab	9,974	59,101	23,173	73,363	2.19	94.5	625	776	4TH		
			3315	Llanera	2,496	14,606	5,084	17,202	1.65	56.3	259	306	6TH		
			3316	Lupao	4,913	18,733	2,090	23,285	2.20	118.0	159	197	5TH		
			3317	Munoz	3,177	23,150	5,995	27,481	1.73	151.7	153	181	5TH		
			3318	Nampicuan	8,635	43,398	8,952	50,356	1.50	231.3	188	218	4TH		
			3320	Pantabangan	0	7,630	2,681	8,426	1.00	52.6	145	160	6TH		
			3322	Quezon	4,950	13,976	4,543	18,341	2.76	376.6	37	49	5TH		
			3326	San Jose City	1,939	20,936	11,674	25,574	2.02	75.1	279	341	5TH		
			3329	Santo Domingo	14,948	64,531	30,644	82,836	2.53	180.5	358	459	3RD		
			3330	Talavera	691	29,138	13,811	35,864	2.10	74.9	389	479	5TH		
			3331	Talugtug	11,740	62,493	25,103	77,256	2.14	111.8	559	691	4TH		
							3,760	11,785	4,377	14,036	1.76	51.8	228	271	6TH
							77,904	429,279	153,596	523,187	2.00	2,493.8	172	210	
				45	3303	Cabanatuan City	60,572	138,895	134,694	173,065	2.22	192.7	721	898	1ST

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION III

Province Code	Zone Name	Municipality Number	Municipality Code	Municipality Name	Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classifi- cation
					1980 Urban	1980 Total	1990 Urban	1990 Total			1980	1990	
34	Pampanga	46	3301	Alinga	4,578	32,489	4,983	40,425	2.21	115.6	281	350	5TH
			3312	Jaen	4,819	39,233	5,293	47,346	1.90	95.6	410	495	5TH
			3321	Paparanda	4,743	16,825	5,263	20,500	2.00	94.2	179	218	5TH
			3327	San Leonardo	7,107	34,856	18,635	39,740	1.32	60.1	580	661	5TH
			3328	Santa Rosa	17,194	32,564	20,289	40,439	2.19	144.2	226	280	5TH
			3332	Zaragoza	9,729	24,523	11,459	28,743	1.60	95.6	257	301	5TH
					48,170	180,490	65,922	217,193	1.87	605.3	298	359	
		47	3304	Cabiao	3,825	38,086	12,520	48,850	2.52	112.5	339	434	5TH
	3308		Gapan	29,235	60,273	42,192	70,489	1.58	134.2	449	525	3RD	
	3324		San Antonio	2,009	43,155	5,118	51,815	1.85	171.7	251	302	5TH	
	3325		San Isidro	5,195	28,673	5,684	34,349	1.82	56.4	508	609	5TH	
						40,264	170,187	65,514	205,503	1.90	474.8	358	433
		48	3302	Bugabon	12,833	32,591	18,758	39,616	1.97	260.2	125	152	5TH
	3307		Gabaldon	3,996	17,243	16,377	21,744	2.35	228.2	76	95	5TH	
	3309		Gen. M. Natividad	1,696	17,463	4,159	21,984	2.33	95.1	184	231	5TH	
	3310		Gen. Tinio	11,036	23,507	17,562	29,491	2.29	682.3	34	43	5TH	
	3313		Laur	6,286	17,806	6,729	21,464	1.89	57.5	310	373	5TH	
	3319		Palayan City	8,729	15,024	9,882	20,393	3.10	35.6	422	573	6TH	
	3323		Rizal	7,360	31,543	18,376	38,970	2.14	158.8	199	245	5TH	
						51,936	155,177	91,843	193,662	2.24	1,517.7	102	128
		49	3401	Angels City	624,902	1,187,772	1,079,806	1,532,682	2.58	2,180.2	545	703	1ST
	3409		Mabalacat	189,822	189,822	236,063	236,685	2.23	60.3	3,148	3,925	1ST	
	3415		Porac	54,864	81,390	110,500	121,115	4.05	152.6	533	794	3RD	
						4,268	51,172	28,756	68,215	2.92	343.1	149	199
					248,954	322,384	375,319	426,015	2.83	556.0	580	766	
		50	3403	Arayat	10,658	57,039	15,691	73,189	2.52	134.7	424	543	5TH
	3405		Canlaba	9,101	53,222	23,072	68,145	2.50	208.7	255	327	5TH	
3411	Magalang		10,517	35,022	18,965	43,940	2.29	97.3	360	452	5TH		
3413	Mexico		6,496	53,771	33,626	69,441	2.59	117.4	458	591	5TH		
3417	San Luis		2,932	25,835	18,342	31,920	2.14	56.8	455	562	5TH		
3419	Santa Ana		2,626	25,494	16,234	32,540	2.47	45.9	555	709	5TH		
					42,330	250,383	125,930	319,175	2.46	660.8	379	483	
	51		3402	Apalit	15,777	48,505	62,373	62,373	2.55	61.5	789	1,014	4TH
3404		Bacolor	6,477	51,209	49,560	67,259	2.76	71.7	714	938	4TH		
3406		Florida Blanca	8,729	51,918	9,707	66,146	2.45	125.0	415	529	4TH		
3407		Guagua	72,989	72,989	88,242	88,290	1.92	62.3	1,172	1,417	3RD		
3408		Lubao	18,974	77,907	43,309	99,705	2.50	155.8	500	640	4TH		
3410		Macabebe	46,070	46,070	55,486	55,505	1.88	44.0	1,047	1,261	4TH		
3412		Masantol	12,780	35,535	12,486	41,964	1.68	129.8	274	323	4TH		
3414		Minalin	9,110	27,557	34,794	34,795	2.36	29.1	947	1,196	5TH		
3416		San Fernando	111,471	111,471	156,891	157,851	3.54	81.2	1,373	1,944	1ST		
3418		San Simon	0	23,641	7,709	30,851	2.70	57.4	412	537	5TH		
3420		Santa Rita	3,530	25,126	22,008	28,296	1.20	33.0	761	857	5TH		
3421		Santo Tomas	25,082	25,082	33,267	33,309	2.88	21.3	1,178	1,564	5TH		
3422		Sexmoan	2,629	17,995	2,725	21,148	1.63	91.3	197	232	5TH		
				333,618	615,005	578,557	787,492	2.50	963.4	638	817		
35	Tarlac	52	3503	Camiling	123,117	690,268	256,594	859,651	2.22	3,053.5	226	282	1ST
			3508	Mayantoc	12,259	54,002	19,672	62,716	1.51	152.3	354	412	3RD
			3513	San Clemente	4,139	17,180	4,801	21,170	2.11	166.4	103	127	5TH
			3514	San Jose	2,092	7,136	2,509	8,873	2.20	63.7	112	139	6TH
			3516	Santa Ignacia	2,980	14,451	5,100	20,483	3.55	574.8	25	36	3RD
							4,318	25,290	13,209	30,470	1.88	67.2	377
					25,788	118,059	45,291	143,712	1.99	1,024.4	115	140	
		53	3501	Anao	0	6,536	354	7,955	1.98	40.7	161	196	6TH
	3506		Gerona	4,969	50,566	18,431	59,486	1.64	153.2	330	388	4TH	
	3509		Moncada	4,610	34,542	8,792	41,672	1.89	97.5	354	428	4TH	
3510	Paniqui		13,576	55,151	16,346	64,949	1.65	117.0	471	555	3RD		

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION III

Province Code	Zone Name	Municipality Number	Municipality Code	Municipality Name	Population 1980		Population 1990		Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classifi- cation	
					Urban	Total	Urban	Total			1980	1990		
36	Zambales		3511	Pura	2,796	14,840	7,862	18,032	1.97	46.1	322	391	5TH	
			3512	Ramos	3,432	11,245	4,015	13,566	1.89	41.2	273	330	6TH	
			3515	San Manuel	0	13,526	4,433	17,261	2.47	57.2	237	302	5TH	
						29,383	186,406	60,233	222,921	1.81	552.7	337	403	
		54	3502	Bamban	8,159	26,141	20,620	35,639	3.15	144.9	180	246	5TH	
			3504	Capas	2,185	46,645	16,238	61,205	2.75	451.8	103	135	4TH	
			3505	Concepcion	10,365	80,859	14,683	103,146	2.46	257.5	314	401	3RD	
			3507	La Paz	6,977	35,423	8,191	41,946	1.70	126.1	281	333	5TH	
			3517	Tarlac	33,342	161,701	78,595	208,722	2.59	373.0	434	560	1ST	
			3518	Victoria	6,918	35,034	12,743	42,360	1.92	123.3	284	344	5TH	
						67,946	385,803	151,070	493,018	2.48	1,476.4	261	334	
		55	3603	Candelaria	2,011	15,732	3,375	18,539	1.66	437.6	36	42	5TH	
			3606	Masinloc	9,170	27,816	14,886	32,375	1.53	256.0	109	126	4TH	
			3613	Santa Cruz	8,266	35,769	9,872	41,273	1.44	414.1	86	100	3RD	
							19,447	79,317	28,133	92,187	1.52	1,107.7	72	83
		56	3601	Botolan	3,063	27,204	3,282	35,604	2.73	613.7	44	58	5TH	
			3602	Cabangan	2,166	11,670	3,079	15,337	2.77	239.4	49	64	5TH	
			3605	Iba	8,343	22,857	0	29,221	2.49	153.4	149	190	5TH	
			3608	Palaui	1,970	17,226	2,339	21,577	2.28	310.0	56	70	5TH	
						15,542	78,957	8,700	101,739	2.57	1,316.5	60	77	
		57	3604	Castillejos	9,973	19,210	21,354	26,753	3.37	86.5	222	309	5TH	
			3607	Olongapo City	156,885	156,884	192,629	193,327	2.11	103.3	1,519	1,872	1ST	
			3609	San Antonio	17,027	22,447	19,989	26,944	1.84	205.0	199	131	5TH	
			3610	San Felipe	7,249	13,874	13,497	15,624	1.19	103.7	134	151	5TH	
			3611	San Marcelino	9,118	25,037	22,730	36,598	3.87	440.9	57	83	4TH	
			3612	San Narciso	11,271	19,175	13,256	22,891	1.79	71.6	268	320	5TH	
		3614	Subic	16,744	30,428	36,633	46,929	4.43	279.2	109	168	4TH		
				228,267	287,055	320,088	369,066	2.54	1,290.2	222	286			

Appendix 2.3 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION IV

Province Code	Name	Zone Number	Municipality Code Name		Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/km ²)		Revenue Classi- fication		
					1980		1990				1,980	1,990			
			Urban	Total	Urban	Total									
41	Aurora	58	4102	Casiguran	26,142	107,479	60,599	139,586	2.65	3,239.8	33	43	5TH		
			4103	Dilasag	3,046	13,968	6,879	18,388	2.79	551.6	25	33	5TH		
			4104	Dinalungan	1,888	6,737	2,495	11,195	5.21	430.0	16	26	5TH		
					2,336	5,258	3,296	6,770	2.56	340.7	15	20	6TH		
				7,270	25,963	12,670	36,353	3.42	1,322.3	20	27				
		59	4101	Baler	10,747	18,406	17,942	24,689	2.98	134.0	137	184	5TH		
	4105		Dingalan	639	8,729	8,830	14,475	5.19	317.4	28	46	6TH			
	4106		Dipaculao	3,167	15,610	7,469	18,951	1.96	385.6	40	49	5TH			
	4107		Maria Aurora	4,319	26,906	6,784	28,378	0.53	405.2	66	70	5TH			
	4108		San Luis	0	11,865	6,904	16,740	3.50	675.3	18	25	5TH			
				18,872	81,516	47,929	103,233	2.39	1,917.5	43	54				
	42	Batangas	60	4203	Balayan	199,829	1,166,869	398,725	1,476,783	2.38	3,165.8	369	466	1ST	
4207				Calaca	11,485	43,214	14,209	53,870	2.23	108.7	399	496	3RD		
4208				Calatagan	3,466	36,280	4,276	45,377	2.26	100.2	362	453	5TH		
4213				Lian	4,104	27,406	8,402	35,543	2.63	112.0	245	317	5TH		
4219				Nasugbu	5,822	25,928	9,248	31,296	1.90	76.8	338	408	5TH		
4234				Tuy	13,203	59,035	22,965	75,515	2.49	263.0	224	287	3RD		
					2,873	24,913	3,436	30,409	2.01	122.4	204	248	5TH		
						40,953	216,776	62,536	272,010	2.30	783.1	277	347		
				61	4201	Agoncillo	0	16,042	1,094	20,227	2.35	54.7	293	370	5TH
4202					Alitagtag	2,855	14,409	2,797	16,016	1.06	23.4	616	684	5TH	
4206		Bauan	11,405		43,288	14,053	59,258	3.19	66.6	650	890	1ST			
4211		Laurel	1,908		17,777	2,359	22,099	2.20	68.1	261	325	5TH			
4212		Leucery	3,610		42,516	4,625	53,932	2.41	101.6	418	531	4TH			
4216		Mabini	1,578		23,489	811	30,474	2.64	43.0	546	709	5TH			
4224		San Luis	1,319		17,879	1,681	22,143	2.16	39.2	456	565	5TH			
4225		San Nicolas	1,503		10,445	1,762	13,174	2.35	26.6	393	495	6TH			
4227		Santa Teresita	1,723		11,064	2,015	12,005	0.82	12.5	885	960	6TH			
4229		Taal	29,514		29,514	34,895	34,925	1.70	29.7	994	1,176	5TH			
4233		Tingloy	1,715	13,297	1,897	15,430	1.50	32.4	410	476	6TH				
				57,130	239,720	67,989	299,683	2.26	497.8	482	602				
		62	4204	Balete	0	8,644	1,447	11,678	3.05	25.0	346	467	6TH		
4214			Lipa City	22,857	120,410	76,703	160,117	2.89	209.4	575	765	2ND			
4217			Malvar	3,193	17,915	5,883	24,253	3.08	36.4	492	666	5TH			
4218			Mataas na kahoy	4,261	11,982	5,464	15,240	2.43	22.1	542	690	5TH			
4220	Padre Garcia		2,641	19,469	3,417	25,958	2.92	93.7	208	277	5TH				
4228	Santo Tomas		3,309	42,741	5,382	58,209	3.14	91.1	469	639	4TH				
4230	Talisay		4,038	19,326	4,394	23,153	1.82	28.2	685	821	5TH				
4231	Tanauan		13,744	73,559	29,231	92,754	2.35	107.2	686	865	3RD				
				54,043	314,046	131,921	411,362	2.74	613.1	512	671				
	63		4205	Batangas City	24,794	142,674	90,312	184,970	2.63	283.0	504	654	1ST		
4209		Cuenca	4,276	17,002	5,189	20,176	1.73	40.4	421	499	5TH				
4210		Ibaan	2,545	25,713	2,461	31,220	1.96	99.0	260	315	5TH				
4221		Rosario	4,762	53,913	6,413	66,923	2.19	189.4	285	353	4TH				
4222		San Jose	1,253	28,564	1,399	38,680	3.08	49.5	577	781	5TH				
4226		San Pascual	3,886	26,057	17,671	34,629	2.88	35.0	744	989	2ND				
4232	Taysan	970	19,249	1,024	22,508	1.58	109.4	176	206	5TH					
			42,486	313,172	124,469	399,106	2.45	805.7	389	495					
	64	4215	Lobo	2,011	24,181	2,374	26,881	1.06	192.7	125	139	5TH			
4223		San Juan	3,206	58,974	9,436	67,741	1.40	273.4	216	248	4TH				
			5,217	83,155	11,810	94,622	1.30	466.1	178	203					
43	Cavite	65	4303	Bacoor	462,605	771,165	875,825	1,152,534	4.10	1,287.6	599	895	1ST		
			4304	Carmona	90,346	90,346	159,633	159,685	5.86	42.1	2,146	3,793	2ND		
			4305	Cavite City	19,486	19,486	22,339	28,247	3.78	30.8	633	917	5TH		
			4306	Dasmariñas	87,648	87,648	91,480	91,641	0.45	11.8	7,428	7,766	2ND		
					32,952	51,884	136,486	136,556	10.16	82.4	630	1,657	3RD		
			4307	Gen. Alvarez	45,515	45,515	65,973	65,977	3.78	9.4	4,842	7,019	4TH		
			4310	Imus	17,310	59,091	89,101	92,125	4.54	97.0	609	950	2ND		

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION IV

Province Code	Name	Zone Number	Municipality Code Name		Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/km ²)		Revenue Classi- fication
					1980		1990				1,980	1,990	
					Urban	Total	Urban	Total					
			4312	Kawit	39,360	39,360	47,755	47,755	1.95	13.4	2,937	3,564	3RD
					332,617	393,330	612,767	621,986	4.69	286.9	1,371	2,168	
		66	4309	General Trias	8,501	39,737	19,370	52,888	2.90	117.6	338	450	4TH
			4317	Novelleta	14,457	14,457	20,409	20,409	3.51	5.6	2,582	3,644	5TH
			4318	Rosario	33,305	33,305	45,387	45,405	3.15	3.6	9,251	12,613	4TH
			4321	Tanza	21,597	43,666	37,147	61,785	3.53	96.3	453	642	4TH
			4323	Trece Martirez City	1,471	8,578	5,623	15,686	6.22	39.1	219	401	5TH
					79,331	139,743	127,936	196,173	3.45	262.2	533	748	
		67	4308	Gen. E. Aguinaldo	3,446	9,569	3,712	10,954	1.36	42.2	227	260	6TH
			4311	Indang	4,855	30,971	7,000	39,294	2.41	81.8	379	480	5TH
			4313	Magallanca	1,664	9,689	2,047	12,556	2.63	78.6	123	160	5TH
			4314	Maragondon	3,862	18,014	4,546	22,814	2.39	98.4	183	232	5TH
			4316	Naic	4,536	38,235	19,992	51,629	3.05	86.0	445	600	5TH
			4322	Ternate	4,094	9,737	5,351	11,981	2.10	43.5	224	275	5TH
					22,457	116,215	42,648	149,228	2.53	430.5	270	347	
		68	4301	Alfonzo	3,560	21,976	6,765	28,944	2.79	65.2	337	444	5TH
			4302	Arnadeo	5,507	16,231	6,793	21,022	2.62	47.9	339	439	5TH
			4315	Mendez Nunez	8,372	15,041	17,651	17,652	1.61	16.7	901	1,057	5TH
			4319	Silang	7,041	52,310	52,035	93,790	6.01	104.2	502	900	4TH
			4320	Tugaytay City	3,720	16,319	9,230	23,739	3.82	74.0	221	321	4TH
					28,200	121,877	92,474	185,147	4.27	308.0	396	601	
44	Laguna				595,142	974,969	1,017,908	1,370,232	3.46	1,759.7	554	779	1ST
		69	4403	Binan	83,844	83,844	134,498	134,553	4.84	43.5	1,927	3,093	3RD
			4404	Cabuyao	8,135	46,375	38,914	66,975	3.74	84.6	548	792	2ND
			4405	Catamba	72,667	121,407	173,033	173,453	3.63	144.8	838	1,198	1ST
			4425	San Pedro	74,699	74,700	156,382	156,486	7.68	22.6	3,305	6,924	6TH
			4428	Santa Rosa	64,448	64,449	94,672	94,719	3.93	39.1	1,648	2,422	5TH
					303,793	390,775	597,499	626,186	4.83	334.6	1,168	1,871	
		70	4401	Alaminos	5,567	20,655	7,102	27,412	2.87	54.7	378	501	5TH
			4402	Bay	1,988	23,004	6,913	32,535	3.53	46.9	490	694	5TH
			4406	Calauan	2,838	25,307	6,808	32,736	2.61	66.4	381	493	5TH
			4411	Los Baños	39,202	49,650	66,071	66,211	2.92	56.5	879	1,172	4TH
			4417	Nagcarlan	8,805	30,696	14,291	37,696	2.08	78.1	393	483	5TH
			4423	Rizal	1,719	7,524	1,795	9,501	2.36	27.9	270	341	6TH
			4424	San Pablo City	68,900	131,908	78,580	161,630	2.05	214.0	616	755	1ST
					129,019	288,744	181,560	367,721	2.45	544.5	530	675	
		71	4407	Cavinti	5,794	13,247	7,428	15,131	1.34	70.4	188	215	5TH
			4410	Liliw (Lilio)	8,576	17,469	10,298	21,911	2.29	39.1	447	560	5TH
			4412	Luisiana	4,447	12,222	10,117	14,241	1.54	63.8	192	223	5TH
			4413	Lumban	11,797	17,393	14,765	19,773	1.29	96.8	180	204	5TH
			4415	Magdalena	2,648	10,453	3,098	13,450	2.55	34.4	304	391	5TH
			4416	Majayjay	7,152	13,725	8,365	15,875	1.47	69.6	197	228	5TH
			4419	Pagsanjan	6,456	19,526	9,375	25,024	2.51	26.4	740	948	5TH
			4422	Pila	7,425	21,002	8,974	27,467	2.72	31.2	673	880	5TH
			4426	Santa Cruz	60,736	60,737	76,563	76,603	2.35	38.6	1,573	1,985	3RD
			4430	Victoria	9,107	16,554	11,563	21,847	2.81	33.1	500	660	5TH
					124,138	202,328	160,546	251,322	2.19	503.4	402	499	
		72	4408	Famy	2,464	5,251	3,214	7,928	4.21	19.4	271	409	6TH
			4409	Kalayuan (Longo)	3,741	10,267	13,116	13,118	2.48	46.6	220	282	6TH
			4414	Mabitan	2,481	8,559	2,967	11,444	2.95	73.3	117	156	6TH
			4418	Pacta	16,414	16,414	20,576	20,579	2.29	32.4	507	635	5TH
			4420	Pakil	4,775	9,065	13,424	13,438	4.02	13.0	697	1,034	5TH
			4421	Pangil	3,761	10,539	4,772	15,212	3.74	23.0	458	661	5TH
			4427	Santa Maria	2,955	15,774	2,955	20,525	2.67	128.4	123	160	3RD
			4429	Siniloan	1,601	17,253	17,279	22,759	2.81	41.1	420	554	5TH
					38,192	93,122	78,303	125,003	2.99	377.2	247	331	

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION IV

Province Code	Zone Name	Zone Number	Municipality Code Name		Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/km ²)		Revenue Classi- fication	
					1980		1990				1980	1990		
					Urban	Total	Urban	Total						
45	Quezon	73	4505	Burdeos	330,106	1,145,188	451,379	1,372,381	1.83	8,706.7	132	158	1ST	
					2,565	15,098	3,060	17,983	1.76	84.0	180	214	5TH	
			4511	General Nakar	563	12,298	761	18,323	4.07	1,300.0	9	14	5TH	
			4514	Infanta	4,045	28,206	5,665	35,564	2.35	130.1	217	273	5TH	
			4515	Jonalig	1,240	4,028	1,425	4,542	1.21	51.7	78	88	6TH	
			4524	Panukulan	1,460	7,996	2,601	9,815	2.07	244.3	33	40	6TH	
			4525	Patnanungan	0	7,561	0	9,447	2.25	88.7	85	107	6TH	
			4529	Polillo	5,426	20,855	5,173	23,183	1.06	286.5	73	81	5TH	
		4531	Real	5,132	14,667	5,994	20,475	3.39	557.0	26	37	5TH		
						20,431	110,709	24,679	139,332	2.33	2,742.3	40	51	
		74	4517	Lucban	18,576	26,190	22,612	30,130	1.41	69.0	380	437	4TH	
			4520	Mauban	14,245	38,347	15,681	43,740	1.32	410.0	94	107	4TH	
			4532	Sampaloc	6,191	9,497	6,872	11,132	1.60	104.1	91	107	5TH	
			4539	Taysbas	14,506	42,731	17,178	54,355	2.44	310.8	137	175	4TH	
						53,518	116,765	62,343	139,357	1.78	893.9	131	156	
		75	4507	Candelaria	13,327	55,399	22,180	69,969	2.36	145.2	382	482	4TH	
			4509	Dolores	2,004	15,568	2,170	18,146	1.54	95.3	163	190	5TH	
			4518	Lucena City	109,400	109,400	149,812	150,624	3.25	68.0	1,609	2,215	2ND	
			4534	San Antonio	1,546	17,950	1,721	20,786	1.48	54.0	332	385	5TH	
			4537	Sarinya	8,747	75,193	10,115	91,081	1.94	239.8	314	380	4TH	
			4540	Tisong	9,740	49,291	13,286	60,662	2.10	115.9	425	523	4TH	
						144,764	322,801	199,284	411,268	2.45	718.2	449	573	
		76	4502	Alabat	4,789	11,545	5,271	11,785	0.21	91.0	127	130	5TH	
			4503	Atimonan	11,052	40,456	12,001	46,651	1.43	160.3	252	291	4TH	
			4522	Padre Burgos	2,661	14,276	2,344	15,219	0.64	69.0	207	221	5TH	
			4523	Pagbilao	9,713	32,127	11,131	41,635	2.63	168.5	191	247	5TH	
			4526	Perez	1,717	7,657	3,290	8,609	1.18	58.6	131	147	6TH	
						29,932	106,061	34,037	123,899	1.57	547.4	194	226	
77	4501	Agdangan	2,744	7,493	3,114	8,207	0.91	34.8	215	236	6TH			
	4510	General Luna	3,152	16,759	3,605	17,997	0.72	137.2	122	131	5TH			
	4513	Gunaca	9,523	42,737	12,275	48,195	1.21	214.7	199	224	4TH			
	4519	Macalelon	3,609	17,409	4,777	19,887	1.34	94.0	185	212	5TH			
	4527	Pitogo	4,519	16,048	6,172	17,086	0.63	89.9	179	190	5TH			
	4528	Plaridel	0	6,476	3,071	7,473	1.44	33.1	196	226	6TH			
	4541	Unisan (Pannon)	3,204	18,487	3,810	19,851	0.71	91.2	203	218	5TH			
					26,751	125,409	36,824	138,696	1.01	694.9	180	200		
78	4506	Caluang	8,941	58,723	13,801	64,856	1.00	395.0	149	164	4TH			
	4512	Guinayangan	2,396	29,585	6,115	32,829	1.05	144.6	205	227	5TH			
	4516	Lopez	11,852	59,245	19,702	66,010	1.09	390.6	152	169	4TH			
	4530	Quezon	3,055	10,885	4,009	11,345	0.41	54.0	202	210	6TH			
	4538	Tagkawayan	3,723	31,823	6,016	40,221	2.37	641.0	50	63	5TH			
				29,967	190,261	49,643	215,261	1.24	1,625.2	117	132			
79	4504	Buenavista	1,161	16,475	1,367	20,060	1.99	147.5	112	136	5TH			
	4508	Catanauan	9,116	42,714	12,508	48,019	1.18	175.0	244	274	5TH			
	4521	Mulanay	3,744	32,148	5,221	38,606	1.85	305.0	105	127	5TH			
	4536	San Narciso	4,134	29,366	8,452	33,025	1.18	201.9	145	164	5TH			
				18,155	120,703	27,548	139,710	1.47	829.4	146	168			
80	4533	San Andres	3,279	18,073	10,566	23,716	2.75	197.4	92	120	5TH			
	4535	San Francisco (Aurora)	3,309	34,406	6,455	41,142	1.80	458.0	75	90	5TH			
				6,588	52,479	17,021	64,858	2.14	655.4	80	99			
46	Rizal	81	4602	Antipolo	417,915	567,347	928,592	980,194	5.62	1,308.8	433	749	1ST	
			4610	Rodriguez (Montalban)	52,920	70,377	196,898	207,842	11.44	306.0	230	679	1ST	
			4611	San Mateo	28,131	42,749	60,129	67,074	4.61	312.7	137	214	3RD	
					33,828	53,014	82,289	82,310	4.50	64.9	817	1,268	4TH	
				114,879	166,140	339,316	357,226	7.96	683.6	243	523			

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION IV

Province Code	Province Name	Zone Number	Municipality Code Name		Population				Population Growth Rate 1980-1990 (%/Year)	Land Area (Km ²)	Population Density (Person/km ²)		Revenue Classi- fication
					1980		1990				1,980	1,990	
					Urban	Total	Urban	Total					
		82	4601	Angono	27,136	27,136	45,439	46,014	5.42	26.0	1,044	1,770	4TH
			4603	Baras	0	11,434	14,891	16,880	3.97	23.4	489	721	5TH
			4604	Binangonan	82,702	82,702	127,421	127,561	4.43	72.7	1,138	1,755	3RD
			4605	Cainta	60,280	60,280	126,680	126,839	7.72	10.2	5,910	12,435	1ST
			4606	Cardona	4,901	25,024	32,958	32,962	2.79	31.2	802	1,056	5TH
			4608	Morong	9,926	25,387	19,482	32,165	2.39	37.6	675	855	5TH
			4613	Taytay	76,930	76,931	112,163	112,403	3.86	38.8	1,983	2,897	2ND
			4614	Teresa	1,162	15,095	20,640	20,645	3.18	18.6	812	1,110	4TH
					263,037	323,989	499,674	515,469	4.75	258.5	1,253	1,994	
		83	4607	Jala-Jala	3,656	12,199	4,693	16,318	2.95	49.3	247	331	5TH
			4609	Pililla	10,490	23,716	32,771	32,771	3.29	74.0	320	443	4TH
			4612	Tanay	25,853	41,303	52,138	58,410	3.53	243.4	170	240	3RD
					39,999	77,218	89,602	107,499	3.36	366.7	211	293	

