Besar, Penjaringan, Setia Budi, Grogol Petamburan and Matraman. Cilincing is behind others having the lowest income level of Rp. 34,603. Cengkareng is the second lowest with Rp. 35,169. Other Kecamatans with the income levels of less than Rp. 40,000 are Tambora and Cempaka Putih.

In Wilayah terms, Jakarta Selatan is the richest having the average per capita per month income of Rp. 49,941. Jakarta Timur takes the second place with Rp. 47,582. Jakarta Pusat is placed in the middle with Rp. 45,762. Then follows Jakarta Barat with Rp. 43,696. Jakarta Utara is the poorest having the income level of Rp. 42,938.

Glancing over Fig. A.12, one thing seems apparent: Jakarta Pusat, being the business center of Jakarta, is not inhabited by richer people, residential areas surround Jakarta Pusat in all directions, and further unurbanized areas lie as the outermost zones enclosing the residential areas.

In the residential areas, there are noted higher income districts such as Menteng, Glodok, Mangga Dua Utara, Block M, Pondok Indah, Kuningan Timur, Tebet, Cempaka Putih, Kayu Putih and Klp. Gading.

4.4 People's Future Income Level

The average per capita per month income across the Study Area in 1989 is Rp. 46,367 as stated in the previous Section.

Population of the Study Area in 1988 is estimated at 8,786,016, which is projected to grow by 45.69% to 12,800,000 in the target year of 2010. Whereas, gross domestic product (GDP) of the area, which was Rp. 17,713 billion in 1988 at 1990 prices, is forecast to grow by 262.04% to Rp. 64,129 billion based on the assumption of annual growth rates of 6.5% for 1988 to 1989 and 6.0% for 1989 to 2010. On the basis of the above assumptions, the per capita GDP of the Study Area is estimated to grow from Rp. 2,016,045 in 1988 by 148.51% to Rp. 5,010,078 in 2010.

Also based on the above projection, the per capita GDP growth rate from 1989 to 2010 is estimated at 138.19%.

Assuming that the per capita income grows along with per capita GDP, the average per capita per month income in the Study Area is estimated at Rp. 110,442 in 2010 (Refer to Table A.8). The average annual growth rate of the per capita income is calculated at 4.22%.

The average per capita per month income and composition of population of the High, Middle and Low Income Classes are respectively, Rp. 115,189 (3,9%), Rp. 57,527 (48.6%) and Rp. 29,298 (47.5%), for 1989 as mentioned before.

It is reasonable to assume that both income level and populational composition of incom classes will change as time goes on. Based on the data for 1989, it is projected that the average per capita per month income and population composition of the respective three (3) income classes will be Rp. 236,092 (15.1%), Rp. 111,266 (48.8%) and Rp. 56,667 (36.1%) in the year 2010.

Table A.1 (1)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
1101	CIDENG	126	27,268	216.4
1102	DURI PULO	72	47,817	664.1
1103	PETOJO UTARA	112	29,602	264.3
1104	PETOJO SELATAN	134	33,425	249.4
1105	KEBON KELAPA	78	21,582	276.7
1106	GAMBIR	258	5,754	22.3
1100	GAMBIR	780	165,448	212.1
1201	MANGGA DUA SELATAN	129	59,615	462.1
1202	KARANG ANYAR	51	43,034	843.8
1203	KAR TINI	55	37,644	684.4
1204	PASAR BARU	189	26,350	139.4
1205	GUNUNG SAHARI UTARA	198	31,768	160.4
1200	SAWAH BESAR	622	198,411	319.0
1301	GUNUNG SAHARI SELATAN	157	35,738	227.6
1302	KEMAYORAN	55	30,928	562.3
1303	KEBON KOSONG	113	35,895	317.7
1304	SERDANG	105	36,658	349.1
1305	HARAPAN MULIA	91	33,156	364.4
1306	UTANPANJANG	105	42,889	408.5
1307	CEMPAKA BARU	92	48,750	529.9
1308	SUMURBATU	103	25,980	252.2
1300	KEMAYORAN	821	289,994	353.2
1401	SENEN	81	13,247	163.5
1402	KWITANG	45	23,223	516.1
1403	KENARI	91	18,945	208.2
1404	KRAMAT	71	39,794	560.5
1405	PASEBAN	71	39,901	562.0
1406	BUNGUR	63	38,758	615.2
1400	SENEN	422	173,868	412.0
1501	TANAH TINGGI	62	48,227	777.9
1502	JOHAR BARU	119	45,442	381.9
1503	GALUR	27	23,790	881.1
1504	KAMPUNG RAWA	30	23,327	777.6
1505	RAWA SARI	125	30,023	240.2
1506	CEMPAKA PUTIH BARAT	122	46,901	384.4
1507	CEMPAKA PUTIH TIMUR	222	34,018	153.2
1500	CEMPAKA PUTIH	707	251,728	356.1
1601	KEBON SIRIH	83	34,683	417.9
1602	GONDANGDIA	146	11,479	78.6
1603	CIKINI	82	18,604	226.9
1604	MENTENG	244	49,850	204.3
1605	PEGANGSAAN	98	38,418	392.0
1600	MENTENG	653	153,034	234.4
1701	KAMPUNG BALI	73	31,241	428.0
1702	KEBON KACANG	71	38,572	543.3
1703	KEBON MELATI	126	69,700	553.2
1704	PETAMBURAN	90	40,032	444.8
1705	KARET TENGSIN	153	57,390	375.1
1706	BENDUNGAN HILIR	158	42,972	272.0
1707	GELORA	259	10,938	42.2
1700	TANAH ABANG	930	290,845	312.7
1000	JAKARTA PUSAT	4,935	1,523,328	308.7

Source : JICA

Table   A.1 (2)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
2201	KAMAL MUARA	1,053	3,972	3.8
2202	KAPUK MUARA	1,006	7,508	7.5
2203	PEJAGALAN	323	63,931	197.9
2204	PENJARINGAN	395	80,543	203.9
2205	PLUIT (MANGGA DUA UTARA)	771	35,389	45.9
2206	PADEMANGAN BARAT	153	66,403	434.0
2207	PADEMANGAN TIMUR	261	48,803	187.0
2208	ANCOL	577	31,858	55.2
2200	PENJARINGAN	4,539	338,407	74.6
2301	SUNTER AGUNG	702	47,418	67.5
2302	PAPANGGO	280	31,394	112.1
2303	SUNGAI BAMBU	236	37,899	160.6
2304	KEBON BAWANG	173	63,030	364.3
2305	TANJUNG PRIOK	554	36,676	66.2
2306	SUNTER JAYA	458	51,065	111.5
2307	WARAKAS	109	55,104	505.5
2300	TANJUNG PRIOK	2,512	322,586	128.4
2401	KOJA UTARA	145	47,676	328.8
2402	LOGOA	158	69,728	441.3
2403	KOJA SELATAN	183	38,069	208.0
2404	TUGU SELATAN	268	12,340	46.0
2405	TUGU UTARA	332	56,287	169.5
2406	RAWA BADAK	225	69,917	310.7
2407	KELAPA GADING BARAT	530	19,650	37.1
2408	KELAPA GADING TIMUR	453	36,886	81.4
2409	PEGANGSAAN DUA	628	22,668	36.1
2400	KOJA	2,922	373,221	127.7
2501	KALI BARU	247	59,005	238.9
2502	CILINCING	831	23,898	28.8
2503	SEMPER BARAT	159	63,252	397.8
2504	SEMPER TIMUR	316	29,722	94.1
2505	MARUNDA	792	7,380	9.3
2506	SUKAPURA	561	19,608	35.0
2507	ROROTAN	1,064	14,092	13.2
2500	CILINCING	3,970	216,957	54.6
2000	JAKARTA UTARA	13,943	1,251,171	89.7
3101	SEMANAN	598	28,450	47.6
3102	KAMAL	276	12,762	46.2
3103	TEGAL ALUR	778	43,847	56.4
3104	PEGADUNGAN	594	17,295	29.1
3105	KALI DERES	493	32,591	66.1
3106	CENGKARENG TIMUR	545	39,306	72.1
3107	KAPUK	723	62,169	86.0
3108	KEDAUNG KALI ANGKE	261	23,567	90.3
3109	DURI KOSAMBI	503	19,873	39.5
3110	RAWA BUAYA	467	27,417	58.7
3111	CENGKARENG BARAT	511	52,640	103.0
3100	CENGKARENG	5,749	359,917	62.6

Source : JICA

Table A.1 (3)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
3201	GROGOL	122	35,685	292.5
3202	JELAMBAR	144	52,283	363.1
3203	TANJUNG DUREN	270	67,587	250.3
3204	TOMANG	188	56,288	299.4
3205	JATI PULO	87	42,349	486.8
3206	KOTA BAMBU	126	68,582	544.3
3207	SLIPI	97	28,009	288.8
3208	PAL MERAH	233	65,863	282.7
3209	KEMANGGISAN	211	48,522	230.0
3210	JELAMBAR BARU	144	57,682	400.6
3211	WIJAYA KUSUMA	261	25,116	96.2
3200	GROGOL PETAMBURAN	1,883	547,966	291.0
3301	PINANGSIA	96	24,951	259.9
3302	MANGGA BESAR	51	17,674	346.5
3303	TANGKI	37	26,408	713.7
3304	GLODOK	38	14,391	378.7
3305	KEAGUNGAN	32	33,024	1,032.0
3306	KRUKUT	55	29,880	543.3
3307	TAMAN SARI	68	27,444	403.6
3308	MAHPAR	59	28,982	491.2
3300	TAMAN SARI	436	202,754	465.0
3401	PEKOJAN	78	39,599	507.7
3402	ROA MALAKA	53	6,592	124.4
3403	TAMBORA	28	17,237	615.6
3404	JEMBATAN LIMA	46	33,596	730.3
3405	ANGKE	80	42,201	527.5
3406	JEMBATAN BESI	55	39,019	709.4
3407	KRENDANG	32	32,749	1,023.4
3408	TANAH SEREAL	62	47,355	763.8
3409	DURI UTARA	70	32,130	459.0
3410	KALI BARU	32	37,299	1,165.6
3411	DURI SELATAN	34	25,227	742.0
3400	TAMBORA	570	353,004	619.3
3501	KEMBANGAN	681	32,879	48.3
3502	KEDOYA	620	55,662	89.8
3503	DURI KEPA	386	40,631	105.3
3504	MARUYA ILIR	520	27,201	52.3
3505	MARUYA UDIK	285	17,892	62.8
3506	JOGLO	486	21,249	43.7
3507	SRENGSENG	492	19,251	39.1
3508	KEBON JERUK	314	38,833	123.7
3509	SUKABUMI ILIR	160	29,905	186.9
3510	KELAPA DUA	145	17,706	122.1
3511	SUKABUMI UDIK	162	21,373	131.9
3500	KEBON JERUK	4,251	322,582	75.9
3000	JAKARTA BARAT	12,889	1,786,223	138.6
4101	MENTENG DALAM	258	67,628	262.1
4102	TEBET BARAT	172	40,078	233.0
4103	TEBET TIMUR	139	32,121	231.1
4104	KEBON BARU	130	47,402	364.6
4105	BUKIT DURI	108	54,289	502.7
4106	MANGGARAI SELATAN	51	40,021	784.7
4107	MANGGARAI	95	46,081	485.1
4100	TEBET	953	327,620	343.8

Source : JICA

Table   A.1   (4)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
4201	SETIA BUDI	74	11,973	161.8
4202	GUNTUR	65	34,858	536.3
4203	KARET	94	45,631	485.4
4204	KARET SEMANGGI	90	15,657	174.0
4205	KARET KUNINGAN	179	52,973	295.9
4206	KUNINGAN TIMUR	215	13,316	61.9
4207	PASAR MANGGIS	78	33,812	433.5
4208	MENTENG ATAS	90	54,739	608.2
4200	SETIA BUDI	885	262,959	297.1
4301	KUNINGAN BARAT	98	23,454	239.3
4302	MAMPANG PRAPATAN	78	25,895	332.0
4303	PELA MAMPANG	162	51,285	316.6
4304	TEGAL PARANG	106	21,716	204.9
4305	BANGKA	330	23,796	72.1
4306	PANCORAN	124	23,373	188.5
4307	DUREN TIGA	259	29,509	113.9
4308	KALI BATA	207	41,176	198.9
4309	CIKOKO	71	13,850	195.1
4310	PENGADEGAN	95	22,127	232.9
4311	RAWAJATI	54	11,911	220.6
4300	MAMPANG PRAPATAN	1,584	288,092	181.9
4401	PEJATEN BARAT	290	34,855	120.2
4402	PASAR MINGGU	335	33,837	101.0
4403	TANJUNG BARAT	525	21,914	41.7
4404	JATI PADANG	153	28,971	189.4
4405	RAGUNAN	579	31,843	55.0
4406	CILANDAK TIMUR	353	24,051	68.1
4407	JAGAKARSA	485	24,009	49.5
4408	LENTENG AGUNG	266	37,479	140.9
4409	SRENGSENG SAWAH	605	28,667	47.4
4410	CIGANJUR	669	23,360	34.9
4411	KEBAGUSAN	274	21,484	78.4
4412	PEJATEN TIMUR	288	50,723	176.1
4400	PASAR MINGGU	4,822	361,193	74.9
4501	SENAYAN	153	42,185	275.7
4502	RAWA BARAT	69	11,125	161.2
4503	SELONG	140	7,372	52.7
4504	GUNUNG	132	18,314	138.7
4505	KRAMAT PELA	123	21,333	173.4
4506	MELAWAI	126	7,950	63.1
4507	PETOGOGAN	87	20,101	231.0
4508	PULO	127	13,491	106.2
4509	GANDARIA UTARA	136	56,292	413.9
4510	CIPETE UTARA	183	38,689	211.4
4500	KABAYORAN BARU	1,276	236,852	185.6
4601	GROGOL UTARA	332	53,647	161.6
4602	GROGOL SELATAN	285	53,257	186.9
4603	CIPULIR	194	41,299	212.9
4604	KEBAYORAN LAMA UTARA	179	55,054	307.6
4605	PONDOK PINANG	684	53,372	78.0
4606	PETUKANGAN UTARA	299	28,961	96.9
4607	PETUKANAGN SELATAN	211	19,387	91.9
4608	ULUJAMI	171	26,425	154.5
4609	PESANGGARAHAN	210	26,870	128.0
4610	BINTARO	456	34,495	75.6
4611	KEBAYORAN LAMA SELATAN	257	48,176	187.5
4600	KEBAYORAN LAMA	3,278	440,943	134.5

Source : JICA

Table   A.1 (5)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
4701	GANDARIA SELATAN	175	23,172	132.4
4702	CIPETE SELATAN	237	24,624	103.9
4703	CILANDAK BARAT	604	62,095	102.8
4704	LEBAK BULUS	441	24,025	54.5
4705	PONDOK LABU	361	30,480	84.4
4700	CILANDAK	1,818	164,396	90.4
4000	JAKARTA SELATAN	14,616	2,082,055	142.5
5101	KEBON MANGGIS	78.75	27,325	347.0
5102	PAL MERIAM	65.39	26,632	407.3
5103	KAYUMANIS	57.06	39,637	694.7
5104	UTAN KAYU UTARA	104.74	45,373	433.2
5105	PISANGAN BARU	67.51	50,461	747.5
5106	UTAN KAYU SELATAN	112.22	44,593	397.4
5100	MATRAMAN	485.67	234,021	481.9
5201	KAYU PUTIH	437.15	56,113	128.4
5202	JATI	210.50	41,352	196.4
5203	PISANGAN TIMUR	179.71	57,775	321.5
5204	CIPINANG	153.94	51,882	337.0
5205	PULO GADUNG	192.30	27,286	141.9
5206	JATINEGARA KAUM	123.45	26,645	215.8
5207	RAWAMANGUN	274.10	62,767	229.0
5200	PULO GADUNG	1,571.15	323,820	206.1
5301	KAMPUNG MELAYU	47.83	32,990	689.7
5302	BALI MESTER	67.37	18,420	273.4
5303	BIDARA CINA	126.10	57,553	456.4
5304	CIPINANG CEMPEDAK	167.20	55,414	331.4
5305	RAWA BUNGA	87.65	40,145	458.0
5306	CIPINANG MUARA	289.58	66,245	228.8
5307	CIPINANG BESAR UTARA	115.20	46,610	404.6
5308	PONDOK BAMBU	499.70	50,391	100.8
5309	KLENDER	308.90	55,955	181.1
5310	DUREN SAWIT	454.30	37,393	82.3
5311	MALAKA SARI	138.23	38,388	277.7
5312	PONDOK KELAPA	572.15	30,776	53.8
5313	CIPINANG BESAR SELATAN	162.59	28,774	177.0
5314	MALAKA JAYA	98.32	49,488	503.3
5315	PONDOK KOPI	206.00	30,992	150.4
5300	JATINEGARA	3,341.12	639,534	191.4
5401	CAWANG	179.04	49,512	276.5
5402	CIPINANG MELAYU	252.79	36,271	143.5
5403	CILILITAN	179.75	47,436	263.9
5404	KRAMAT JATI	151.58	35,308	232.9
5405	KEBON PALA	229.50	38,343	167.1
5406	HALIM PERDANA KUSUMA	1,306.85	47,496	36.3
5407	BATU AMPAR	255.02	31,073	121.8
5408	BALE KAMBANG	167.45	15,158	90.5
5409	MAKASSAR	184.72	33,759	182.8
5410	KAMPUNG TENGAH	202.52	28,623	141.3
5411	DUKUH	198.09	13,657	68.9
5412	PINANG RANTE	189.15	10,861	57.4
5400	KRAMAT JATI	3,496.46	387,497	110.8