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION V

Province Code	Zone Name	Zone Number	Municipality Code Name		Population				Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density		Revenue Classifi- cation		
					1980		1990				1980	1990			
					Urban	Total	Urban	Total							
51 Albay	84	5110	Malinao		159,422	812,265	285,835	903,023	1.06	2,552.6	318	354	2ND		
					519	28,480	2,767	31,349	0.96	107.5	265	292	5TH		
					5117	Tabaco	16,669	72,911	32,546	85,697	1.63	116.4	627	737	3RD
					5118	Tiwi	3,669	28,836	9,563	34,658	1.86	105.8	273	328	4TH
					20,857	130,227	44,876	151,704	1.54	329.6	395	460			
	85	5107	Libon		6,893	52,358	16,607	59,910	1.36	185.4	282	323	4TH		
					5108	Ligao	9,043	70,127	15,644	72,560	0.34	246.6	284	294	5TH
					5112	Oas	5,365	52,468	10,960	53,061	0.11	271.3	193	196	5TH
					5114	Polangui	10,669	55,822	17,249	61,556	0.98	145.3	384	424	4TH
					31,970	230,775	60,460	247,087	0.69	848.6	272	291			
	86	5101	Bacacay		4,356	44,603	13,529	49,202	0.99	122.2	365	403	5TH		
					5102	Carnalig	3,344	46,216	3,590	49,975	0.79	130.9	353	382	5TH
					5103	Daraga	15,985	73,503	30,626	83,928	1.34	118.6	620	708	3RD
					5104	Guinobatan	4,417	53,844	14,338	58,926	0.91	242.1	222	243	4TH
					5106	Legaspi City	51,991	100,147	83,011	121,116	1.92	153.7	652	788	5TH
					5109	Malilipot	5,060	23,327	4,970	24,160	0.35	54.0	432	448	5TH
					5111	Manito	1,654	15,475	2,864	16,011	0.34	107.4	144	149	5TH
					5115	Rapu-Rapu	3,776	25,272	3,634	26,232	0.37	153.8	164	171	5TH
					5116	Sto. Domingo	5,774	19,839	7,402	22,939	1.46	52.6	377	436	5TH
							96,357	402,226	163,964	452,489	1.18	1,135.3	354	399	
87	5105	Jovellar		2,503	15,073	4,060	14,884	-0.13	105.4	143	141	6TH			
				5113	Pio Duran	7,735	33,964	12,475	36,859	0.82	133.7	254	276	5TH	
				10,238	49,037	16,535	51,743	0.54	239.1	205	216				
52 Camarines Norte	88	5202	Capalonga		89,296	309,208	132,549	390,982	2.37	2,112.1	146	185	3RD		
					5204	Jose Panganiban	5,974	21,803	7,591	23,557	0.78	291.5	75	81	5TH
					5205	Labo	8,962	30,376	16,087	44,408	3.87	214.4	142	207	4TH
					5207	Paracale	6,831	56,911	17,247	70,371	2.15	503.4	113	140	4TH
					5210	Santa Elena	8,951	25,407	12,678	39,192	4.43	194.8	130	201	5TH
								4,187	13,143	6,227	20,105	4.34	129.2	102	156
					34,905	147,640	59,830	197,633	2.96	1,333.3	111	148			
	89	5201	Basud		2,071	23,132	3,982	27,295	1.67	119.3	194	229	5TH		
					5203	Daet	27,897	55,003	39,202	66,477	1.91	204.2	269	326	3RD
					5206	Mercedes	12,169	27,753	16,325	34,300	2.14	155.1	179	221	5TH
				5208	San Lorenzo Ruiz	1,953	8,894	2,561	9,286	0.43	100.9	88	92	3RD	
				5209	San Vicente	1,859	6,603	1,949	7,321	1.04	61.9	107	118	6TH	
				5211	Talisay	2,425	13,923	2,506	16,896	1.95	46.8	298	361	5TH	
				5212	Vinzons	6,017	26,260	6,194	31,774	1.92	90.6	290	351	5TH	
				54,391	161,568	72,719	193,349	1.81	778.8	207	248				
53 Camarines Sur	90	5307	Cabusao		264,795	1,102,721	458,332	1,305,919	1.71	5,266.8	209	248	1ST		
					5312	Del Gallego	1,418	10,877	1,994	15,305	3.47	46.8	232	327	6TH
					5319	Lupi	2,266	13,517	3,081	17,047	2.35	286.7	47	59	5TH
					5330	Ragay	1,646	21,281	4,095	24,809	1.55	263.1	81	94	5TH
					5334	Sipocot	2,848	34,998	5,802	41,438	1.70	272.3	129	152	5TH
								7,344	43,639	16,985	49,501	1.27	211.6	206	234
					15,522	124,312	31,957	148,100	1.77	1,080.5	115	137			
	91	5311	Caramoan		2,814	32,759	3,454	36,107	0.98	249.7	131	145	5TH		
					5314	Garchitorena	3,382	16,929	3,695	19,439	1.39	243.3	69	80	5TH
					5317	Lagonoy	5,923	34,824	6,985	38,163	0.92	377.9	92	101	5TH
				5329	Presentacion (Parubcan)	0	13,285	6,389	14,788	1.08	143.8	92	103	5TH	
				12,119	97,797	20,523	108,497	1.04	1,015.2	96	107				
92	5308	Calabanga		6,762	43,162	18,496	54,261	2.31	163.8	264	331	4TH			
				5315	Gos	8,125	36,365	9,559	39,888	0.93	210.6	173	189	5TH	
				5333	San Jose	3,426	23,971	7,561	27,517	1.39	39.0	615	706	5TH	
				5335	Siruma	621	11,649	812	13,103	1.18	127.4	91	103	5TH	

Appendix 2.2 PAST DEMOGRAPHIC DATA BY MUNICIPALITY, ZONE, PROVINCE AND REGION

REGION V

Province Code	Zone Name	Zone Number	Municipality		Population				Population Growth Rate 1980 - 1990 (%/Year)	Land Area (Km ²)	Population Density (Person/Km ²)		Revenue Classifi- cation
			Code	Name	1980		1990				1980	1990	
			5337	Tinambac	4,290	39,743	7,640	46,570	1.60	314.6	126	148	5TH
					23,224	154,890	44,068	181,339	1.59	855.4	181	212	
	93		5304	Bonbon	0	8,259	6,743	10,874	2.79	44.2	187	246	6TH
			5309	Canaligan	4,153	11,023	15,431	15,436	3.42	13.0	848	1,187	6TH
			5310	Canaman	4,566	15,835	6,614	20,298	2.51	24.7	641	822	5TH
			5313	Gainza	0	6,231	1,591	7,095	1.31	18.7	333	379	6TH
			5318	Libmanan	3,479	68,623	12,039	77,565	1.23	336.1	204	231	4TH
			5320	Magarao	8,924	13,455	11,752	16,623	2.14	39.0	345	426	6TH
			5321	Milaor	5,759	15,064	6,838	18,199	1.91	23.4	644	778	6TH
			5322	Minalabac	3,051	30,429	3,874	35,922	1.67	126.1	241	285	5TH
			5324	Naga City	90,991	90,991	114,898	115,329	2.40	77.5	1,174	1,488	5TH
			5325	Ocampo	2,081	24,870	4,159	30,876	2.19	118.3	210	261	5TH
			5326	Pamplona	3,461	19,711	3,889	24,097	2.03	80.6	245	299	5TH
			5327	Pasacao	9,359	25,381	12,906	31,960	2.33	149.5	170	214	4TH
			5328	Pili	8,368	43,314	26,878	52,481	1.94	126.2	343	416	6TH
			5332	San Fernando	3,709	17,229	4,806	20,608	1.81	65.0	265	317	5TH
			5336	Tigaon	2,565	26,585	3,411	33,650	2.38	91.0	292	370	5TH
					150,466	417,000	235,829	511,013	2.05	1,333.3	313	383	
	94		5301	Baao	11,844	34,000	17,715	39,040	1.39	143.0	238	273	5TH
			5302	Balatan	2,263	15,238	6,223	19,324	2.40	63.7	239	303	5TH
			5303	Hato	9,689	29,865	15,220	35,294	1.68	98.6	303	358	5TH
			5305	Buhi	10,428	48,774	14,132	57,496	1.66	191.8	254	300	5TH
			5306	Bula	2,682	40,767	8,416	48,240	1.70	151.3	269	319	5TH
			5316	Iriga City	18,308	66,316	40,630	74,269	1.14	119.6	554	621	5TH
			5323	Nabua	8,250	53,459	23,619	60,885	1.31	96.2	556	633	4TH
			5331	Sagnay	0	20,303	0	22,422	1.00	118.2	172	190	5TH
					63,464	308,722	125,955	356,970	1.46	982.4	314	363	
54	Sorsogon				107,329	502,648	135,910	522,960	0.40	2,141.4	235	244	2ND
		95	5406	Castilla	1,889	34,918	7,864	34,702	-0.06	186.2	188	186	5TH
			5407	Donsol	3,455	33,917	4,904	33,159	-0.23	156.2	217	212	5TH
			5413	Pilar	7,021	45,758	7,845	46,268	0.11	248.0	185	187	5TH
					12,365	114,593	20,613	114,129	-0.04	590.4	194	193	
		96	5401	Bacon	5,571	32,090	5,785	32,810	0.22	166.6	193	197	5TH
			5405	Casiguran	5,931	21,875	6,329	22,277	0.18	83.3	263	267	5TH
			5408	Gubat	11,041	44,038	16,065	43,296	-0.17	104.3	422	415	5TH
			5414	Prieto Diaz	471	15,664	4,997	15,324	-0.22	30.3	517	506	5TH
			5416	Sorsogon	29,908	60,811	34,747	72,871	1.83	188.1	323	387	3RD
					52,922	174,478	67,923	186,578	0.67	572.6	305	326	
		97	5402	Barcelona	2,168	16,126	2,643	16,251	0.08	54.7	295	297	5TH
			5404	Buhusan	5,669	18,121	5,462	18,009	-0.06	96.3	188	187	5TH
			5409	Irosin	11,484	35,115	11,622	37,887	0.76	158.7	221	239	5TH
			5410	Juban	782	19,737	1,387	20,671	0.46	121.5	162	170	5TH
			5412	Mtunoog	3,256	24,288	4,826	25,957	0.67	162.4	150	160	5TH
			5415	Santa Magdalena	3,494	13,174	3,303	12,274	-0.71	43.5	303	282	6TH
					26,853	126,561	29,243	131,049	0.35	637.1	199	206	
		98	5403	Bulan	14,278	61,150	17,483	66,450	0.83	196.8	311	338	4TH
			5411	Magallanes	911	25,866	648	24,754	-0.44	144.5	179	171	5TH
					15,189	87,016	18,131	91,204	0.47	341.3	255	267	

Appendix 2.3.1 GRDP BY SECTOR AND REGION (Current Price) (1/2)

REGION	1987				1988				1989				1990			
	P'000	Share by Sector (%)	% to 6 Regions	% to Philippines	P'000	Share by Sector (%)	% to 6 Regions	% to Philippines	P'000	Share by Sector (%)	% to 6 Regions	% to Philippines	P'000	Share by Sector (%)	% to 6 Regions	% to Philippines
CAR	13,054,885	100.0	5.9	1.9	14,077,841	100.0	5.5	1.8	16,116,754	100.0	5.5	1.7	17,843,883	100.0	5.2	1.7
Agriculture, Fishery & Forestry	2,911,018	22.3	4.2	1.8	3,213,453	22.8	4.0	1.8	3,577,291	22.2	3.9	1.7	4,142,057	23.2	3.9	1.8
Industry Sector	7,137,989	54.7	9.7	3.0	7,325,301	52.0	8.4	2.6	7,852,917	48.7	8.2	2.4	8,260,395	46.3	7.1	2.2
Service Sector	3,005,878	23.0	3.8	1.1	3,539,087	25.1	4.0	1.1	4,686,546	29.1	4.5	1.2	5,441,431	30.5	4.5	1.2
I	21,784,126	100.0	9.8	3.2	24,461,572	100.0	9.5	3.0	27,628,138	100.0	9.5	3.0	31,025,307	100.0	9.1	2.9
Agriculture, Fishery & Forestry	8,778,841	40.3	12.6	5.4	9,833,804	40.2	12.5	5.4	11,325,291	41.0	12.4	5.5	12,877,279	41.5	12.3	5.5
Industry Sector	4,438,121	20.4	6.1	1.9	4,971,265	20.3	5.7	1.7	5,453,311	19.7	5.7	1.7	5,908,208	19.0	5.1	1.6
Service Sector	8,567,164	39.3	10.9	3.0	9,656,503	39.5	10.8	2.9	10,849,536	39.3	10.5	2.8	12,259,820	39.5	10.2	2.7
II	13,725,718	100.0	6.2	2.0	15,408,576	100.0	6.0	1.9	17,707,101	100.0	6.1	1.9	20,392,382	100.0	6.0	1.9
Agriculture, Fishery & Forestry	7,314,170	53.3	10.5	4.5	8,154,959	52.9	10.2	4.4	9,395,566	53.1	10.3	4.5	10,545,936	51.7	10.1	4.5
Industry Sector	1,489,984	10.9	2.0	0.6	1,690,703	11.0	1.9	0.6	2,118,083	12.0	2.2	0.6	2,442,367	12.0	2.1	0.7
Service Sector	4,921,564	35.9	6.3	1.7	5,562,914	36.1	6.2	1.7	6,193,502	35.0	6.0	1.6	7,404,079	36.3	6.2	1.6
III	59,770,503	100.0	27.0	8.7	70,125,084	100.0	27.3	8.7	77,232,606	100.0	26.6	8.4	94,156,825	100.0	27.5	8.8
Agriculture, Fishery & Forestry	13,518,021	22.3	19.1	8.1	15,268,742	21.8	19.0	8.3	18,005,640	23.3	19.7	8.7	21,479,211	22.8	20.5	9.1
Industry Sector	23,452,966	39.2	32.0	9.9	27,994,265	39.9	32.1	9.8	28,413,250	36.8	29.6	8.7	36,865,853	39.2	31.5	9.8
Service Sector	22,999,516	38.5	29.4	8.1	26,862,077	38.3	30.1	9.0	30,813,736	39.9	29.9	8.0	35,813,781	38.0	29.8	7.8
IV	93,957,305	100.0	42.1	13.6	109,912,954	100.0	42.8	13.7	125,285,456	100.0	43.1	13.6	147,599,996	100.0	43.2	13.8
Agriculture, Fishery & Forestry	28,780,604	30.8	41.2	17.6	33,921,784	30.9	42.3	18.5	37,951,500	30.3	41.5	18.3	43,054,482	29.2	41.0	18.3
Industry Sector	34,051,819	36.5	46.5	14.3	42,094,474	38.3	48.2	14.8	47,911,366	38.2	49.9	14.6	58,452,989	39.6	50.0	15.6
Service Sector	30,524,882	32.7	39.0	10.8	33,896,696	30.8	38.0	10.1	39,422,590	31.5	38.2	10.2	46,092,525	31.2	38.4	10.1
V	19,799,750	100.0	8.9	2.9	22,846,074	100.0	8.9	2.8	26,742,360	100.0	9.2	2.9	30,873,686	100.0	9.0	2.9
Agriculture, Fishery & Forestry	8,781,493	44.4	12.6	5.4	9,864,448	43.2	12.3	5.4	11,209,334	41.9	12.3	5.4	12,819,827	41.5	12.2	5.4
Industry Sector	2,704,131	13.7	3.7	1.1	3,218,512	14.1	3.7	1.1	4,290,346	16.0	4.5	1.3	5,023,145	16.3	4.3	1.3
Service Sector	8,314,126	42.0	10.6	2.9	9,763,114	42.7	10.9	2.9	11,242,680	42.0	10.9	2.9	13,030,714	42.2	10.9	2.9
Sub-Total	221,492,287	100.0	100.0	32.3	256,832,101	100.0	100.0	32.0	290,712,415	100.0	100.0	31.5	341,892,079	100.0	100.0	32.1
Agriculture, Fishery & Forestry	69,884,147	31.6	100.0	42.6	80,257,190	31.2	100.0	43.7	91,464,542	31.5	100.0	44.1	104,918,792	30.7	100.0	44.6
Industry Sector	73,275,010	33.1	100.0	30.9	87,294,520	34.0	100.0	30.6	96,039,203	33.0	100.0	29.3	116,950,937	34.2	100.0	31.2
Service Sector	78,333,130	35.4	100.0	27.6	89,280,391	34.8	100.0	26.7	103,208,570	35.5	100.0	26.6	120,022,350	35.1	100.0	26.3
Philippines	685,069,701	100.0	100.0	100.0	802,520,765	100.0	100.0	100.0	922,568,578	100.0	100.0	100.0	1,066,223,555	100.0	100.0	100.0
Agriculture, Fishery & Forestry	163,927,445	23.9	100.0	100.0	183,515,426	22.9	100.0	100.0	207,416,622	22.5	100.0	100.0	235,464,579	22.1	100.0	100.0
Industry Sector	237,598,811	34.7	100.0	100.0	284,937,749	35.5	100.0	100.0	327,666,629	35.5	100.0	100.0	374,505,891	35.1	100.0	100.0
Service Sector	283,743,445	41.4	100.0	100.0	334,067,590	41.6	100.0	100.0	387,485,327	42.0	100.0	100.0	456,253,085	42.8	100.0	100.0

Appendix 2.3.1 GRDP BY SECTOR AND REGION (Current Price) (2/2)

REGION	1987			1988			1989			1990					
	P000	Share by Sector (%)	% to 7 Regions Philippines	P000	Share by Sector (%)	% to 7 Regions Philippines	P000	Share by Sector (%)	% to 7 Regions Philippines	P000	Share by Sector (%)	% to 7 Regions Philippines			
NCR	213,852,100	100.0	49.1	256,112,907	100.0	49.9	31.9	302,642,020	100.0	51.0	32.8	345,941,682	100.0	50.3	32.4
Agriculture, Fishery & Forestry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industry Sector	96,854,243	45.3	56.9	114,860,340	44.8	56.8	40.3	137,504,039	45.4	58.8	41.9	147,603,719	42.7	55.8	39.4
Service Sector	116,997,857	54.7	59.9	141,252,567	55.2	61.3	42.3	165,337,981	54.6	61.6	42.7	198,337,963	57.3	62.3	43.5
CAR	13,054,885	100.0	3.0	14,077,841	100.0	2.7	1.8	16,116,754	100.0	2.7	1.7	17,843,383	100.0	2.6	1.7
Agriculture, Fishery & Forestry	2,911,018	22.3	4.2	3,213,453	22.8	4.0	1.8	3,577,291	22.2	3.9	1.7	4,142,057	23.2	3.9	1.8
Industry Sector	7,137,989	54.7	4.2	7,325,301	52.0	3.6	2.6	7,852,917	48.7	3.4	2.4	8,260,395	46.3	3.1	2.2
Service Sector	3,005,878	23.0	1.5	3,539,087	25.1	1.5	1.1	4,686,546	29.1	1.7	1.2	5,441,431	30.5	1.7	1.2
I	21,784,126	100.0	5.0	24,461,572	100.0	4.8	3.0	27,628,138	100.0	4.7	3.0	31,025,307	100.0	4.5	2.9
Agriculture, Fishery & Forestry	8,778,841	40.3	12.6	9,833,804	40.2	12.3	5.4	11,325,291	41.0	12.4	5.5	12,877,279	41.5	12.3	5.5
Industry Sector	4,438,121	20.4	2.6	4,971,265	20.3	2.5	1.7	5,453,311	19.7	2.3	1.7	5,908,208	19.0	2.2	1.6
Service Sector	8,567,164	39.3	4.4	9,656,503	39.5	4.2	2.9	10,849,536	39.3	4.0	2.8	12,239,820	39.5	3.8	2.7
II	13,725,718	100.0	3.2	15,408,576	100.0	3.0	1.9	17,707,101	100.0	3.0	1.9	20,392,382	100.0	3.0	1.9
Agriculture, Fishery & Forestry	7,314,170	53.3	10.5	8,154,959	52.9	10.2	4.4	9,395,566	53.1	10.3	4.5	10,545,936	51.7	10.1	4.5
Industry Sector	1,489,984	10.9	0.9	1,690,703	11.0	0.8	0.6	2,118,033	12.0	0.9	0.6	2,442,367	12.0	0.9	0.7
Service Sector	4,921,564	35.9	2.5	5,562,914	36.1	2.4	1.7	6,193,502	35.0	2.3	1.6	7,404,079	36.3	2.3	1.6
III	59,770,503	100.0	13.7	70,125,084	100.0	13.7	8.7	77,232,606	100.0	13.0	8.4	94,156,825	100.0	13.7	8.8
Agriculture, Fishery & Forestry	13,318,021	22.3	19.1	15,268,742	21.8	19.0	8.3	18,005,640	23.3	19.7	8.7	21,479,211	22.8	20.5	9.1
Industry Sector	23,452,966	39.2	13.8	27,994,265	39.9	13.8	9.8	28,413,230	36.8	12.2	8.7	36,863,833	39.2	13.9	9.8
Service Sector	22,999,516	38.5	11.8	26,862,077	38.3	11.7	8.0	30,813,736	39.9	11.5	8.0	35,813,781	38.0	11.2	7.8
IV	53,357,305	100.0	21.4	109,912,854	100.0	21.4	13.7	125,285,456	100.0	21.1	13.6	147,599,996	100.0	21.5	13.8
Agriculture, Fishery & Forestry	28,780,604	53.8	41.2	33,921,784	30.9	42.3	18.5	37,951,500	30.3	41.5	18.3	43,054,482	29.2	41.0	18.3
Industry Sector	34,051,819	36.5	20.0	42,094,474	38.3	20.8	14.8	47,911,366	38.2	20.5	14.6	58,452,989	39.6	22.1	15.6
Service Sector	30,524,882	32.7	15.6	33,896,696	30.8	14.7	10.1	39,422,590	31.5	14.7	10.2	46,092,525	31.2	14.5	10.1
V	19,799,750	100.0	4.5	22,846,074	100.0	4.5	2.8	26,742,350	100.0	4.5	2.9	30,873,686	100.0	4.5	2.9
Agriculture, Fishery & Forestry	8,781,493	44.4	12.6	9,864,448	43.2	12.3	5.4	11,209,354	41.9	12.3	5.4	12,819,827	41.5	12.2	5.4
Industry Sector	2,704,131	13.7	1.6	3,218,512	14.1	1.6	1.1	4,290,346	16.0	1.8	1.3	5,023,145	16.3	1.9	1.3
Service Sector	8,314,126	42.0	4.3	9,763,114	42.7	4.2	2.9	11,242,660	42.0	4.2	2.9	13,030,714	42.2	4.1	2.9
Sub-Total	435,344,387	100.0	100.0	512,945,008	100.0	100.0	63.9	593,354,435	100.0	100.0	64.3	687,833,761	100.0	100.0	64.5
Agriculture, Fishery & Forestry	69,884,147	16.1	100.0	80,257,190	15.6	100.0	43.7	91,464,642	15.4	100.0	44.1	104,918,792	15.3	100.0	44.6
Industry Sector	170,129,253	39.1	100.0	202,154,860	39.4	100.0	70.9	233,343,242	39.3	100.0	71.2	264,554,656	38.5	100.0	70.6
Service Sector	195,330,987	44.9	100.0	230,532,958	44.9	100.0	69.0	268,546,551	45.3	100.0	69.3	318,360,313	46.3	100.0	69.8
Philippines	685,069,701	100.0	100.0	802,520,765	100.0	100.0	100.0	922,568,578	100.0	100.0	100.0	1,066,223,555	100.0	100.0	100.0
Agriculture, Fishery & Forestry	163,927,445	23.9	100.0	183,515,426	22.9	100.0	100.0	207,416,622	22.5	100.0	100.0	235,464,579	22.1	100.0	100.0
Industry Sector	237,398,811	34.7	100.0	284,937,749	35.5	100.0	100.0	327,666,629	35.5	100.0	100.0	374,505,891	35.1	100.0	100.0
Service Sector	283,743,445	41.4	100.0	334,067,590	41.6	100.0	100.0	387,485,327	42.0	100.0	100.0	456,253,085	42.8	100.0	100.0

Appendix 2.3.2 GRDP BY SECTOR AND REGION, 1985 Constant Price (1/2)

REGION	1987			1988			1989			1990		
	P000	Share by Sector (%)	% to 6 Regions Philippines	P000	Share by Sector (%)	% to 6 Regions Philippines	P000	Share by Sector (%)	% to 6 Regions Philippines	P000	Share by Sector (%)	% to 6 Regions Philippines
CAR	10,694,203	100.0	5.2	11,034,433	100.0	5.1	12,040,363	100.0	5.2	12,038,059	100.0	5.1
Agriculture, Fishery & Forestry	2,555,747	23.9	3.9	2,739,228	24.8	4.0	2,853,500	23.7	4.0	2,872,825	23.9	4.0
Industry Sector	5,448,877	51.0	7.9	5,988,386	48.3	7.1	5,806,288	48.2	7.2	5,737,682	47.7	6.8
Service Sector	2,689,579	25.1	3.8	2,906,819	26.3	3.9	3,380,575	28.1	4.3	3,427,552	28.5	4.3
I	19,247,181	100.0	9.4	20,343,535	100.0	9.4	21,184,120	100.0	9.2	21,381,163	100.0	9.0
Agriculture, Fishery & Forestry	7,829,916	40.5	12.0	8,311,794	40.9	12.2	8,604,771	40.6	12.2	8,824,684	41.3	12.1
Industry Sector	3,720,855	19.2	5.4	4,051,194	19.9	5.4	4,366,209	20.6	5.4	4,440,266	20.8	5.3
Service Sector	7,796,410	40.3	10.9	7,980,547	39.2	10.8	8,213,140	38.8	10.5	8,116,213	38.0	10.1
II	12,585,588	100.0	6.1	12,893,727	100.0	5.9	13,289,548	100.0	5.8	13,424,180	100.0	5.7
Agriculture, Fishery & Forestry	6,911,035	54.9	10.6	7,105,166	55.1	10.5	7,145,725	53.8	10.1	7,130,795	53.1	9.8
Industry Sector	1,291,124	10.3	1.9	1,526,188	10.3	1.8	1,587,409	11.9	2.0	1,645,326	12.3	1.9
Service Sector	4,383,429	34.8	6.2	4,462,373	34.6	6.0	4,556,414	34.3	5.8	4,648,059	34.6	5.8
III	57,247,529	100.0	27.8	61,494,683	100.0	28.3	63,854,003	100.0	27.8	68,391,649	100.0	28.8
Agriculture, Fishery & Forestry	12,943,820	22.6	19.8	13,243,799	21.5	19.5	14,008,399	21.9	19.9	15,211,737	22.2	20.9
Industry Sector	23,359,130	40.8	33.7	25,666,689	41.7	34.0	25,679,199	40.2	31.7	28,316,804	41.4	33.5
Service Sector	20,944,579	36.6	29.4	22,584,195	36.7	30.5	24,166,405	37.8	30.9	24,863,108	36.4	31.1
IV	87,880,525	100.0	42.7	92,581,460	100.0	42.6	99,170,365	100.0	43.1	101,346,047	100.0	42.7
Agriculture, Fishery & Forestry	27,051,735	30.8	41.4	28,149,595	30.4	41.4	29,305,251	29.6	41.6	30,037,648	29.6	41.4
Industry Sector	32,826,675	37.5	47.5	36,295,675	39.2	48.1	40,291,666	40.5	49.7	41,002,560	40.5	48.5
Service Sector	27,902,115	31.8	39.2	28,136,190	30.4	38.0	29,573,448	29.8	37.8	30,305,839	29.9	37.9
V	18,062,252	100.0	8.8	19,144,453	100.0	8.8	20,300,375	100.0	8.8	20,516,014	100.0	8.7
Agriculture, Fishery & Forestry	8,019,807	44.4	12.3	8,432,260	44.0	12.4	8,601,187	42.4	12.2	8,563,158	41.7	11.8
Industry Sector	2,551,853	14.1	3.7	2,668,592	13.9	3.5	3,267,996	16.1	4.0	3,350,318	16.3	4.0
Service Sector	7,490,592	41.5	10.5	8,043,601	42.0	10.9	8,431,192	41.5	10.8	8,602,538	41.9	10.8
Sub-Total	205,817,278	100.0	100.0	217,492,291	100.0	100.0	229,838,774	100.0	100.0	237,097,112	100.0	100.0
Agriculture, Fishery & Forestry	65,312,060	31.7	100.0	67,981,842	31.3	100.0	70,518,333	30.7	100.0	72,640,847	30.6	100.0
Industry Sector	69,298,514	33.7	100.0	75,396,724	34.7	100.0	80,998,767	35.2	100.0	84,492,956	35.6	100.0
Service Sector	71,206,704	34.6	100.0	74,113,725	34.1	100.0	78,321,174	34.1	100.1	79,963,309	33.7	100.0
Philippines	619,707,814	100.0	100.0	658,473,926	100.0	100.0	697,816,849	100.0	100.0	712,681,674	100.0	100.0
Agriculture, Fishery & Forestry	150,414,475	24.3	100.0	155,291,812	23.6	100.0	159,397,783	22.8	100.0	162,481,399	22.8	100.0
Industry Sector	216,172,013	34.9	100.0	232,510,646	35.3	100.0	251,582,363	36.1	100.0	254,358,586	35.7	100.0
Service Sector	253,121,326	40.8	100.0	270,671,468	41.1	100.0	286,836,703	41.1	100.0	295,841,689	41.5	100.0

Appendix 2.3.2 GRDP BY SECTOR AND REGION, 1985 Constant Price (2/2)