Source : JICA

Table A.1 (6)   Existing Population and Population Density by Kelurahan in 1988

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
5501	LUBANG BUAYA	372.20	26,061	70.0
5502	GEDONG	263.40	26,607	101.0
5503	RAMBUTAN	209.00	22,130	105.9
5504	CEGER	362.60	7,275	20.1
5505	BAMBU APUS	316.52	9,232	29.2
5506	SETU	325.12	7,254	22.3
5507	CIPAYUNG	294.00	8,491	28.9
5508	SUSUKAN	190.60	33,814	177.4
5509	CIRACAS	421.55	38,225	90.7
5510	CIJANTUNG	238.57	26,149	109.6
5511	BARU	188.95	17,552	92.9
5512	KALI SARI	285.95	16,603	58.1
5513	PEKAYON	317.73	31,938	100.5
5514	KELAPA DUA WETAN	336.86	17,897	53.1
5515	MUNJUL	217.30	9,856	45.4
5516	CILANGKAP	412.90	8,338	20.2
5517	CIBUBUR	450.29	34,638	76.9
5518	PONDOK RANGON	419.95	7,304	17.4
5500	PASAR REBO	5,623.49	349,364	62.1
5601	RAWA TERATE	410.05	17,175	41.9
5602	JATI NEGARA	659.75	43,563	66.0
5603	PENGGILINGAN	448.45	37,337	83.3
5604	CAKUNG BARAT	619.43	29,924	48.3
5605	UJUNG MENTENG	443.21	13,332	30.1
5606	PULO GEBANG	685.81	40,446	59.0
5607	CAKUNG TIMUR	981.38	27,226	27.7
5600	CAKUNG	4,248.08	209,003	49.2
5000	JAKARTA TIMUR	18,765.97	2,143,239	114.2
10000	JAKARTA	65,148.97	8,786,016	134.9

Source : JICA

Table A.2 (1) Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
1101	CIDENG	126	30,600	242.9
1102	DURI PULO	72	50,200	697.2
1103	PETOJO UTARA	112	33,300	297.3
1104	PETOJO SELATAN	134	42,600	317.9
1105	KEBON KELAPA	78	24,100	309.0
1106	GAMBIR	258	25,300	98.1
1100	GAMBIR	780	206,100	264.2
1201	MANGGA DUA SELATAN	129	63,600	493.0
1202	KARANG ANYAR	51	44,700	876.5
1203	KAR TINI	55	39,400	716.4
1204	PASAR BARU	189	32,600	172.5
1205	GUNUNG SAHARI UTARA	198	32,000	161.6
1200	SAWAH BESAR	622	212,300	341.3
1301	GUNUNG SAHARI SELATAN	157	57,000	363.1
1302	KEMAYORAN	55	31,000	563.6
1303	KEBON KOSONG	113	36,000	318.6
1304	SERDANG	105	37,000	352.4
1305	HARAPAN MULIA	91	34,000	373.6
1306	UTANPANJANG	105	43,000	409.5
1307	CEMPAKA BARU	92	49,000	532.6
1308	SUMURBATU	103	26,000	252.4
1300	KEMAYORAN	821	313,000	381.2
1401	SENEN	81	14,000	172.8
1402	KWITANG	45	24,700	548.9
1403	KENARI	91	21,900	240.7
1404	KRAMAT	71	42,100	593.0
1405	PASEBAN	71	42,200	594.4
1406	BUNGUR	63	39,000	619.0
1400	SENEN	422	183,900	435.8
1501	TANAH TINGGI	62	50,200	809.7
1502	JOHAR BARU	119	49,300	414.3
1503	GALUR	27	24,700	914.8
1504	KAMPUNG RAWA	30	24,300	810.0
1505	RAWA SARI	125	33,900	271.2
1506	CEMPAKA PUTIH BARAT	122	50,900	417.2
1507	CEMPAKA PUTIH TIMUR	222	41,200	185.6
1500	CEMPAKA PUTIH	707	274,500	388.3
1601	KEBON SIRIH	83	40,200	484.3
1602	GONDANGDIA	146	22,500	154.1
1603	CIKINI	82	24,500	298.8
1604	MENTENG	244	63,300	259.4
1605	PEGANGSAAN	98	45,800	467.3
1600	MENTENG	653	196,300	300.6
1701	KAMPUNG BALI	73	36,500	500.0
1702	KEBON KACANG	71	43,900	618.3
1703	KEBON MELATI	126	79,000	627.0
1704	PETAMBURAN	90	45,900	510.0
1705	KARET TENGSIN	153	68,200	445.8
1706	BENDUNGAN HILIR	158	52,100	329.7
1707	GELORA	259	18,900	73.0
1700	TANAH ABANG	930	344,500	370.4
1000	JAKARTA PUSAT	4,935	1,730,600	350.7

Source : JICA

Table A.2 (2)   Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
2201	KAMAL MUARA	1,053	25,600	24.3
2202	KAPUK MUARA	1,006	50,800	50.5
2203	PEJAGALAN	323	74,700	231.3
2204	PENJARINGAN	395	93,000	235.4
2205	PLUIT (MANGGA DUA UTARA)	771	60,000	77.8
2206	PADEMANGAN BARAT	153	67,000	437.9
2207	PADEMANGAN TIMUR	261	81,000	310.3
2208	ANCOL	577	47,600	82.5
2200	PENJARINGAN	4,539	499,700	110.1
2301	SUNTER AGUNG	702	78,200	111.4
2302	PAPANGGO	280	51,900	185.4
2303	SUNGAI BAMBU	236	57,200	242.4
2304	KEBON BAWANG	173	77,100	445.7
2305	TANJUNG PRIOK	554	76,800	138.6
2306	SUNTER JAYA	458	72,000	157.2
2307	WARAKAS	109	62,800	576.1
2300	TANJUNG PRIOK	2,512	476,000	189.5
2401	KOJA UTARA	145	59,500	410.3
2402	LOGOA	158	82,600	522.8
2403	KOJA SELATAN	183	52,800	288.5
2404	TUGU SELATAN	268	30,700	114.6
2405	TUGU UTARA	332	82,000	247.0
2406	RAWA BADAK	225	88,400	392.9
2407	KELAPA GADING BARAT	530	44,400	83.8
2408	KELAPA GADING TIMUR	453	59,200	130.7
2409	PEGANGSAAN DUA	628	50,800	80.9
2400	KOJA	2,922	550,400	188.4
2501	KALI BARU	247	79,100	320.2
2502	CILINCING	831	58,500	70.4
2503	SEMPER BARAT	159	75,100	472.3
2504	SEMPER TIMUR	316	51,000	161.4
2505	MARUNDA	792	23,900	30.2
2506	SUKAPURA	561	44,600	79.5
2507	ROROTAN	1,064	44,500	41.8
2500	CILINCING	3,970	376,700	94.9
2000	JAKARTA UTARA	13,943	1,902,800	136.5
3101	SEMANAN	598	56,800	95.0
3102	KAMAL	276	18,600	67.4
3103	TEGAL ALUR	778	73,700	94.7
3104	PEGADUNGAN	594	46,100	77.6
3105	KALI DERES	493	57,800	117.2
3106	CENGKARENG TIMUR	545	67,900	124.6
3107	KAPUK	723	94,400	130.6
3108	KEDAUNG KALI ANGKE	261	34,100	130.7
3109	DURI KOSAMBI	503	44,300	88.1
3110	RAWA BUAYA	467	47,600	101.9
3111	CENGKARENG BARAT	511	75,300	147.4
3100	CENGKARENG	5,749	616,600	107.3

Source : JICA

Table A.2 (3) Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
3201	GROGOL	122	39,700	325.4
3202	JELAMBAR	144	57,000	395.8
3203	TANJUNG DUREN	270	76,500	283.3
3204	TOMANG	188	62,500	332.4
3205	JATI PULO	87	45,200	519.5
3206	KOTA BAMBU	126	72,500	575.4
3207	SLIPI	97	30,900	318.6
3208	PAL MERAH	233	73,500	315.5
3209	KEMANGGISAN	211	55,200	261.6
3210	JELAMBAR BARU	144	62,400	433.3
3211	WIJAYA KUSUMA	261	33,600	128.7
3200	GROGOL PETAMBURAN	1,883	609,000	323.4
3301	PINANGSIA	96	28,100	292.7
3302	MANGGA BESAR	51	19,100	374.5
3303	TANGKI	37	27,600	745.9
3304	GLODOK	38	15,000	394.7
3305	KEAGUNGAN	32	34,100	1,065.6
3306	KRUKUT	55	31,700	576.4
3307	TAMAN SARI	68	29,600	435.3
3308	MAHPAR	59	30,900	523.7
3300	TAMAN SARI	436	216,100	495.6
3401	PEKOJAN	78	42,000	538.5
3402	ROA MALAKA	53	8,300	156.6
3403	TAMBORA	28	18,200	650.0
3404	JEMBATAN LIMA	46	35,100	763.0
3405	ANGKE	80	44,800	560.0
3406	JEMBATAN BESI	55	40,800	741.8
3407	KRENDANG	32	33,800	1,056.3
3408	TANAH SEREAL	62	49,400	796.8
3409	DURI UTARA	70	34,400	491.4
3410	KALI BARU	32	38,200	1,193.8
3411	DURI SELATAN	34	26,300	773.5
3400	TAMBORA	570	371,300	651.4
3501	KEMBANGAN	681	122,500	179.9
3502	KEDOYA	620	151,000	243.5
3503	DURI KEPA	386	96,800	250.8
3504	MARUYA ILIR	520	93,200	179.2
3505	MARUYA UDIK	285	55,900	196.1
3506	JOGLO	486	89,400	184.0
3507	SRENGSENG	492	87,700	178.3
3508	KEBON JERUK	314	77,700	247.5
3509	SUKABUMI ILIR	160	48,000	300.0
3510	KELAPA DUA	145	37,800	260.7
3511	SUKABUMI UDIK	162	43,600	269.1
3500	KEBON JERUK	4,251	903,600	212.6
3000	JAKARTA BARAT	12,889	2,716,600	210.8
4101	MENTENG DALAM	258	87,200	338.0
4102	TEBET BARAT	172	52,900	307.6
4103	TEBET TIMUR	139	42,400	305.0
4104	KEBON BARU	130	57,200	440.0
4105	BUKIT DURI	108	62,400	577.8
4106	MANGGARAI SELATAN	51	43,900	860.8
4107	MANGGARAI	95	53,300	561.1
4100	TEBET	953	399,300	419.0

Source : JICA

Table A.2 (4) Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
4201	SETIA BUDI	74	17,000	229.7
4202	GUNTUR	65	39,200	603.1
4203	KARET	94	52,400	557.4
4204	KARET SEMANGGI	90	22,200	246.7
4205	KARET KUNINGAN	179	66,200	369.8
4206	KUNINGAN TIMUR	215	27,800	129.3
4207	PASAR MANGGIS	78	39,600	507.7
4208	MENTENG ATAS	90	61,100	678.9
4200	SETIA BUDI	885	325,500	367.8
4301	KUNINGAN BARAT	98	29,200	298.0
4302	MAMPANG PRAPATAN	78	31,700	406.4
4303	PELA MAMPANG	162	62,700	387.0
4304	TEGAL PARANG	106	29,500	278.3
4305	BANGKA	330	48,100	145.8
4306	PANCORAN	124	32,200	259.7
4307	DUREN TIGA	259	49,100	189.6
4308	KALI BATA	207	54,600	263.8
4309	CIKOKO	71	19,200	270.4
4310	PENGADEGAN	95	29,100	306.3
4311	RAWAJATI	54	16,000	296.3
4300	MAMPANG PRAPATAN	1,584	401,400	253.4
4401	PEJATEN BARAT	290	55,700	192.1
4402	PASAR MINGGU	335	46,300	138.2
4403	TANJUNG BARAT	525	40,200	76.6
4404	JATI PADANG	153	34,400	224.8
4405	RAGUNAN	579	51,900	89.6
4406	CILANDAK TIMUR	353	36,600	103.7
4407	JAGAKARSA	485	39,700	81.9
4408	LENTENG AGUNG	266	44,600	167.7
4409	SRENGSENG SAWAH	605	50,200	83.0
4410	CIGANJUR	669	45,200	67.6
4411	KEBAGUSAN	274	29,700	108.4
4412	PEJATEN TIMUR	288	67,500	234.4
4400	PASAR MINGGU	4,822	542,000	112.4
4501	SENAYAN	153	53,200	347.7
4502	RAWA BARAT	69	16,100	233.3
4503	SELONG	140	18,000	128.6
4504	GUNUNG	132	28,200	213.6
4505	KRAMAT PELA	123	30,300	246.3
4506	MELAWAI	126	17,500	138.9
4507	PETOGOGAN	87	26,200	301.1
4508	PULO	127	22,700	178.7
4509	GANDARIA UTARA	136	66,200	486.8
4510	CIPETE UTARA	183	51,900	283.6
4500	KABAYORAN BARU	1,276	330,300	258.9
4601	GROGOL UTARA	332	103,300	311.1
4602	GROGOL SELATAN	285	96,000	336.8
4603	CIPULIR	194	70,300	362.4
4604	KEBAYORAN LAMA UTARA	179	80,900	452.0
4605	PONDOK PINANG	684	156,000	228.1
4606	PETUKANGAN UTARA	299	71,000	237.5
4607	PETUKANAGN SELATAN	211	46,900	222.3
4608	ULUJAMI	171	51,300	300.0
4609	PESANGGARAHAN	210	54,300	258.6
4610	BINTARO	456	99,300	217.8
4611	KEBAYORAN LAMA SELATAN	257	86,100	335.0
4600	KEBAYORAN LAMA	3,278	915,400	279.3

Table A.2 (5)   Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
4701	GANDARIA SELATAN	175	35,300	201.7
4702	CIPETE SELATAN	237	42,300	178.5
4703	CILANDAK BARAT	604	83,700	138.6
4704	LEBAK BULUS	441	40,700	92.3
4705	PONDOK LABU	361	41,700	115.5
4700	CILANDAK	1,818	243,700	134.0
4000	JAKARTA SELATAN	14,616	3,157,600	216.0
5101	KEBON MANGGIS	78.75	35,700	453.3
5102	PAL MERIAM	65.39	33,600	513.8
5103	KAYUMANIS	57.06	45,700	800.9
5104	UTAN KAYU UTARA	104.74	56,300	537.5
5105	PISANGAN BARU	67.51	57,700	854.7
5106	UTAN KAYU SELATAN	112.22	55,300	492.8
5100	MATRAMAN	485.67	284,300	585.4
5201	KAYU PUTIH	437.15	70,400	161.0
5202	JATI	210.50	63,300	300.7
5203	PISANGAN TIMUR	179.71	77,000	428.5
5204	CIPINANG	153.94	68,300	443.7
5205	PULO GADUNG	192.30	47,800	248.6
5206	JATINEGARA KAUM	123.45	39,600	320.8
5207	RAWAMANGUN	274.10	91,900	335.3
5200	PULO GADUNG	1,571.15	458,300	291.7
5301	KAMPUNG MELAYU	47.83	38,100	796.6
5302	BALI MESTER	67.37	25,600	380.0
5303	BIDARA CINA	126.10	71,000	563.0
5304	CIPINANG CEMPEDAK	167.20	73,300	438.4
5305	RAWA BUNGA	87.65	49,500	564.7
5306	CIPINANG MUARA	289.58	95,500	329.8
5307	CIPINANG BESAR UTARA	115.20	57,800	501.7
5308	PONDOK BAMBU	499.70	102,700	205.5
5309	KLENDER	308.90	87,400	282.9
5310	DUREN SAWIT	454.30	82,100	180.7
5311	MALAKA SARI	138.23	52,300	378.4
5312	PONDOK KELAPA	572.15	90,100	157.5
5313	CIPINANG BESAR SELATAN	162.59	44,400	273.1
5314	MALAKA JAYA	98.32	59,800	608.2
5315	PONDOK KOPI	206.00	44,200	214.6
5300	JATINEGARA	3,341.12	973,800	291.5
5401	CAWANG	179.04	67,500	377.0
5402	CIPINANG MELAYU	252.79	62,100	245.7
5403	CILILITAN	179.75	53,800	299.3
5404	KRAMAT JATI	151.58	45,300	298.9
5405	KEBON PALA	229.50	57,600	251.0
5406	HALIM PERDANA KUSUMA	1,306.85	97,300	74.5
5407	BATU AMPAR	255.02	39,800	156.1
5408	BALE KAMBANG	167.45	20,600	123.0
5409	MAKASSAR	184.72	50,700	274.5
5410	KAMPUNG TENGAH	202.52	36,200	178.7
5411	DUKUH	198.09	21,100	106.5
5412	PINANG RANTE	189.15	17,900	94.6
5400	KRAMAT JATI	3,496.46	569,900	163.0

Source : JICA

Table A.2 (6) Future Population and Population Density by Kelurahan in 2010

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	Area (ha)	Population	Population Density
5501	LUBANG BUAYA	372.20	35,500	95.4
5502	GEDONG	263.40	36,800	139.7
5503	RAMBUTAN	209.00	27,500	131.6
5504	CEGER	362.60	19,400	53.5
5505	BAMBU APUS	316.52	17,900	56.6
5506	SETU	325.12	14,300	44.0
5507	CIPAYUNG	294.00	16,700	56.8
5508	SUSUKAN	190.60	40,700	213.5
5509	CIRACAS	421.55	53,600	127.1
5510	CIJANTUNG	238.57	34,100	142.9
5511	BARU	188.95	24,600	130.2
5512	KALI SARI	285.95	23,600	82.5
5513	PEKAYON	317.73	41,600	130.9
5514	KELAPA DUA WETAN	336.86	26,100	77.5
5515	MUNJUL	217.30	15,500	71.3
5516	CILANGKAP	412.90	21,600	52.3
5517	CIBUBUR	450.29	48,900	108.6
5518	PONDOK RANGON	419.95	19,100	45.5
5500	PASAR REBO	5,623.49	517,500	92.0
5601	RAWA TERATE	410.05	35,100	85.6
5602	JATI NEGARA	659.75	112,600	170.7
5603	PENGGILINGAN	448.45	78,700	175.5
5604	CAKUNG BARAT	619.43	55,900	90.2
5605	UJUNG MENTENG	443.21	32,100	72.4
5606	PULO GEBANG	685.81	98,400	143.5
5607	CAKUNG TIMUR	981.38	75,800	77.2
5600	CAKUNG	4,248.08	488,600	115.0
5000	JAKARTA TIMUR	18,765.97	3,292,400	175.4
10000	JAKARTA	65,148.97	12,800,000	196.5

Source : JICA

Table A.3(1) Existing Land Use by Kelurahan in 1988

Unit : (ha) / Ratio

CODE NUMBER	NAME OF KELURAHAN / KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
1101	CIDENG	74.00 / 0.59	0.00 / 0.00	--	52.00 / 0.41	126.00 / 1.00
1102	DURI PULO	63.00 / 0.88	9.00 / 0.13	0.00	0.00 / 0.00	72.00 / 1.00
1103	PETOJO UTARA	62.00 / 0.55	49.00 / 0.44	0.00	1.00 / 0.01	112.00 / 1.00
1104	PETOJO SELATAN	83.00 / 0.62	19.00 / 0.14	0.00	32.00 / 0.24	134.00 / 1.00
1105	KEBON KELAPA	37.00 / 0.47	41.00 / 0.53	0.00	0.00 / 0.00	78.00 / 1.00
1106	GAMBIR	57.00 / 0.22	201.00 / 0.78	--	0.00 / 0.00	258.00 / 1.00
	G A M B I R	376.00 / 0.48	319.00 / 0.41	0.00	85.00 / 0.11	780.00 / 1.00
1201	MANGGA II SELATAN	107.00 / 0.83	10.00 / 0.08	3.00 / 0.02	9.00 / 0.07	129.00 / 1.00
1202	KARANG ANYAR	47.00 / 0.92	4.00 / 0.08	0.00	0.00 / 0.00	51.00 / 1.00
1203	KARTINI	41.00 / 0.75	0.00 / 0.00	--	14.00 / 0.25	55.00 / 1.00
1204	PASAR BARU	21.00 / 0.11	168.00 / 0.89	0.00	0.00 / 0.00	189.00 / 1.00
1205	GUNUNG SAHARI UTARA	107.00 / 0.54	75.00 / 0.38	16.00 / 0.08	0.00 / 0.00	198.00 / 1.00
	S A W A H B E S A R	323.00 / 0.52	257.00 / 0.41	19.00 / 0.03	23.00 / 0.04	622.00 / 1.00
1301	GUNUNG SAHARI SELATAN	30.00 / 0.19	24.00 / 0.15	3.00 / 0.02	100.00 / 0.64	157.00 / 1.00
1302	KEMAYORAN	52.00 / 0.95	3.00 / 0.05	0.00	0.00 / 0.00	55.00 / 1.00
1303	KEBON KOSONG	62.00 / 0.55	0.00 / 0.00	0.00	51.00 / 0.45	113.00 / 1.00
1304	SERDANG	74.00 / 0.70	0.00 / 0.00	0.00	31.00 / 0.30	105.00 / 1.00
1305	HARAPAN MULIA	89.00 / 0.98	0.00 / 0.00	0.00	2.00 / 0.02	91.00 / 1.00
1306	UTAN PANJANG	70.00 / 0.67	21.00 / 0.20	0.00	14.00 / 0.13	105.00 / 1.00
1307	CEMPAKA BARU	90.00 / 0.98	0.00 / 0.00	0.00	2.00 / 0.02	92.00 / 1.00
1308	SUMURBATU	77.00 / 0.75	16.00 / 0.15	0.00	10.00 / 0.10	103.00 / 1.00
	K E M A Y O R A N	544.00 / 0.66	64.00 / 0.08	3.00 / 0.00	210.00 / 0.26	821.00 / 1.00
1401	SENEN	51.00 / 0.63	30.00 / 0.37	--	0.00 / 0.00	81.00 / 1.00
1402	KWITANG	33.00 / 0.73	12.00 / 0.27	0.00	0.00 / 0.00	45.00 / 1.00
1403	KENARI	87.00 / 0.96	4.00 / 0.04	0.00	0.00 / 0.00	91.00 / 1.00
1404	KRAMAT	57.00 / 0.80	8.00 / 0.11	6.00 / 0.08	0.00 / 0.00	71.00 / 1.00
1405	PASEBAN	62.00 / 0.87	9.00 / 0.13	0.00	0.00 / 0.00	71.00 / 1.00
1406	BUNGUR	54.00 / 0.86	6.00 / 0.10	2.00 / 0.03	1.00 / 0.02	63.00 / 1.00
	S E N E N	344.00 / 0.82	69.00 / 0.16	8.00 / 0.02	1.00 / 0.00	422.00 / 1.00
1501	TANAH TINGGI	61.00 / 0.98	0.00 / 0.00	--	1.00 / 0.02	62.00 / 1.00
1502	JOHAR BARU	109.00 / 0.92	6.00 / 0.05	2.00 / 0.02	2.00 / 0.02	119.00 / 1.00
1503	GALUR	25.00 / 0.92	0.00 / 0.00	2.00 / 0.07	0.00 / 0.00	27.00 / 1.00
1504	KAMPUNG RAWA	30.00 / 1.00	0.00 / 0.00	0.00	0.00 / 0.00	30.00 / 1.00
1505	RAWASARI	70.00 / 0.56	22.00 / 0.18	27.00 / 0.22	6.00 / 0.04	125.00 / 1.00
1506	CEMPAKA PUTIH BARAT	78.00 / 0.62	37.00 / 0.30	9.00 / 0.07	0.00 / 0.00	124.00 / 1.00
1507	CEMPAKA PUTIH TIMUR	155.00 / 0.70	24.00 / 0.11	40.00 / 0.18	3.00 / 0.01	222.00 / 1.00
	C E M P A K A P U T I H	526.00 / 0.74	89.00 / 0.13	80.00 / 0.11	12.00 / 0.02	707.00 / 1.00
1601	KEBON SIRIH	60.00 / 0.72	13.00 / 0.16	--	10.00 / 0.12	83.00 / 1.00
1602	GONDANGDIA	113.00 / 0.98	3.00 / 0.02	0.00	0.00 / 0.00	116.00 / 1.00
1603	CIKINI	70.00 / 0.98	1.00 / 0.01	1.00 / 0.01	0.00 / 0.00	72.00 / 1.00
1604	MENTENG	149.00 / 0.61	15.00 / 0.06	0.00	80.00 / 0.33	244.00 / 1.00
1605	PEGANGSAAN	78.00 / 0.80	12.00 / 0.12	7.00 / 0.07	1.00 / 0.01	98.00 / 1.00
	M E N T E N G	506.00 / 0.77	44.00 / 0.07	8.00 / 0.01	95.00 / 0.15	653.00 / 1.00
1701	KAMPUNG BALI	59.00 / 0.81	10.00 / 0.14	1.00 / 0.01	3.00 / 0.04	73.00 / 1.00
1702	KEBON KACANG	64.00 / 1.00	0.00 / 0.00	0.00	0.00 / 0.00	64.00 / 1.00
1703	KEBONG MELATI	121.00 / 0.96	0.00 / 0.00	0.00	5.00 / 0.04	126.00 / 1.00
1704	PETAMBURAN	41.00 / 0.46	28.00 / 0.31	9.00 / 0.10	12.00 / 0.13	90.00 / 1.00
1705	KARET TENGSIN	76.00 / 0.50	64.00 / 0.42	1.00 / 0.01	12.00 / 0.07	153.00 / 1.00
1706	BENDUNGAN HILIR	101.00 / 0.64	5.00 / 0.03	2.00 / 0.01	50.00 / 0.32	158.00 / 1.00
1707	GELORA	60.00 / 0.23	199.00 / 0.77	--	0.00 / 0.00	259.00 / 1.00
	T A N A H A B A N G	522.00 / 0.56	306.00 / 0.33	21.00 / 0.02	81.00 / 0.09	920.00 / 1.00
1000	**SUB TOTAL (PUSAT)**	3211.00 / 0.65	1148.00 / 0.23	239.00 / 0.05	507.00 / 0.10	4935.00 / 1.00
2201	KAMAL MUARA	105.00 / 0.10	0.00 / 0.00	73.00 / 0.07	875.00 / 0.83	1053.00 / 1.00
2202	KAPUK MUARA	513.00 / 0.51	91.00 / 0.09	171.00 / 0.17	211.00 / 0.21	1006.00 / 1.00
2203	PEJAGALAN	203.00 / 0.63	46.00 / 0.14	71.00 / 0.21	0.00 / 0.00	323.00 / 1.00
2204	PENJARINGAN	115.00 / 0.29	122.00 / 0.31	138.00 / 0.35	20.00 / 0.05	395.00 / 1.00
2205	PLUIT / MANGGA DUA UTARA	470.00 / 0.61	278.00 / 0.36	0.00	23.00 / 0.03	771.00 / 1.00
2206	PADEMANGAN BARAT	145.00 / 0.95	0.00 / 0.00	5.00 / 0.03	3.00 / 0.02	153.00 / 1.00
2207	PADEMANGAN TIMUR	248.00 / 0.95	13.00 / 0.05	0.00	0.00 / 0.00	261.00 / 1.00
2208	ANCOL	317.00 / 0.55	18.00 / 0.03	111.00 / 0.25	98.00 / 0.17	577.00 / 1.00
	P E N J A R I N G A N	2135.00 / 0.47	568.00 / 0.13	605.00 / 0.13	1230.00 / 0.27	4535.00 / 1.00
2301	SUNTER AGUNG	315.00 / 0.45	196.00 / 0.28	56.00 / 0.08	135.00 / 0.19	702.00 / 1.00
2302	PAPANGGO	210.00 / 0.75	0.00 / 0.00	39.00 / 0.14	31.00 / 0.11	280.00 / 1.00
2303	SUNGAI BAMBU	103.00 / 0.89	0.00 / 0.00	71.00 / 0.30	2.00 / 0.01	236.00 / 1.00
2304	KEBON BAWANG	171.00 / 0.99	0.00 / 0.00	0.00	2.00 / 0.01	173.00 / 1.00
2305	TANJUNG PRIOK	470.00 / 0.85	2.00 / 0.01	17.00 / 0.03	66.00 / 0.12	554.00 / 1.00
2306	SUNTER JAYA	284.00 / 0.65	50.00 / 0.11	62.00 / 0.14	42.00 / 0.09	438.00 / 1.00
2307	WARAKAS	77.00 / 0.71	0.00 / 0.00	0.00	32.00 / 0.29	109.00 / 1.00
	T A N J U N G P R I O K	1730.00 / 0.69	246.00 / 0.10	226.00 / 0.09	310.00 / 0.12	2512.00 / 1.00
2401	KOJA UTARA	120.00 / 0.83	24.00 / 0.17	--	1.00 / 0.01	145.00 / 1.00
2402	LAGOA	153.00 / 0.97	3.00 / 0.02	--	2.00 / 0.01	158.00 / 1.00
2403	KOJA SELATAN	170.00 / 0.93	9.00 / 0.05	0.00	4.00 / 0.02	183.00 / 1.00
2404	TUGU SELATAN	150.00 / 0.56	5.00 / 0.02	0.00	113.00 / 0.42	268.00 / 1.00
2405	TUGU UTARA	299.00 / 0.90	13.00 / 0.04	0.00	20.00 / 0.06	332.00 / 1.00
2406	RAWA BADAK	93.00 / 0.41	36.00 / 0.16	90.00 / 0.40	0.00 / 0.00	225.00 / 1.00

Unit : (ha)
: Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
2407	KELAPA GADING BRT.	313.00 / 0.59	10.00 / 0.02	5.00 / 0.01	202.00 / 0.38	530.00 / 1.00
2408	KELAPA GADING TMR.	240.00 / 0.53	58.00 / 0.13	145.00 / 0.32	10.00 / 0.02	453.00 / 1.00
2409	PEGANGSAAN DUA	144.00 / 0.23	94.00 / 0.15	---	390.00 / 0.62	628.00 / 1.00
	K O J A	1588.00 / 0.58	252.00 / 0.09	210.00 / 0.08	742.00 / 0.25	2922.00 / 1.00
2501	KALI BARU	227.00 / 0.92	10.00 / 0.04	2.00 / 0.01	8.00 / 0.03	247.00 / 1.00
2502	CILINCING	155.00 / 0.19	9.00 / 0.01	8.00 / 0.01	659.00 / 0.79	831.00 / 1.00
2503	SEMPER BARAT	70.00 / 0.44	27.00 / 0.17	32.00 / 0.20	30.00 / 0.19	159.00 / 1.00
2504	SEMPER TIMUR	101.00 / 0.32	32.00 / 0.10	126.00 / 0.40	57.00 / 0.18	316.00 / 1.00
2505	MARUNDA	214.00 / 0.27	0.00 / 0.00	8.00 / 0.01	570.00 / 0.72	792.00 / 1.00
2505	SUKAPURA	90.00 / 0.16	6.00 / 0.01	84.00 / 0.15	381.00 / 0.68	561.00 / 1.00
2507	ROROTAN	128.00 / 0.12	0.00 / 0.00	0.00 / 0.00	936.00 / 0.88	1064.00 / 1.00
	C I L I N C I N G	985.00 / 0.25	84.00 / 0.02	260.00 / 0.07	2641.00 / 0.67	3970.00 / 1.00
2000	SUB TOTAL (UTARA)	6539.00 / 0.47	1150.00 / 0.08	1331.00 / 0.10	4923.00 / 0.35	13943.00 / 1.00
3101	SEMANAN	335.00 / 0.56	0.00 / 0.00	102.00 / 0.17	161.00 / 0.27	598.00 / 1.00
3102	KAMAL	102.00 / 0.37	5.00 / 0.02	0.00 / 0.00	169.00 / 0.61	276.00 / 1.00
3103	TEGAL ALUR	482.00 / 0.62	31.00 / 0.04	31.00 / 0.04	234.00 / 0.30	778.00 / 1.00
3104	PEGADUNGAN	166.00 / 0.28	362.00 / 0.61	0.00 / 0.00	66.00 / 0.11	594.00 / 1.00
3105	KALI DERES	148.00 / 0.30	5.00 / 0.01	74.00 / 0.15	266.00 / 0.54	493.00 / 1.00
3106	CENGKARENG TIMUR	131.00 / 0.24	0.00 / 0.00	38.00 / 0.07	376.00 / 0.69	545.00 / 1.00
3107	KAPUK	502.00 / 0.69	42.00 / 0.06	10.00 / 0.01	169.00 / 0.23	723.00 / 1.00
3108	KEDAUNG KALI ANGKE	141.00 / 0.54	16.00 / 0.06	26.00 / 0.10	78.00 / 0.30	261.00 / 1.00
3109	DURI KOSAMBI	40.00 / 0.08	101.00 / 0.20	46.00 / 0.09	316.00 / 0.63	503.00 / 1.00
3110	RAWA BUAYA	117.00 / 0.25	172.00 / 0.37	65.00 / 0.14	113.00 / 0.24	467.00 / 1.00
3111	CENGKARENG BARAT	187.00 / 0.37	44.00 / 0.09	18.00 / 0.04	262.00 / 0.51	511.00 / 1.00
	C E N G K A R E N G	2351.00 / 0.41	778.00 / 0.14	410.00 / 0.07	2210.00 / 0.38	5749.00 / 1.00
3201	GROGOL	65.00 / 0.53	57.00 / 0.47	---	0.00 / 0.00	122.00 / 1.00
3202	JELAMBAR	119.00 / 0.83	25.00 / 0.17	---	0.00 / 0.00	144.00 / 1.00
3203	TANJUNG DUREN	246.00 / 0.91	24.00 / 0.09	0.00 / 0.00	0.00 / 0.00	270.00 / 1.00
3204	TOMANG	126.00 / 0.67	62.00 / 0.33	---	0.00 / 0.00	188.00 / 1.00
3205	JATI PULO	69.00 / 0.79	18.00 / 0.21	---	0.00 / 0.00	87.00 / 1.00
3206	KOTA BAMBU	118.00 / 0.94	0.00 / 0.00	0.00 / 0.00	8.00 / 0.06	126.00 / 1.00
3207	SLIPI	63.00 / 0.65	15.00 / 0.15	8.00 / 0.08	11.00 / 0.11	97.00 / 1.00
3208	PAL MERAH	148.00 / 0.64	19.00 / 0.08	65.00 / 0.28	1.00 / 0.00	233.00 / 1.00
3209	KEMANGGISAN	173.00 / 0.82	31.00 / 0.15	0.00 / 0.00	7.00 / 0.03	211.00 / 1.00
3210	JELAMBAR BARU	92.00 / 0.64	25.00 / 0.17	27.00 / 0.19	0.00 / 0.00	144.00 / 1.00
3211	WIJAYA KUSUMA	211.00 / 0.81	42.00 / 0.16	5.00 / 0.02	3.00 / 0.01	261.00 / 1.00
	G R O G O L PETAMBURAN	1430.00 / 0.76	318.00 / 0.17	105.00 / 0.06	30.00 / 0.02	1883.00 / 1.00