REGION	1987			1988			1989			1990		
	P'000	Share by Sector (%)	% to 7 Regions, Philippines	P'000	Share by Sector (%)	% to 7 Regions, Philippines	P'000	Share by Sector (%)	% to 7 Regions, Philippines	P'000	Share by Sector (%)	% to 7 Regions, Philippines
NCR	187,201,383	100.0	47.6	204,306,706	100.0	48.4	222,868,763	100.0	49.2	225,445,670	100.0	48.7
Agriculture, Fishery & Forestry	0	0	0	0	0	0	0	0	0	0	0	0
Industry Sector	86,818,735	46.4	55.6	94,661,637	46.3	55.7	105,557,999	47.4	56.6	102,779,478	45.6	54.9
Service Sector	100,382,648	53.6	58.5	109,645,069	53.7	59.7	117,310,764	52.6	60.0	122,666,192	54.4	60.5
CAR	10,694,203	100.0	2.7	11,034,433	100.0	2.6	12,040,363	100.0	2.7	12,038,059	100.0	2.6
Agriculture, Fishery & Forestry	2,555,747	23.9	3.9	2,739,228	24.8	4.0	2,859,500	23.7	4.0	2,872,825	23.9	4.0
Industry Sector	5,448,877	51.0	3.5	5,388,386	48.8	3.2	5,806,288	48.2	3.1	5,737,682	47.7	3.1
Service Sector	2,689,579	25.1	1.6	2,906,819	26.3	1.6	3,380,575	28.1	1.7	3,427,552	28.5	1.7
I	19,347,181	100.0	4.9	20,343,535	100.0	4.8	21,184,120	100.0	4.7	21,381,163	100.0	4.6
Agriculture, Fishery & Forestry	7,829,916	40.5	12.0	8,311,794	40.9	12.2	8,604,771	40.6	12.2	8,824,684	41.3	12.1
Industry Sector	3,720,855	19.2	2.4	4,051,194	19.9	2.4	4,366,209	20.6	2.3	4,440,266	20.8	2.4
Service Sector	7,796,410	40.3	4.5	7,980,547	39.2	4.3	8,213,140	38.8	4.2	8,116,213	38.0	4.0
II	12,585,588	100.0	3.2	12,893,727	100.0	3.1	13,289,548	100.0	2.9	13,424,180	100.0	2.9
Agriculture, Fishery & Forestry	6,911,035	54.9	10.6	7,105,166	55.1	10.5	7,145,725	53.8	10.1	7,130,795	53.1	9.8
Industry Sector	1,291,124	10.3	0.8	1,326,188	10.3	0.8	1,587,409	11.9	0.9	1,645,325	12.3	0.9
Service Sector	4,383,429	34.8	2.6	4,462,373	34.6	2.4	4,556,414	34.3	2.3	4,648,059	34.6	2.3
III	57,247,529	100.0	14.6	61,494,683	100.0	14.6	63,854,003	100.0	14.1	68,391,649	100.0	14.8
Agriculture, Fishery & Forestry	12,943,820	22.6	19.8	13,243,799	21.5	19.5	14,003,999	21.9	19.9	15,211,737	22.2	20.9
Industry Sector	23,359,130	40.8	15.0	25,666,689	41.7	15.1	25,679,199	40.2	13.8	28,316,804	41.4	15.1
Service Sector	20,944,579	36.6	12.2	22,584,195	36.7	12.3	24,166,405	37.8	12.4	24,863,108	36.4	12.3
IV	87,880,525	100.0	22.4	92,581,460	100.0	21.9	99,170,365	100.0	21.9	101,346,047	100.0	21.9
Agriculture, Fishery & Forestry	27,051,735	30.8	41.4	28,149,595	30.4	41.4	29,305,231	29.6	41.6	30,037,648	29.6	41.4
Industry Sector	32,926,675	37.5	21.1	36,295,675	39.2	21.3	40,291,666	40.6	21.6	41,002,560	40.5	21.9
Service Sector	27,902,115	31.8	16.3	28,136,190	30.4	15.3	29,573,448	29.8	15.1	30,305,839	29.9	15.0
V	18,062,252	100.0	4.6	19,144,453	100.0	4.5	20,300,375	100.0	4.5	20,516,014	100.0	4.4
Agriculture, Fishery & Forestry	8,019,807	44.4	12.3	8,432,260	44.0	12.4	8,601,187	42.4	12.2	8,563,158	41.7	11.8
Industry Sector	2,551,853	14.1	1.6	2,668,592	13.9	1.6	3,267,996	16.1	1.8	3,350,318	16.3	1.8
Service Sector	7,490,592	41.5	4.4	8,043,601	42.0	4.4	8,431,192	41.5	4.3	8,602,538	41.9	4.2
Sub-Total	399,018,661	100.0	63.4	421,798,997	100.0	64.1	452,707,537	100.0	64.9	462,542,782	100.0	64.9
Agriculture, Fishery & Forestry	65,312,060	16.6	100.0	67,981,842	16.1	100.0	70,518,833	15.6	100.0	72,640,847	15.7	100.0
Industry Sector	156,117,249	39.7	100.0	170,038,361	40.3	100.1	186,556,766	41.2	100.0	187,272,434	40.5	100.0
Service Sector	171,589,352	43.7	100.0	183,758,794	43.6	100.0	195,631,938	43.2	100.0	202,629,501	42.8	100.0
Philippines	619,707,814	100.0	100.0	658,473,926	100.0	100.0	697,816,849	100.0	100.0	712,681,674	100.0	100.0
Agriculture, Fishery & Forestry	150,414,475	24.3	100.0	155,291,812	23.6	100.0	159,397,783	22.8	100.0	162,481,999	22.8	100.0
Industry Sector	216,172,013	34.9	100.0	232,510,646	35.3	100.0	251,582,363	36.1	100.0	254,358,586	35.7	100.0
Service Sector	253,121,326	40.8	100.0	270,671,468	41.1	100.0	286,836,703	41.1	100.0	295,841,689	41.5	100.0

Appendix 2.3.3 EMPLOYMENT SITUATION IN THE STUDY AREA (1988)

(In '000 Persons)

Region / Province	Population 15 Years Old & Over	Labor Force					Total
		Agriculture	Industry	Services	Unemployed		
NCR	5,004	47 (1.7)	984 (35.2)	1,477 (52.8)	287 (10.3)	2,795 (100.0)	
CAR	677	269 (53.1)	84 (16.6)	139 (27.4)	15 (3.0)	507 (100.0)	
Abra	128	85 (78.7)	7 (6.5)	13 (12.0)	3 (2.8)	108 (100.0)	
Benguet	234	53 (27.7)	61 (31.9)	72 (37.7)	5 (2.6)	191 (100.0)	
M. Province	93	24 (48.0)	6 (12.0)	18 (36.0)	2 (4.0)	50 (100.0)	
Ifugao	95	39 (60.0)	7 (10.8)	17 (26.2)	2 (3.1)	65 (100.0)	
K. Apayao	127	68 (73.1)	3 (3.2)	19 (20.4)	3 (3.2)	93 (100.0)	
REGION I	2,096	707 (53.5)	133 (10.1)	414 (31.3)	67 (5.1)	1,321 (100.0)	
Ilocos Norte	293	120 (60.6)	10 (5.1)	59 (29.8)	9 (4.5)	198 (100.0)	
Ilocos Sur	337	152 (70.4)	7 (3.2)	46 (21.3)	11 (5.1)	216 (100.0)	
La Union	354	92 (42.8)	23 (10.7)	89 (41.4)	11 (5.1)	215 (100.0)	
Pangasinan	1,112	343 (49.6)	93 (13.4)	220 (31.8)	36 (5.2)	692 (100.0)	
REGION II	1,409	620 (63.5)	67 (6.9)	262 (26.8)	28 (2.9)	977 (100.0)	
Cagayan	517	209 (60.1)	23 (6.6)	106 (30.5)	10 (2.9)	348 (100.0)	
Isabela	625	299 (65.6)	32 (7.0)	113 (24.8)	12 (2.6)	456 (100.0)	
N. Vizcaya	181	75 (62.5)	9 (7.5)	33 (27.5)	3 (2.5)	120 (100.0)	
Quirino	76	34 (70.8)	3 (6.3)	9 (18.8)	2 (4.2)	48 (100.0)	
Others	10	3 (60.0)	- (0.0)	1 (20.0)	1 (20.0)	5 (100.0)	
REGION III	3,629	763 (33.6)	444 (19.6)	882 (38.9)	181 (8.0)	2,270 (100.0)	
Bataan	259	42 (28.8)	27 (18.5)	64 (43.8)	13 (8.9)	146 (100.0)	
Bulacan	867	105 (18.4)	175 (30.6)	249 (43.5)	43 (7.5)	572 (100.0)	
N. Ecija	733	272 (55.2)	46 (9.3)	138 (28.0)	37 (7.5)	493 (100.0)	
Pampanga	863	107 (20.8)	106 (20.6)	258 (50.2)	43 (8.4)	514 (100.0)	
Tarlac	534	166 (55.9)	26 (8.8)	78 (26.3)	27 (9.1)	297 (100.0)	
Zambales	373	71 (28.6)	64 (25.8)	95 (38.3)	18 (7.3)	248 (100.0)	
REGION IV	4,689	1,510 (39.6)	732 (19.2)	1,371 (35.9)	201 (5.3)	3,814 (100.0)	
Aurora	206	115 (76.7)	9 (6.0)	17 (11.3)	9 (6.0)	150 (100.0)	
Batangas	725	259 (39.7)	128 (19.6)	235 (36.0)	31 (4.7)	653 (100.0)	
Cavite	439	107 (26.0)	87 (21.2)	198 (48.2)	19 (4.6)	411 (100.0)	
Laguna	654	166 (30.1)	137 (24.8)	221 (40.0)	28 (5.1)	552 (100.0)	
Quezon	633	289 (52.7)	70 (12.8)	162 (29.6)	27 (4.9)	548 (100.0)	
Rizal	467	146 (36.1)	118 (29.2)	120 (29.7)	20 (5.0)	404 (100.0)	
Others	1,565	428 (39.1)	183 (16.7)	418 (38.1)	67 (6.1)	1,096 (100.0)	
REGION V	2,417	1,076 (58.4)	244 (13.2)	454 (24.6)	70 (3.8)	1,844 (100.0)	
Albay	518	191 (46.2)	87 (21.1)	120 (29.1)	15 (3.6)	413 (100.0)	
Camarines Norte	287	127 (57.0)	26 (11.7)	62 (27.8)	8 (3.6)	223 (100.0)	
Camarines Sur	750	387 (63.4)	45 (7.4)	156 (25.6)	22 (3.6)	610 (100.0)	
Sorsogon	343	185 (65.1)	26 (9.2)	63 (22.2)	10 (3.5)	284 (100.0)	
Others	519	186 (59.2)	60 (19.1)	53 (16.9)	15 (4.8)	314 (100.0)	
6 Regions Total	14,917	4,945 (46.1)	1,704 (15.9)	3,522 (32.8)	562 (5.2)	10,733 (100.0)	
7 Regions Total	19,921	4,992 (36.9)	2,688 (19.9)	4,999 (37.0)	849 (6.3)	13,528 (100.0)	
Philippines	35,856	10,163 (15.4)	47,211 (71.6)	7,081 (10.7)	1,506 (2.3)	65,961 (100.0)	

Appendix 2.4.1 PALAY PRODUCTION BY PROVINCE, 1986-1990

PROVINCE	1986	1987	1988	1989	1990	Average	Average	(Unit : t)
						86-88 (A)	88-90 (B)	Growth Rate (%/year) (A)/(B)
CAR	180,360	157,598	181,374	163,249	165,585	173,111	170,069	-0.88
ABRA	32,945	23,085	31,159	27,509	25,637	29,063	28,102	-1.67
BENGUET	10,605	5,303	5,999	6,562	5,964	7,302	6,175	-8.04
IFUGAO	28,110	27,376	27,468	27,344	24,190	27,651	26,334	-2.41
KALINGA	95,275	88,449	102,670	84,324	92,523	95,465	93,172	-1.21
MT. PROVINCE	13,425	13,385	14,078	17,510	17,271	13,629	16,286	9.31
REGION 1	814,330	682,581	841,311	755,823	847,691	779,407	814,942	2.25
ILOCOS NORTE	86,160	65,293	110,214	91,064	95,741	87,222	99,006	6.54
ILOCOS SUR	95,080	51,629	80,033	68,452	82,395	75,581	76,960	0.91
LA UNION	88,340	60,697	79,780	48,427	84,438	76,272	70,882	-3.60
PANGASINAN	544,750	504,962	571,284	547,880	585,117	540,332	568,094	2.54
REGION 2	1,035,440	996,606	1,091,307	1,094,869	1,164,758	1,041,118	1,116,978	3.58
CAGAYAN	300,030	233,405	280,153	250,624	218,658	271,196	249,812	-4.02
ISABELA	577,760	620,278	655,323	678,737	781,685	617,787	705,248	6.84
N. VIZCAYA	109,465	101,230	117,637	117,058	113,513	109,444	116,069	2.98
QUIRINO	48,185	41,693	38,194	48,450	50,902	42,691	45,849	3.63
REGION 3	1,607,075	1,540,235	1,270,835	1,684,950	1,810,930	1,472,715	1,588,905	3.87
BATAAN	57,525	67,550	57,368	59,605	63,070	60,814	60,014	-0.66
BULACAN	267,170	308,107	283,253	342,483	225,935	286,177	283,890	-0.40
NUEVA ECIIA	805,060	677,844	501,909	768,477	971,763	661,604	747,383	6.29
PAMPANGA	171,840	173,441	160,342	192,530	202,758	168,541	185,210	4.83
TARLAC	242,790	239,974	210,831	256,116	272,178	231,198	246,375	3.23
ZAMBALES	62,690	73,319	57,132	65,739	75,226	64,380	66,032	1.27
REGION 4	966,305	866,513	998,809	1,028,411	957,286	943,876	994,835	2.66
BATANGAS	61,290	48,817	49,630	67,359	80,904	53,246	65,964	11.30
CAVITE	49,055	38,404	40,003	49,451	59,949	42,487	49,801	8.27
LAGUNA	111,365	128,045	118,635	126,926	109,512	119,348	118,358	-0.42
MARINDUQUE	17,670	11,257	11,961	12,251	17,148	13,629	13,787	0.58
MINDORO OCC.	228,995	230,082	261,315	224,359	174,639	240,131	220,104	-4.26
MINDORO ORIENTAL	171,200	128,544	182,375	197,876	192,904	160,706	191,052	9.03
PALAWAN	68,800	66,499	69,934	79,102	71,750	68,411	73,595	3.72
RIZAL	21,140	24,449	23,388	24,014	26,648	22,992	24,683	3.61
QUEZON	180,380	143,706	182,045	195,633	144,175	168,710	173,951	1.54
ROMBLON	20,975	17,754	22,232	17,988	26,668	20,320	22,296	4.75
AURORA	35,435	28,956	37,291	33,452	52,989	33,894	41,244	10.31
REGION 5	703,840	581,404	708,817	668,007	686,998	664,687	652,743	-0.90
ALBAY	121,290	99,754	119,629	110,556	129,406	113,558	109,980	-1.59
CAMARINES NORTE	50,545	44,947	52,577	47,002	47,032	49,356	48,175	-1.20
CAMARINES SUR	324,105	268,468	333,193	317,261	323,503	308,589	306,307	-0.37
CATANDUANES	25,235	14,515	24,685	21,826	21,737	21,478	20,342	-2.68
MASBATE	60,125	58,948	72,630	66,892	48,102	63,901	66,157	1.75
SORSOGON	122,540	94,772	106,103	104,470	117,218	107,805	101,782	-2.83

Appendix 2.4.2 PALAY AREA HARVESTED BY PROVINCE, 1986-1990

PROVINCE	1986	1987	1988	1989	1990	Average		Rate (%/year) (A)/(B)
						86-88 (A)	88-90 (B)	
CAR	68,602	63,382	69,492	65,970	64,570	67,159	66,677	-0.36
ABRA	18,280	15,870	16,920	16,580	16,610	17,023	16,703	-0.94
BENGUET	5,610	3,400	3,850	3,960	3,610	4,287	3,807	-5.76
IFUGAO	9,860	10,280	9,460	9,570	8,530	9,867	9,187	-3.51
KALINGA	28,630	27,810	33,090	25,310	26,710	29,843	28,370	-2.50
MT. PROV	6,222	6,022	6,172	10,550	9,110	6,139	8,611	18.43
REGION 1	305,530	280,610	312,270	298,530	306,490	299,470	305,763	1.05
ILOCOS NORTE	34,850	30,310	43,090	39,200	44,180	36,083	42,157	8.09
ILOCOS SUR	35,130	27,390	33,800	32,110	33,590	32,107	33,167	1.64
LA UNION	32,190	28,420	31,180	31,170	34,510	30,597	32,287	2.72
PANGASINAN	203,360	194,490	204,200	196,050	194,210	200,683	198,153	-0.63
REGION 2	366,470	333,610	341,070	358,890	347,650	347,050	349,203	0.31
CAGAYAN	137,360	107,760	111,540	107,660	94,370	118,887	104,523	-6.24
ISABELA	174,690	175,820	178,750	197,180	204,280	176,420	193,403	4.70
N. VIZCAYA	36,510	33,670	34,900	37,140	32,020	35,027	34,687	-0.49
QUIRINO	17,910	16,360	15,880	16,910	16,980	16,717	16,590	-0.38
REGION 3	496,560	483,960	465,050	517,390	521,370	481,857	501,270	1.99
BATAAN	16,690	18,930	20,380	17,160	17,300	18,667	18,280	-1.04
BULACAN	76,860	88,050	83,170	84,630	79,110	82,693	82,303	-0.24
N. ECIJA	235,640	195,180	187,690	234,270	240,210	206,170	220,723	3.47
PAMPANGA	52,720	51,520	50,860	53,860	51,590	51,700	52,103	0.39
TARLAC	90,430	101,640	96,180	99,720	105,100	96,083	100,333	2.19
ZAMBALES	24,220	28,640	26,770	27,750	28,060	26,543	27,527	1.84
REGION 4	383,220	361,010	392,860	402,380	381,380	379,030	392,207	1.72
BATANGAS	35,450	31,350	35,210	36,210	37,790	34,003	36,403	3.47
CAVITE	19,420	15,620	17,710	16,240	18,320	17,583	17,423	-0.46
LAGUNA	32,540	37,720	33,850	34,490	30,010	34,703	32,783	-2.81
MARINDUQUE	11,760	9,560	8,600	7,730	12,780	9,973	9,703	-1.36
MINDORO OCC.	69,440	78,220	75,570	77,420	59,470	74,410	70,820	-2.44
MINDORO OR.	66,620	64,170	75,040	73,580	75,050	68,610	74,557	4.24
PALAWAN	33,050	34,530	34,780	39,190	33,530	34,120	35,833	2.48
RIZAL	6,670	7,660	7,550	7,380	8,080	7,293	7,670	2.55
QUEZON	81,940	57,190	75,100	84,340	72,200	71,410	77,213	3.98
ROMBLON	13,650	13,510	14,820	12,560	16,530	13,993	14,637	2.28
AURORA	12,680	11,480	14,630	13,240	17,620	12,930	15,163	8.29
REGION 5	332,950	282,730	331,360	313,270	275,670	315,680	309,120	-1.04
ALBAY	59,950	46,940	56,310	46,820	50,090	54,400	50,023	-4.11
CAMARINES N.	20,470	16,850	19,270	17,710	17,780	18,863	17,943	-2.47
CAMARINES S.	142,620	113,200	137,170	134,420	114,510	130,997	128,263	-1.05
CATANDUANES	13,410	9,940	14,290	14,310	13,160	12,547	12,847	1.19
MASBATE	46,360	59,110	60,930	52,970	34,860	55,467	57,670	1.97
SORSOGON	50,140	36,690	43,390	47,040	45,270	43,407	42,373	-1.20

Appendix 2.4.3 CORN PRODUCTION BY PROVINCE, 1986-1990

PROVINCE	1986	1987	1988	1989	1990	(Unit : t)		
						Average 86-88 (A)	Average 88-90 (B)	Growth te (%/year) (A)/(B)
CAR	20,560	22,088	28,171	22,602	24,208	23,606	24,994	2.90
ABRA	6,310	7,455	7,663	6,841	6,828	7,143	7,111	-0.22
BENGUET	1,000	955	999	1,008	676	985	894	-4.73
IFUGAO	4,058	5,358	6,365	4,166	4,962	5,260	5,164	-0.92
KALINGA	6,972	6,060	10,793	8,634	9,800	7,942	9,742	10.75
MT. PROV	2,220	2,260	2,351	1,953	1,942	2,277	2,082	-4.38
REGION 1	55,170	63,830	57,792	66,884	87,933	58,931	70,870	9.66
ILOCOS NORTE	4,560	5,185	5,828	5,282	6,804	5,191	5,971	7.25
ILOCOS SUR	3,030	3,960	4,061	6,059	9,409	3,684	6,510	32.93
LA UNION	1,325	1,470	1,248	1,128	1,070	1,348	1,149	-7.68
PANGASINAN	46,255	53,215	46,655	54,415	70,650	48,708	57,240	8.41
REGION 2	358,150	398,517	438,167	448,692	550,840	398,278	479,233	9.69
CAGAYAN	27,315	44,915	45,487	49,632	53,863	39,239	49,661	12.50
ISABELA	302,355	324,884	360,672	372,896	458,868	329,304	397,479	9.86
N. VIZCAYA	11,005	11,537	12,684	9,856	13,540	11,742	12,027	1.21
QUIRINO	17,475	17,181	19,324	16,308	24,569	17,993	20,067	5.61
REGION 3	8,530	9,307	11,752	12,888	17,304	9,863	13,981	19.06
BATAAN	140	160	160	192	105	153	152	-0.33
BULACAN	505	665	1,265	1,333	1,615	812	1,404	31.49
N. ECIJA	4,220	4,347	5,289	4,075	4,044	4,619	4,469	-1.64
PAMPANGA	1,635	1,740	2,543	2,610	4,195	1,973	3,116	25.67
TARLAC	1,980	2,350	2,478	4,669	7,341	2,269	4,829	45.89
ZAMBALES	50	45	17	9	4	37	10	-48.01
REGION 4	250,030	248,084	235,185	222,179	219,628	244,433	225,664	-3.92
BATANGAS	135,690	134,939	136,628	125,154	117,665	135,752	126,482	-3.47
CAVITE	19,230	18,940	18,872	15,802	12,708	19,014	15,794	-8.86
LAGUNA	39,060	37,605	28,940	27,373	27,013	35,202	27,775	-11.17
MARINDUQUE	460	375	514	983	915	450	804	33.67
MINDORO OCC.	6,265	5,525	3,427	3,844	4,171	5,072	3,814	-13.28
MINDORO OR.	2,960	3,610	2,920	3,313	3,375	3,163	3,203	0.63
PALAWAN	23,135	22,225	21,365	26,477	28,499	22,242	25,447	6.96
RIZAL	1,595	1,710	1,568	1,290	1,268	1,624	1,375	-7.99
QUEZON	13,290	16,115	13,279	12,898	17,561	14,228	14,579	1.23
ROMBLON	8,250	6,925	7,558	4,843	6,421	7,578	6,274	-9.01
AURORA	95	115	114	202	32	108	116	3.64
REGION 5	138,575	121,415	138,093	127,021	150,317	132,694	138,477	2.16
ALBAY	80,500	66,585	74,856	59,818	66,562	73,980	67,079	-4.78
CAMARINES N.	4,830	4,850	5,158	5,758	5,525	4,946	5,480	5.26
CAMARINES S.	19,050	20,260	26,194	31,160	48,683	21,835	35,346	27.23
CATANDUANES	250	245	601	618	1,164	365	794	47.49
MASBATE	29,200	25,890	26,768	26,864	25,088	27,286	26,240	-1.94
SORSOGON	4,745	3,585	4,516	2,803	3,295	4,282	3,538	-9.10

Appendix 2.4.4 CORN AREA HARVESTED BY PROVINCE, 1986-1990

PROVINCE	1986	1987	1988	1989	1990	(Unit : t)		
						Average 86-88 (A)	Average 88-90 (B)	Growth te (%/year) (A)/(B)
CAR	20,590	21,110	21,600	20,540	19,460	21,100	20,533	-1.35
ABRA	8,490	7,890	7,730	9,040	9,030	8,037	8,600	3.44
BENGUET	1,330	1,270	1,300	1,340	1,230	1,300	1,290	-0.39
IFUGAO	2,920	3,360	3,380	3,380	1,910	3,220	2,890	-5.26
KALINGA	6,200	6,960	7,630	5,580	6,040	6,930	6,417	-3.77
MT. PROV	1,650	1,630	1,560	1,200	1,250	1,613	1,337	-8.96
REGION 1	65,850	72,460	75,610	71,960	79,030	71,307	75,533	2.92
ILOCOS NORTE	10,850	12,380	13,220	11,030	12,410	12,150	12,220	0.29
ILOCOS SUR	3,790	4,530	5,190	5,710	6,790	4,503	5,897	14.44
LA UNION	1,840	1,990	1,900	1,780	1,640	1,910	1,773	-3.65
PANGASINAN	49,370	53,560	55,300	53,440	58,190	52,743	55,643	2.71
REGION 2	324,800	333,200	346,400	347,690	347,390	334,800	347,160	1.83
CAGAYAN	35,940	43,460	45,830	45,660	44,480	41,743	45,323	4.20
ISABELA	271,210	270,360	279,250	285,930	286,620	273,607	283,933	1.87
N. VIZCAYA	9,950	10,680	11,740	9,290	7,420	10,790	9,483	-6.25
QUIRINO	7,700	8,700	9,580	6,810	8,870	8,660	8,420	-1.40
REGION 3	10,670	10,210	12,010	12,920	12,750	10,963	12,560	7.04
BATAAN	290	330	330	350	150	317	277	-6.52
BULACAN	530	570	930	1,080	990	677	1,000	21.54
N. ECIJA	6,360	5,360	5,840	6,170	5,010	5,853	5,673	-1.55
PAMPANGA	1,150	1,170	2,010	2,000	2,650	1,443	2,220	24.03
TARLAC	2,230	2,690	2,870	3,300	3,940	2,597	3,370	13.91
ZAMBALES	110	90	30	20	10	77	20	-49.04
REGION 4	250,480	255,140	248,530	237,530	237,170	251,383	241,077	-2.07
BATANGAS	163,660	165,490	167,900	160,370	161,070	165,683	163,113	-0.78
CAVITE	17,480	18,080	17,650	13,920	11,740	17,737	14,437	-9.78
LAGUNA	18,720	18,920	16,110	14,090	13,780	17,917	14,660	-9.54
MARINDUQUE	940	940	1,190	1,550	1,510	1,023	1,417	17.69
MINDORO OCC.	4,630	4,690	2,880	4,740	5,160	4,067	4,260	2.35
MINDORO OR.	4,990	5,220	5,080	6,220	6,570	5,097	5,957	8.11
PALAWAN	13,320	13,720	12,680	14,950	10,670	13,240	12,767	-1.80
RIZAL	2,470	2,540	2,130	1,820	1,750	2,380	1,900	-10.65
QUEZON	18,250	19,030	15,440	13,210	17,020	17,573	15,223	-6.93
ROMBLON	5,940	6,420	7,380	6,480	7,860	6,580	7,240	4.90
AURORA	80	90	90	180	40	87	103	8.81
REGION 5	180,070	187,290	194,490	186,950	193,510	187,283	191,650	1.16
ALBAY	66,800	65,080	67,750	60,780	65,000	66,543	64,510	-1.54
CAMARINES N.	5,410	5,520	5,970	6,720	6,690	5,633	6,460	7.09
CAMARINES S.	29,320	36,760	39,950	47,110	56,780	35,343	47,947	16.47
CATANDUANES	1,150	1,220	2,200	2,080	3,110	1,523	2,463	27.17
MASBATE	68,200	71,120	70,020	64,090	56,660	69,780	63,590	-4.54
SORSOGON	9,190	7,590	8,600	6,170	5,270	8,460	6,680	-11.14

Appendix 2.5.1 MINING AND QUARRYING PRODUCTION IN THE STUDY AREA

(Unit : ton.)