Unit : (ha)
: Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
3301	PINANGSIA	48.00 / 0.50	48.00 / 0.50	0.00 / 0.00	0.00 / 0.00	96.00 / 1.00
3302	MANGGA BESAR	23.00 / 0.45	20.00 / 0.39	0.00 / 0.00	8.00 / 0.16	51.00 / 1.00
3303	TANGKI	30.00 / 0.81	7.00 / 0.19	0.00 / 0.00	0.00 / 0.00	37.00 / 1.00
3304	GLODOK	16.00 / 0.42	2.00 / 0.05	---	20.00 / 0.53	38.00 / 1.00
3305	KEAGUNGAN	26.00 / 0.81	6.00 / 0.19	0.00 / 0.00	0.00 / 0.00	32.00 / 1.00
3306	KRUKUT	45.00 / 0.82	2.00 / 0.04	8.00 / 0.15	0.00 / 0.00	55.00 / 1.00
3307	TAMAN SARI	42.00 / 0.62	25.00 / 0.37	0.00 / 0.00	1.00 / 0.01	68.00 / 1.00
3308	MAMPAR	31.00 / 0.53	28.00 / 0.47	0.00 / 0.00	0.00 / 0.00	59.00 / 1.00
	T A M A N S A R I	261.00 / 0.60	138.00 / 0.32	8.00 / 0.02	29.00 / 0.07	436.00 / 1.00
3401	PEKOJAN	47.00 / 0.60	23.00 / 0.29	4.00 / 0.05	4.00 / 0.05	79.00 / 1.00
3402	ROA MALAKA	21.00 / 0.40	30.00 / 0.57	2.00 / 0.04	0.00 / 0.00	53.00 / 1.00
3403	TAMBORA	23.00 / 0.82	5.00 / 0.18	0.00 / 0.00	0.00 / 0.00	28.00 / 1.00
3404	JEMBATAN LIMA	39.00 / 0.85	2.00 / 0.04	5.00 / 0.11	0.00 / 0.00	46.00 / 1.00
3405	ANGKE	74.00 / 0.93	0.00 / 0.00	5.00 / 0.06	1.00 / 0.01	80.00 / 1.00
3406	JEMBATAN BESI	29.00 / 0.53	23.00 / 0.42	2.00 / 0.04	1.00 / 0.02	55.00 / 1.00
3407	KRENDANG	30.00 / 0.94	0.00 / 0.00	2.00 / 0.04	0.00 / 0.00	32.00 / 1.00
3408	TANAH SEREAL	56.00 / 0.90	0.00 / 0.00	6.00 / 0.10	0.00 / 0.00	62.00 / 1.00
3409	DURI UTARA	55.00 / 0.79	6.00 / 0.09	9.00 / 0.13	0.00 / 0.00	70.00 / 1.00
3410	KALI BARU	25.00 / 0.78	0.00 / 0.00	2.00 / 0.05	5.00 / 0.16	32.00 / 1.00
3411	DURI SELATAN	28.00 / 0.82	3.00 / 0.09	2.00 / 0.06	1.00 / 0.03	34.00 / 1.00
	T A M B O R A	427.00 / 0.75	92.00 / 0.16	39.00 / 0.07	12.00 / 0.02	570.00 / 1.00
3501	KEMBANGAN	227.00 / 0.43	20.00 / 0.03	0.00 / 0.00	434.00 / 0.64	631.00 / 1.00
3502	KEDOYA	477.00 / 0.77	125.00 / 0.22	6.00 / 0.01	12.00 / 0.02	520.00 / 1.00
3503	DURI KEPA	197.00 / 0.51	173.00 / 0.45	4.00 / 0.01	12.00 / 0.03	386.00 / 1.00
3504	MERUYA ILIR	291.00 / 0.56	89.00 / 0.17	0.00 / 0.00	140.00 / 0.27	520.00 / 1.00
3505	MERUYA UDIK	197.00 / 0.69	56.00 / 0.20	---	32.00 / 0.11	285.00 / 1.00
3506	JOGLO	255.00 / 0.53	87.00 / 0.18	0.00 / 0.00	140.00 / 0.29	486.00 / 1.00
3507	SRENGSENG	327.00 / 0.66	65.00 / 0.13	0.00 / 0.00	100.00 / 0.20	492.00 / 1.00
3508	KEBON JERUK	191.00 / 0.61	44.00 / 0.14	---	79.00 / 0.25	314.00 / 1.00
3509	SUKABUMI ILIR	80.00 / 0.50	11.00 / 0.07	0.00 / 0.00	69.00 / 0.43	160.00 / 1.00
3510	KELAPA DUA	100.00 / 0.69	34.00 / 0.23	0.00 / 0.00	11.00 / 0.08	145.00 / 1.00
3511	SUKABUMI UDIK	118.00 / 0.73	30.00 / 0.19	0.00 / 0.00	14.00 / 0.09	162.00 / 1.00
	K E B O N J E R U K	2464.00 / 0.58	734.00 / 0.17	10.00 / 0.00	1043.00 / 0.25	4251.00 / 1.00
3000	SUB TOTAL (BARAT)	6933.00 / 0.54	2060.00 / 0.16	572.00 / 0.04	3324.00 / 0.26	12889.00 / 1.00

Table A.3(3) Existing Land Use by Kelurahan in 1988

Unit : (ha)
; Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
4101	MENTENG DALAM	186.00 / 0.72	67.00 / 0.26	4.00 / 0.02	1.00 / 0.00	258.00 / 1.00
4102	TEBET BARAT	131.00 / 0.76	35.00 / 0.20	4.00 / 0.02	2.00 / 0.01	172.00 / 1.00
4103	TEBET TIMUR	103.00 / 0.74	31.00 / 0.22	2.00 / 0.01	3.00 / 0.02	139.00 / 1.00
4104	KEBON BARU	102.00 / 0.78	28.00 / 0.22	0.00	0.00	130.00 / 1.00
4105	BUKIT DURI	81.00 / 0.75	26.00 / 0.24	0.00	1.00 / 0.01	108.00 / 1.00
4106	MANGGARAI SELATAN	43.00 / 0.84	8.00 / 0.16	0.00	0.00	51.00 / 1.00
4107	MANGGARAI	83.00 / 0.87	11.00 / 0.12	1.00 / 0.01	0.00	95.00 / 1.00
	T E B E T	729.00 / 0.76	206.00 / 0.22	11.00 / 0.01	7.00 / 0.01	953.00 / 1.00
4201	SETIA BUDI	32.00 / 0.43	35.00 / 0.47	0.00	7.00 / 0.09	74.00 / 1.00
4202	GUNTUR	46.00 / 0.71	11.00 / 0.17	0.00	8.00 / 0.00	65.00 / 1.00
4203	KARET	69.00 / 0.73	14.00 / 0.15	7.00 / 0.07	4.00 / 0.04	94.00 / 1.00
4204	KARET SEMANGI	58.00 / 0.64	8.00 / 0.09	21.00 / 0.23	3.00 / 0.03	90.00 / 1.00
4205	KARET KUNINGAN	146.00 / 0.82	13.00 / 0.09	16.00 / 0.06	4.00 / 0.02	179.00 / 1.00
4205	KUNINGAN TIMUR	142.00 / 0.66	37.00 / 0.17	12.00 / 0.06	24.00 / 0.11	215.00 / 1.00
4207	PASAR MANGGIS	70.00 / 0.90	7.00 / 0.09	0.00	1.00 / 0.01	78.00 / 1.00
4208	MENTENG ATAS	74.00 / 0.82	10.00 / 0.11	0.00	6.00 / 0.06	90.00 / 1.00
	S E T I A B U D I	637.00 / 0.72	141.00 / 0.16	50.00 / 0.06	57.00 / 0.06	885.00 / 1.00
4301	KUNINGAN BARAT	65.00 / 0.66	10.00 / 0.10	1.00 / 0.01	22.00 / 0.22	98.00 / 1.00
4302	MAMPANG PRAPATAN	73.00 / 0.94	4.00 / 0.05	0.00	1.00 / 0.01	78.00 / 1.00
4303	PELA MAMPANG	112.00 / 0.69	30.00 / 0.19	0.00	20.00 / 0.12	162.00 / 1.00
4304	TEGAL PARANG	41.00 / 0.39	52.00 / 0.49	0.00	13.00 / 0.12	106.00 / 1.00
4305	BANGKA	261.00 / 0.79	50.00 / 0.15	4.00 / 0.01	15.00 / 0.05	330.00 / 1.00
4306	PANCORAN	89.00 / 0.72	23.00 / 0.19	1.00 / 0.01	11.00 / 0.09	124.00 / 1.00
4307	DUREN TIGA	157.00 / 0.61	102.00 / 0.39	0.00	0.00	259.00 / 1.00
4308	KALIBATA	156.00 / 0.75	10.00 / 0.05	0.00	41.00 / 0.20	207.00 / 1.00
4309	CIKOKO	43.00 / 0.61	28.00 / 0.39	0.00	0.00	71.00 / 1.00
4310	PENGADEGAN	66.00 / 0.69	16.00 / 0.17	0.00	13.00 / 0.14	95.00 / 1.00
4311	RAWAJATI	40.00 / 0.74	4.00 / 0.07	10.00 / 0.19	0.00	54.00 / 1.00
	M A M P A N G PRAPATAN	1103.00 / 0.70	329.00 / 0.21	16.00 / 0.01	136.00 / 0.09	1584.00 / 1.00
4401	PEJATEN BARAT	230.00 / 0.79	46.00 / 0.16	0.00	14.00 / 0.05	290.00 / 1.00
4402	PASAR MINGGU	265.00 / 0.79	42.00 / 0.13	0.00	28.00 / 0.08	335.00 / 1.00
4403	TANJUNG BARAT	281.00 / 0.54	158.00 / 0.30	0.00	86.00 / 0.16	525.00 / 1.00
4404	JATIPADANG	82.00 / 0.54	46.00 / 0.30	0.00	25.00 / 0.16	153.00 / 1.00
4405	RAGUNAN	294.00 / 0.51	201.00 / 0.35	0.00	84.00 / 0.15	579.00 / 1.00
4406	CILANDAK TIMUR	256.00 / 0.73	45.00 / 0.13	10.00 / 0.03	42.00 / 0.12	353.00 / 1.00
4407	JAGAKARSA	133.00 / 0.27	78.00 / 0.16	3.00 / 0.01	271.00 / 0.56	485.00 / 1.00
4408	LENTENG AGUNG	104.00 / 0.39	73.00 / 0.27	0.00	89.00 / 0.33	266.00 / 1.00
4409	SRENGSENG SAWAH	187.00 / 0.80	46.00 / 0.08	0.00	72.00 / 0.12	605.00 / 1.00

Unit : (ha)
; Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
4410	CIGANJUR	264.00 / 0.39	96.00 / 0.14	—	309.00 / 0.46	669.00 / 1.00
4411	KEBAGUSAN	70.00 / 0.26	30.00 / 0.11	0.00	174.00 / 0.64	274.00 / 1.00
4412	PEJATEN TIMUR	187.00 / 0.65	15.00 / 0.12	0.00	66.00 / 0.23	288.00 / 1.00
	P A S A R M I N G G U	2653.00 / 0.55	896.00 / 0.19	13.00 / 0.00	1260.00 / 0.26	4822.00 / 1.00
4501	SENAYAN	146.00 / 0.95	0.00	—	7.00 / 0.05	153.00 / 1.00
4502	RAWA BARAT	65.00 / 0.95	0.00	0.00	4.00 / 0.05	69.00 / 1.00
4503	SELONG	129.00 / 0.94	11.00 / 0.08	0.00	0.00	140.00 / 1.00
4504	GUNUNG	91.00 / 0.92	36.00 / 0.27	0.00	5.00 / 0.04	132.00 / 1.00
4505	KRAMAT PELA	98.00 / 0.80	20.00 / 0.16	0.00	5.00 / 0.04	123.00 / 1.00
4506	MELAWAI	125.00 / 0.80	0.00	0.00	0.00	126.00 / 1.00
4507	PETOGOGAN	54.00 / 1.00	20.00 / 0.00	6.00 / 0.07	7.00 / 0.08	87.00 / 1.00
4508	PULO	112.00 / 0.88	10.00 / 0.23	0.00	5.00 / 0.04	127.00 / 1.00
4509	GANDARIA UTARA	127.00 / 0.93	0.00	0.00	9.00 / 0.07	126.00 / 1.00
4510	CIPETE UTARA	82.00 / 0.45	5.00 / 0.03	0.00	96.00 / 0.52	183.00 / 1.00
	K E B A Y O R A N BARU	1030.00 / 0.81	102.00 / 0.08	6.00 / 0.00	138.00 / 0.11	1276.00 / 1.00
4601	GROGOL UTARA	244.00 / 0.73	70.00 / 0.21	17.00 / 0.05	1.00 / 0.00	332.00 / 1.00
4602	GROGOL SELATAN	163.00 / 0.57	91.00 / 0.32	31.00 / 0.11	0.00	285.00 / 1.00
4603	CIPULIR	158.00 / 0.81	31.00 / 0.16	4.00 / 0.02	1.00 / 0.01	194.00 / 1.00
4604	KEBAYORAN LAMA UTARA	103.00 / 0.58	68.00 / 0.38	1.00 / 0.01	7.00 / 0.04	179.00 / 1.00
4605	PONDOK PINANG	496.00 / 0.73	150.00 / 0.22	38.00 / 0.06	0.00	684.00 / 1.00
4606	PETUKANGAN UTARA	280.00 / 0.94	0.00	0.00	19.00 / 0.06	299.00 / 1.00
4607	PETUKANGAN SELATAN	116.00 / 0.55	0.00	0.00	95.00 / 0.45	211.00 / 1.00
4608	ULUJAHI	163.00 / 0.95	0.00	0.00	8.00 / 0.05	171.00 / 1.00
4609	PESANGGRAHAN	130.00 / 0.62	44.00 / 0.21	0.00	36.00 / 0.17	210.00 / 1.00
4610	BINTARO	364.00 / 0.80	68.00 / 0.15	0.00	24.00 / 0.05	456.00 / 1.00
4611	KEB.LAMA SELATAN	196.00 / 0.76	57.00 / 0.22	0.00	4.00 / 0.02	257.00 / 1.00
	K E B A Y O R A N LAMA	2413.00 / 0.74	579.00 / 0.18	91.00 / 0.03	195.00 / 0.06	3278.00 / 1.00
4701	GANDARIA SELATAN	124.00 / 0.71	26.00 / 0.15	10.00 / 0.06	15.00 / 0.09	175.00 / 1.00
4702	CIPETE SELATAN	173.00 / 0.73	50.00 / 0.21	3.00 / 0.01	11.00 / 0.05	237.00 / 1.00
4703	CILANDAK BARAT	375.00 / 0.62	137.00 / 0.23	25.00 / 0.04	67.00 / 0.11	604.00 / 1.00
4704	LEBAK BULUS	359.00 / 0.81	44.00 / 0.10	0.00	38.00 / 0.09	441.00 / 1.00
4705	PONDOK LABU	141.00 / 0.39	64.00 / 0.18	11.00 / 0.03	145.00 / 0.40	361.00 / 1.00
	C I L A N D A K	1172.00 / 0.64	321.00 / 0.18	49.00 / 0.03	276.00 / 0.15	1818.00 / 1.00
4000	SUB TOTAL (SELATAN)	9737.00 / 0.67	2574.00 / 0.18	236.00 / 0.02	2059.00 / 0.14	14616.00 / 1.00
5101	KEBON MANGGIS	72.69 / 0.94	5.06 / 0.06	—	0.00	78.75
5102	PAL MERIAM	63.34 / 0.94	2.05 / 0.06	0.00	0.00	65.39
5103	KAYUMANIS	57.06 / 1.00	0.00	0.00	0.00	57.06 / 1.00

Table A.3(4) Existing Land Use by Kelurahan in 1988

Unit : (ha) ; Ratio

CODE NUMBER	NAME OF KELURAHAN / KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
5104	UTAN KAYU UTARA	96.00 / 0.92	6.10 / 0.06	-- / 0.00	2.84 / 0.03	104.74 / 1.00
5105	PISANGAN BARU	55.45 / 0.82	12.06 / 0.18	0.00 / 0.00	0.00 / 0.00	67.51 / 1.00
5106	UTAN KAYU SELATAN	72.43 / 0.65	19.52 / 0.17	0.04 / 0.00	20.27 / 0.18	112.22 / 1.00
	M A T R A M A N	417.97 / 0.86	44.79 / 0.09	0.00 / 0.00	22.91 / 0.05	485.67 / 1.00
5201	KAYU PUTIH	340.98 / 0.78	93.87 / 0.21	1.00 / 0.00	1.50 / 0.00	437.15 / 1.00
5202	JATI	172.40 / 0.82	33.10 / 0.16	0.00 / 0.00	5.00 / 0.02	210.50 / 1.00
5203	PISANGAN TIMUR	153.77 / 0.86	24.44 / 0.14	1.50 / 0.01	0.00 / 0.00	179.71 / 1.00
5204	CIPINANG	115.46 / 0.75	32.48 / 0.21	6.00 / 0.04	0.00 / 0.00	153.94 / 1.00
5205	PULO GADUNG	153.84 / 0.80	28.46 / 0.15	10.00 / 0.05	0.00 / 0.00	192.30 / 1.00
5206	JATINEGARA KAUM	90.29 / 0.73	15.76 / 0.13	15.00 / 0.12	2.40 / 0.02	123.45 / 1.00
5207	RAWAMANGUN	208.08 / 0.76	64.52 / 0.24	-- / --	1.50 / 0.01	274.10 / 1.00
	P U L O G A D U N G	1234.82 / 0.79	292.43 / 0.19	33.50 / 0.02	10.40 / 0.01	1571.15 / 1.00
5301	KAMPUNG MELAYU	38.00 / 0.79	9.83 / 0.21	-- / --	0.00 / 0.00	47.83 / 1.00
5302	BALI MESTER	43.20 / 0.64	24.17 / 0.36	0.00 / 0.00	0.00 / 0.00	67.37 / 1.00
5303	BIDARA CINA	98.33 / 0.78	27.32 / 0.22	0.45 / 0.00	0.00 / 0.00	126.10 / 1.00
5304	CIPINANG CEMPEDAK	132.37 / 0.79	34.83 / 0.21	0.00 / 0.00	0.00 / 0.00	167.20 / 1.00
5305	RAWA BUNGA	70.15 / 0.80	17.00 / 0.19	0.50 / 0.01	0.00 / 0.00	87.65 / 1.00
5306	CIPINANG MUARA	239.08 / 0.83	6.00 / 0.02	0.00 / 0.00	44.50 / 0.15	289.58 / 1.00
5307	CIPINANG BESAR UTARA	69.00 / 0.60	33.00 / 0.29	0.00 / 0.00	13.20 / 0.11	115.20 / 1.00
5308	PONDOK BAMBU	380.20 / 0.76	49.39 / 0.10	60.11 / 0.12	10.00 / 0.02	499.70 / 1.00
5309	KLENDER	282.25 / 0.91	10.15 / 0.03	2.20 / 0.01	14.30 / 0.05	308.90 / 1.00
5310	DUREN SAWIT	294.71 / 0.65	0.91 / 0.00	1.20 / 0.00	157.48 / 0.35	454.30 / 1.00
5311	MALAKA SARI	130.23 / 0.94	0.00 / 0.00	0.00 / 0.00	8.00 / 0.06	138.23 / 1.00
5312	PONDOK KELAPA	541.28 / 0.94	15.00 / 0.03	0.00 / 0.00	15.87 / 0.03	572.15 / 1.00
5313	CIPINANG BESAR SEL.	105.40 / 0.65	41.00 / 0.25	0.00 / 0.00	16.59 / 0.10	162.59 / 1.00
5314	MALAKA JAYA	97.02 / 0.99	0.00 / 0.00	0.00 / 0.00	1.30 / 0.01	98.32 / 1.00
5315	PONDOK KOPI	123.00 / 0.60	0.99 / 0.00	0.92 / 0.00	82.08 / 0.40	206.00 / 1.00
	J A T I N E G A R A	2643.42 / 0.79	257.69 / 0.08	65.33 / 0.02	364.23 / 0.11	3041.12 / 1.00
5401	CAWANG	106.49 / 0.59	59.78 / 0.33	2.07 / 0.01	10.70 / 0.06	179.04 / 1.00
5402	CIPINANG MELAYU	196.32 / 0.78	41.02 / 0.16	3.69 / 0.01	11.76 / 0.05	252.79 / 1.00
5403	CILILITAN	112.89 / 0.63	12.24 / 0.07	2.07 / 0.01	52.55 / 0.29	179.75 / 1.00
5404	KRAMAT JATI	136.86 / 0.90	6.12 / 0.04	0.60 / 0.00	8.00 / 0.05	151.58 / 1.00
5405	KEBON PALA	131.71 / 0.58	6.23 / 0.03	37.66 / 0.16	51.94 / 0.23	229.50 / 1.00
5406	HALIM PERDANA KUS.	344.19 / 0.26	0.00 / 0.00	0.00 / 0.00	962.66 / 0.74	1306.85 / 1.00
5407	BATU AMPAR	179.98 / 0.71	3.96 / 0.02	2.00 / 0.01	69.08 / 0.27	255.02 / 1.00
5408	BALE KAMBANG	123.46 / 0.74	3.56 / 0.02	6.00 / 0.04	34.43 / 0.21	167.45 / 1.00
5409	MAKASSAR	157.78 / 0.85	0.21 / 0.00	0.00 / 0.00	26.73 / 0.14	184.72 / 1.00
5410	KAMPUNG TENGAH	176.92 / 0.87	8.68 / 0.04	1.50 / 0.01	15.72 / 0.08	202.52 / 1.00
5411	DUKUH	176.00 / 0.89	3.20 / 0.02	3.00 / 0.02	15.89 / 0.08	198.09 / 1.00
5412	PINANG RANTI	150.00 / 0.79	24.13 / 0.13	0.00 / 0.00	15.15 / 0.08	189.15 / 1.00
	K R A M A T J A T I	1994.30 / 0.57	188.06 / 0.05	61.59 / 0.02	1272.51 / 0.36	3496.45 / 1.00
5501	LUBANG BUAYA	136.20 / 0.37	27.00 / 0.07	-- / 0.00	209.00 / 0.56	372.20 / 1.00
5502	GEDONG	244.92 / 0.93	4.04 / 0.02	2.80 / 0.01	11.64 / 0.04	263.40 / 1.00
5503	RAMBUTAN	25.09 / 0.12	0.00 / 0.01	8.30 / 0.04	175.61 / 0.84	209.00 / 1.00
5504	CEGER	140.08 / 0.39	159.54 / 0.44	0.00 / 0.00	62.98 / 0.17	362.60 / 1.00
5505	BAMBU APUS	177.12 / 0.56	36.15 / 0.11	0.00 / 0.00	103.25 / 0.33	316.52 / 1.00
5506	SETU	151.48 / 0.47	4.90 / 0.02	-- / --	168.74 / 0.52	325.12 / 1.00
5507	CIPAYUNG	172.54 / 0.59	20.61 / 0.07	0.00 / 0.00	100.85 / 0.34	294.00 / 1.00
5508	SUSUKAN	137.60 / 0.72	33.70 / 0.18	0.00 / 0.00	19.30 / 0.10	190.60 / 1.00
5509	CIRACAS	168.42 / 0.40	63.15 / 0.15	147.37 / 0.35	42.61 / 0.10	421.55 / 1.00
5510	CIJANTUNG	194.84 / 0.82	3.14 / 0.01	0.04 / 0.00	40.75 / 0.17	238.57 / 1.00
5511	BARU	173.95 / 0.92	0.00 / 0.00	0.00 / 0.00	15.00 / 0.08	188.95 / 1.00
5512	KALI SARI	139.34 / 0.49	4.56 / 0.02	0.00 / 0.00	142.05 / 0.50	285.95 / 1.00
5513	PEKAYON	196.73 / 0.62	20.88 / 0.07	13.31 / 0.04	87.01 / 0.27	317.73 / 1.00
5514	KELAPA DUA WETAN	202.77 / 0.60	0.07 / 0.00	0.04 / 0.00	134.09 / 0.40	336.86 / 1.00
5515	MUNJUL	95.08 / 0.44	15.22 / 0.07	0.00 / 0.00	107.00 / 0.49	217.30 / 1.00
5516	CILANGKAP	135.50 / 0.33	104.30 / 0.25	0.00 / 0.00	173.10 / 0.42	412.90 / 1.00
5517	CIBUBUR	341.78 / 0.76	11.18 / 0.02	0.00 / 0.00	97.33 / 0.22	450.29 / 1.00
5518	PONDOK RANGGON	143.19 / 0.34	148.10 / 0.35	0.00 / 0.00	128.66 / 0.31	419.95 / 1.00
	P A S A R R E B O	2976.43 / 0.53	656.27 / 0.12	171.82 / 0.03	1818.97 / 0.32	5623.19 / 1.00
5601	RAWA TERATE	107.00 / 0.26	231.00 / 0.56	0.00 / 0.00	72.05 / 0.18	410.05 / 1.00
5602	JATINEGARA	280.92 / 0.43	365.83 / 0.55	0.00 / 0.00	13.00 / 0.02	659.75 / 1.00
5603	PENGGILINGAN	299.00 / 0.67	144.00 / 0.32	0.00 / 0.00	5.45 / 0.01	448.45 / 1.00
5604	CAKUNG BARAT	174.12 / 0.34	87.09 / 0.17	0.00 / 0.00	258.22 / 0.50	519.43 / 1.00
5605	UJUNG MENTENG	119.05 / 0.27	32.97 / 0.07	0.00 / 0.00	291.19 / 0.66	443.21 / 1.00
5606	PULO GEBANG	471.84 / 0.69	43.00 / 0.06	0.00 / 0.00	170.97 / 0.25	685.81 / 1.00
5607	CAKUNG TIMUR	937.00 / 0.95	26.99 / 0.03	0.00 / 0.00	17.39 / 0.02	981.38 / 1.00
	C A K U N G	2288.93 / 0.54	930.88 / 0.22	0.00 / 0.00	1028.27 / 0.24	4248.08 / 1.00
5000	SUB TOTAL (TIMUR)	11556.27 / 0.62	2360.12 / 0.13	332.29 / 0.02	4517.29 / 0.24	18765.97 / 1.00
10000	TOTAL (JAKARTA)	37905.27 / 0.58	9292.12 / 0.14	2610.29 / 0.04	15340.29 / 0.24	65148.97 / 1.00

Table A.4(1) Future Land Use by Kelurahan in 2010

Unit : (ha) : Ratio

CODE NUMBER	NAME OF KELURAHAN / KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
1101	CIDENG	74.00 / 0.59	27.00 / 0.21	— / 0.00	25.00 / 0.20	126.00 / 1.00
1102	DURI PULO	54.00 / 0.75	18.00 / 0.25	—	—	72.00 / 1.00
1103	PETOJO UTARA	45.00 / 0.40	66.00 / 0.59	0.00	1.00 / 0.01	112.00 / 1.00
1104	PETOJO SELATAN	60.00 / 0.45	61.00 / 0.46	0.00	13.00 / 0.10	134.00 / 1.00
1105	KEBON KELAPA	24.00 / 0.31	54.00 / 0.69	0.00	—	78.00 / 1.00
1106	GAMBIR	57.00 / 0.22	201.00 / 0.78	0.00	—	258.00 / 1.00
	G A M B I R	314.00 / 0.40	427.00 / 0.55	0.00	39.00 / 0.05	780.00 / 1.00
1201	MANGGA II SELATAN	71.00 / 0.55	49.00 / 0.38	0.00	9.00 / 0.07	129.00 / 1.00
1202	KARANG ANYAR	44.00 / 0.86	7.00 / 0.14	0.00	—	51.00 / 1.00
1203	KARTINI	39.00 / 0.71	13.00 / 0.24	0.00	3.00 / 0.05	55.00 / 1.00
1204	PASAR BARU	21.00 / 0.11	168.00 / 0.89	0.00	—	189.00 / 1.00
1205	GUNUNG SAHARI UTARA	91.00 / 0.46	61.00 / 0.31	46.00 / 0.23	—	198.00 / 1.00
	S A W A H B E S A R	266.00 / 0.43	298.00 / 0.48	46.00 / 0.07	12.00 / 0.02	622.00 / 1.00
1301	GUNUNG SAHARI SELATAN	62.00 / 0.39	93.00 / 0.59	0.00	2.00 / 0.01	157.00 / 1.00
1302	KEMAYORAN	44.00 / 0.80	11.00 / 0.20	0.00	—	55.00 / 1.00
1303	KEBON KOSONG	81.00 / 0.72	10.00 / 0.09	0.00	22.00 / 0.19	113.00 / 1.00
1304	SERDANG	78.00 / 0.74	14.00 / 0.13	0.00	13.00 / 0.12	105.00 / 1.00
1305	HARAPAN MULIA	81.00 / 0.89	10.00 / 0.11	0.00	—	91.00 / 1.00
1306	UTAN PANJANG	70.00 / 0.67	26.00 / 0.25	0.00	9.00 / 0.09	105.00 / 1.00
1307	CEMPAKA BARU	73.00 / 0.79	17.00 / 0.18	0.00	2.00 / 0.02	92.00 / 1.00
1308	SUMURBATU	69.00 / 0.67	17.00 / 0.17	7.00 / 0.07	10.00 / 0.10	103.00 / 1.00
	KEMAYORAN	558.00 / 0.68	198.00 / 0.24	7.00 / 0.01	58.00 / 0.07	821.00 / 1.00
1401	SENEN	46.00 / 0.57	35.00 / 0.43	0.00	—	81.00 / 1.00
1402	KWITANG	30.00 / 0.67	15.00 / 0.33	0.00	—	45.00 / 1.00
1403	KENARI	31.00 / 0.34	60.00 / 0.66	0.00	—	91.00 / 1.00
1404	KRAMAT	51.00 / 0.72	20.00 / 0.28	0.00	—	71.00 / 1.00
1405	PASEBAN	42.00 / 0.59	29.00 / 0.41	0.00	—	71.00 / 1.00
	BUNGUR	50.00 / 0.79	12.00 / 0.19	0.00	1.00 / 0.02	63.00 / 1.00
	S E N E N	250.00 / 0.59	171.00 / 0.41	0.00	1.00 / 0.00	422.00 / 1.00
1501	TANAH TINGGI	56.00 / 0.90	5.00 / 0.08	0.00	1.00 / 0.02	62.00 / 1.00
1502	JOHAR BARU	104.00 / 0.87	6.00 / 0.05	7.00 / 0.06	2.00 / 0.02	119.00 / 1.00
1503	GALUR	23.00 / 0.85	4.00 / 0.15	0.00	—	27.00 / 1.00
1504	KAMPUNG RAWA	27.00 / 0.90	3.00 / 0.10	0.00	—	30.00 / 1.00
1505	RAMASARI	82.00 / 0.66	35.00 / 0.28	2.00 / 0.02	6.00 / 0.04	125.00 / 1.00
1506	CEMPAKA PUTIH BARAT	85.00 / 0.70	37.00 / 0.30	0.00	0.00	122.00 / 1.00
1507	CEMPAKA PUTIH TIMUR	161.00 / 0.73	33.00 / 0.15	25.00 / 0.11	3.00 / 0.01	222.00 / 1.00
	C E M P A K A P U T I H	538.00 / 0.76	123.00 / 0.17	34.00 / 0.05	12.00 / 0.02	707.00 / 1.00
1601	KEBON SIRIH	40.00 / 0.48	36.00 / 0.43	2.00 / 0.02	5.00 / 0.06	83.00 / 1.00
1602	GONDANGDIA	106.00 / 0.73	40.00 / 0.27	0.00	0.00	146.00 / 1.00
1603	CIKINI	28.00 / 0.34	50.00 / 0.61	0.00	4.00 / 0.05	82.00 / 1.00
1604	MENTENG	162.00 / 0.66	16.00 / 0.07	0.00	66.00 / 0.27	244.00 / 1.00
1605	PEGANGSAAN	78.00 / 0.80	12.00 / 0.12	7.00 / 0.07	1.00 / 0.01	98.00 / 1.00
	M E N T E N G	414.00 / 0.63	154.00 / 0.24	9.00 / 0.01	76.00 / 0.12	653.00 / 1.00
1701	KAMPUNG BALI	38.00 / 0.52	32.00 / 0.44	0.00	3.00 / 0.04	73.00 / 1.00
1702	KEBON KACANG	60.00 / 0.85	11.00 / 0.15	0.00	—	71.00 / 1.00
1703	KEBONG MELATI	106.00 / 0.85	15.00 / 0.12	0.00	5.00 / 0.04	126.00 / 1.00
1704	PETAMBURAN	49.00 / 0.54	29.00 / 0.32	0.00	12.00 / 0.13	90.00 / 1.00
1705	KARET TENGSIN	76.00 / 0.50	66.00 / 0.43	0.00	11.00 / 0.07	153.00 / 1.00
1706	BENDUNGAN HILIR	88.00 / 0.56	33.00 / 0.21	0.00	37.00 / 0.23	158.00 / 1.00
1707	GELORA	37.00 / 0.14	219.00 / 0.85	3.00 / 0.01	0.00	259.00 / 1.00
	T A N A H A B A N G	454.00 / 0.49	405.00 / 0.44	3.00 / 0.00	68.00 / 0.07	930.00 / 1.00
1000	SUB TOTAL (PUSAT)	2794.00 / 0.57	1776.00 / 0.36	99.00 / 0.02	266.00 / 0.05	4935.00 / 1.00
2201	KAMAL MUARA	154.00 / 0.15	119.00 / 0.11	123.00 / 0.12	657.00 / 0.62	1053.00 / 1.00
2202	KAPUK MUARA	542.00 / 0.54	60.00 / 0.06	194.00 / 0.19	211.00 / 0.21	1006.00 / 1.00
2203	PEJAGALAN	174.00 / 0.54	84.00 / 0.26	65.00 / 0.20	0.00	323.00 / 1.00
2204	PENJARINGAN	102.00 / 0.26	63.00 / 0.16	210.00 / 0.53	20.00 / 0.05	395.00 / 1.00
2205	PLUIT(MANGGA DUA UTARA)	470.00 / 0.61	271.00 / 0.35	7.00 / 0.01	23.00 / 0.03	771.00 / 1.00
2206	PADEMANGAN BARAT	120.00 / 0.78	30.00 / 0.20	0.00	3.00 / 0.02	153.00 / 1.00
2207	PADEMANGAN TIMUR	82.00 / 0.31	6.00 / 0.02	0.00	173.00 / 0.66	261.00 / 1.00
2208	ANCOL	207.00 / 0.36	102.00 / 0.18	170.00 / 0.29	98.00 / 0.17	577.00 / 1.00
	P E N J A R I N G A N	1850.00 / 0.41	735.00 / 0.16	769.00 / 0.17	1185.00 / 0.26	4539.00 / 1.00
2301	SUNTER AGUNG	362.00 / 0.52	76.00 / 0.11	176.00 / 0.25	88.00 / 0.13	702.00 / 1.00
2302	PAPANGO	120.00 / 0.43	20.00 / 0.07	80.00 / 0.29	60.00 / 0.21	280.00 / 1.00
2303	SUNGAI BAMBU	57.00 / 0.24	30.00 / 0.13	147.00 / 0.62	2.00 / 0.01	236.00 / 1.00
2304	KEBON BAWANG	91.00 / 0.53	80.00 / 0.46	0.00	2.00 / 0.01	173.00 / 1.00
2305	TANJUNG PRIOK	75.00 / 0.14	29.00 / 0.05	384.00 / 0.69	66.00 / 0.12	554.00 / 1.00
2306	SUNTER JAYA	245.00 / 0.53	47.00 / 0.10	124.00 / 0.27	42.00 / 0.09	458.00 / 1.00
2307	WARAKAS	81.00 / 0.74	12.00 / 0.11	0.00	16.00 / 0.15	109.00 / 1.00
	T A N J U N G P R I O K	1031.00 / 0.41	294.00 / 0.12	911.00 / 0.36	276.00 / 0.11	2512.00 / 1.00