Region/ Province	Metallic (Zinc, Copper, Gold, Silver, etc.)				Non-Metallic										Average 1988-1990		
	1988	1989	1990	Average 1988-1990	A					B						Cement	Total
					1988	1989	1990	1988	1989	1990	1988	1989	1990				
CAR	185,264	165,252	143,537	164,684	18,621	19,123	11,809	2,016,540	4,123,490	15,309,783	0	0	0	2,035,161	4,142,613	15,221,592	7,166,455
Abra	0	0	0	0	0	0	0	0	10,530	273,445	0	0	0	0	0	0	0
Benguet	185,264	165,252	143,537	164,684	18,621	19,123	11,809	1,717,693	3,802,276	14,614,275	0	0	0	1,736,314	3,821,399	14,626,084	6,727,932
Ifugao	0	0	0	0	0	0	0	23,962	75,920	46,956	0	0	0	23,962	75,920	46,956	48,946
K. Apayso	0	0	0	0	0	0	0	270,353	143,114	156,686	0	0	0	270,353	143,114	156,686	190,051
Mt. Province	0	0	0	0	0	0	0	4,532	91,650	218,421	0	0	0	4,532	91,650	218,421	104,868
REGION I	0	0	0	0	1,408,383	1,356,898	1,571,812	606,765	1,777,888	2,079,532	788,235	856,577	843,544	2,803,383	3,991,363	4,494,888	3,765,211
Ilocos Norte	0	0	0	0	12,891	35,625	172,969	51,548	5,200	597,784	0	0	0	64,439	40,825	770,753	292,006
Ilocos Sur	0	0	0	0	1,250	0	46,098	0	0	48,898	0	0	0	1,250	0	94,996	32,082
La Union	0	0	0	0	533,754	488,151	516,612	515,629	1,300,317	780,866	319,213	347,582	367,938	1,368,596	2,136,050	1,665,416	1,723,554
Pangasinan	0	0	0	0	860,488	833,122	836,133	39,588	472,371	651,984	469,022	508,995	475,606	1,368,098	1,814,488	1,968,723	1,715,770
REGION II	0	40,000	0	13,333	2,150	102,057	8,158	1,358,300	1,421,326	1,426,211	0	0	0	1,360,450	1,523,383	1,434,369	1,439,401
Batanes	0	0	0	0	2,150	0	0	0	0	0	0	0	0	2,150	0	0	717
Cagayan	0	0	0	0	0	18,056	1,771	462,706	322,787	448,237	0	0	0	462,706	340,843	450,008	417,852
Isabela	0	40,000	0	13,333	0	23,000	6,317	782,504	1,098,539	977,974	0	0	0	782,504	1,121,539	984,291	962,778
N. Viscaya	0	0	0	0	0	36,000	70	0	0	0	0	0	0	36,000	0	70	12,023
Quirino	0	0	0	0	0	25,001	0	113,090	0	0	0	0	113,090	25,001	0	0	46,030
REGION III	244,601	230,748	254,662	243,337	1,238,248	1,148,058	1,302,001	12,445,420	9,701,899	2,122,575	1,042,229	1,162,769	1,280,960	14,725,897	12,012,726	4,705,536	10,481,386
Batuan	0	0	0	0	0	0	0	497,094	3,710	163,686	0	0	0	497,094	3,710	163,686	221,497
Bulacan	0	0	0	0	1,233,081	1,131,778	1,282,902	4,063,358	1,554,290	698,214	1,042,229	1,162,769	1,280,960	6,343,668	3,843,837	3,262,076	4,484,860
N. Ecija	286	1,576	5,305	2,389	0	0	0	5,301,018	633,766	62,512	0	0	0	5,301,018	633,766	62,512	1,999,099
Pampanga	0	0	0	0	40	10,488	3,567	1,290,221	779,412	546,036	0	0	0	1,290,221	789,900	549,603	876,588
Tarlac	0	0	0	0	62	482	9,412	388,006	6,718,904	627,635	0	0	0	388,006	6,719,586	637,047	2,581,500
Zambales	244,315	229,172	249,357	240,948	65	5,310	6,120	905,723	11,817	24,492	0	0	0	905,788	17,127	30,612	317,842
REGION IV	0	0	0	0	460,728	716,853	930,410	2,750,176	2,309,393	1,740,242	833,657	1,978,111	2,055,355	4,044,561	5,004,357	4,726,007	4,591,642
Batangas	0	0	0	0	396,683	29,969	164,093	1,867,047	525,047	347,407	307,761	328,520	320,532	2,571,491	883,536	832,032	1,429,020
Cavite	0	0	0	0	12,036	69,097	51,000	18,556	112,385	0	0	0	0	30,592	181,482	51,000	87,691
Laguna	0	0	0	0	0	0	50	234,198	414,939	201,848	0	0	0	234,198	414,939	201,898	283,678
Quezon	0	0	0	0	23,947	9,202	17,169	2,064	402,990	24,045	0	0	0	26,011	412,192	41,214	159,806
Rizal	0	0	0	0	28,062	608,585	698,098	628,311	854,032	1,166,942	525,896	1,649,591	1,734,823	1,182,269	3,112,208	3,599,863	2,631,447
Aurora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGION V	1	2,630	2,234	1,628	84,319	62,322	76,605	584,418	893,406	1,400,992	0	0	0	668,737	955,728	1,477,597	1,034,021
Albay	0	0	0	0	83,865	59,069	54,601	358,228	7,584	3,559	0	0	0	442,093	66,653	58,160	188,989
Camarines Norte	1	3	3	2	0	384	0	27,204	496,116	549,570	0	0	0	27,204	496,500	549,570	357,758
Camarines Sur	0	2,647	2,231	1,626	454	2,369	22,004	156,403	145,647	499,174	0	0	0	156,857	148,516	521,178	275,517
Sorsogon	0	0	0	0	0	0	0	42,583	244,059	348,689	0	0	0	42,583	244,059	348,689	211,777
6 Regions	429,866	438,650	460,433	422,982	3,212,449	3,405,311	3,900,795	19,761,619	20,227,402	24,079,335	2,664,121	3,997,457	4,179,859	25,638,189	27,630,170	32,159,989	28,476,116

Note :

A : Feldspar, salt, white clay, shale clay, limestone, rock phosphate, silica, quicklime, guano, diorite, jade, pumice, gypsum, chromite, staurolite, etc.

B : Rock aggregate, sand and gravel, stones, cobbles, boulders, pebbles, marble, soil, limestone for const. materials, volcanic cinders, basalt, perlite, diatomaceous earth.

Appendix 2.5.2 MANUFACTURING ESTABLISHMENT IN THE STUDY AREA

Region/ Province	Food Processing	Handicrafts	Wood Processing	Metalcraft 1988-1990	Textiles & Garments	Total
NCR	497	310	165	235	280	1,487
CAR	131	303	134	45	291	904
Abra	4	39	18	-	5	66
Benguet	83	71	34	34	143	365
Ifugao	21	17	34	6	78	156
K. Apayao	16	169	40	1	55	281
Mt. Province	7	7	8	4	10	36
REGION I	910	182	400	113	333	1,938
Ilocos Norte	130	27	65	25	78	325
Ilocos Sur	250	20	160	32	163	625
La Union	180	35	120	18	60	413
Pangasinan	350	100	55	38	32	575
REGION II	42	57	305	15	30	449
Cagayan	15	21	85	8	7	136
Isabela	15	9	91	2	15	132
N. Vizcaya	8	23	50	1	3	85
Quirino	4	4	79	4	5	96
REGION III	930	646	380	359	242	2,557
Bataan	231	103	30	34	60	458
Bulacan	307	50	45	175	68	645
N. Ecija	68	134	49	16	32	299
Pampanga	258	276	190	98	46	868
Tarlac	51	36	41	24	22	174
Zambales	15	47	25	12	14	113
REGION IV	455	109	253	132	318	1,267
Batangas	205	6	45	30	115	401
Cavite	56	29	60	45	90	280
Laguna	37	28	73	15	58	211
Quezon	120	6	12	7	30	175
Rizal	22	39	10	20	-	91
Aurora	15	1	53	15	25	109
REGION V	1,366	255	260	233	483	2,597
Albay	412	149	68	42	182	853
Camarines Nor	216	29	50	55	79	429
Camarines Sur	486	50	94	104	183	917
Catanduanes	-	-	-	-	-	0
Masbate	-	-	-	-	-	0
Sorsogon	252	27	48	32	39	398
6 Regions	3,834	1,552	1,732	897	1,697	9,712
7 Regions	4,331	1,862	1,897	1,132	1,977	11,199

Appendix 2.6.1 INDUSTRIAL DEVELOPMENT IN THE STUDY AREA (1/2)

Region/ Province	Existing Industrial Area		Proposed Industrial Development			
	Location	Item	Rural Industrial Center		Other (Export Processing Zone, People Industrial Center, etc.)	
			Location	Item	Location	Item
CAR						
Abra	-	-	-	-	Bangued/Bucay/Botocny	Bamboo Craft/Rattan Craft/Ceramics
Benguet	Baguio	Baguio Export Processing Zone	-	-	Baguio City	Export Processing Zone
Ifugao	-	-	-	-	-	-
K. Apayao	-	-	-	-	Tabuk	Meat Processing/Bamboo Craft, Coffee & Fruit Processing
REGION I						
Ilocos Norte	-	-	-	-	Corrinao, Ilocos Norte	Peoples's Ind'l. Center (H'craft, W'craft, Rattan)
Ilocos Sur	-	-	-	-	-	-
La Union	-	-	Bacnotan	Agri-Based Processing, Fish Processing, Hagney Production Center (1,096 ha)	San Fernando	Poro Ind'l. Dev't. Area (Handtools, Yacht/Boat Bldg., Automotive, Electronics, Rubber Prod., Garments, etc.) (101 ha.)
Pangasinan	-	-	-	-	-	-
REGION II						
Batanes	-	-	-	-	-	-
Cagayan	-	-	-	-	State Colleges within the Region Sta. Ana	Commodity Integrated Tech./Extension Program, Sta. Ana Port Project
Isabela	-	-	-	-	Cauayan	Cauayan Regional Industrial Center
N. Vizcaya	-	-	-	-	-	-
Quirino	-	-	-	-	-	-
REGION III						
Bataan	Mariveles	Bataan Processing Zone (Ceramics, Garment, Stuffed Toys, Electronics & Electrical, etc.)	-	-	-	-
Bulacan	-	-	-	-	-	-
N. Ecija	-	-	-	-	-	-
Pampanga	-	-	-	-	-	-
Tarlac	-	-	-	-	Sapang Maragul, Tarlac	Sspang Maragul Ind'l. Estate/Luisita Ind'l. Park
Zambales	Subic	Maritime Ind'l. Complex (Ship Repair, Ship Parts, Fabrication & Fuel Depot)	-	-	-	-
REGION IV						
Cavite	Rosario, Cavite	Cavite Export Processing Zone (275 ha)	-	-	-	-
	Carmona, Cavite	Cavite-Carmona Ind'l. Estate (52 ha)	-	-	-	-
		People's Tech. Complex Cavite-Carmona	-	-	-	-
	Imus, Cavite	Informal Ind'l. Estate (12 ha)	-	-	-	-
	Gen. Trias, Cavite	New Cavite Ind'l. City (43 ha)	-	-	-	-

Appendix 2.6.1 INDUSTRIAL DEVELOPMENT IN THE STUDY AREA (2/2)

Region/ Province	Existing Industrial Area		Proposed Industrial Development			
	Location	Item	Rural Industrial Center		Other (Export Processing Zone, People Industrial Center, etc.)	
			Location	Item	Location	Item
	Dasmariñas, Cavite	First Cityland Heavy Industrial Center	-	-	-	-
		First Cavite Dasmariñas Bagong-Bayan NHA Ind'l. Estate (8.6 ha)	Dasmariñas	Marubeni	-	-
	Gen. M. Alvarez, Cavite	Gen. Mariano Alvarez-NHA Industrial Estate (10 ha)	-	-	-	-
	Silang, Cavite	Buliphan-NHA Ind'l. Estate (3 ha)	-	-	-	-
Laguna	Canlubang, Laguna	Canlubang Ind'l. Park (292 ha)	-	-	-	-
	Biñan, Sta. Rosa	Ayala-Laguna Techno Park	-	-	-	-
	Bo. Diezmo, Canlubang	Science Park of Phils.	Canlubang	Mitsubishi	-	-
Quezon	-	-	-	-	-	-
Rizal	-	-	-	-	-	-
	-	-	Pinaguyan	Industrial	-	-
	-	-	San Mateo	Industrial	-	-
Aurora	-	-	-	-	-	-
Batangas	-	-	Baur	Batangas Ind'l. Estate	-	-
REGION V						
Albay	-	-	Albay	Bicol Regional Industrial Center	People's Industrial Enterprises	Congressional Districts of the Region
Camarines Norte	-	-	Camarines Norte	Provincial Industrial Center	-	-
Camarines Sur	-	-	Camarines Sur	Provincial Industrial Center	-	-
Catanduanes	-	-	Catanduanes	Provincial Centers	-	-
Masbate	-	-	Masbate	Provincial Industrial Center	-	-
Sorsogon	-	-	Sorsogon	Provincial Industrial	-	-

Appendix 2.6.2 TOURISM DEVELOPMENT STATUS IN THE STUDY AREA (1/2)

Region/ Province	Main Location	Hotels						No. of Tourism Spot	Tourism Spots Main Location
		No. of Hotels			Number of Rooms				
		3 Stars	Others	Total	3 Stars	Others	Total		
CAR		15	90	105	529	1,643	2,172	103	
Abra		0	4	4	0	38	38	13	
Benguet	Baguio	13	48	61	377	1,223	1,600	41	Baguio
Ifugao	Banaue	1	24	25	130	224	354	17	
K. Apayao	Tabuk	0	4	4		42	42	11	
Mt. Province	Boatoc	1	10	11	22	116	138	21	
REGION I		12	40	52	418	621	1,039	88	
Ilocos Norte	Laoag	1	6	7	126	166	292	42	Curriniao
Ilocos Sur	Vigan	3	5	8	48	49	97	19	Sinait
La Union	Bauang	1	3	4	20	68	88	14	Bawang
Pangasinan	Dagupan	7	26	33	224	338	562	13	San Fabian
REGION II		3	12	15	130	269	399	38	
Cagayan	Tuguegarao	1	6	7	54	134	188	21	Tuguegarao
Isabela	Cauayan	2	3	5	76	78	154	5	Santiago
N. Vizcaya	Bayombong	0	3	3	0	57	57	7	Bayombong
Quirino		0	0	0	0	0	0	5	
REGION III		28	148	176	1,494	1,749	3,243	111	
Bataan	Mariveles	2	11	13	50	161	211	34	Begac
Bulacan			10	10	0	150	150	22	Guiguinto
N. Ecija	Cabanatuan City	1	8	9	28	42	70	6	Mayapyap Sur, Cabanatuan City
Pampanga	Angeles City	17	34	51	1,028	523	1,551	17	Porac, Pampanga
Tarlac	Tarlac	1	11	12	44	165	209	12	Bamban, Paniqui, Tarlac
Zambales	Olongapo	7	74	81	344	708	1,052	20	Iba, Botolan, Subic
REGION IV		16	52	68	816	624	1,440	203	
Batangas	San Luis, Lipa, Balanga	5	20	25	162	225	387	49	Talisay, Lemery, Mabini, Lobo, Lipa, Nasugbu
Cavite	Ternate, Tagaytay	3	6	9	457	73	530	21	Ternate, Tanza, Tagaytay, Noveleta, Naic
Laguna	Los Baños, Pagsanjan	3	6	9	79	86	165	69	Calamba, Los Baños, Liliw, Majayjay, Pacte, Cavinti
Quezon	Lucena	5	13	18	118	220	338	36	Lucena, Sariaya, Polilio, Atimonan
Rizal	Antipolo	0	7	7	0	20	20	23	Montalban, Binangonan, Cardona
Aurora		0	0	0	0	0	0	5	
REGION V		13	33	46	505	555	1,060	50	
Albay	Legaspi	6	20	26	217	328	545	20	Tiwi
Camarines Norte	Daet	0	3	3	0	20	20	10	
Camarines Sur	Naga	7	5	12	288	131	419	8	Naga City
Sorsogon	Sorsogon	0	5	5	0	76	76	12	Matnog, Bulan
Total 6 Regions		87	375	462	3,892	5,461	9,353	593	

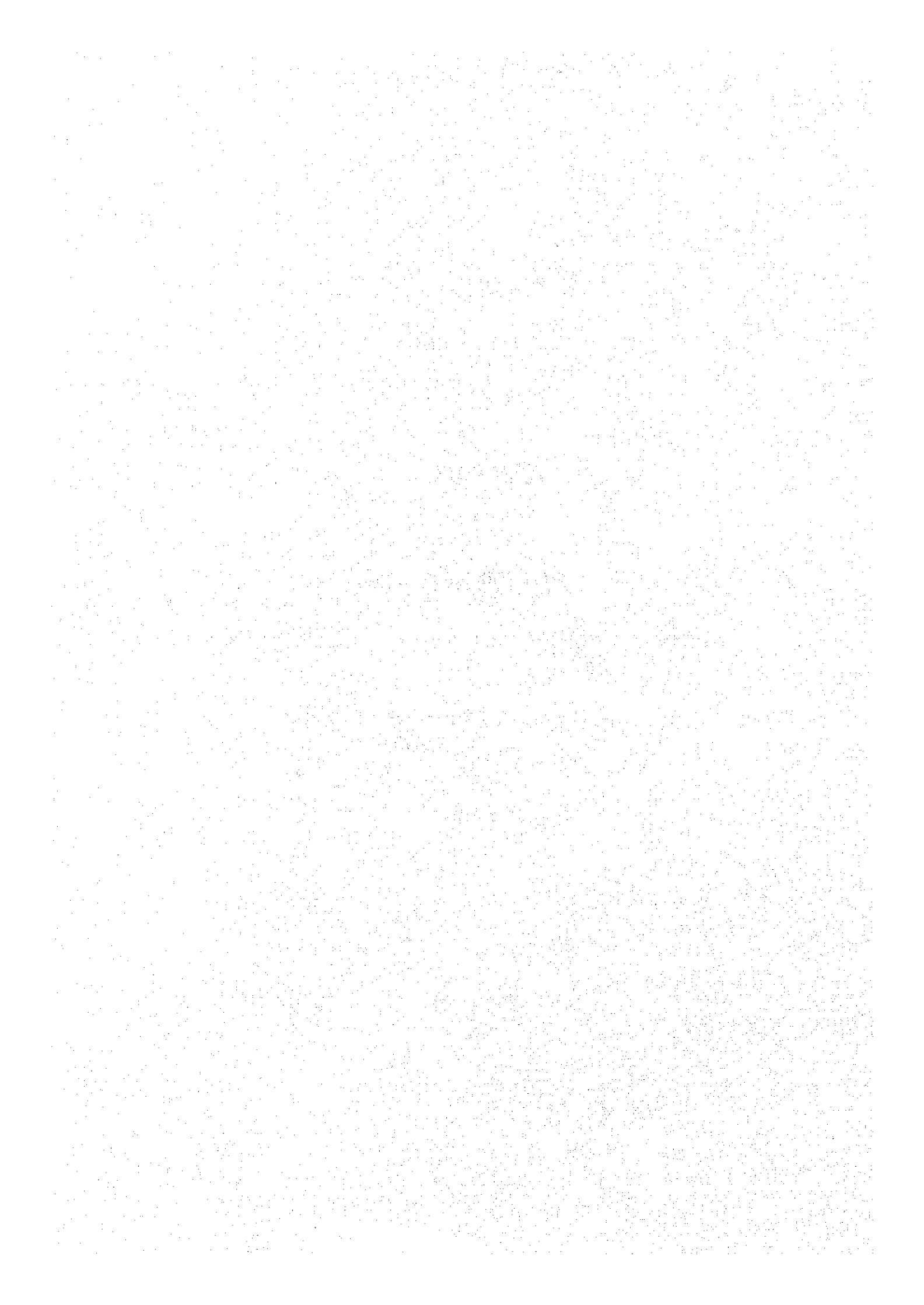
Appendix 2.6.2 TOURISM DEVELOPMENT STATUS IN THE STUDY AREA (2/2)

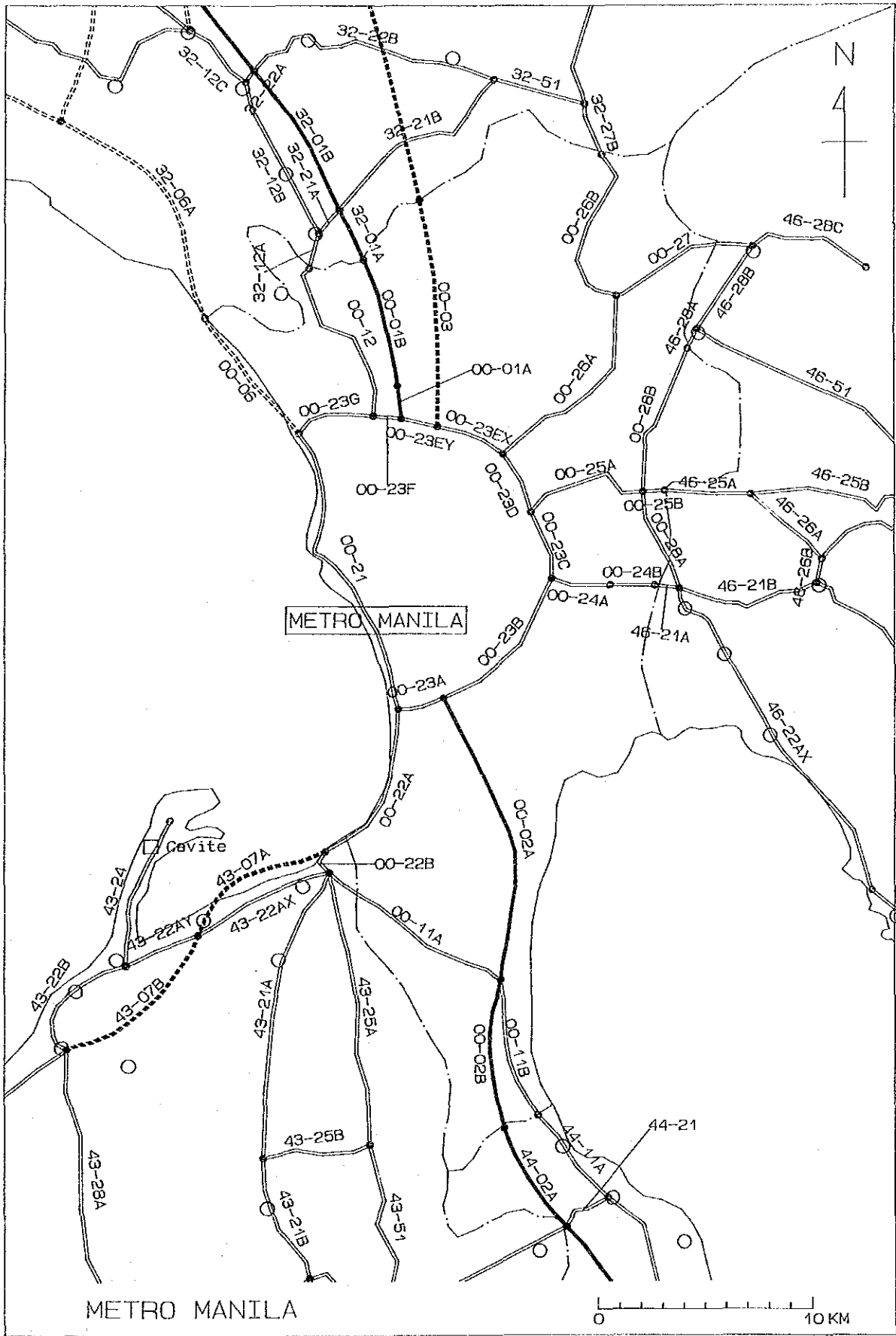
Region/ Province	Tourism Spots		Future Tourism Development
	Kind		
CAR			
Abra	Hills, Tunnel, Spring		The preservation of cultural treasures in the Region such as the Alab petroglyphs, burial caves in Kabayan and Ifugao rice terraces, environmental protection, construction of tourism-related infrastructures such as roads, lodging-houses, hotels, etc.
Benguet	Caves, Falls, Hot Springs, Rice Terraces		
Ifugao	Caves, Rice Terraces, Waterfalls, Swimming Pool		
K. Apayao	Waterfalls, Hills		
Mt. Province	Museums, Rice Terraces, Lakes, Waterfalls		
REGION I			
Ilocos Norte	Springs, Waterfalls, Caves, Museums, Churches		Dev't. of Laoag Tourism & Recreation Circuit Restoration & Dev't. of Vigan Heritage Vill. & Const. of Tourism Complex Const. of Bolinao Tourism Estate & Retirement Village
Ilocos Sur	Beaches, Waterfalls, Museums, Caves		
La Union	Beaches, Parks		
Pangasinan	Beaches, Parks, Museum		
REGION II			
Cagayan	Waterfalls, Beaches		Park beautification & street lighting Park beautification & street lighting Construction of Children's Park
Isabela	Beaches, Caves, Waterfalls		
N. Vizcaya	Waterfalls, Hot Springs		
Quirino	Caves, Waterfalls		
REGION III			
Bataan	Churches, Parks, Beaches		Tourism dev't. shall be pursue along coastal/beach sand areas with due consideration to environmental protection and conservation of the ecosystems
Bulacan	Churches, Springs, Parks		
N. Eeija	Parks		
Pampanga	Parks		
Tarlac	Parks, Caves, Museums		
Zambales	Beach Resorts		
REGION IV			
Batangas	Beach Resorts, Hot Springs, Swimming Pools		Dev't. of Nasugbu-Ternate coastline, Dev't. of Taal town Linkage of Tagaytay, Taal Lakeshore, Town of Taal & Mabini peninsula Environmental Protection Environmental Protection
Cavite	Beach Resorts, Beach Resorts, Falls		
Laguna	Swimming Pools, Beach Resorts, Falls		
Quezon	Swimming Pools Beach Resorts, Springs, Falls		
Rizal	Hot springs, Swimming Pools, Caves, Falls		
Aurora	Beaches, Springs		
REGION V			
Albay	Parks, Beaches, Hist. Church, Mt. View, S. Pools, Cavcs, Spring		Const. of Multi-Purpose Stgae in Locsin Park, Rehabilitation of Daraga Church, Construction of Picnic Grove at Basay Falls, Dev't. of Bagasbas Beach, CONSOCEP Mountain Resort Proj., Capitol Park Dev't., Marinawa Falls Dev't., Paco Beach Resort Dev't., Palhi Spring Resort Rehabilitation
Camarines Norte	Parks, Church, Resort, Spring, Lake		
Camarines Sur	Parks, Swimming Pool		
Sorsogon	Hot Springs, Lake, Mt. View, Historical Church, Beach Resort, Parks		