Table A.4(2)   Future Land Use by Kelurahan in 2010

Unit : (ha)
Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential		Commercial and Institutional		Industry		Others		Total	
2401	KOJA UTARA	62.00	0.43	3.00	0.02	79.00	0.54	1.00	0.01	145.00	1.00
2402	LAGOA	130.00	0.82	26.00	0.16	--	--	2.00	0.01	158.00	1.00
2403	KOJA SELATAN	135.00	0.74	20.00	0.11	24.00	0.13	4.00	0.02	183.00	1.00
2404	TUGU SELATAN	187.00	0.70	36.00	0.13	0.00	0.00	45.00	0.17	268.00	1.00
2405	TUGU UTARA	288.00	0.87	24.00	0.07	0.00	0.00	20.00	0.06	332.00	1.00
2406	RAWA BADAK	137.00	0.61	36.00	0.16	52.00	0.23	0.00	0.00	225.00	1.00
2407	KELAPA GADING BRT.	299.00	0.55	43.00	0.08	150.00	0.28	38.00	0.07	530.00	1.00
2408	KELAPA GADING TMR.	355.00	0.81	58.00	0.13	20.00	0.04	10.00	0.02	453.00	1.00
2409	PEGANGSAAN DUA	348.00	0.55	10.00	0.02	200.00	0.32	70.00	0.11	628.00	1.00
	K O J A	1951.00	0.67	256.00	0.09	525.00	0.18	190.00	0.07	2922.00	1.00
2501	KALI BARU	79.00	0.32	4.00	0.02	161.00	0.65	3.00	0.01	247.00	1.00
2502	CILINCING	210.00	0.37	52.00	0.06	324.00	0.39	145.00	0.17	831.00	1.00
2503	SEMPER BARAT	85.00	0.53	27.00	0.17	32.00	0.20	15.00	0.09	159.00	1.00
2504	SEMPER TIMUR	76.00	0.24	31.00	0.10	150.00	0.47	57.00	0.18	316.00	1.00
2505	MARUNDA	93.00	0.12	25.00	0.03	210.00	0.27	464.00	0.59	792.00	1.00
2506	SUKAPURA	165.00	0.29	10.00	0.02	320.00	0.57	66.00	0.12	561.00	1.00
2507	ROROTAN	515.00	0.48	35.00	0.03	54.00	0.05	460.00	0.43	1064.00	1.00
	C I L I N C I N G	1223.00	0.33	186.00	0.05	1251.00	0.32	1210.00	0.30	3970.00	1.00
2000	SUB TOTAL (UTARA)	6155.00	0.44	1471.00	0.11	3456.00	0.25	2861.00	0.21	13943.00	1.00
3101	SEMANAN	281.00	0.47	10.00	0.02	229.00	0.38	78.00	0.13	598.00	1.00
3102	KAMAL	78.00	0.28	7.00	0.03	22.00	0.08	169.00	0.61	276.00	1.00
3103	TEGAL ALUR	412.00	0.53	40.00	0.05	96.00	0.12	230.00	0.30	778.00	1.00
3104	PEGADUNGAN	166.00	0.28	362.00	0.61	0.00	0.00	66.00	0.11	594.00	1.00
3105	KALI DERES	267.00	0.54	100.00	0.20	96.00	0.19	30.00	0.06	493.00	1.00
3106	CENGKARENG TIMUR	407.00	0.75	79.00	0.14	39.00	0.07	20.00	0.04	545.00	1.00
3107	KAPUK	461.00	0.64	70.00	0.10	60.00	0.08	132.00	0.18	723.00	1.00
3108	KEDAUNG KALI ANGKE	94.00	0.36	45.00	0.17	55.00	0.21	67.00	0.26	261.00	1.00
3109	DURI KOSAMBI	253.00	0.50	110.00	0.22	85.00	0.17	55.00	0.11	503.00	1.00
3110	RAWA BUAYA	120.00	0.26	172.00	0.37	116.00	0.25	59.00	0.13	467.00	1.00
3111	CENGKARENG BARAT	346.00	0.68	44.00	0.09	25.00	0.05	95.00	0.19	511.00	1.00
	C E N G K A R E N G	2885.00	0.50	1039.00	0.18	823.00	0.14	1002.00	0.17	5749.00	1.00
3201	GROGOL	65.00	0.53	57.00	0.47	--	--	--	--	122.00	1.00
3202	JELAMBAR	112.00	0.78	21.00	0.15	11.00	0.08	0.00	0.00	144.00	1.00
3203	TANJUNG DUREN	233.00	0.86	30.00	0.11	7.00	0.03	0.00	0.00	270.00	1.00
3204	TOMANG	126.00	0.67	62.00	0.33	--	--	0.00	0.00	188.00	1.00
3205	JATI PULO	69.00	0.79	18.00	0.21	0.00	0.00	0.00	0.00	87.00	1.00

Unit : (ha)
Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential		Commercial and Institutional		Industry		Others		Total	
3206	KOTA BAMBU	104.00	0.83	14.00	0.11	--	0.00	8.00	0.06	126.00	1.00
3207	SLIPI	57.00	0.59	20.00	0.21	10.00	0.10	10.00	0.10	97.00	1.00
3208	PAL MERAH	202.00	0.87	25.00	0.11	5.00	0.02	1.00	0.00	233.00	1.00
3209	KEMANGGISAN	173.00	0.82	31.00	0.15	0.00	0.00	7.00	0.03	211.00	1.00
3210	JELAMBAR BARU	109.00	0.76	25.00	0.17	10.00	0.07	0.00	0.00	144.00	1.00
3211	WIJAYA KUSUMA	199.00	0.76	42.00	0.16	17.00	0.07	3.00	0.01	261.00	1.00
	G R O G O L PETAMBURAN	1459.00	0.77	345.00	0.18	50.00	0.03	29.00	0.02	1883.00	1.00
3301	PINANGSIA	48.00	0.50	48.00	0.50	0.00	0.00	--	--	96.00	1.00
3302	MANGGA BESAR	23.00	0.45	20.00	0.39	0.00	0.00	8.00	0.16	51.00	1.00
3303	TANGKI	25.00	0.68	12.00	0.32	0.00	0.00	0.00	0.00	37.00	1.00
3304	GLODOK	26.00	0.68	12.00	0.32	0.00	0.00	0.00	0.00	38.00	1.00
3305	KEAGUNGAN	18.00	0.56	14.00	0.44	0.00	0.00	0.00	0.00	32.00	1.00
3306	KRUKUT	38.00	0.69	17.00	0.31	0.00	0.00	0.00	0.00	55.00	1.00
3307	TAMAN SARI	42.00	0.62	25.00	0.37	0.00	0.00	1.00	0.01	68.00	1.00
3308	MAPAR	31.00	0.53	28.00	0.47	0.00	0.00	0.00	0.00	59.00	1.00
	T A M A N S A R I	251.00	0.58	176.00	0.40	0.00	0.00	9.00	0.02	436.00	1.00
3401	PEKOJAN	49.00	0.63	14.00	0.18	11.00	0.14	4.00	0.05	78.00	1.00
3402	ROA MALAKA	23.00	0.43	30.00	0.57	0.00	0.00	0.00	0.00	53.00	1.00
3403	TAMBORA	23.00	0.82	5.00	0.18	0.00	0.00	0.00	0.00	28.00	1.00
3404	JEMBATAN LIMA	38.00	0.83	8.00	0.17	0.00	0.00	0.00	0.00	46.00	1.00
3405	ANGKE	59.00	0.74	15.00	0.19	5.00	0.06	1.00	0.01	80.00	1.00
3406	JEMBATAN BESI	31.00	0.69	23.00	0.51	0.00	0.01	1.00	0.02	45.00	1.00
3407	KRENDANG	27.00	0.84	5.00	0.16	0.00	0.00	0.00	0.00	32.00	1.00
3408	TANAH SEREAL	50.00	0.81	12.00	0.19	0.00	0.00	0.00	0.00	62.00	1.00
3409	DURI UTARA	61.00	0.87	9.00	0.13	0.00	0.00	0.00	0.00	70.00	1.00
3410	KALI BARU	30.00	0.94	2.00	0.06	0.00	0.00	0.00	0.00	32.00	1.00
3411	DURI SELATAN	28.00	0.82	5.00	0.15	0.00	0.00	1.00	0.03	34.00	1.00
	T A M B O R A	419.00	0.74	128.00	0.22	16.00	0.03	7.00	0.01	570.00	1.00
3501	KEMBANGAN	393.00	0.58	204.00	0.30	0.00	0.00	84.00	0.12	681.00	1.00
3502	KEDOYA	477.00	0.77	125.00	0.20	6.00	0.01	12.00	0.02	620.00	1.00
3503	DURI KEPA	191.00	0.49	173.00	0.45	10.00	0.03	12.00	0.03	386.00	1.00
3504	MERUYA ILIR	351.00	0.68	89.00	0.17	0.00	0.00	80.00	0.15	520.00	1.00
3505	MERUYA UDIK	197.00	0.69	56.00	0.20	0.00	0.00	32.00	0.11	285.00	1.00
3506	JOGLO	367.00	0.76	87.00	0.18	0.00	0.00	32.00	0.07	486.00	1.00
3507	SRENGSENG	391.00	0.79	65.00	0.13	0.00	0.00	36.00	0.07	492.00	1.00
3508	KEBON JERUK	215.00	0.68	44.00	0.14	0.00	0.00	55.00	0.18	314.00	1.00
3509	SUKABUMI ILIR	120.00	0.75	28.00	0.18	0.00	0.00	12.00	0.08	160.00	1.00

Table A.4(3) Future Land Use by Kelurahan in 2010

Unit : (ha)
: Ratio

CODE NUMBER	NAME OF KELURAHAN / KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
3510	KELAPA DUA	100.00 / 0.69	34.00 / 0.23	- / 0.00	11.00 / 0.08	145.00 / 1.00
3511	SUKABUMI UDIK	118.00 / 0.73	30.00 / 0.19	0.00	14.00 / 0.09	162.00 / 1.00
3000	K E B O N J E R U K	2920.00 / 0.69	935.00 / 0.22	16.00 / 0.00	380.00 / 0.09	4251.00 / 1.00
	SUB TOTAL (BARAT)	7934.00 / 0.62	2623.00 / 0.20	905.00 / 0.07	1427.00 / 0.11	12889.00 / 1.00
4101	MENTENG DALAM	185.00 / 0.72	67.00 / 0.26	4.00 / 0.02	1.00 / 0.00	258.00 / 1.00
4102	TEBET BARAT	129.00 / 0.75	39.00 / 0.23	2.00 / 0.01	2.00 / 0.00	172.00 / 1.00
4103	TEBET TIMUR	103.00 / 0.74	31.00 / 0.22	2.00 / 0.01	3.00 / 0.02	139.00 / 1.00
4104	KEBON BARU	100.00 / 0.77	28.00 / 0.22	2.00 / 0.02	0.00	130.00 / 1.00
4105	BUKIT DURI	78.00 / 0.72	26.00 / 0.24	3.00 / 0.03	1.00 / 0.01	108.00 / 1.00
4106	MANGGARAI SELATAN	43.00 / 0.84	8.00 / 0.16	0.00	0.00	51.00 / 1.00
4107	MANGGARAI	55.00 / 0.58	37.00 / 0.39	3.00 / 0.03	0.00	95.00 / 1.00
	T E B E T	694.00 / 0.73	236.00 / 0.25	16.00 / 0.02	7.00 / 0.01	953.00 / 1.00
4201	SETIA BUDI	32.00 / 0.43	35.00 / 0.47	0.00	7.00 / 0.09	74.00 / 1.00
4202	GUNTUR	45.00 / 0.69	12.00 / 0.18	0.00	8.00 / 0.12	65.00 / 1.00
4203	KARET	65.00 / 0.69	25.00 / 0.27	0.00	4.00 / 0.04	94.00 / 1.00
4204	KARET SEMANGGI	60.00 / 0.67	27.00 / 0.30	0.00	3.00 / 0.03	90.00 / 1.00
4205	KARET KUNINGAN	145.00 / 0.81	30.00 / 0.17	0.00	4.00 / 0.02	179.00 / 1.00
4206	KUNINGAN TIMUR	126.00 / 0.59	65.00 / 0.30	0.00	24.00 / 0.11	215.00 / 1.00
4207	PASAR MANGGIS	53.00 / 0.68	24.00 / 0.31	0.00	1.00 / 0.01	78.00 / 1.00
4208	MENTENG ATAS	72.00 / 0.80	12.00 / 0.13	0.00	6.00 / 0.07	90.00 / 1.00
	S E T I A B U D I	598.00 / 0.68	230.00 / 0.26	0.00	57.00 / 0.06	885.00 / 1.00
4301	KUNINGAN BARAT	31.00 / 0.32	45.00 / 0.46	0.00	22.00 / 0.22	98.00 / 1.00
4302	MAMPANG PRAPATAN	57.00 / 0.73	20.00 / 0.26	0.00	1.00 / 0.01	78.00 / 1.00
4303	PELA MAMPANG	121.00 / 0.73	30.00 / 0.19	0.00	11.00 / 0.07	152.00 / 1.00
4304	TEGAL PARANG	51.00 / 0.48	52.00 / 0.49	0.00	3.00 / 0.03	106.00 / 1.00
4305	BANGKA	271.00 / 0.82	50.00 / 0.15	0.00	9.00 / 0.03	330.00 / 1.00
4306	PANCORAN	86.00 / 0.69	30.00 / 0.24	0.00	8.00 / 0.06	124.00 / 1.00
4307	DUREN TIGA	157.00 / 0.61	102.00 / 0.39	0.00	0.00	259.00 / 1.00
4308	KALIBATA	157.00 / 0.76	20.00 / 0.10	0.00	30.00 / 0.14	207.00 / 1.00
4309	CIKOKO	43.00 / 0.59	28.00 / 0.39	0.00	1.00 / 0.01	72.00 / 1.00
4310	PENGADEGAN	76.00 / 0.80	16.00 / 0.17	0.00	3.00 / 0.03	95.00 / 1.00
4311	RAWAJATI	36.00 / 0.57	18.00 / 0.33	0.00	0.00	54.00 / 1.00
	M A M P A N G PRAPATAN	1086.00 / 0.69	411.00 / 0.26	0.00	87.00 / 0.05	1584.00 / 1.00
4401	PEJATEN BARAT	230.00 / 0.79	44.00 / 0.15	2.00 / 0.01	14.00 / 0.05	290.00 / 1.00
4402	PASAR MINGGU	265.00 / 0.79	42.00 / 0.13	0.00	28.00 / 0.08	335.00 / 1.00
4403	TANJUNG BARAT	294.00 / 0.56	158.00 / 0.30	0.00	73.00 / 0.14	525.00 / 1.00

Unit : (ha)
: Ratio

CODE NUMBER	NAME OF KELURAHAN / KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
4404	JATIPADANG	118.00 / 0.77	15.00 / 0.10	- / 0.00	20.00 / 0.13	153.00 / 1.00
4405	RAGUNAN	294.00 / 0.51	201.00 / 0.35	0.00	84.00 / 0.15	579.00 / 1.00
4406	CILANDAK TIMUR	231.00 / 0.65	65.00 / 0.18	15.00 / 0.04	42.00 / 0.12	353.00 / 1.00
4407	JAGAKARSA	311.00 / 0.64	78.00 / 0.16	0.00	96.00 / 0.20	485.00 / 1.00
4408	LENTENG AGUNG	104.00 / 0.39	73.00 / 0.27	0.00	89.00 / 0.33	266.00 / 1.00
4409	SRENGSENG SAWAH	455.00 / 0.75	77.00 / 0.13	0.00	72.00 / 0.12	605.00 / 1.00
4410	CIGANJUR	445.00 / 0.67	96.00 / 0.14	0.00	128.00 / 0.19	669.00 / 1.00
4411	KEBAGUSAN	172.00 / 0.63	30.00 / 0.11	0.00	72.00 / 0.26	274.00 / 1.00
4412	PEJATEN TIMUR	187.00 / 0.65	35.00 / 0.12	0.00	66.00 / 0.23	288.00 / 1.00
	P A S A R M I N G G U	3107.00 / 0.64	914.00 / 0.19	17.00 / 0.00	784.00 / 0.16	4822.00 / 1.00
4501	SENAYAN	90.00 / 0.59	56.00 / 0.37	0.00	7.00 / 0.05	153.00 / 1.00
4502	RAWA BARAT	63.00 / 0.91	3.00 / 0.04	0.00	3.00 / 0.04	69.00 / 1.00
4503	SELONG	106.00 / 0.76	34.00 / 0.24	0.00	0.00	140.00 / 1.00
4504	GUNUNG	94.00 / 0.71	36.00 / 0.27	0.00	2.00 / 0.02	132.00 / 1.00
4505	KRAMAT PELA	98.00 / 0.80	20.00 / 0.16	0.00	5.00 / 0.04	123.00 / 1.00
4506	MELAWAI	98.00 / 0.78	28.00 / 0.22	0.00	0.00	125.00 / 1.00
4507	PETOGOGAN	60.00 / 0.69	20.00 / 0.23	0.00	7.00 / 0.08	87.00 / 1.00
4508	PULO	111.00 / 0.87	11.00 / 0.09	0.00	5.00 / 0.04	127.00 / 1.00
4509	GANDARIA UTARA	119.00 / 0.88	12.00 / 0.09	0.00	5.00 / 0.04	136.00 / 1.00
4510	CIPETE UTARA	167.00 / 0.91	8.00 / 0.04	0.00	8.00 / 0.04	183.00 / 1.00
	K E B A Y O R A N BARU	1006.00 / 0.79	228.00 / 0.18	0.00	42.00 / 0.03	1276.00 / 1.00
4601	GROGOL UTARA	244.00 / 0.73	70.00 / 0.21	17.00 / 0.05	1.00 / 0.00	332.00 / 1.00
4602	GROGOL SELATAN	185.00 / 0.65	91.00 / 0.32	9.00 / 0.03	0.00	285.00 / 1.00
4603	CIPULIR	158.00 / 0.81	35.00 / 0.18	0.00	1.00 / 0.01	194.00 / 1.00
4604	KEBAYORAN LAMA UTARA	104.00 / 0.58	68.00 / 0.38	0.00	7.00 / 0.04	179.00 / 1.00
4605	PONDOK PINANG	534.00 / 0.78	150.00 / 0.22	0.00	0.00	684.00 / 1.00
4606	PETUKANGAN UTARA	245.00 / 0.82	35.00 / 0.12	0.00	19.00 / 0.06	299.00 / 1.00
4607	PETUKANGAN SELATAN	158.00 / 0.75	25.00 / 0.12	0.00	28.00 / 0.13	211.00 / 1.00
4608	ULUJAMI	144.00 / 0.84	22.00 / 0.13	0.00	5.00 / 0.03	171.00 / 1.00
4609	PESANGGRAHAN	133.00 / 0.63	50.00 / 0.24	0.00	27.00 / 0.13	210.00 / 1.00
4610	BINTARO	352.00 / 0.77	80.00 / 0.18	0.00	24.00 / 0.05	456.00 / 1.00
4611	KEB.LAMA SELATAN	193.00 / 0.75	60.00 / 0.23	0.00	4.00 / 0.02	257.00 / 1.00
	K E B A Y O R A N LAMA	2450.00 / 0.75	686.00 / 0.21	26.00 / 0.01	116.00 / 0.04	3278.00 / 1.00
4701	GANDARIA SELATAN	122.00 / 0.70	38.00 / 0.22	0.00	15.00 / 0.09	175.00 / 1.00
4702	CIPETE SELATAN	184.00 / 0.79	50.00 / 0.21	0.00	3.00 / 0.01	237.00 / 1.00
4703	CILANDAK BARAT	400.00 / 0.66	137.00 / 0.23	0.00	67.00 / 0.11	604.00 / 1.00
4704	LEBAK BULUS	369.00 / 0.84	44.00 / 0.10	0.00	28.00 / 0.05	441.00 / 1.00

Table A.4(4) Future Land Use by Kelurahan in 2010

Unit : (ha)
: Ratio

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
4705	PONDOK LABU	161.00 / 0.45	60.00 / 0.17	-- / 0.00	140.00 / 0.39	361.00 / 1.00
	C I L A N D A K	1236.00 / 0.68	329.00 / 0.18	0.00 / 0.00	253.00 / 0.14	1818.00 / 1.00
4000	SUB TOTAL (SELATAN)	10177.00 / 0.70	3034.00 / 0.21	59.00 / 0.00	1346.00 / 0.09	14616.00 / 1.00
5101	KEBON MANGGIS	61.75 / 0.78	17.00 / 0.22		-- / --	78.75 / 1.00
5102	PAL MERIAM	52.39 / 0.80	13.00 / 0.20		-- / --	65.39 / 1.00
5103	KAYUMANIS	52.06 / 0.91	5.00 / 0.09		-- / --	57.06 / 1.00
5104	UTAN KAYU UTARA	89.10 / 0.85	13.00 / 0.12		2.64 / 0.03	104.74 / 1.00
5105	PISANGAN BARU	54.51 / 0.81	12.00 / 0.18		1.00 / 0.01	67.51 / 1.00
5106	UTAN KAYU SELATAN	79.00 / 0.70	21.00 / 0.19		12.22 / 0.11	112.22 / 1.00
	M A T R A M A N	388.81 / 0.80	82.00 / 0.17		14.86 / 0.03	485.87 / 1.00
5201	KAYU PUTIH	313.00 / 0.72	99.00 / 0.23	24.00 / 0.05	1.15 / 0.00	437.15 / 1.00
5202	JATI	169.50 / 0.81	36.00 / 0.17		5.00 / 0.02	210.50 / 1.00
5203	PISANGAN TIMUR	136.71 / 0.76	30.00 / 0.17	13.00 / 0.07	0.00 / 0.00	179.71 / 1.00
5204	CIPINANG	120.94 / 0.79	33.00 / 0.21		0.00 / 0.00	153.94 / 1.00
5205	PULO GADUNG	147.79 / 0.77	30.16 / 0.16	15.00 / 0.08	0.00 / 0.00	192.00 / 1.00
5206	JATINEGARA KAUM	55.00 / 0.45	33.00 / 0.27	33.05 / 0.27	2.40 / 0.02	123.45 / 1.00
5207	RAWAMANGUN	173.00 / 0.63	100.00 / 0.36		1.10 / 0.00	274.10 / 1.00
	P U L O G A D U N G	1115.44 / 0.71	361.00 / 0.23	85.05 / 0.05	9.65 / 0.01	1571.15 / 1.00
5301	KAMPUNG MELAYU	35.83 / 0.77	11.00 / 0.23	0.00 / 0.00	0.00 / 0.00	47.83 / 1.00
5302	BALI MESTER	35.00 / 0.52	32.37 / 0.48	0.00 / 0.00	0.00 / 0.00	67.37 / 1.00
5303	BIDARA CINA	98.10 / 0.78	28.00 / 0.22	0.00 / 0.00	0.00 / 0.00	126.10 / 1.00
5304	CIPINANG CEMPEDAK	132.20 / 0.79	35.00 / 0.21	0.00 / 0.00	0.00 / 0.00	167.20 / 1.00
5305	RAWA BUNGA	59.00 / 0.68	28.65 / 0.33	0.00 / 0.00	0.00 / 0.00	87.65 / 1.00
5306	CIPINANG MUARA	239.67 / 0.83	10.00 / 0.03	15.98 / 0.05	23.93 / 0.08	289.58 / 1.00
5307	CIPINANG BESAR UTARA	72.00 / 0.63	33.00 / 0.29	0.00 / 0.00	10.20 / 0.09	115.20 / 1.00
5308	PONDOK BAMBU	427.30 / 0.85	49.40 / 0.10	13.00 / 0.03	10.00 / 0.02	499.70 / 1.00
5309	KLENDER	251.60 / 0.81	36.00 / 0.12	7.00 / 0.02	14.30 / 0.05	308.90 / 1.00
5310	DUREN SAWIT	372.00 / 0.82	47.00 / 0.10	0.00 / 0.00	35.30 / 0.08	454.30 / 1.00
5311	MALAKA SARI	117.23 / 0.85	13.00 / 0.09	0.00 / 0.00	8.00 / 0.06	138.23 / 1.00
5312	PONDOK KELAPA	513.28 / 0.90	43.00 / 0.08	0.00 / 0.00	15.87 / 0.03	572.15 / 1.00
5313	CIPINANG BESAR SEL.	105.00 / 0.65	41.00 / 0.25	0.00 / 0.00	16.59 / 0.10	162.59 / 1.00
5314	MALAKA JAYA	86.02 / 0.87	11.00 / 0.11	0.00 / 0.00	1.30 / 0.01	98.32 / 1.00
5315	PONDOK KOPI	104.00 / 0.50	20.00 / 0.10	0.00 / 0.00	82.00 / 0.40	206.00 / 1.00
	J A T I N E G A R A	2668.56 / 0.80	443.42 / 0.13	20.00 / 0.01	209.14 / 0.06	3341.12 / 1.00
5401	CAKUNG	108.00 / 0.60	60.00 / 0.34	1.00 / 0.01	10.04 / 0.06	179.04 / 1.00
5402	CIPINANG MELAYU	200.00 / 0.79	42.00 / 0.17	0.00 / 0.00	10.79 / 0.04	252.79 / 1.00
5403	CILILITAN	104.00 / 0.58	25.00 / 0.14	0.00 / 0.00	50.75 / 0.28	179.75 / 1.00

CODE NUMBER	NAME OF KELURAHAN KECAMATAN	Residential	Commercial and Institutional	Industry	Others	Total
5404	KRAMAT JATI	95.00 / 0.63	51.00 / 0.34	-- / --	5.58 / 0.04	151.58 / 1.00
5405	KEBON PALA	148.63 / 0.65	32.00 / 0.14	0.00 / 0.00	43.90 / 0.22	229.50 / 1.00
5406	HALIM PERDANA KUS.	285.64 / 0.22	55.00 / 0.04	6.00 / 0.00	960.85 / 0.74	1306.85 / 1.00
5407	BATU AMPAR	205.22 / 0.81	9.00 / 0.04	0.00 / 0.00	40.92 / 0.16	255.02 / 1.00
5408	BALE KAMBANG	129.01 / 0.77	5.00 / 0.04	0.00 / 0.00	93.45 / 0.18	167.46 / 1.00
5409	MAKASSAR	145.00 / 0.78	14.00 / 0.08	0.00 / 0.00	25.72 / 0.14	184.72 / 1.00
5410	KAMPUNG TENGAH	176.00 / 0.87	11.00 / 0.05	0.00 / 0.00	15.52 / 0.08	202.52 / 1.00
5411	DUKUH	173.00 / 0.87	10.00 / 0.05	0.00 / 0.00	15.09 / 0.08	198.09 / 1.00
5412	PINANG RANTI	90.00 / 0.48	84.00 / 0.44	0.00 / 0.00	15.15 / 0.08	189.15 / 1.00
	K R A M A T J A T I	1659.00 / 0.53	398.00 / 0.11	7.00 / 0.00	1232.46 / 0.35	3496.46 / 1.00
5501	LUBANG BUAYA	194.00 / 0.52	40.00 / 0.11	0.00 / 0.00	138.20 / 0.37	372.20 / 1.00
5502	GEDONG	225.00 / 0.85	17.00 / 0.06	10.00 / 0.04	11.40 / 0.04	263.40 / 1.00
5503	RAMBUTAN	99.00 / 0.47	33.00 / 0.16	0.00 / 0.00	77.00 / 0.37	209.00 / 1.00
5504	CEGER	140.00 / 0.39	160.00 / 0.44	0.00 / 0.00	62.60 / 0.17	362.60 / 1.00
5505	BAMBU APUS	167.53 / 0.53	47.00 / 0.15	0.00 / 0.00	102.32 / 0.32	316.85 / 1.00
5506	SETU	159.00 / 0.49	16.00 / 0.05	0.00 / 0.00	150.32 / 0.46	325.32 / 1.00
5507	CIPAYUNG	183.00 / 0.62	21.00 / 0.07	0.00 / 0.00	90.00 / 0.31	294.00 / 1.00
5508	SUSUKAN	57.00 / 0.30	35.00 / 0.18	80.00 / 0.42	18.60 / 0.10	190.60 / 1.00
5509	CIRACAS	179.00 / 0.42	40.00 / 0.09	160.00 / 0.38	42.55 / 0.10	421.55 / 1.00
5510	CIJANTUNG	171.00 / 0.72	27.00 / 0.11	0.00 / 0.00	40.57 / 0.17	238.57 / 1.00
5511	BARU	166.00 / 0.84	8.00 / 0.04	0.00 / 0.00	14.95 / 0.08	188.95 / 1.00
5512	KALI SARI	155.04 / 0.54	17.00 / 0.06	0.00 / 0.00	113.95 / 0.40	285.95 / 1.00
5513	PEKAYON	173.00 / 0.54	16.00 / 0.05	50.00 / 0.16	78.73 / 0.25	317.73 / 1.00
5514	KELAPA DUA WETAN	198.00 / 0.59	5.00 / 0.01	0.16	133.86 / 0.40	336.86 / 1.00
5515	MUNJUL	124.00 / 0.57	16.00 / 0.07	0.00 / 0.00	77.30 / 0.36	217.30 / 1.00
5516	CILANGKAP	217.00 / 0.51	130.00 / 0.27	0.00 / 0.00	85.95 / 0.21	432.90 / 1.00
5517	CIBUBUR	286.00 / 0.64	37.00 / 0.08	30.00 / 0.07	97.22 / 0.21	450.22 / 1.00
5518	PONDOK RANGON	142.00 / 0.34	150.00 / 0.36	0.00 / 0.00	127.95 / 0.30	419.95 / 1.00
	P A S A R R E B O	3035.00 / 0.54	795.00 / 0.14	330.00 / 0.06	1462.49 / 0.26	5622.49 / 1.00
5601	RAWA TERATE	35.00 / 0.09	1.00 / 0.00	319.00 / 0.78	55.05 / 0.13	410.05 / 1.00
5602	JATINEGARA	188.00 / 0.29	29.00 / 0.04	430.00 / 0.65	12.75 / 0.02	659.75 / 1.00
5603	PENGGILINGAN	228.00 / 0.51	30.00 / 0.07	130.00 / 0.29	60.45 / 0.13	448.45 / 1.00
5604	CAKUNG BARAT	95.00 / 0.15	18.00 / 0.03	403.00 / 0.65	103.43 / 0.17	619.43 / 1.00
5605	UJUNG MENTENG	248.00 / 0.56	41.00 / 0.09	83.00 / 0.19	71.21 / 0.16	443.21 / 1.00
5606	PULO GEBANG	417.00 / 0.61	118.00 / 0.17	8.00 / 0.01	142.81 / 0.21	685.81 / 1.00
5607	CAKUNG TIMUR	894.00 / 0.91	21.00 / 0.02	49.00 / 0.05	17.38 / 0.02	981.38 / 1.00
	C A K U N G	2105.00 / 0.50	258.00 / 0.06	1422.00 / 0.33	463.08 / 0.11	4248.08 / 1.00
5000	SUB TOTAL (TIMUR)	11171.82 / 0.60	2337.42 / 0.12	1864.05 / 0.10	3372.68 / 0.18	18765.97 / 1.00
10000	TOTAL (JAKARTA)	38231.82 / 0.59	11241.42 / 0.17	6383.05 / 0.10	9292.68 / 0.14	65148.97 / 1.00