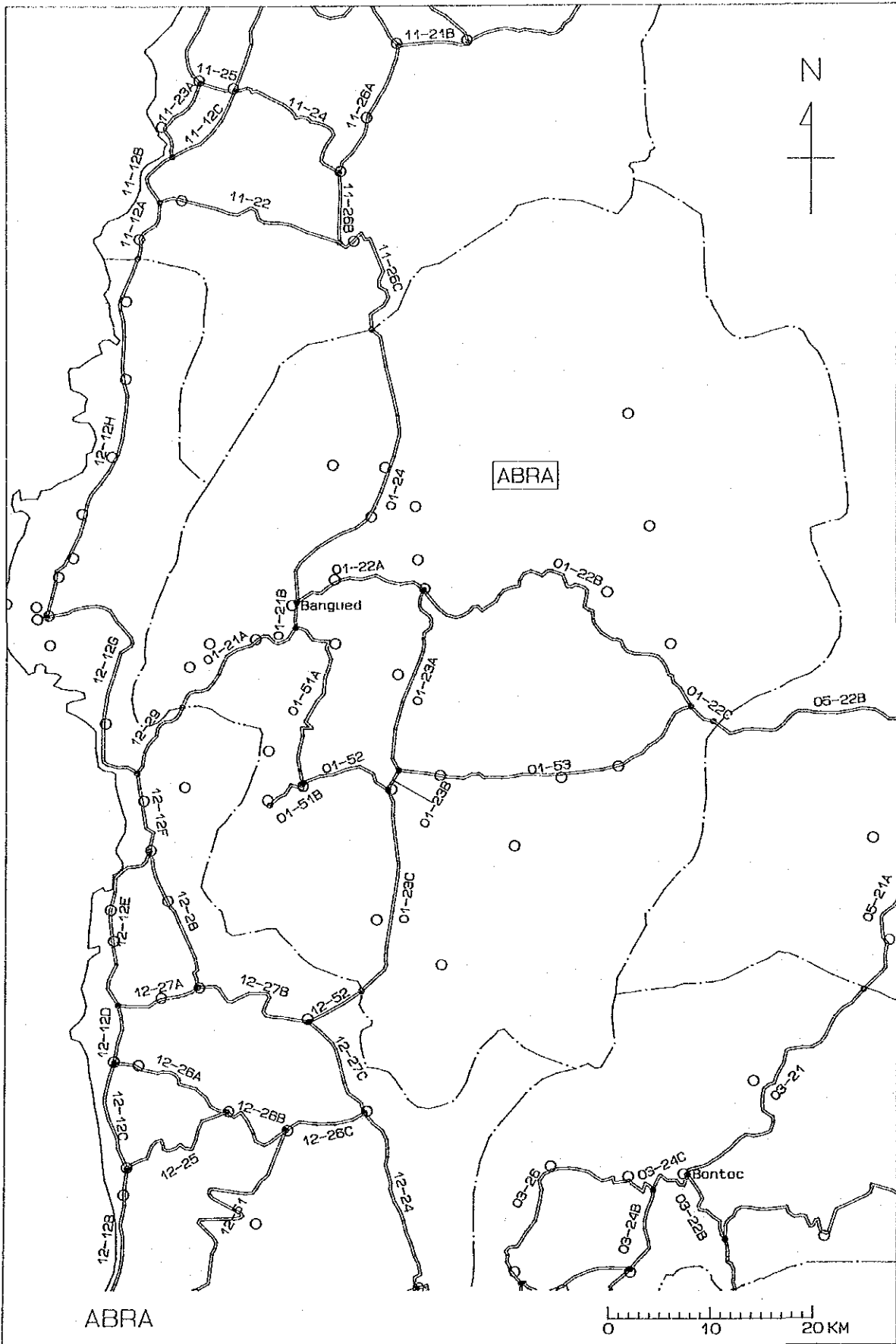
APPENDIX FOR CHAPTER 3

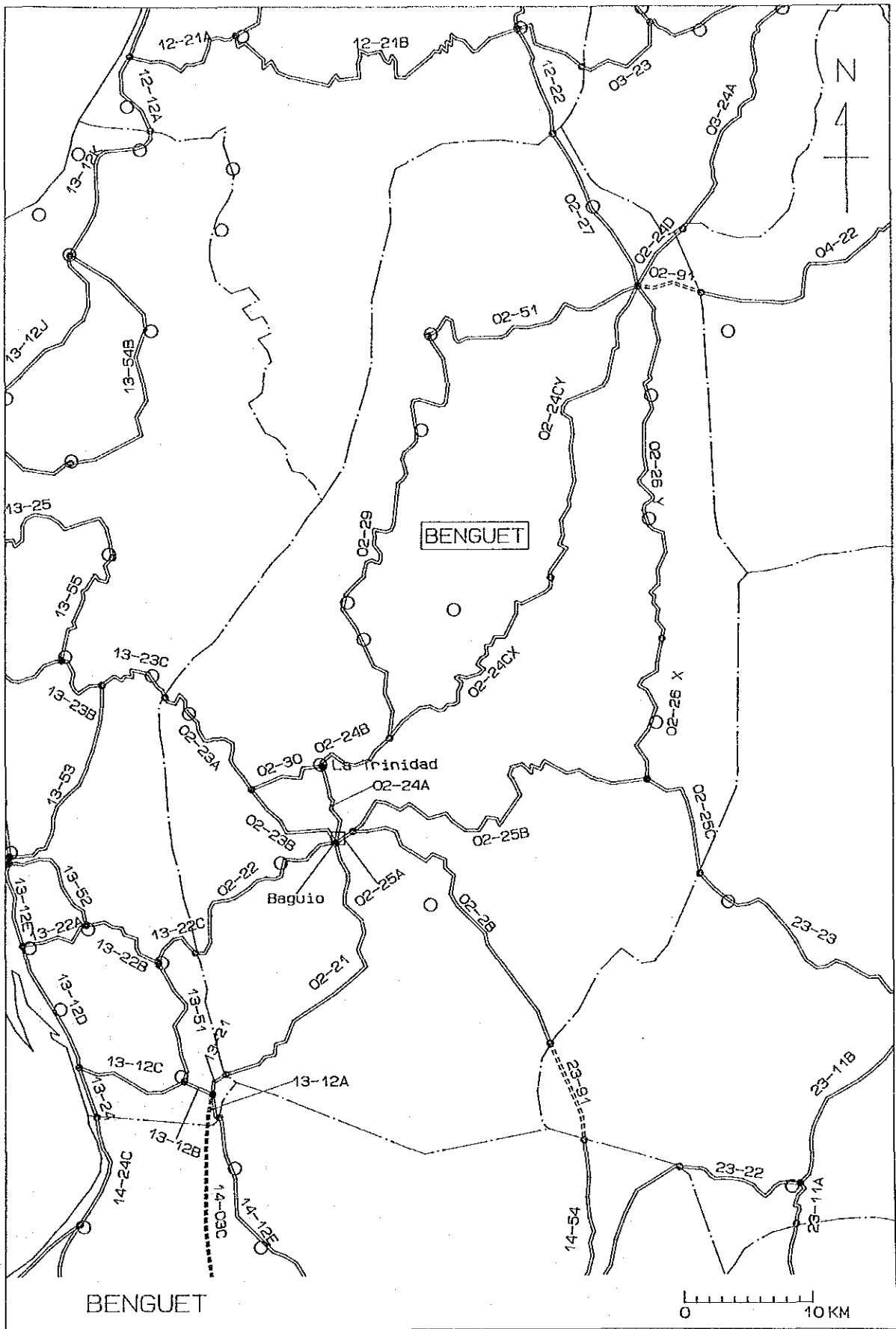
APPENDIX 3.1

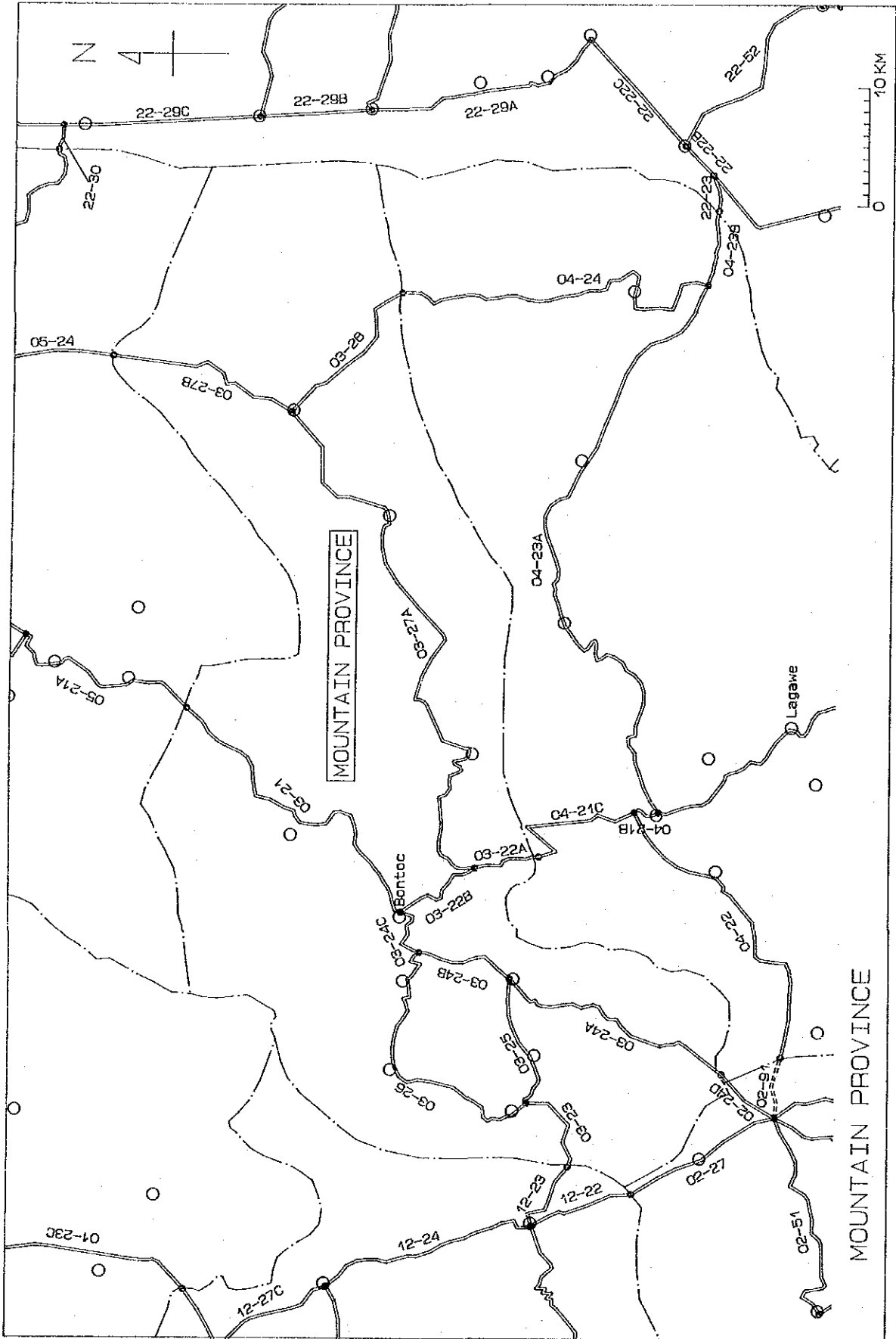
ROAD INDEX MAP

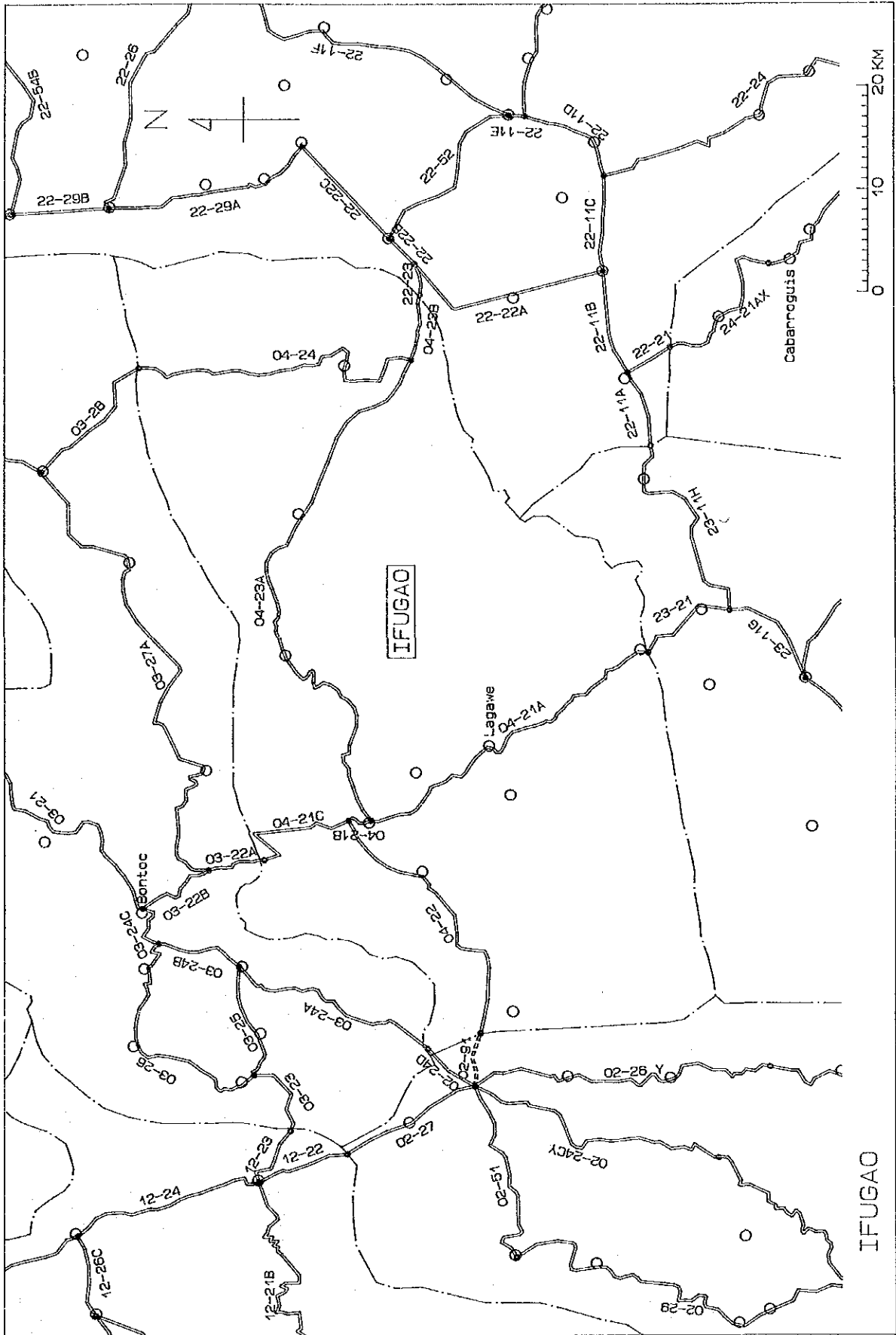


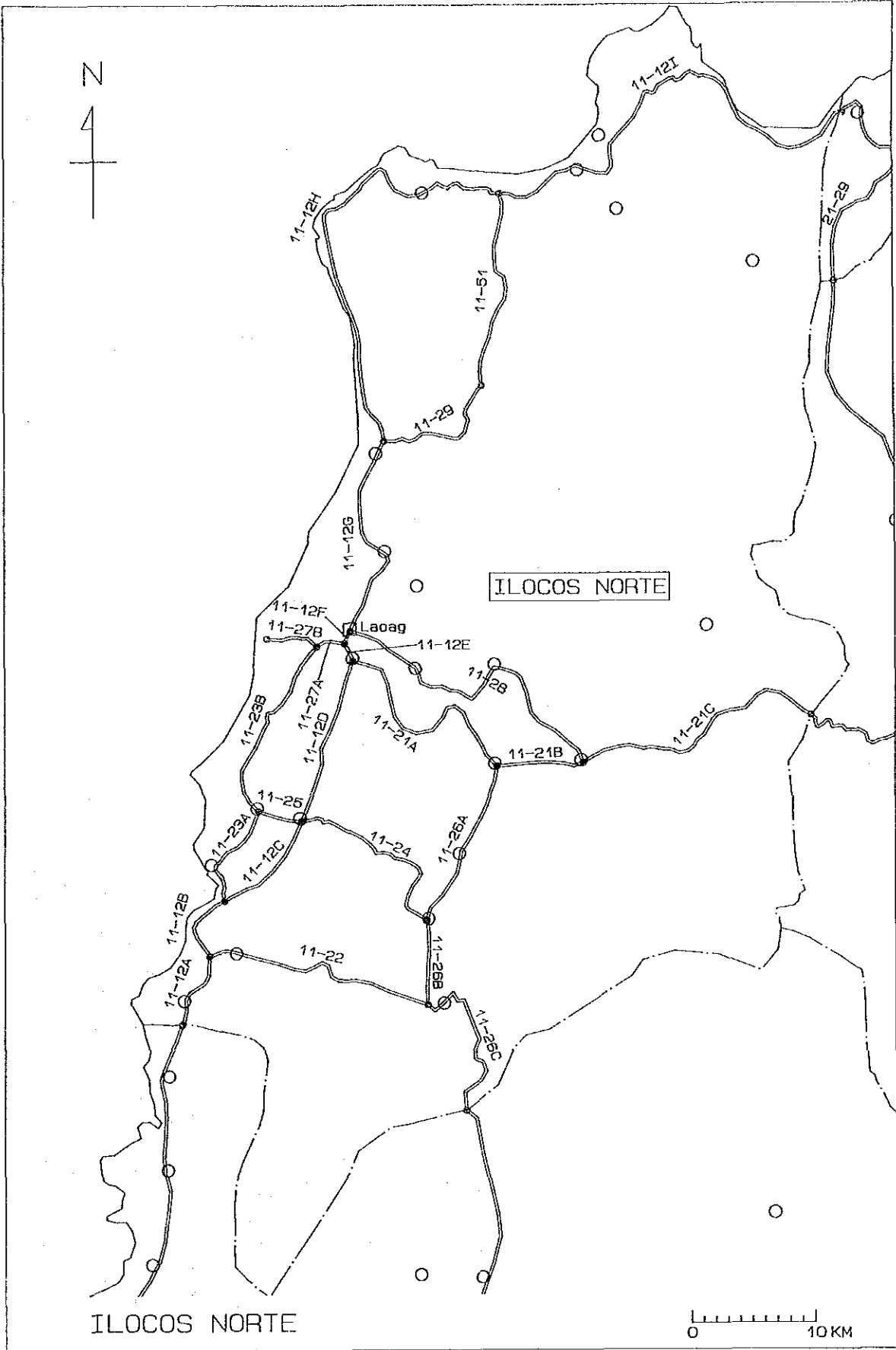


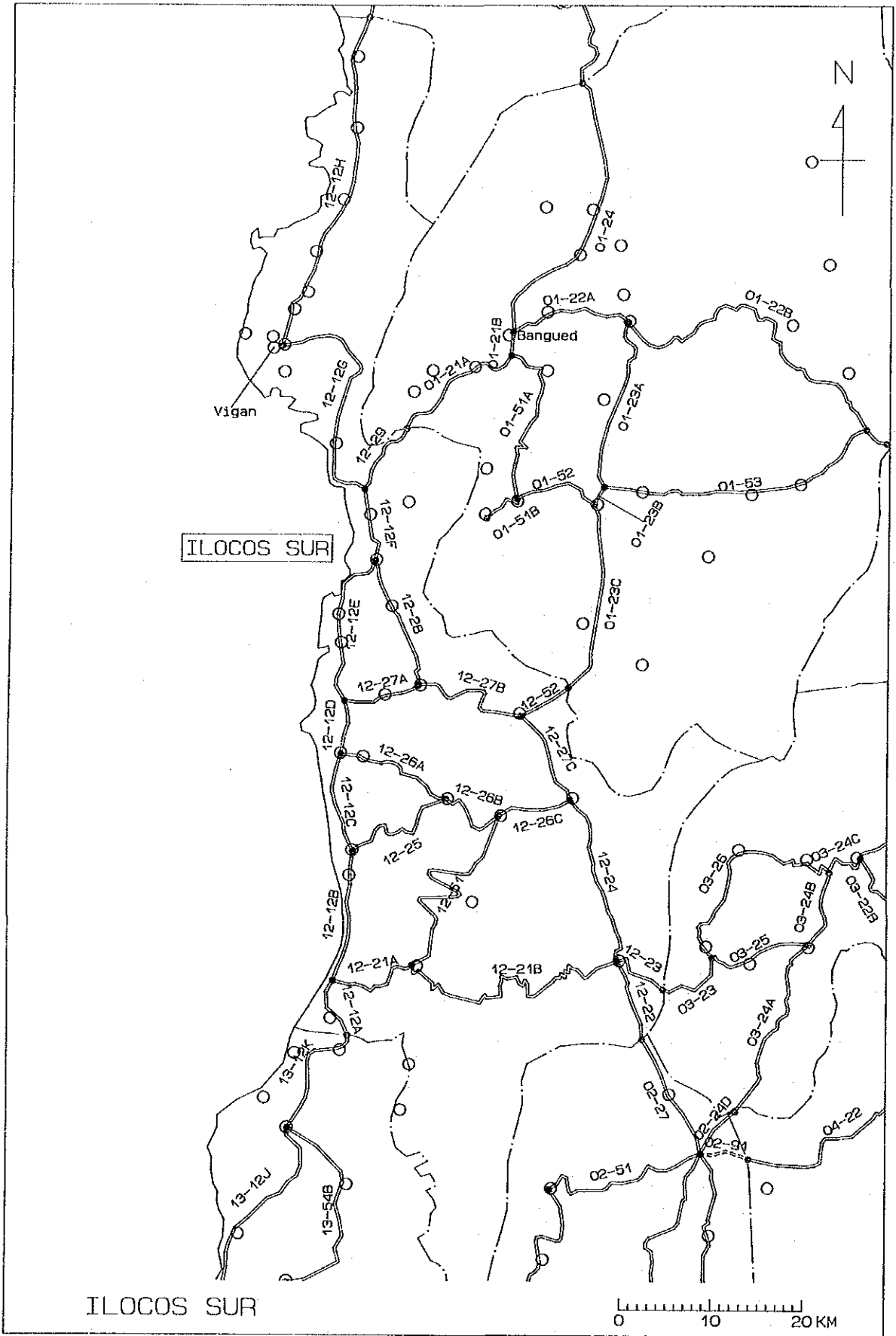


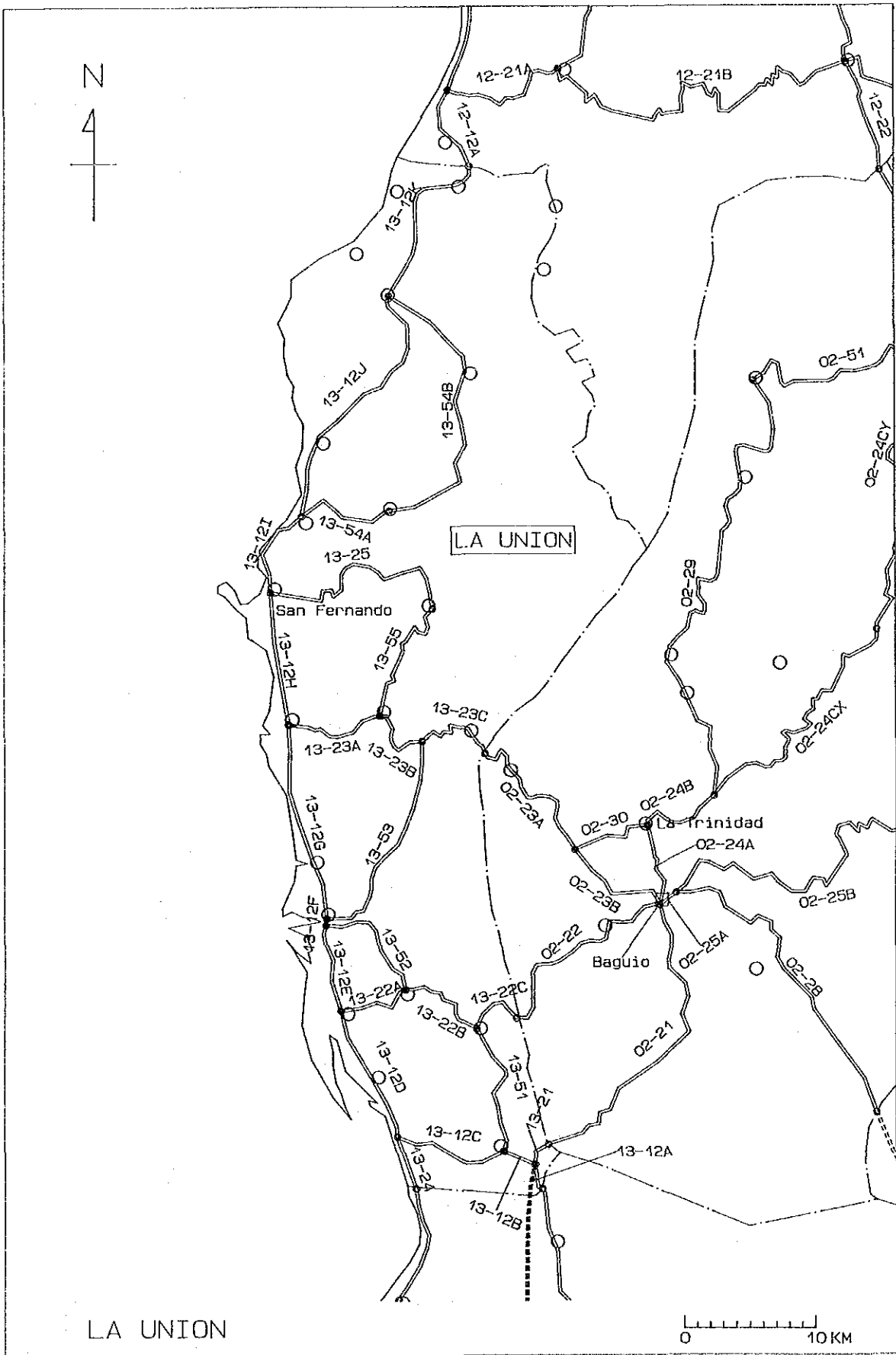


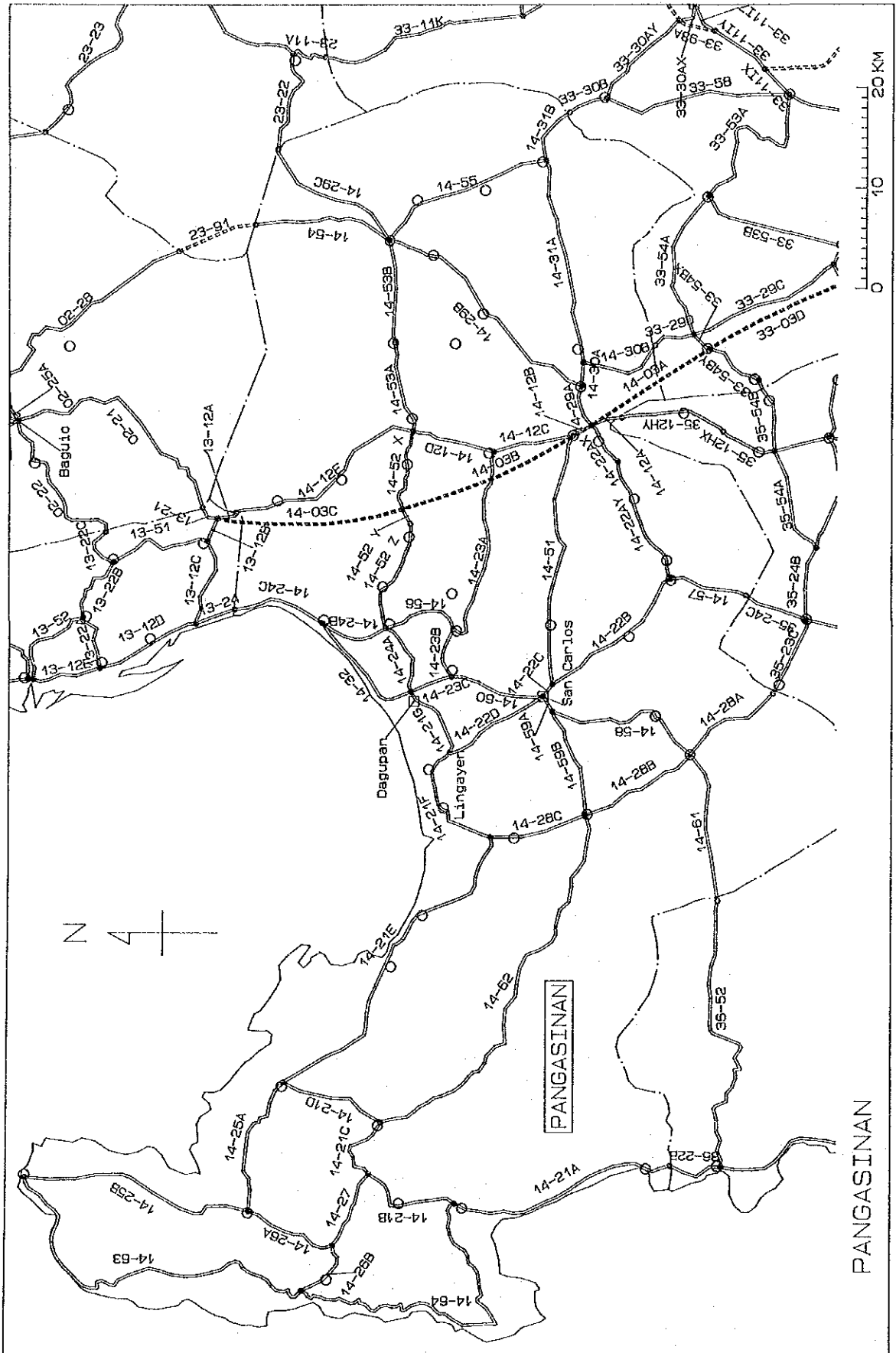


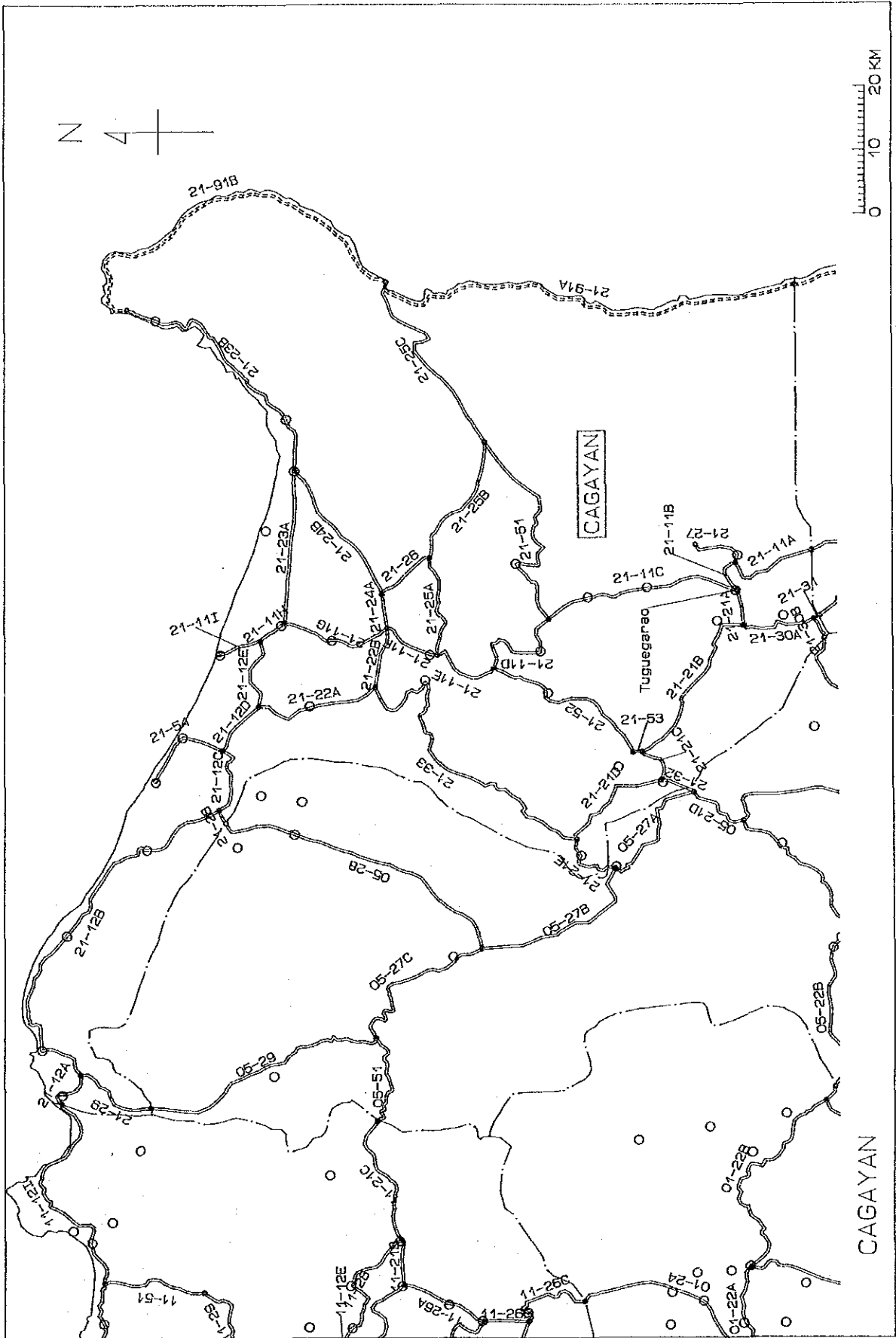


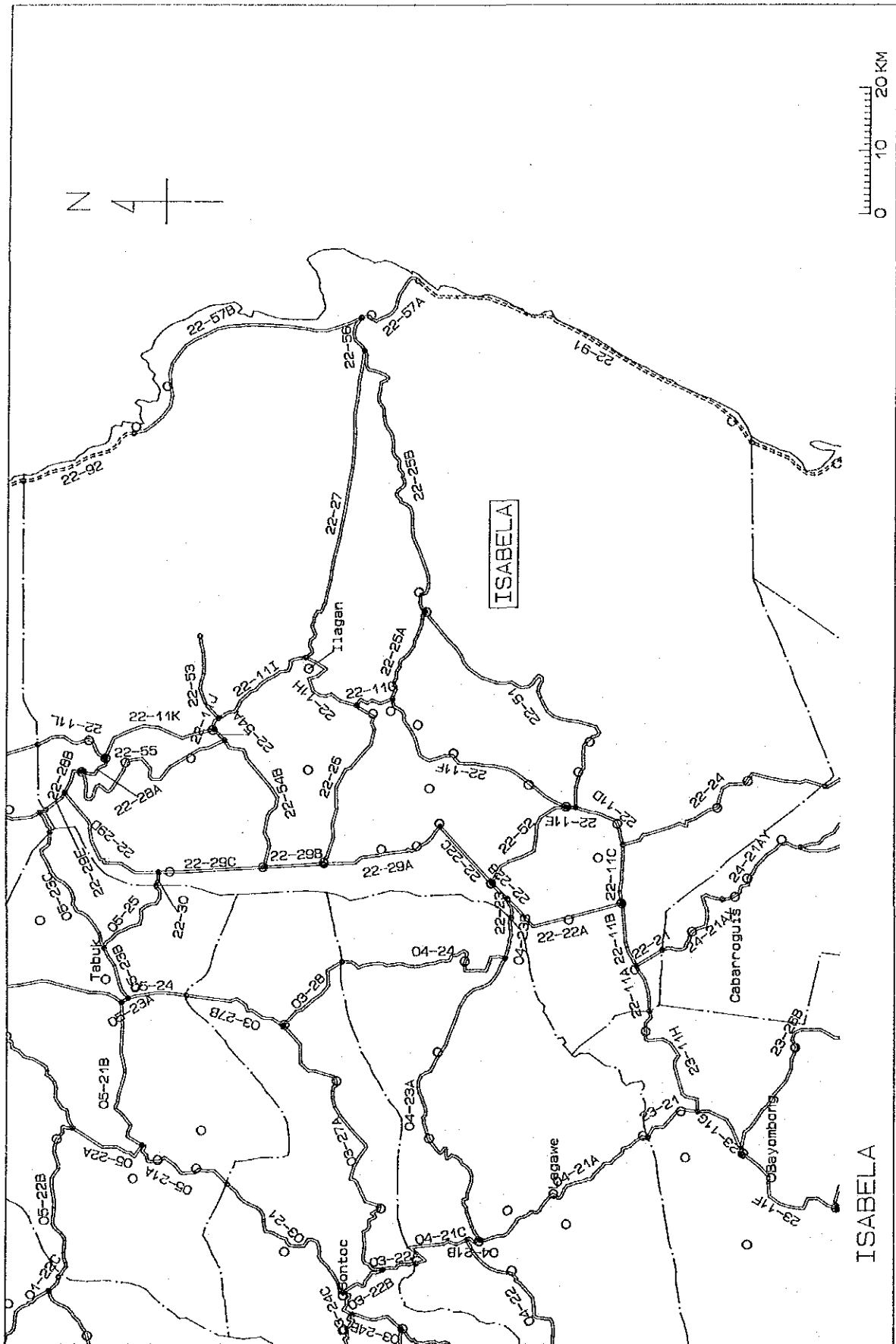


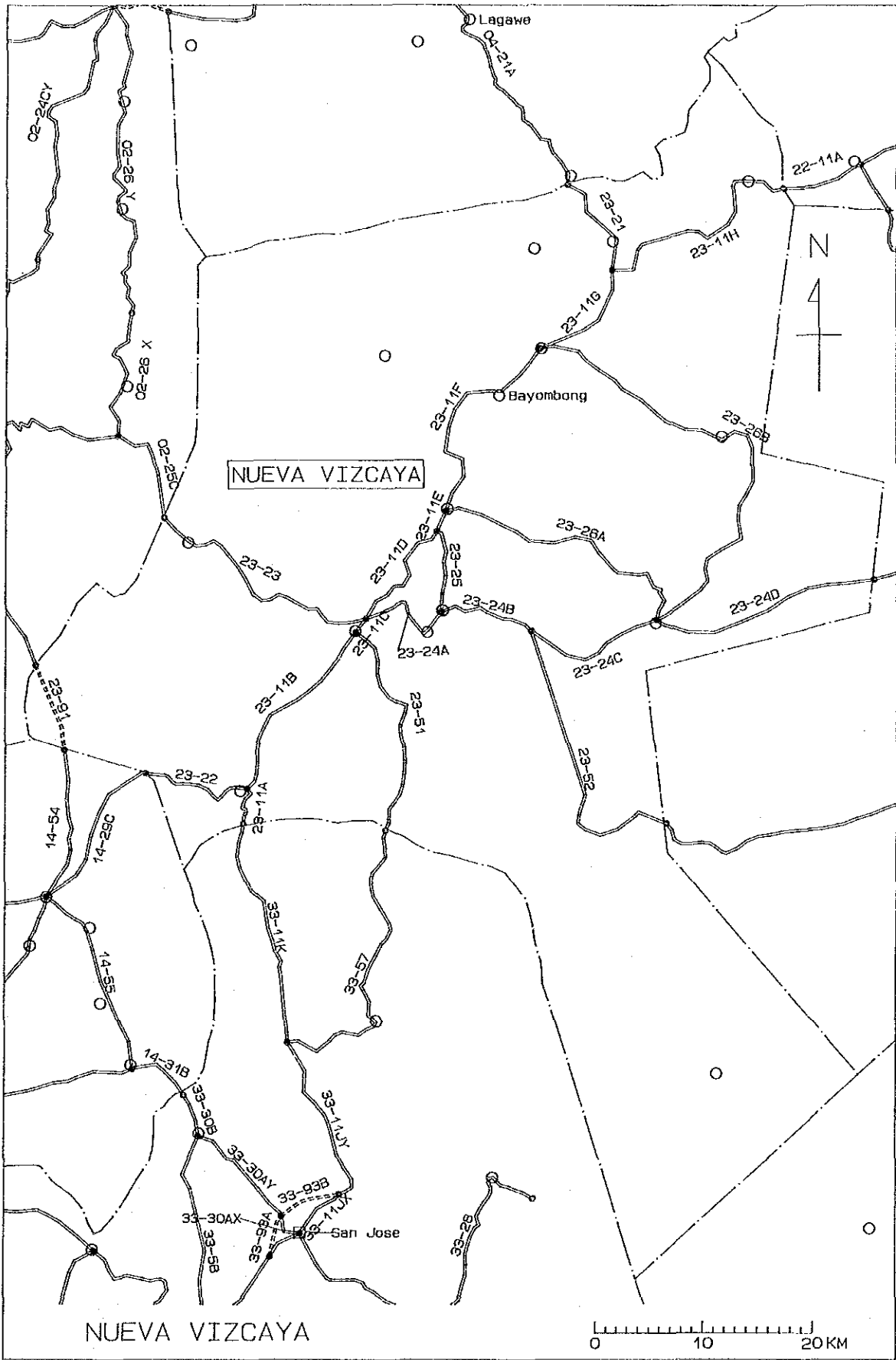


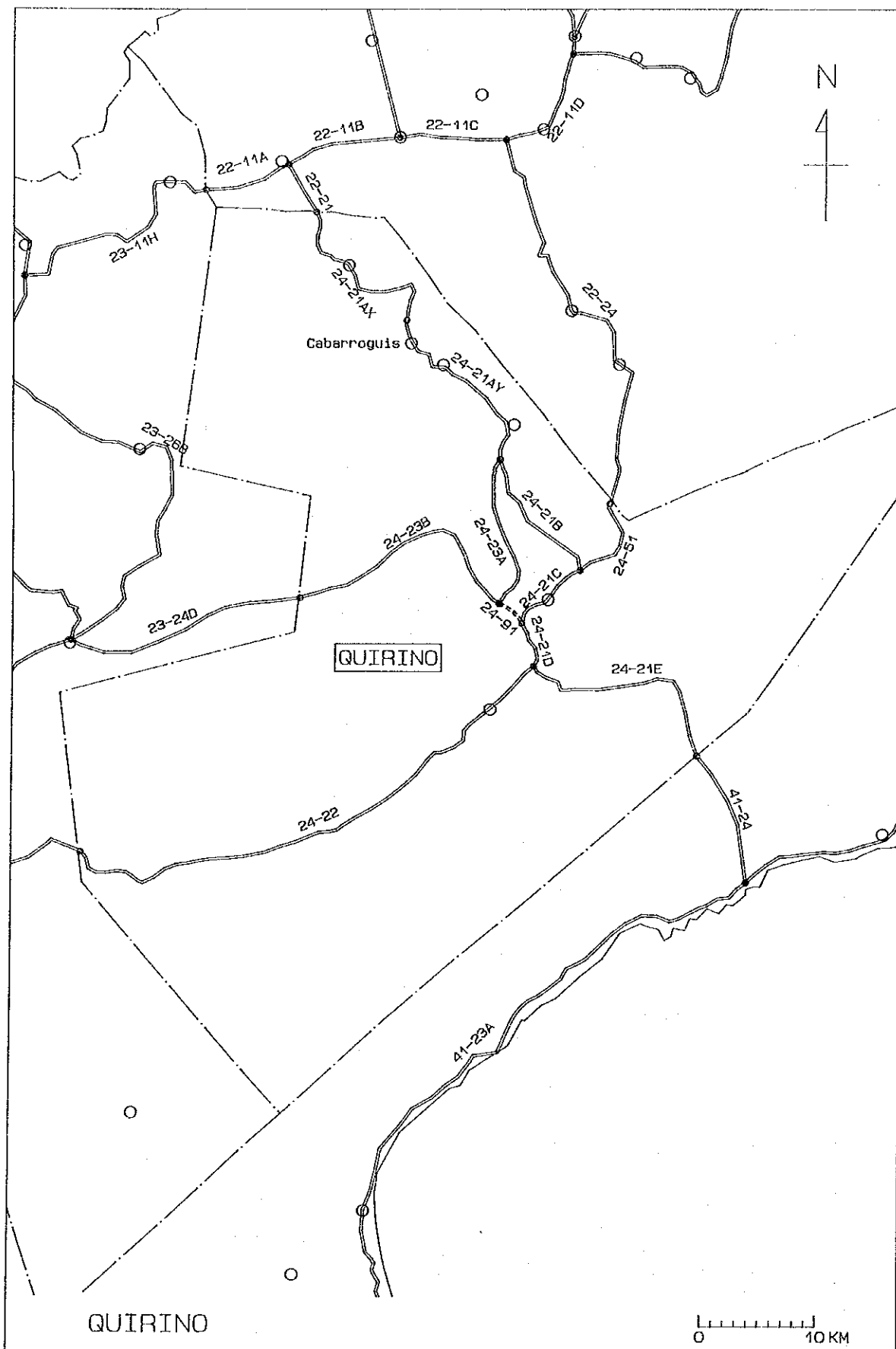


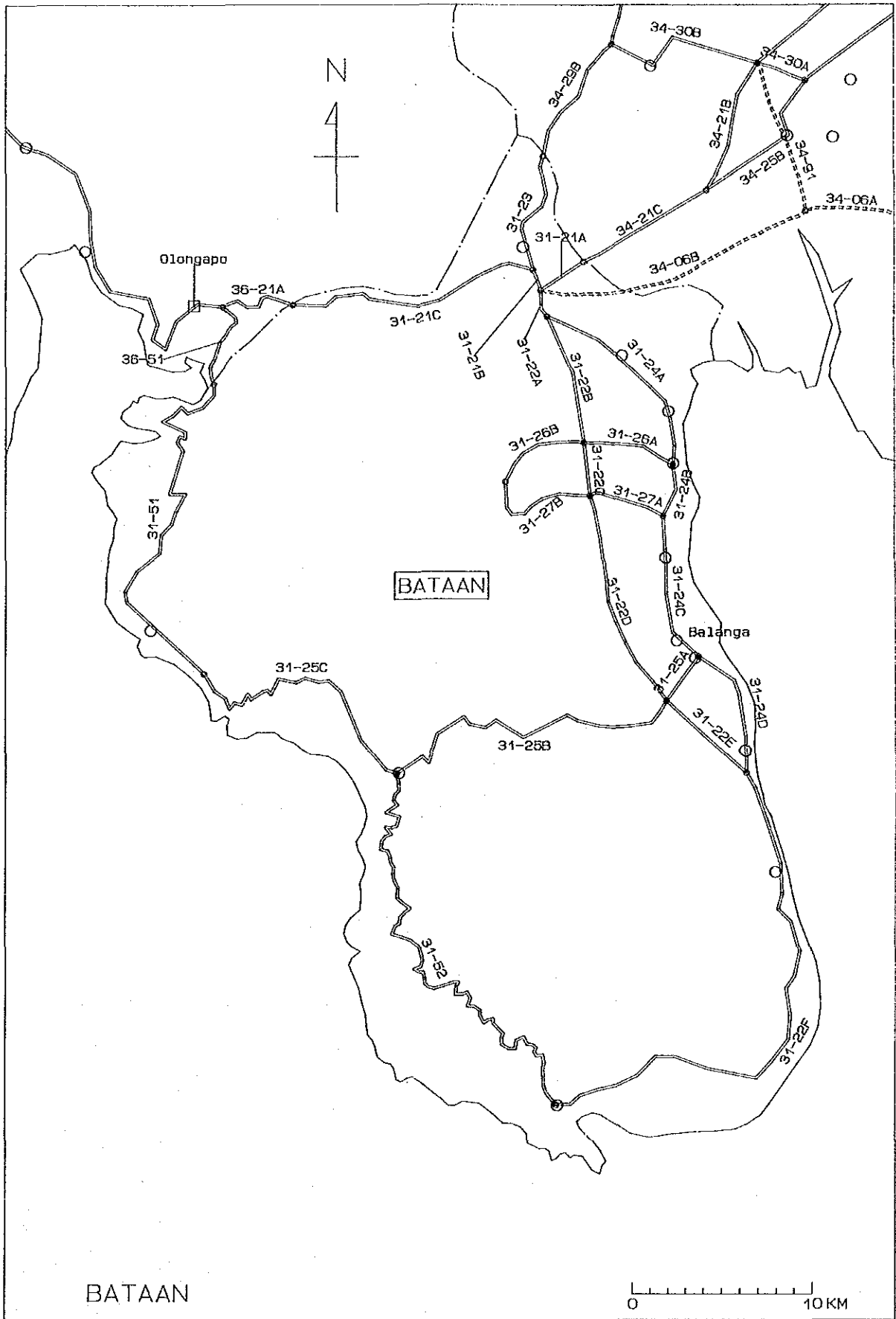


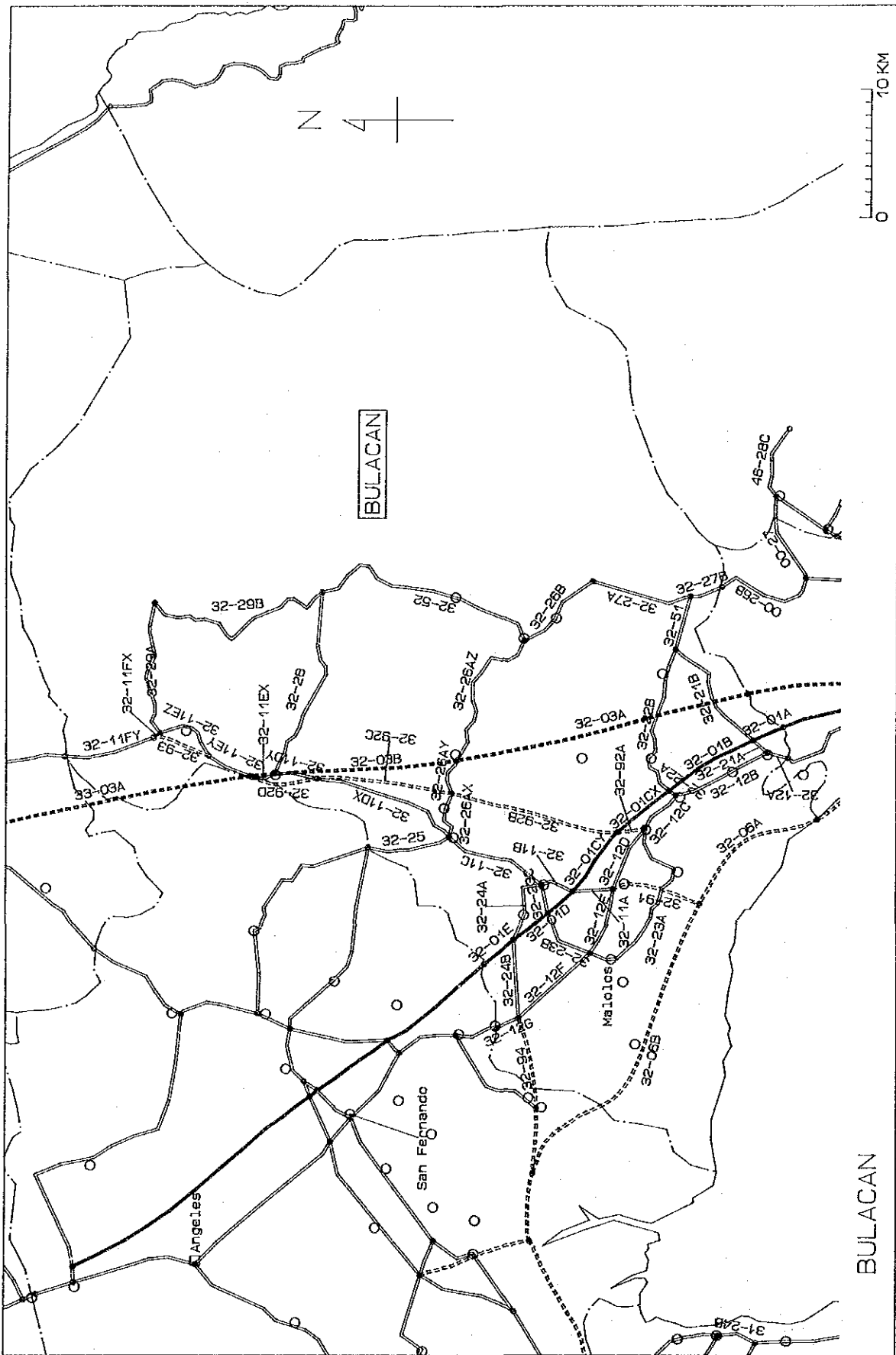


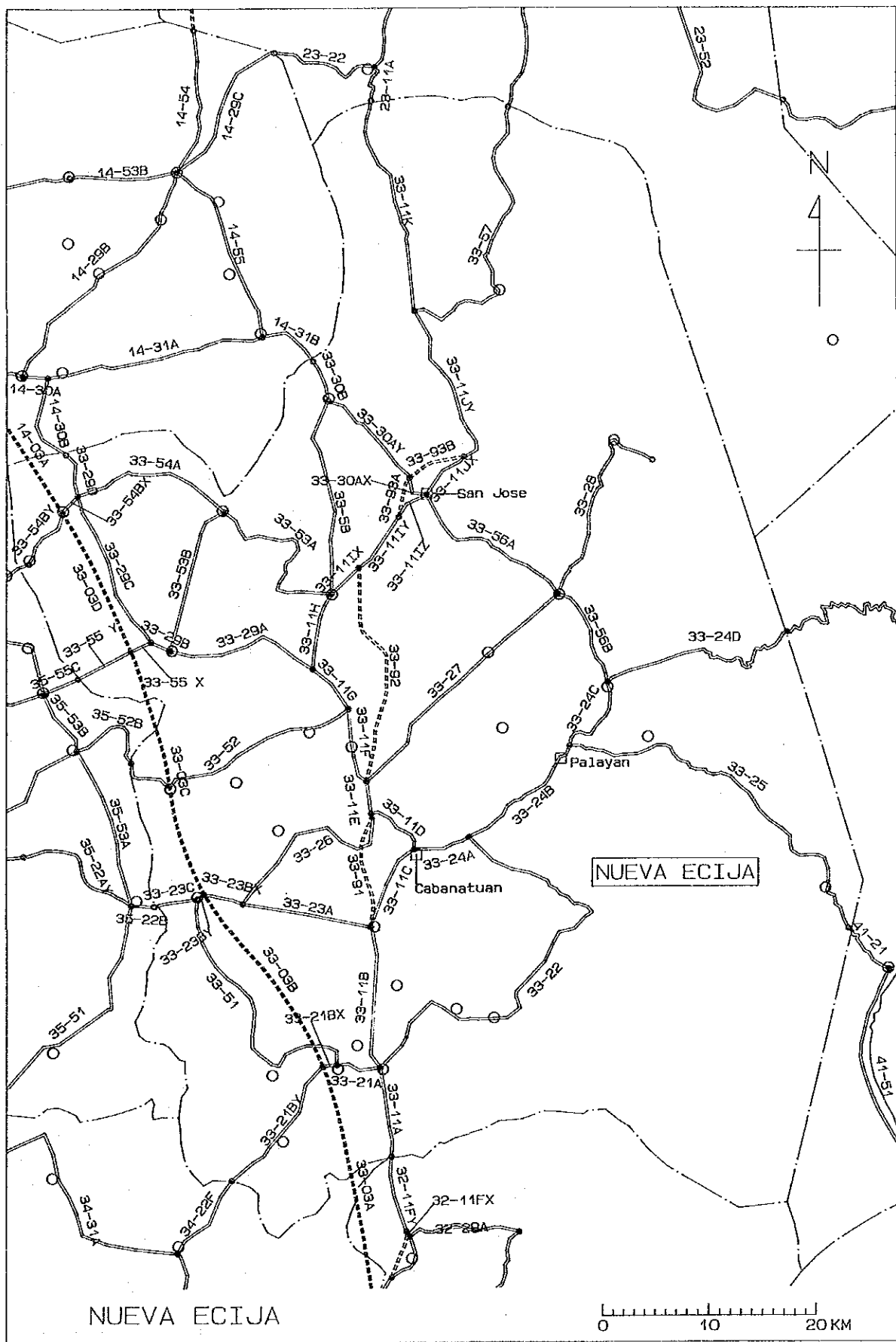


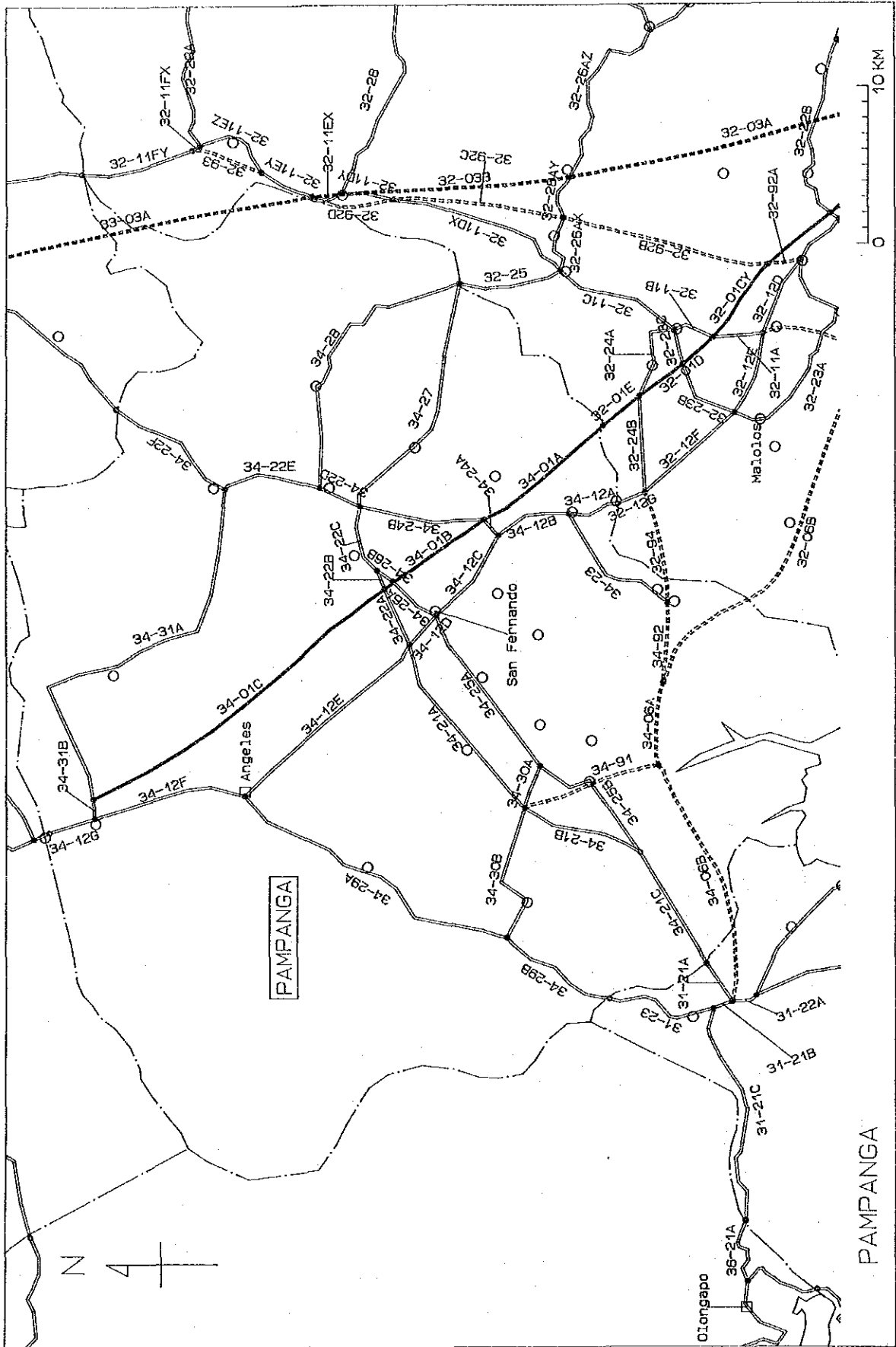


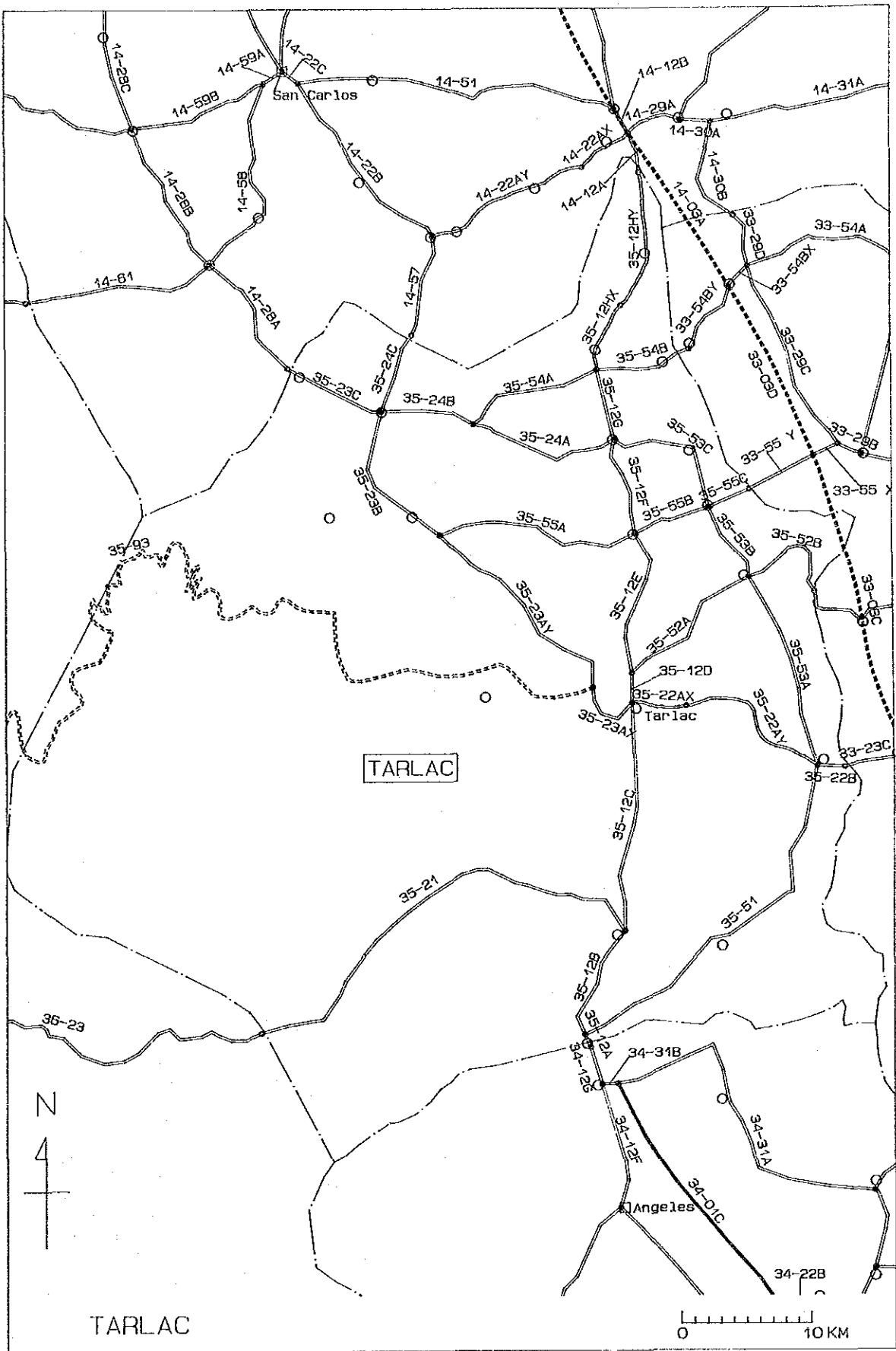


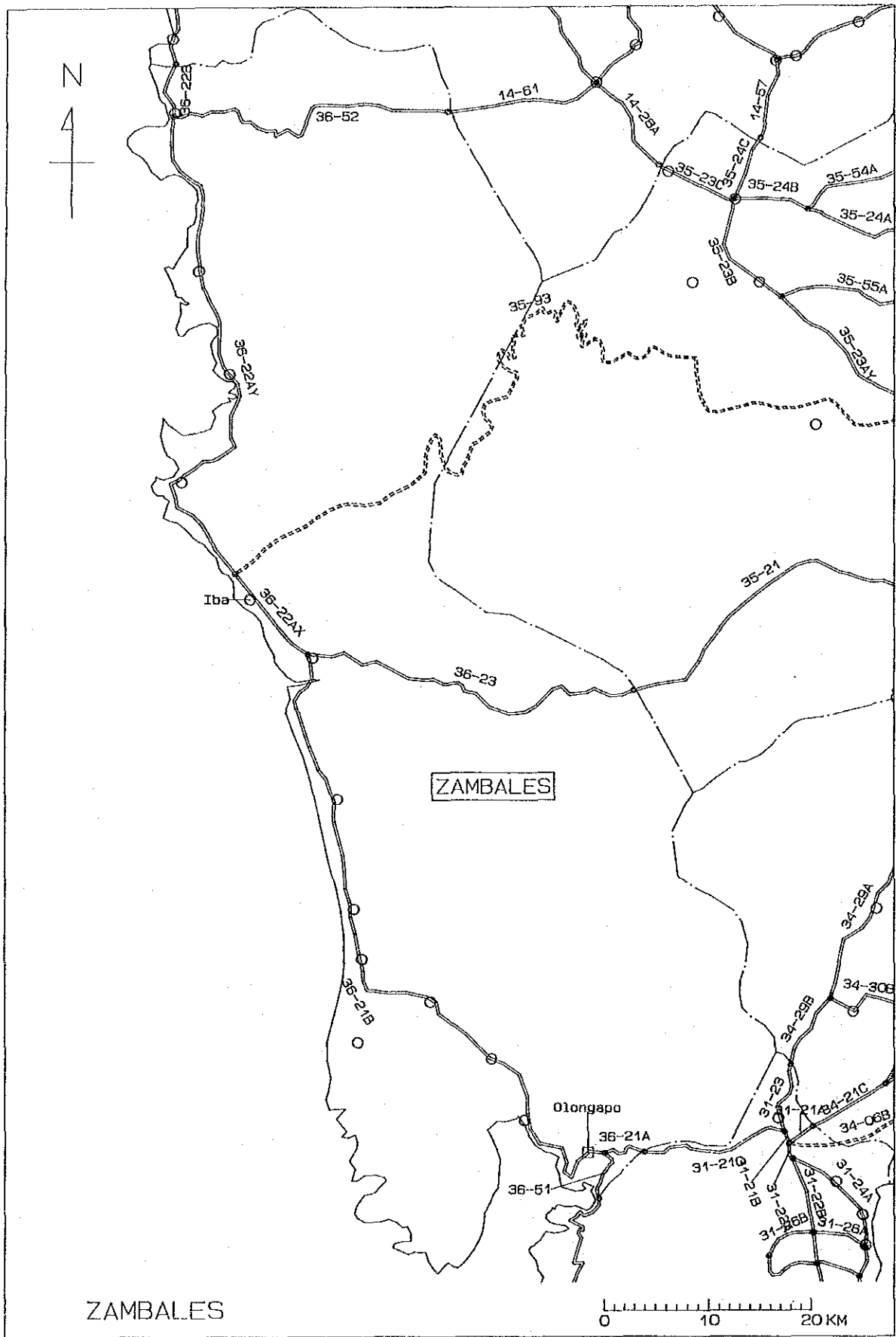


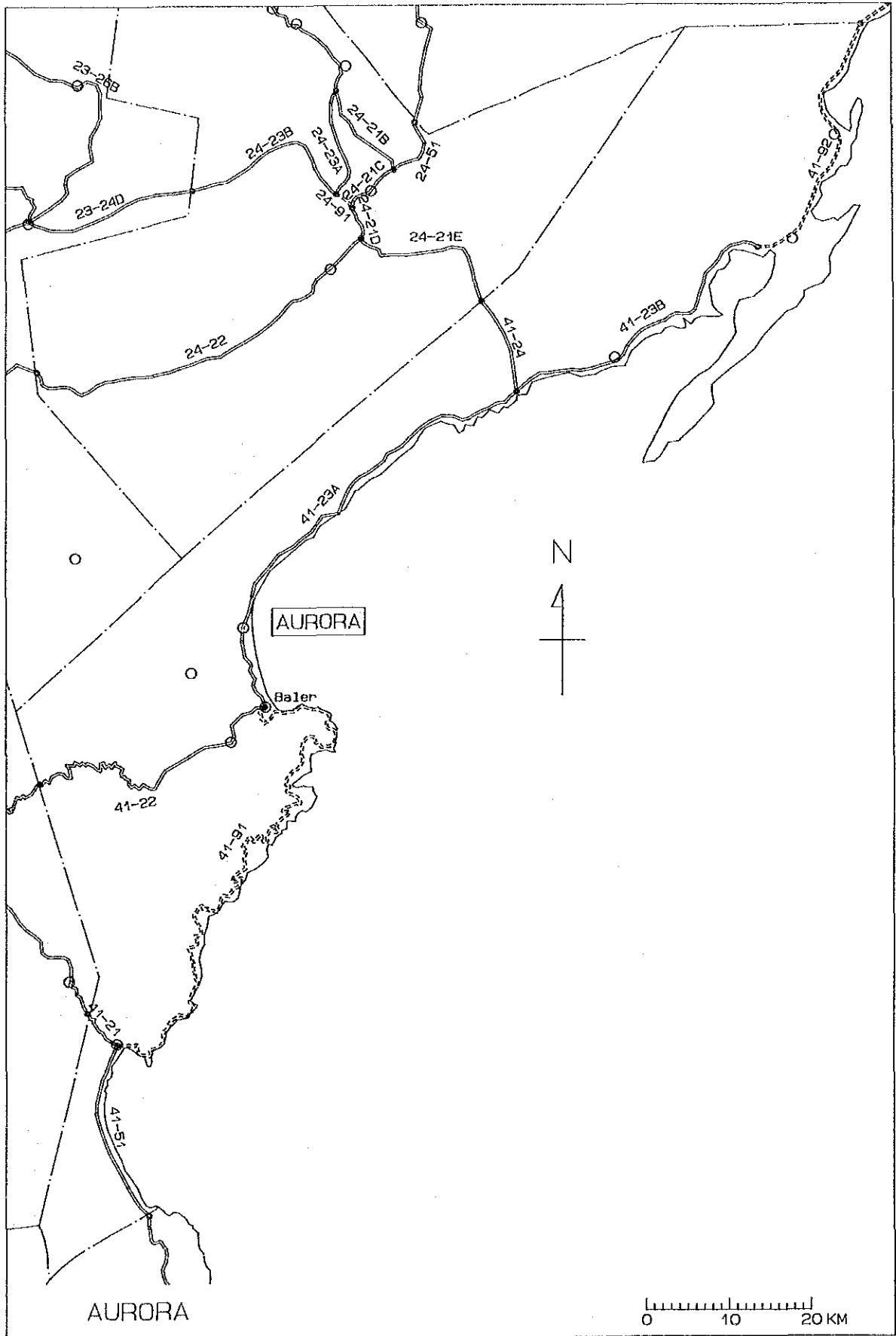


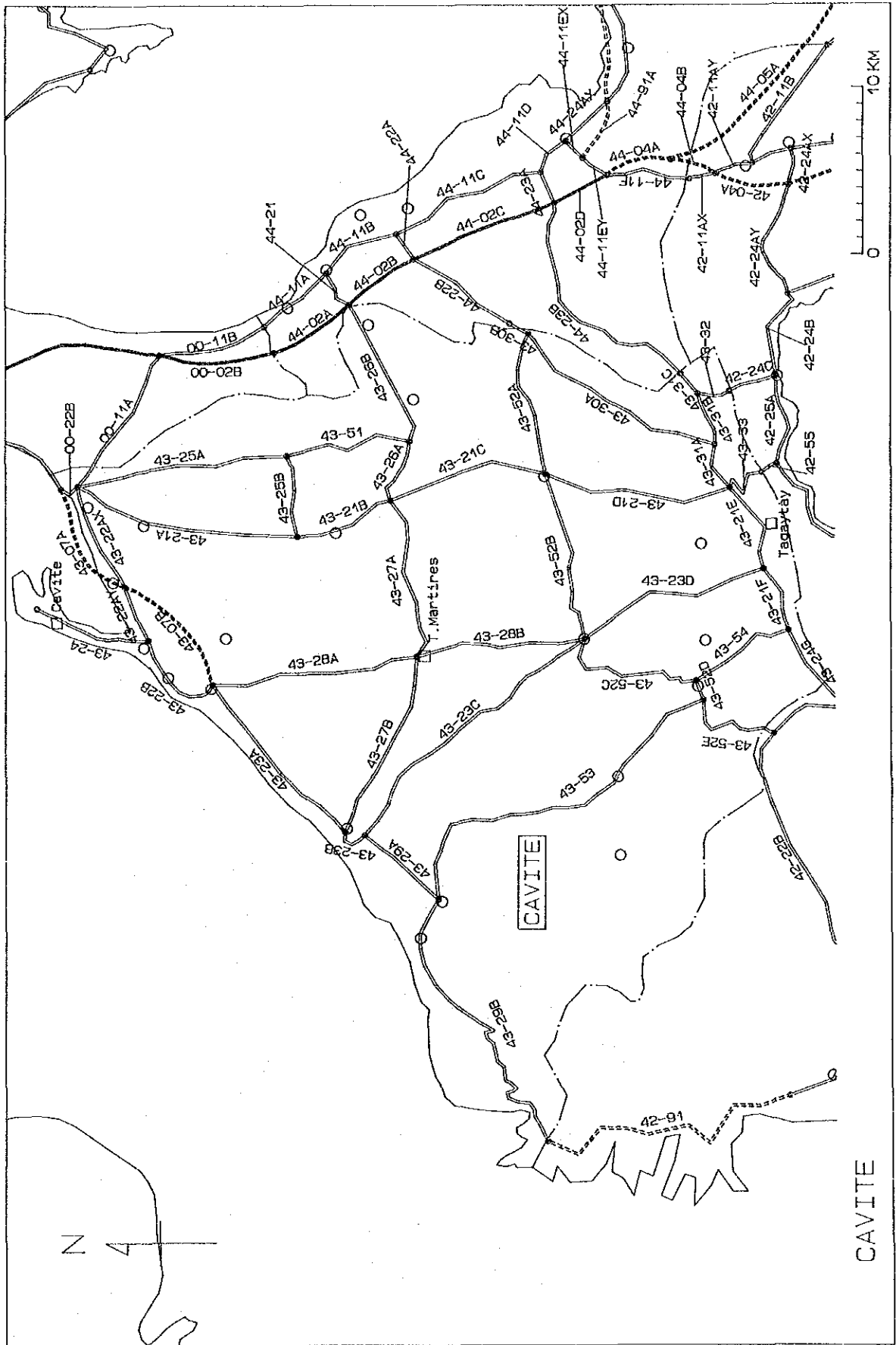


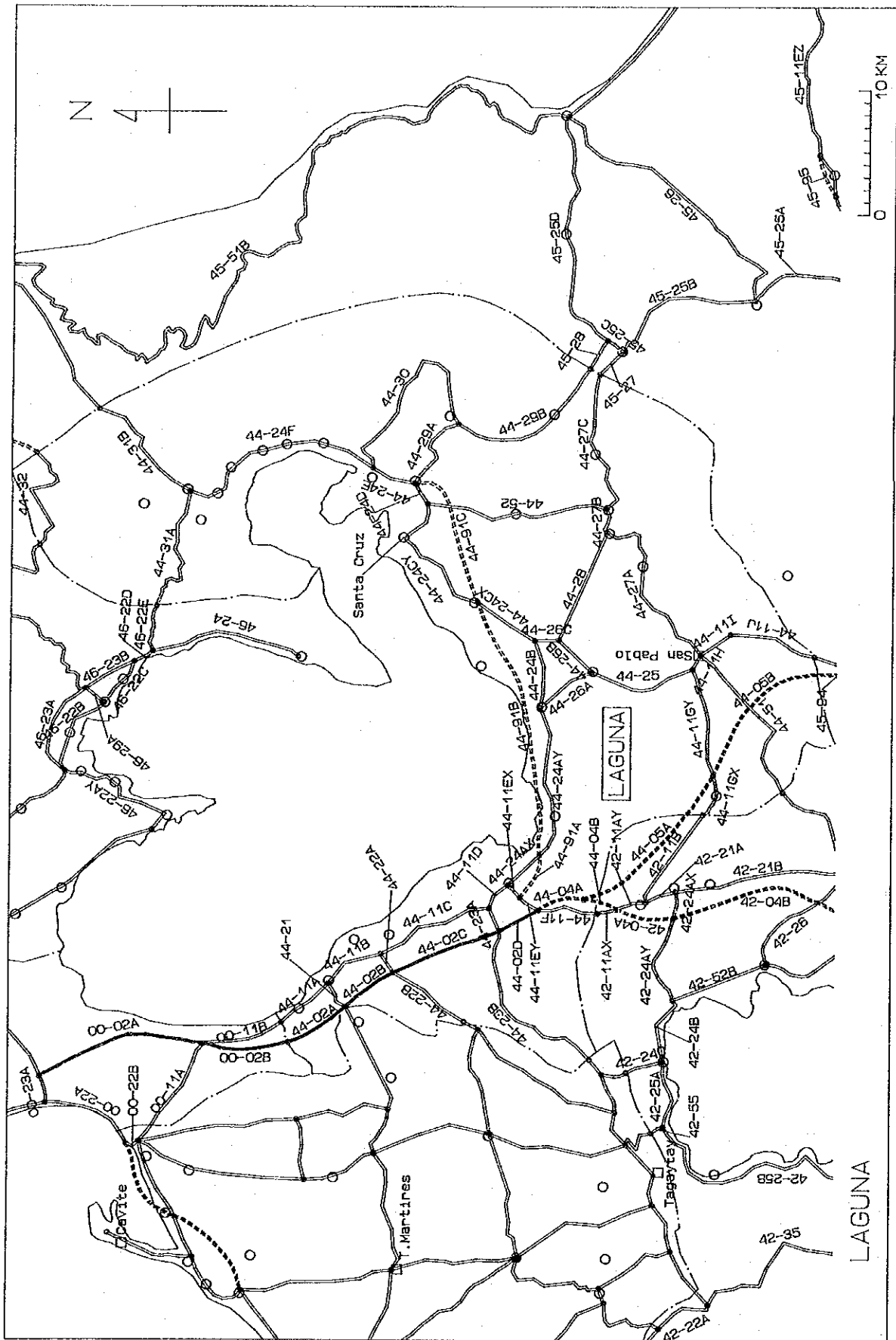


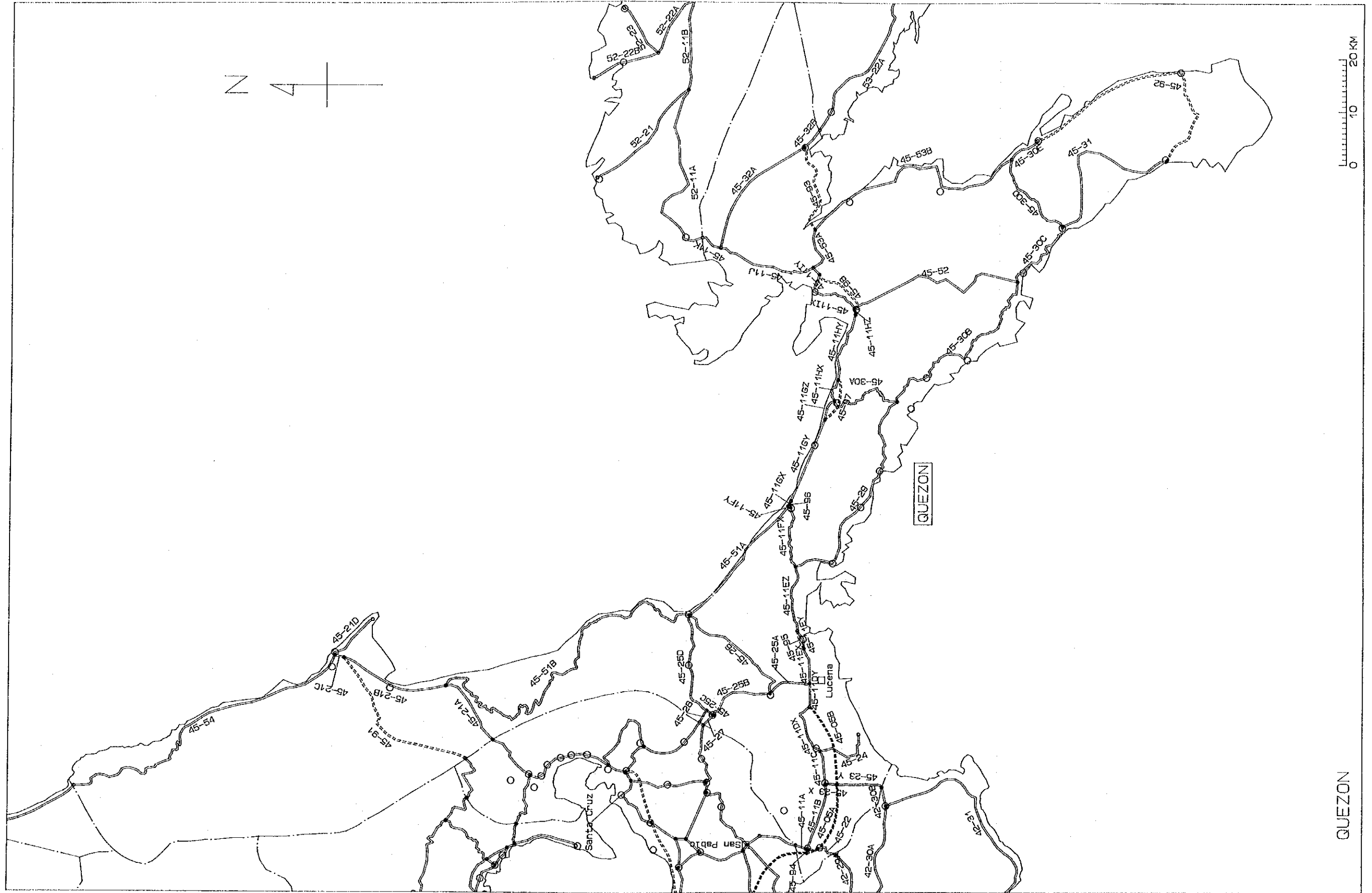


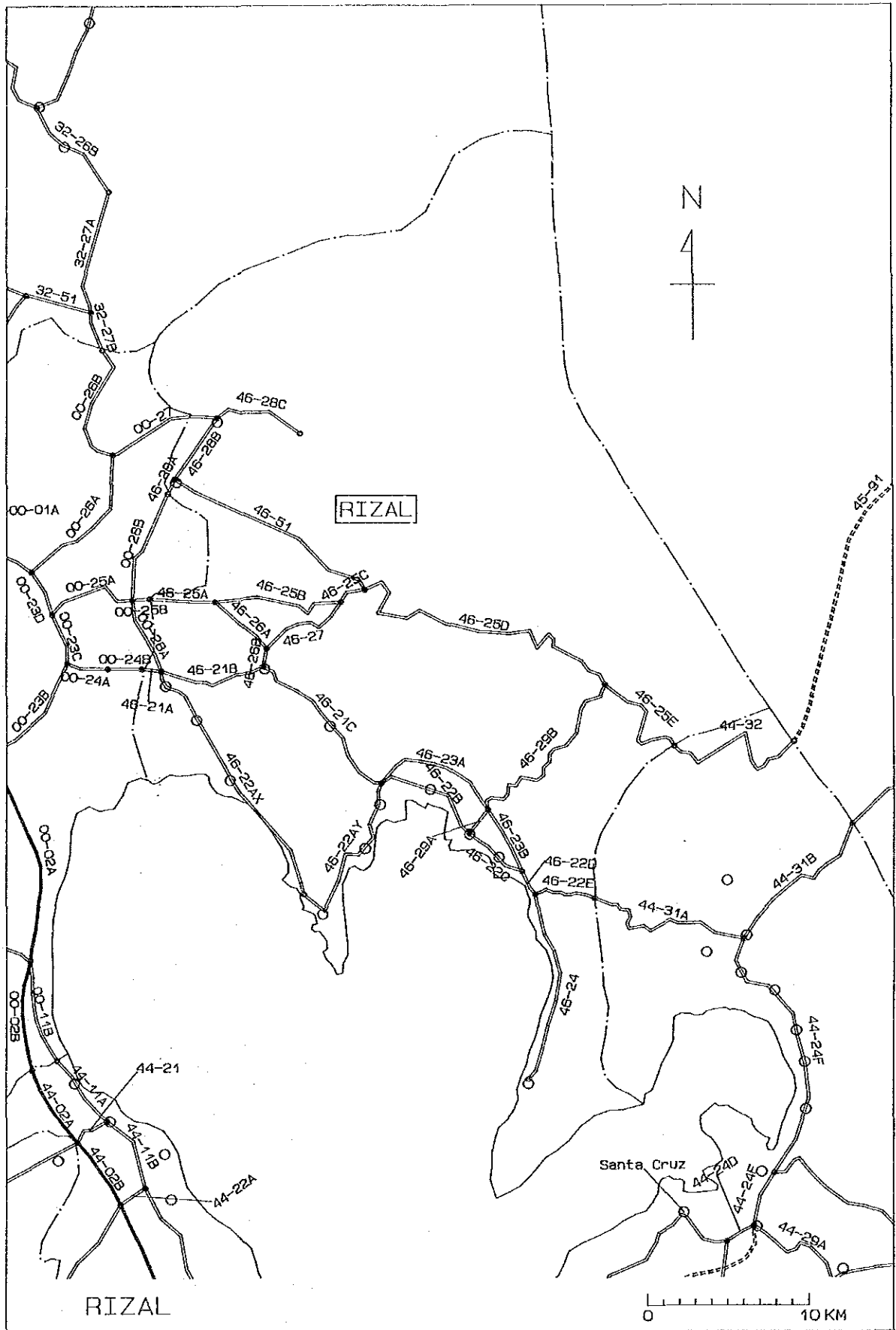


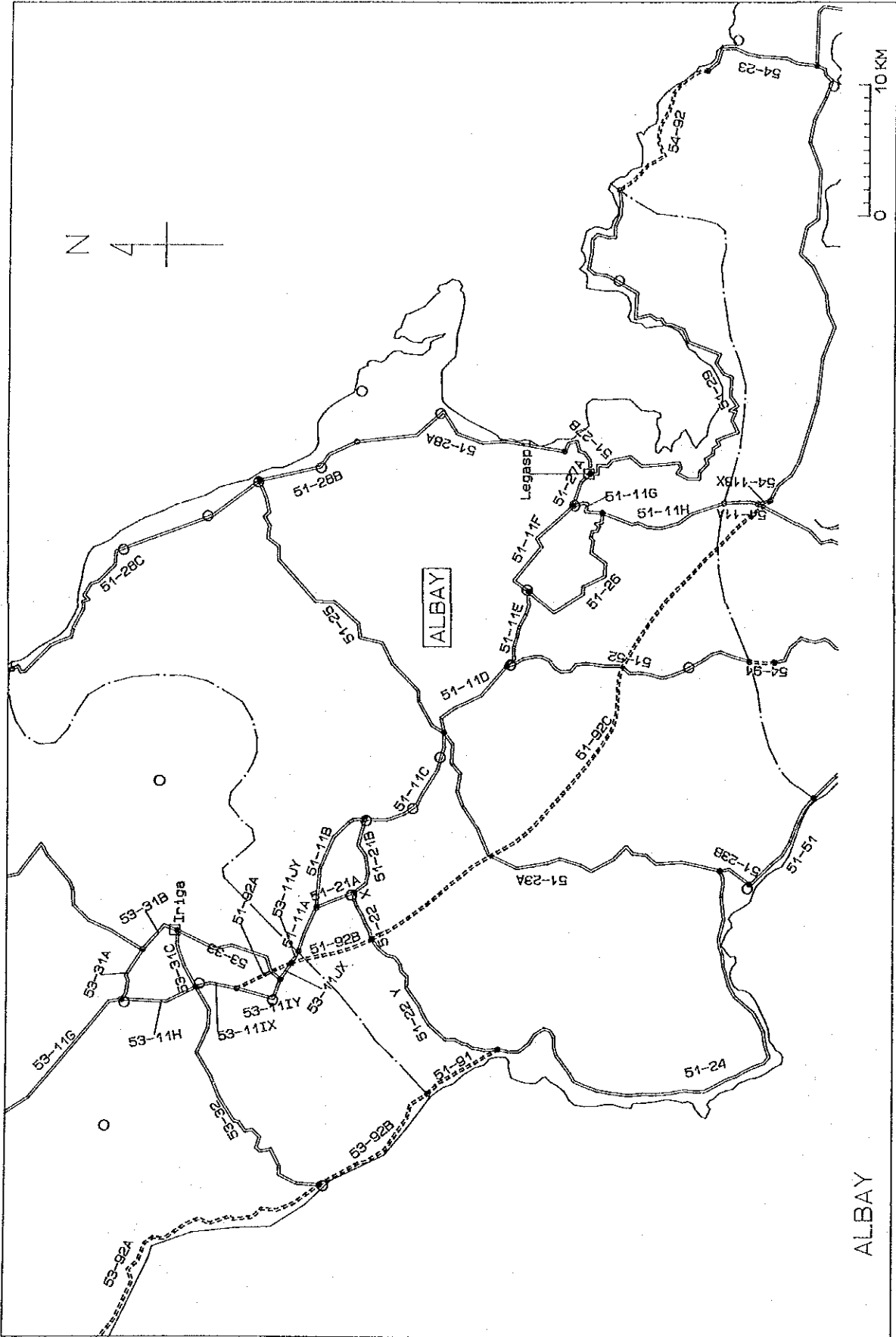


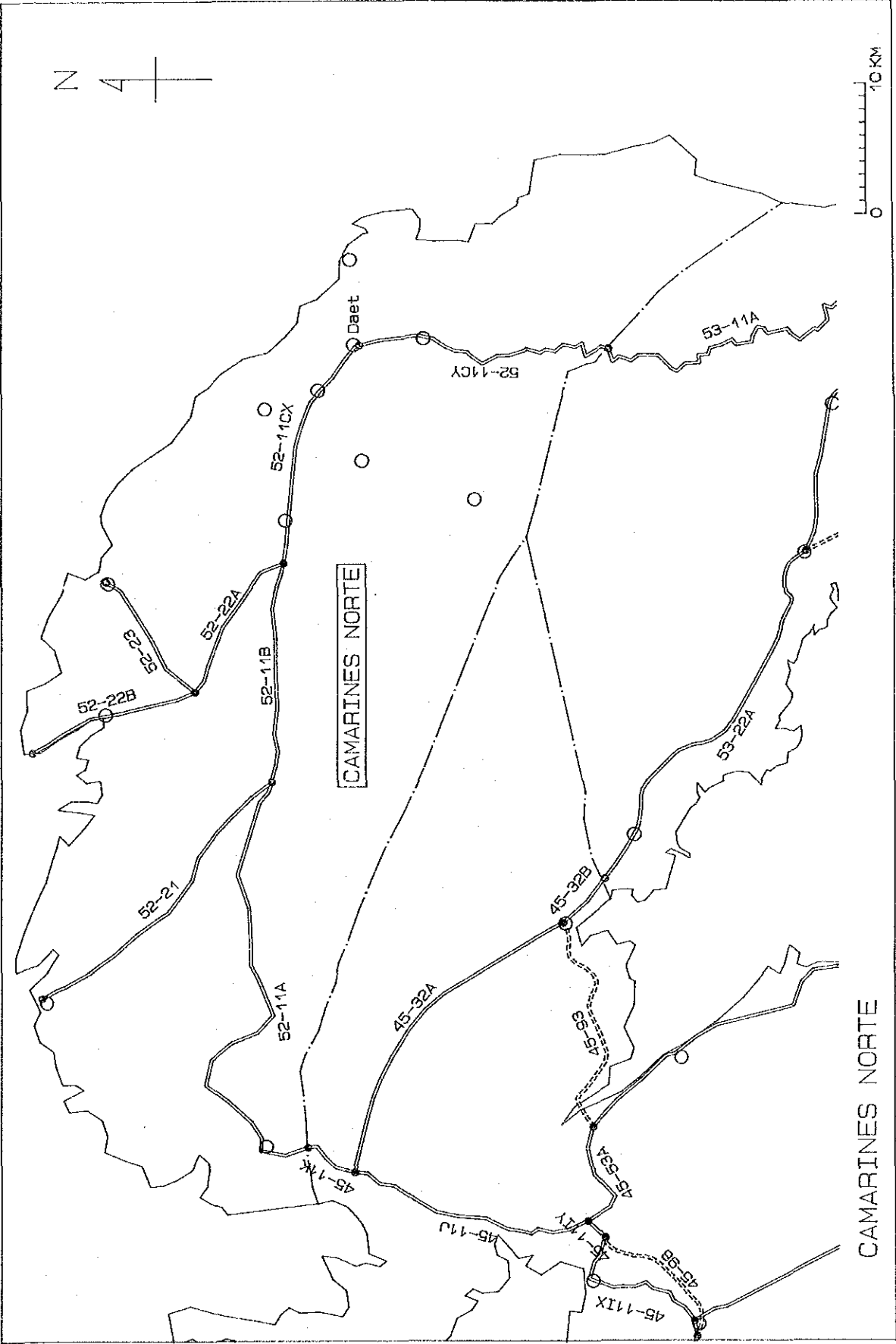


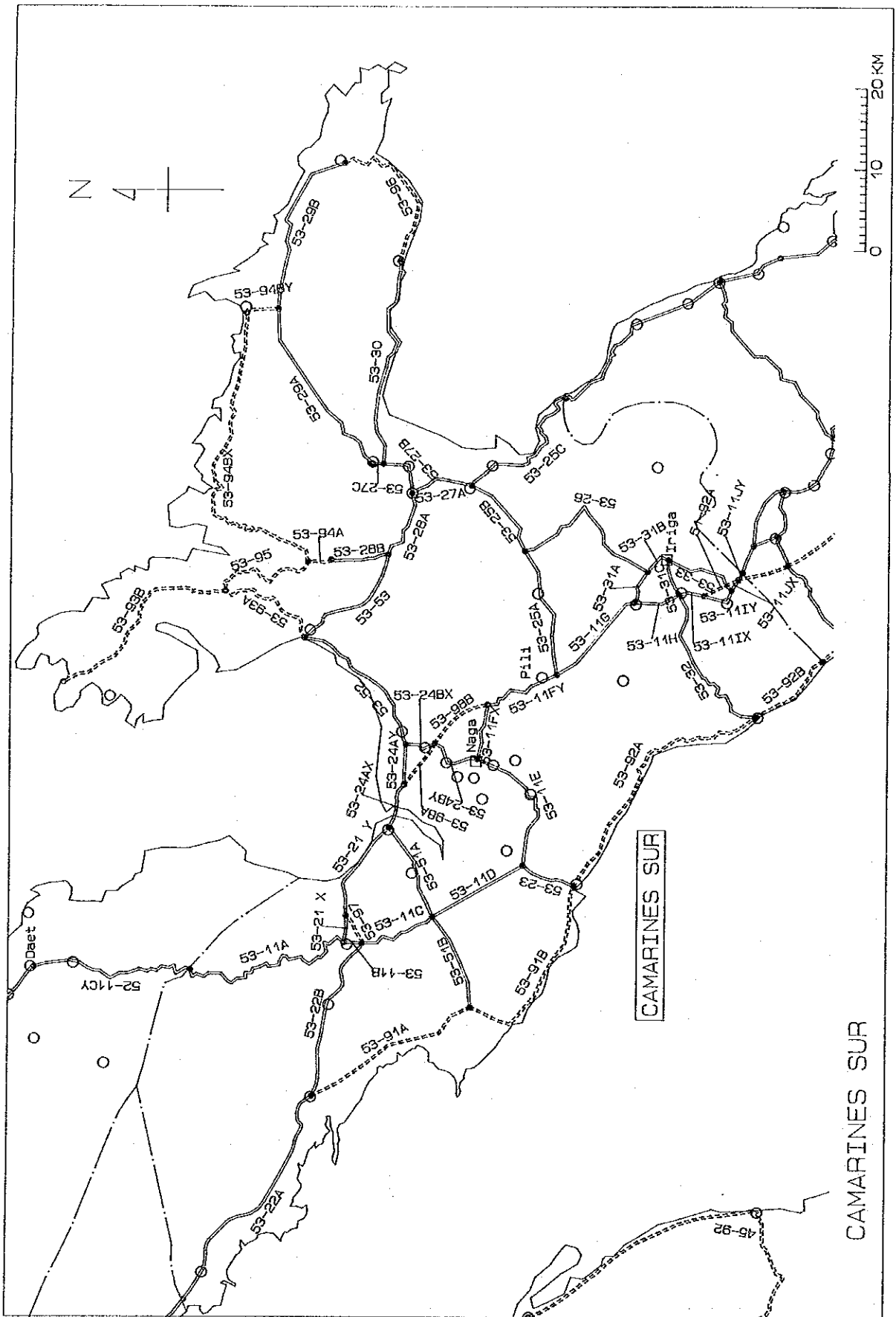


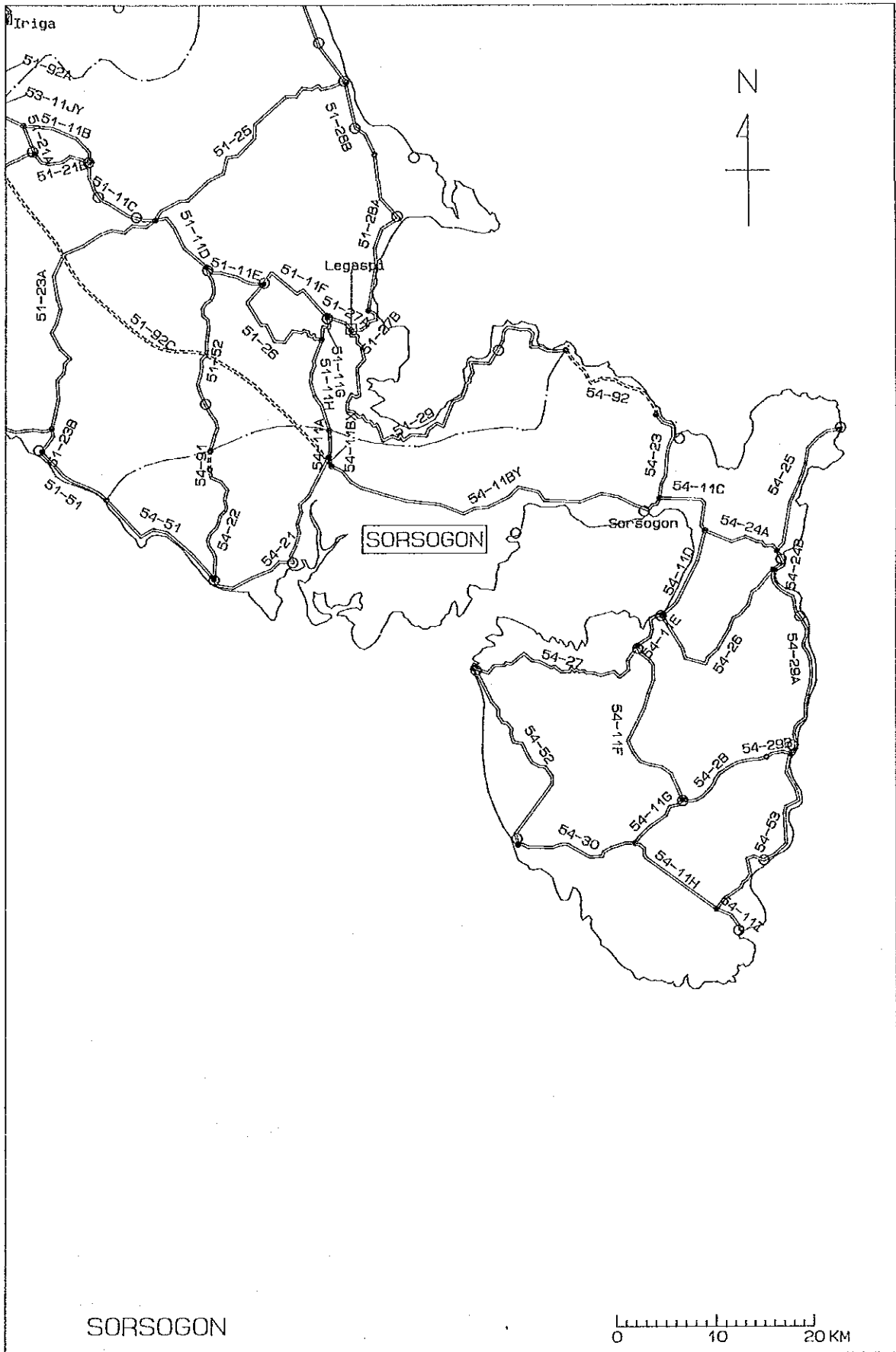






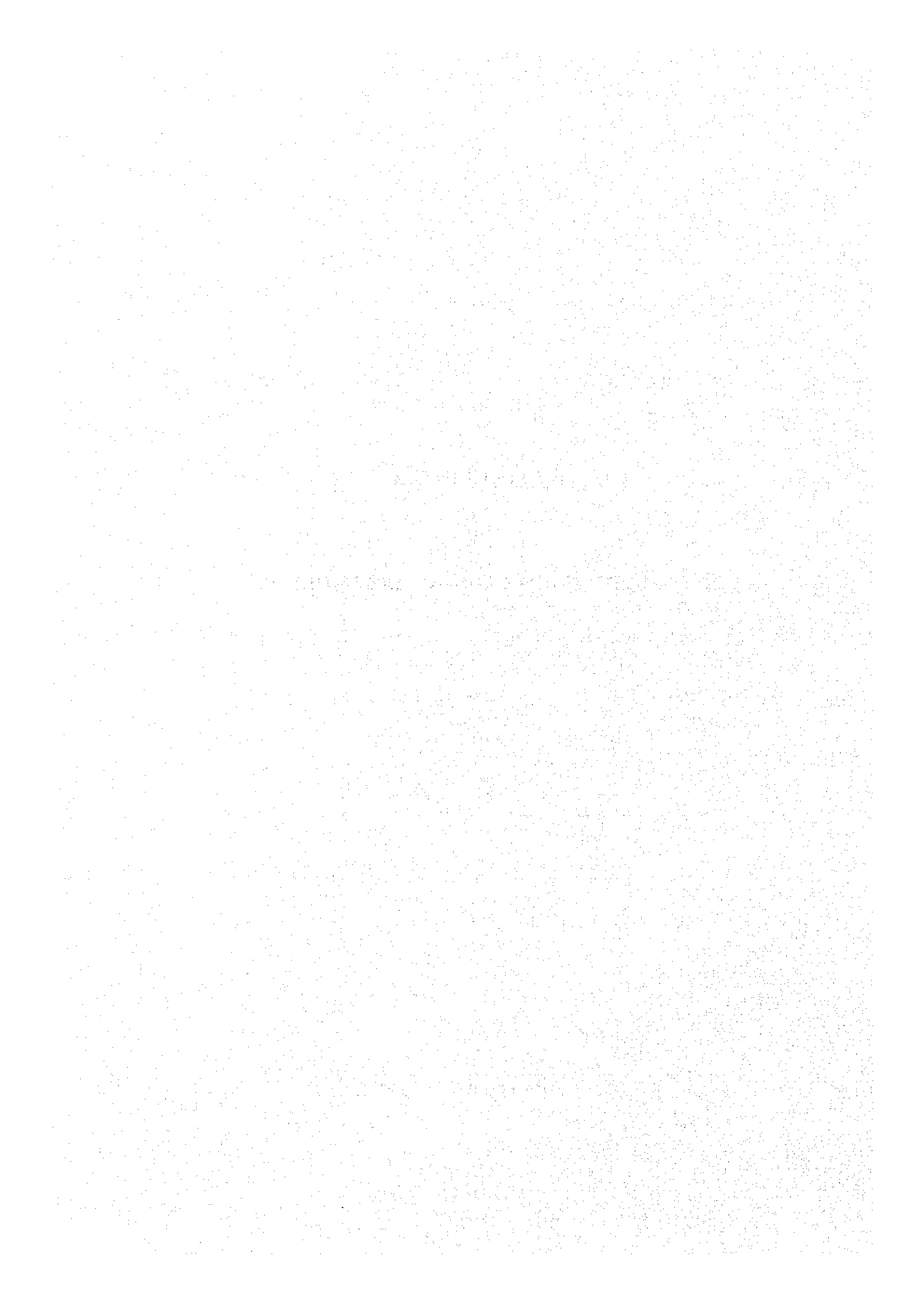




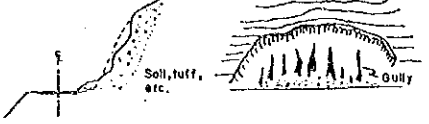
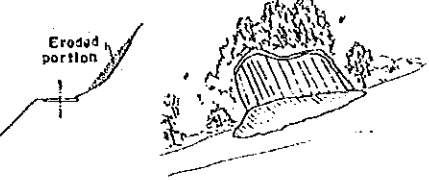
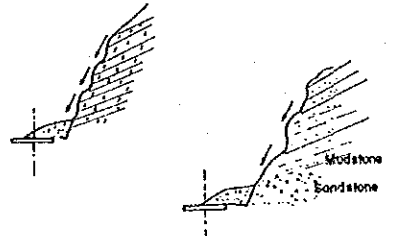

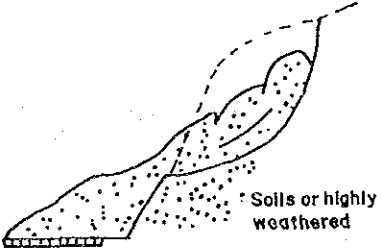
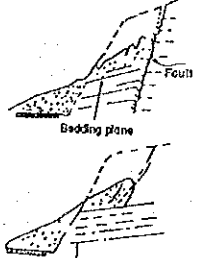


APPENDIX 3.2

DEFINITION OF ROAD DISASTER



DEFINITION OF CUT SLOPE FAILURE

Sub-classification	Definition	Illustration	Remarks
Surface Failure	<p>(1) Erosion:</p> <p>Shallow failures which formed slight gullies on slope surface due to intensive rainfall.</p>		<p>Erosion occurs mainly on bare slope of soft strata. If left unprotected, deep failure may develop.</p>
	<p>(2) Top soil slip:</p> <p>Shallow failure caused by slipping down of top soil due to saturation of rainwater in top soil.</p>		<p>Top soil slip occurs on slope of cohesive soil with poor vegetation during long rainfall.</p>
	<p>(3) Weathering or structural weakness failure:</p> <p>Shallow failure of slope which has structural weakness such as highly weathered rock, developed crack, fault, etc.</p>		<p>This failure occurs on slope with weak shear strength due to penetration of water or drying up of border plane.</p>
Deep Failure	<p>(1) Scouring:</p> <p>Scouring is due to concentration of surface water on slope.</p>		<p>Scouring forms deep gullies to slope of soil and all kinds of soft rocks.</p>
	<p>(2) Rotational failure:</p> <p>Failure occurs along circular slide plane of slope with weak shear strength.</p>		<p>This failure mainly occurs at steep slope of soil, talus and metamorphic rocks.</p>
	<p>(3) Translational failure:</p> <p>Failure occurs along the structural weakness of slope such as fault, bedding plane and border plane between firm bedrocks and overlaying detritus or soil.</p>		<p>This type of failure occurs easily at the joint or bedding plane inclined toward a steep slope.</p>


DEFINITION OF EMBANKMENT SLOPE FAILURE

Sub-classification	Definition	Illustration	Remarks
Surface Failure	<p>Erosion:</p> <p>Shallow failure which formed slight gullies on slope surface due to intensive rainfall.</p>		<p>Erosion occurs by concentrated water flowing down from the road shoulder with no vertical ditches. Once a small gully is formed, it easily becomes bigger and deeper with every rainfall.</p>
Deep Failure	<p>(1) Scouring:</p> <p>Deep failure caused by scouring due to development of erosion, or due to meandering or overflow of river stream.</p>		
	<p>(2) Saturation failure:</p> <p>Deep failure caused by saturation of water due to seepage of surface or ground water into embankment.</p>		<p>Seepage of water decrease shear strength of roadbed.</p>

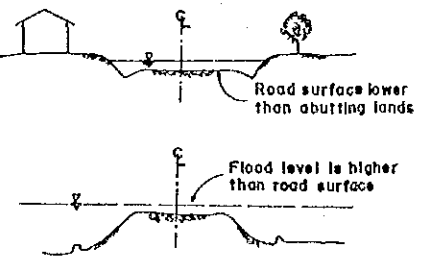
DEFINITION OF DEBRIS FLOW

Sub-classification	Definition	Illustration	Remarks
Debris Flow	<p>Mass flow of deposits which contains large stones with rainwater. Flow of deposits is subjected to liquefaction and flow movement resembles those of viscous fluid.</p>		
Mud Flow	<p>Same as above except on the deposit materials which are soils and mud sans large stones.</p>		

DEFINITION OF SCOUR

Sub-classification	Definition	Illustration	Remarks
Scour or Washout of Roadbed	Washout or scouring of roadbed due to effect of river stream action or overflowing water.		

DEFINITION OF FLOOD

Sub-classification	Definition	Illustration	Remarks
Flood	Road surface is flooded and often muddy due to lower road surface than adjoining land or insufficient capacity of side ditch or aggradation of riverbed by sedimentation.		

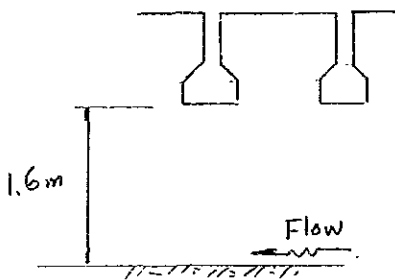
APPENDIX 3.3

RESULT OF SECOND DISASTER SURVEY

Form-3 : DEBRIS FLOW INSPECTION SHEET

		Name of Province	PAMPANGA	
Road NO.	34 - 21		Name of Road	SAN FERNANDO - OLONGAPO
Spot NO.	STA. BARBARA BR.		Location of Spot	75.327
Classification of Road		<input checked="" type="checkbox"/> National Road <input type="checkbox"/> Provincial Road		
NO. of Lanes & Roadway Width		(1) 1-lane <input checked="" type="checkbox"/> (2) 2-lane <input type="checkbox"/> (3) -Lane	Total Width: 13.0	
Surface Type & Pavement Width		(1) PCC <input checked="" type="checkbox"/> (2) AC <input type="checkbox"/> (3) Gravel <input type="checkbox"/> (4) Earth	Pave. Width: 7.0	
Terrain		<input checked="" type="checkbox"/> Flat <input type="checkbox"/> Rolling <input type="checkbox"/> Mountainous		
Evidence of Flow	1	Size of Damage	(1) Width (150 m) (2) Length (UP TO MT. PINATUBO)	
	2	Date Occured	AUGUST / 16 ~ 21 / 1992	
	3	Traffic Interruption	Magnitude	(1) Full Width <input checked="" type="checkbox"/> (2) Half Width (3) Shoulder (4) No Influence
Duration			(1) 1 day < (2) 1~7 days (3) 7 days >	
Existing Flow Condition	4	Average Gradient	<input checked="" type="checkbox"/> 20' < (2) 20' ~ 30' (3) 30' >	
	5	Area of Basin	(1) 50,000m ² < (2) 50,000~200,000m ² <input checked="" type="checkbox"/> (3) 200,000m ² >	
	6	Deposit on Riverbed	(1) None (2) Rare <input checked="" type="checkbox"/> (3) Abundant (4) Overflow	
	7	Deposit Material	(1) Clay <input checked="" type="checkbox"/> (2) Sand (3) Gravel (4) Cobble (5) Boulder	
	8	Vegetation	Covering Rate of Bare Land or Thin Forest: (1) 50% < <input checked="" type="checkbox"/> (2) 50% >	
Engineering Judgement	9	Impact to Traffic	(1) Low (2) Medium <input checked="" type="checkbox"/> (3) High	
	10	Cause of Damage	ERUPTION OF MT. PINATUBO AND TROPICAL MONSOON RAINS	
	11	Countermeasure	DREDGING OF RIVERBED	
	12	Detour Road	(1) None <input checked="" type="checkbox"/> (2) Available	

Typical Photo PASIG - POTRERO RIVER



Date of Inspection	25 / AUGUST / 1992	Inspector	NAGAMI / JAKE
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Form-3 : DEBRIS FLOW INSPECTION SHEET

		Name of Province	PAMPANGA	
Road NO.	34-21		Name of Road	SAN FERNANDO - OLONGAPO
Spot NO.	STA CRUZ BR		Location of Spot	87.803
Classification of Road		<input checked="" type="checkbox"/> National Road (2) Provincial Road		
NO. of Lanes & Roadway Width		(1) 1-lane <input checked="" type="checkbox"/> 2-lane (3) -Lane	Total Width: 13.0	
Surface Type & Pavement Width		(1) PCC <input checked="" type="checkbox"/> AC (3) Gravel (4) Earth	Pave. Width: 7.0	
Terrain		<input checked="" type="checkbox"/> Flat (2) Rolling (3) Mountainous		
Evidence of Flow	1	Size of Damage	(1) Width (285.0 m) (2) Length (UP TO MT. PINATUBO)	
	2	Date Occured	AUGUST / 16-21 / 1992	
	3	Traffic Interruption	Magnitude	(1) Full Width (2) Half Width (3) Shoulder (4) No Influence
			Duration	(1) 1 day < (2) 1~7 days (3) 7 days >
Existing Flow Condition	4	Average Gradient	<input checked="" type="checkbox"/> 20' < (2) 20' ~ 30' (3) 30' >	
	5	Area of Basin	(1) 50,000m ² < (2) 50,000~200,000m ² <input checked="" type="checkbox"/> 200,000m ² >	
	6	Deposit on Riverbed	(1) None (2) Rare <input checked="" type="checkbox"/> Abundant (4) Overflow	
	7	Deposit Material	(1) Clay <input checked="" type="checkbox"/> Sand (3) Gravel (4) Cobble (5) Boulder	
	8	Vegetation	Covering Rate of Bare Land or Thin Forest: (1) 50% <input checked="" type="checkbox"/> 50% <	
Engineering Judgement	9	Impact to Traffic	(1) Low (2) Medium <input checked="" type="checkbox"/> High	
	10	Cause of Damage	MT. PINATUBO ERUPTION AND TROPICAL MONSOON RAINS	
	11	Countermeasure	DREDGING OF RIVER BED	
	12	Detour Road	<input checked="" type="checkbox"/> None (2) Available	
Typical Photo GUMAIN - PORAC RIVER				
Date of Inspection	25 / AUGUST / 1992		Inspector	NAGAMI / JAKE

Form-3 : DEBRIS FLOW INSPECTION SHEET

		Name of Province	ZAMBALES
Road NO.	36 - 21	Name of Road	OLONGAPO - ZAMBALES ROAD
Spot NO.	MACULCOL BR.	Location of Spot	166, 257
Classification of Road		<input checked="" type="checkbox"/> (1) National Road	<input type="checkbox"/> (2) Provincial Road
NO. of Lanes & Roadway Width		(1) 1-lane <input checked="" type="checkbox"/> (2) 2-lane (3) -lane	Total Width: 8.1
Surface Type & Pavement Width		(1) PCC <input checked="" type="checkbox"/> (2) AC (3) Gravel (4) Earth	Pave. Width: 6.1
Terrain		<input checked="" type="checkbox"/> (1) Flat	<input type="checkbox"/> (2) Rolling <input type="checkbox"/> (3) Mountainous
Evidence of Flow	1	Size of Damage	(1) Width (FULL WIDTH OF R. 385m) (2) Length (UP TO MT. PINATUBO)
	2	Date Occured	AUGUST/ 16 ~ 21 / 1992
	3	Traffic Interruption	Magnitude: <input checked="" type="checkbox"/> (1) Full Width (2) Half Width (3) Shoulder (4) No Influence Duration: <input checked="" type="checkbox"/> (1) 1 day < (2) 1~7 days (3) 7 days >
Existing Flow Condition	4	Avarage Gradient	<input checked="" type="checkbox"/> (1) 20' < (2) 20' ~ 30' (3) 30' >
	5	Area of Basin	(1) 50,000m2 < (2) 50,000~200,000m2 <input checked="" type="checkbox"/> (3) 200,000m2 >
	6	Deposit on Riverbed	(1) None (2) Rare (3) Abundant <input checked="" type="checkbox"/> (4) Overflow
	7	Deposit Material	(1) Clay <input checked="" type="checkbox"/> (2) Sand (3) Gravel (4) Cobble (5) Boulder
	8	Vegetation	Covering Rate of Bare Land or Thin Forest: (1) 50% <input checked="" type="checkbox"/> (2) 50% <
Engineering Judgement	9	Impact to Traffic	(1) Low (2) Medium <input checked="" type="checkbox"/> (3) High
	10	Cause of Damage	ERUPTION OF MT. PINATUBO AND TROPICAL MONSOON RAINS
	11	Countermeasure	DREDGING OF RIVER BED
	12	Detour Road	<input checked="" type="checkbox"/> (1) None (2) Available

Typical Photo

STO. TOMAS RIVER



Date of Inspection

25 / AUGUST / 1992

Inspector

NAGAMI / JAKE

Form-1 : CUT SLOPE DAMAGE INSPECTION SHEET

		Name of Province	BENGUET		
Road NO.	0221		Name of Road	KENNON ROAD	
Spot NO.	01		Location of Spot	244.50	
Classification of Road		<input checked="" type="checkbox"/> National Road (2) Provincial Road			
NO. of Lanes & Roadway Width		(1) 1-Lane <input checked="" type="checkbox"/> 2-Lane (3) -Lane	Total Width: 7.10		
Surface Type & Pavement Width		(1) PCC <input checked="" type="checkbox"/> AC (3) Gravel (4) Earth	Pave. Width: 6.10		
Terrain		(1) Flat (2) Rolling <input checked="" type="checkbox"/> 3) Mountainous			
Evidence of Failure	1	Type of Slope	<input checked="" type="checkbox"/> Cut Slope (2) Natural Slope (3) ()		
	2	Kind of Failure	(1) Gully (2) Erosion <input checked="" type="checkbox"/> 3) Land Slide (4) Rock/Debris Fall		
	3	Size of Failure	(1) Width: 20.0 m (2) Height: 10.0 m (3) Number: 1		
	4	Date Occured	AUGUST / / 1992		
	5	Traffic Interruption	Magnitude	(1) Full Width (2) Half Width <input checked="" type="checkbox"/> 3) Shoulder (4) No Influence	
			Duration	<input checked="" type="checkbox"/> 1 day < (2) 1~7 days (3) 7 days >	
6	Countermeasure		<input checked="" type="checkbox"/> Structure (ROOTED RIPRAP) <input checked="" type="checkbox"/> 2) Removal of Slide Materials		
Existing Slope Condition	7	Height	<input checked="" type="checkbox"/> 1) 10m < (2) 10~30m (3) 30~50m (4) 50m >		
	8	Gradient	(1) 45' < <input checked="" type="checkbox"/> 3) 45' ~ 60' (3) 60' > (4) Overhang		
	9	Berm	<input checked="" type="checkbox"/> None (2) Existing Number() (3) Width()		
	10	Protection	(1) None (2) Vegetation <input checked="" type="checkbox"/> 3) Structure(RIPRAP)		
Geological Condition	Rock	11	Hardness (1) Hard rock <input checked="" type="checkbox"/> 2) Soft Rock (3) ()		
		12	Withering Condition (1) Fresh (2) Slightly Withered <input checked="" type="checkbox"/> 3) Highly Withered (4) Nearly Soil		
		13	Direction of Strata (1) Inclined to Mountain <input checked="" type="checkbox"/> 2) Inclined to Slope (3) Not Clear		
	Soil	14	Condition of Crack (1) Fine Crack <input checked="" type="checkbox"/> 2) Clear (3) Open (4) Clay into Crack		
		15	Thickness <input checked="" type="checkbox"/> 1) 1m < (2) 1~5m (3) 5~10m (4) 10~20m (5) 20m >		
		16	Compactness (1) Tight (2) Slightly Loose <input checked="" type="checkbox"/> 3) Loose		
Weather Condition	17	Degree of Saturation (1) Dry (2) Wet <input checked="" type="checkbox"/> 3) Seepage (4) Spring			
	18	Surface Water Concentration (1) None (2) Low <input checked="" type="checkbox"/> 3) High			
	19	Drainage Facilities (1) Existing() <input checked="" type="checkbox"/> 2) Nothing			
Engineering Judgement	20	Impact to Traffic <input checked="" type="checkbox"/> 1) Low (2) Medium (3) High			
	21	Cause of Damage <input checked="" type="checkbox"/> 1) Concentration of Surface Water (2) Seepage/Spring (3) Steeper than Normal Slope (4) ()			
	22	Countermeasure RE-CUTTING (TOP PORTION) / DRAINAGE			
	23	Detour Road <input checked="" type="checkbox"/> 1) None (2) Available			

THICKNESS OF TOP SOIL = 0.1 m ~ 0.3 m

DIRECTION OF STRATA ARE MOSTLY INCLINED TO SLOPE AT THE LEFT SIDE OF THE RIVER AND INCLINED TO MOUNTAIN AT THE RIGHT SIDE OF THE RIVER

Date of Inspection 02 / SEPT / 1992 Inspector NAGAMI / JAKE