Table A.5 (1)   Per Capita per Month Average Income by Kelurahan in 1989

(Unit : Rp.)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME	CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME
1101	CIDENG	50,677	2201	KAMAL MUARA	44,415
1102	DURI PULO	50,677	2202	KAPUK MUARA	44,415
1103	PETOJO UTARA	50,677	2203	PEJAGALAN	59,038
1104	PETOJO SELATAN	45,756	2204	PENJARINGAN	59,038
1105	KEBON KELAPA	50,677	2205	PLUIT (MANGGA DUA UTARA)	59,038
1106	GAMBIR	45,756	2206	PADEMANGAN BARAT	53,129
1100	GAMBIR	49,037	2207	PADEMANGAN TIMUR	55,308
1201	MANGGA DUA SELATAN	50,207	2208	ANCOL	53,129
1202	KARANG ANYAR	55,017	2200	PENJARINGAN	53,439
1203	KAR TINI	55,017	2301	SUNTER AGUNG	38,473
1204	PASAR BARU	55,017	2302	PAPANGGO	41,011
1205	GUNUNG SAHARI UTARA	51,207	2303	SUNGAI BAMBU	41,011
1200	SAWAH BESAR	53,493	2304	KEBON BAWANG	41,011
1301	GUNUNG SAHARI SELATAN	41,951	2305	TANJUNG PRIOK	40,583
1302	KEMAYORAN	41,951	2306	SUNTER JAYA	38,473
1303	KEBON KOSONG	41,951	2307	WARAKAS	41,011
1304	SERDANG	43,043	2300	TANJUNG PRIOK	40,225
1305	HARAPAN MULIA	43,043	2401	KOJA UTARA	37,383
1306	UTANPANJANG	43,043	2402	LOGOA	41,042
1307	CEMPAKA BARU	43,043	2403	KOJA SELATAN	37,383
1308	SUMURBATU	43,043	2404	TUGU SELATAN	41,042
1300	KEMAYORAN	42,633	2405	TUGU UTARA	41,042
1401	SENEN	46,536	2406	RAWA BADAK	41,042
1402	KWITANG	46,312	2407	KELAPA GADING BARAT	53,827
1403	KENARI	46,312	2408	KELAPA GADING TIMUR	53,827
1404	KRAMAT	46,312	2409	PEGANGSAAN DUA	37,348
1405	PASEBAN	46,312	2400	KOJA	42,660
1406	BUNGUR	46,536	2501	KALI BARU	35,354
1400	SENEN	46,387	2502	CILINCING	33,293
1501	TANAH TINGGI	32,839	2503	SEMPER BARAT	36,753
1502	JOHAR BARU	32,839	2504	SEMPER TIMUR	36,753
1503	GALUR	32,839	2505	MARUNDA	33,293
1504	KAMPUNG RAWA	32,839	2506	SUKAPURA	33,387
1505	RAWA SARI	32,839	2507	ROROTAN	33,387
1506	CEMPAKA PUTIH BARAT	46,610	2500	CILINCING	34,603
1507	CEMPAKA PUTIH TIMUR	46,610	2000	JAKARTA UTARA	42,938
1500	CEMPAKA PUTIH	36,773	3101	SEMANAN	35,162
1601	KEBON SIRIH	38,368	3102	KAMAL	30,409
1602	GONDANGDIA	69,673	3103	TEGAL ALUR	30,409
1603	CIKINI	42,623	3104	PEGADUNGAN	30,409
1604	MENTENG	65,539	3105	KALI DERES	35,162
1605	PEGANGSAAN	40,185	3106	CENGKARENG TIMUR	35,678
1600	MENTENG	51,278	3107	KAPUK	35,678
1701	KAMPUNG BALI	45,573	3108	KEDAUNG KALI ANGKE	39,424
1702	KEBON KACANG	45,573	3109	DURI KOSAMBI	39,424
1703	KEBON MELATI	45,573	3110	RAWA BUAYA	39,424
1704	PETAMBURAN	50,680	3111	CENGKARENG BARAT	35,678
1705	KARET TENGSIN	50,680	3100	CENGKARENG	35,169
1706	BENDUNGAN HILIR	50,680			
1707	GELORA	50,680			
1700	TANAH ABANG	48,491			
1000	JAKARTA PUSAT	45,762			

Source : JICA

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Table A.5 (2)　　Per Capita per Month Average Income by Kelurahan in 1989

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME	CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME
3201	GROGOL	55,565	4201	SETIA BUDI	50,947
3202	JELAMBAR	55,565	4202	GUNTUR	56,850
3203	TANJUNG DUREN	61,580	4203	KARET	50,947
3204	TOMANG	61,580	4204	KARET SEMANGGI	54,309
3205	JATI PULO	48,004	4205	KARET KUNINGAN	50,947
3206	KOTA BAMBU	48,004	4206	KUNINGAN TIMUR	48,346
3207	SLIPI	48,004	4207	PASAR MANGGIS	56,850
3208	PAL MERAH	48,004	4208	MENTENG ATAS	56,850
3209	KEMANGGISAN	48,004	4200	SETIA BUDI	53,256
3210	JELAMBAR BARU	55,565	4301	KUNINGAN BARAT	52,334
3211	WIJAYA KUSUMA	55,565	4302	MAMPANG PRAPATAN	49,830
3200	GROGOL PETAMBURAN	53,222	4303	PELA MAMPANG	51,705
3301	PINANGSIA	52,534	4304	TEGAL PARANG	49,830
3302	MANGGA BESAR	52,534	4305	BANGKA	51,705
3303	TANGKI	52,534	4306	PANCORAN	51,021
3304	GLODOK	52,534	4307	DUREN TIGA	54,027
3305	KEAGUNGAN	52,534	4308	KALI BATA	54,027
3306	KRUKUT	52,534	4309	CIKOKO	51,021
3307	TAMAN SARI	52,534	4310	PENGADEGAN	51,021
3308	MAHPAR	52,534	4311	RAWAJATI	54,027
3300	TAMAN SARI	52,534	4300	MAMPANG PRAPATAN	51,868
3401	PEKOJAN	37,078	4401	PEJATEN BARAT	50,858
3402	ROA MALAKA	37,078	4402	PASAR MINGGU	49,254
3403	TAMBORA	37,078	4403	TANJUNG BARAT	49,254
3404	JEMBATAN LIMA	37,078	4404	JATI PADANG	46,538
3405	ANGKE	34,451	4405	RAGUNAN	46,538
3406	JEMBATAN BESI	34,451	4406	CILANDAK TIMUR	46,538
3407	KRENDANG	37,078	4407	JAGAKARSA	45,400
3408	TANAH SEREAL	37,078	4408	LENTENG AGUNG	49,254
3409	DURI UTARA	37,078	4409	SRENGSENG SAWAH	44,846
3410	KALI BARU	34,451	4410	CIGANJUR	45,400
3411	DURI SELATAN	37,078	4411	KEBAGUSAN	49,254
3400	TAMBORA	36,362	4412	PEJATEN TIMUR	50,858
3501	KEMBANGAN	42,764	4400	PASAR MINGGU	47,832
3502	KEDOYA	43,571	4501	SENAYAN	35,159
3503	DURI KEPA	43,571	4502	RAWA BARAT	56,230
3504	MARUYA ILIR	47,674	4503	SELONG	56,230
3505	MARUYA UDIK	42,341	4504	GUNUNG	56,230
3506	JOGLO	42,341	4505	KRAMAT PELA	56,230
3507	SRENGSENG	42,341	4506	MELAWAI	56,230
3508	KEBON JERUK	59,156	4507	PETOGOGAN	56,230
3509	SUKABUMI ILIR	45,889	4508	PULO	56,230
3510	KELAPA DUA	45,889	4509	GANDARIA UTARA	45,917
3511	SUKABUMI UDIK	45,889	4510	CIPETE UTARA	45,917
3500	KEBON JERUK	45,584	4500	KABAYORAN BARU	52,060
3000	JAKARTA BARAT	43,696	4601	GROGOL UTARA	43,426
4101	MENTENG DALAM	51,814	4602	GROGOL SELATAN	43,426
4102	TEBET BARAT	51,814	4603	CIPULIR	46,762
4103	TEBET TIMUR	51,814	4604	KEBAYORAN LAMA UTARA	43,109
4104	KEBON BARU	51,814	4605	PONDOK PINANG	47,800
4105	BUKIT DURI	36,310	4606	PETUKANGAN UTARA	46,762
4106	MANGGARAI SELATAN	36,310	4607	PETUKANAGN SELATAN	50,616
4107	MANGGARAI	36,310	4608	ULUJAMI	46,762
4100	TEBET	45,169	4609	PESANGGARAHAN	50,616
			4610	BINTARO	50,616
			4611	KEBAYORAN LAMA SELATAN	43,109
			4600	KEBAYORAN LAMA	46,637

Source : JICA

Table A.5 (3)   Per Capita per Month Average Income by Kelurahan in 1989

(Unit : Rp.)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME	CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	AVERAGE INCOME
4701	GANDARIA SELATAN	58,742	5501	LUBANG BUAYA	39,066
4702	CIPETE SELATAN	58,742	5502	GEDONG	45,317
4703	CILANDAK BARAT	57,688	5503	RAMBUTAN	45,317
4704	LEBAK BULUS	57,688	5504	CEGER	39,066
4705	PONDOK LABU	57,688	5505	BAMBU APUS	39,066
4700	CILANDAK	58,110	5506	SETU	39,066
4000	JAKARTA SELATAN	49,941	5507	CIPAYUNG	41,819
5101	KEBON MANGGIS	53,922	5508	SUSUKAN	45,317
5102	PAL MERIAM	53,922	5509	CIRACAS	45,317
5103	KAYUMANIS	52,815	5510	CIJANTUNG	45,317
5104	UTAN KAYU UTARA	52,815	5511	BARU	45,317
5105	PISANGAN BARU	52,815	5512	KALI SARI	46,373
5106	UTAN KAYU SELATAN	52,815	5513	PEKAYON	46,373
5100	MATRAMAN	53,184	5514	KELAPA DUA WETAN	41,819
5201	KAYU PUTIH	60,549	5515	MUNJUL	41,819
5202	JATI	56,190	5516	CILANGKAP	41,819
5203	PISANGAN TIMUR	56,190	5517	CIBUBUR	41,819
5204	CIPINANG	56,190	5518	PONDOK RANGON	41,819
5205	PULO GADUNG	60,549	5500	PASAR REBO	42,879
5206	JATINEGARA KAUM	56,190	5601	RAWA TERATE	38,132
5207	RAWAMANGUN	56,190	5602	JATI NEGARA	38,857
5200	PULO GADUNG	57,436	5603	PENGGILINGAN	44,612
5301	KAMPUNG MELAYU	49,194	5604	CAKUNG BARAT	41,117
5302	BALI MESTER	49,194	5605	UJUNG MENTENG	41,117
5303	BIDARA CINA	49,194	5606	PULO GEBANG	44,612
5304	CIPINANG CEMPEDAK	49,194	5607	CAKUNG TIMUR	41,117
5305	RAWA BUNGA	47,817	5600	CAKUNG	41,366
5306	CIPINANG MUARA	45,706	5000	JAKARTA TIMUR	47,583
5307	CIPINANG BESAR UTARA	45,706	10000	JAKARTA	46,366
5308	PONDOK BAMBU	56,482			
5309	KLENDER	56,482			
5310	DUREN SAWIT	56,262			
5311	MALAKA SARI	56,262			
5312	PONDOK KELAPA	56,262			
5313	CIPINANG BESAR SELATAN	45,706			
5314	MALAKA JAYA	56,262			
5315	PONDOK KOPI	56,262			
5300	JATINEGARA	51,732			
5401	CAWANG	44,560			
5402	CIPINANG MELAYU	48,419			
5403	CILILITAN	44,560			
5404	KRAMAT JATI	44,099			
5405	KEBON PALA	44,560			
5406	HALIM PERDANA KUSUMA	48,419			
5407	BATU AMPAR	46,805			
5408	BALE KAMBANG	46,805			
5409	MAKASSAR	44,099			
5410	KAMPUNG TENGAH	46,805			
5411	DUKUH	46,862			
5412	PINANG RANTE	46,862			
5400	KRAMAT JATI	46,071			

Source : JICA

Table A.6　　Income Class-Wise per Capita per Month Income by Kecamatan in 1989

(Unit : Rp.)

CODE NUMBER	NAME OF KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	AVERAGE
1100	GAMBIR	123,488	59,030	29,474	49,037
1200	SAWAH BESAR	120,140	71,408	33,303	53,493
1300	KEMAYORAN	102,180	55,368	28,564	42,633
1400	SENEN	123,042	51,655	38,118	46,387
1500	CEMPAKA PUTIH	130,406	42,933	25,385	36,773
1600	MENTENG	133,436	46,089	25,232	51,278
1700	TANAH ABANG	130,033	59,611	25,805	48,491
1000	JAKARTA PUSAT	123,775	54,826	29,206	45,762
2200	PENJARINGAN	108,336	69,411	36,990	53,439
2300	TANJUNG PRIOK	68,325	55,576	29,274	40,225
2400	KOJA	96,051	58,775	29,261	42,660
2500	CILINCING	123,948	43,786	28,816	34,603
3000	JAKARTA UTARA	96,875	57,413	31,158	42,938
3100	CENGKARENG	114,027	49,723	26,488	35,169
3200	GROGOL PETAMBURAN	158,263	61,015	28,339	53,222
3300	TAMAN SARI	184,468	63,324	29,476	52,534
3400	TAMBORA	91,470	45,347	26,241	36,362
3500	KEBON JERUK	106,071	50,937	27,353	45,584
3000	JAKARTA BARAT	126,058	53,535	27,470	43,696
4100	TEBET	154,286	54,303	24,093	45,169
4200	SETIA BUDI	120,579	66,496	36,665	53,256
4300	MAMPANG PRAPATAN	96,690	66,502	31,107	51,868
4400	PASAR MINGGU	90,163	61,063	31,843	47,832
4500	KEBAYORAN BARU	130,208	54,709	30,420	52,060
4600	KEBAYORAN LAMA	130,300	59,204	27,774	46,637
4700	CILANDAK	136,698	55,636	40,931	58,110
4000	JAKARTA SELATAN	118,363	60,201	31,260	49,941
5100	MATRAMAN	131,340	67,478	30,185	53,184
5200	PULO GADUNG	111,170	76,151	22,873	57,436
5300	JATINEGARA	124,865	59,300	26,403	51,732
5400	KRAMAT JATI	88,897	54,532	27,818	46,071
5500	PASAR REBO	92,957	55,365	29,978	42,879
5600	CAKUNG	80,463	59,834	29,942	41,366
5000	JAKARTA TIMUR	104,989	59,957	28,004	47,582
10000	JAKARTA	115,189	57,524	29,298	46,366

Source　:　JICA

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Table A.7 (1)　　Populational Composition of Income Classes by Kelurahan in 1989

(Unit : %)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
1101	CIDENG	6.3	51.7	42.0	100.0
1102	DURI PULO	6.3	51.7	42.0	100.0
1103	PETOJO UTARA	6.3	51.7	42.0	100.0
1104	PETOJO SELATAN	2.7	46.5	50.8	100.0
1105	KEBON KELAPA	6.3	51.7	42.0	100.0
1106	GAMBIR	2.7	46.5	50.8	100.0
1100	GAMBIR	5.1	50.0	44.9	100.0
1201	MANGGA DUA SELATAN	2.1	42.2	55.7	100.0
1202	KARANG ANYAR	2.1	52.2	45.7	100.0
1203	KAR TINI	2.1	52.2	45.7	100.0
1204	PASAR BARU	2.1	52.2	45.7	100.0
1205	GUNUNG SAHARI UTARA	2.1	42.2	55.7	100.0
1200	SAWAH BESAR	2.1	48.2	49.7	100.0
1301	GUNUNG SAHARI SELATAN	2.2	43.9	53.9	100.0
1302	KEMAYORAN	2.2	43.9	53.9	100.0
1303	KEBON KOSONG	2.2	43.9	53.9	100.0
1304	SERDANG	1.9	48.8	49.3	100.0
1305	HARAPAN MULIA	1.9	48.8	49.3	100.0
1306	UTANPANJANG	1.9	48.8	49.3	100.0
1307	CEMPAKA BARU	1.9	48.8	49.3	100.0
1308	SUMURBATU	1.9	48.8	49.3	100.0
1300	KEMAYORAN	2.0	47.0	51.0	100.0
1401	SENEN	3.6	39.6	56.8	100.0
1402	KWITANG	3.4	39.2	57.4	100.0
1403	KENARI	3.4	39.2	57.4	100.0
1404	KRAMAT	3.4	39.2	57.4	100.0
1405	PASEBAN	3.4	39.2	57.4	100.0
1406	BUNGUR	3.6	39.6	56.8	100.0
1400	SENEN	3.5	39.3	57.2	100.0
1501	TANAH TINGGI	1.6	32.9	65.5	100.0
1502	JOHAR BARU	1.6	32.9	65.5	100.0
1503	GALUR	1.6	32.9	65.5	100.0
1504	KAMPUNG RAWA	1.6	32.9	65.5	100.0
1505	RAWA SARI	1.6	32.9	65.5	100.0
1506	CEMPAKA PUTIH BARAT	9.7	62.9	27.4	100.0
1507	CEMPAKA PUTIH TIMUR	9.7	62.9	27.4	100.0
1500	CEMPAKA PUTIH	3.9	41.5	54.6	100.0
1601	KEBON SIRIH	6.4	30.0	63.6	100.0
1602	GONDANGDIA	27.0	73.0	0.0	100.0
1603	CIKINI	3.1	67.3	29.6	100.0
1604	MENTENG	26.9	53.7	19.4	100.0
1605	PEGANGSAAN	5.7	42.0	52.3	100.0
1600	MENTENG	13.8	53.2	33.0	100.0
1701	KAMPUNG BALI	2.1	52.0	45.9	100.0
1702	KEBON KACANG	2.1	52.0	45.9	100.0
1703	KEBON MELATI	2.1	52.0	45.9	100.0
1704	PETAMBURAN	7.0	52.0	41.0	100.0
1705	KARET TENGSIN	7.0	52.0	41.0	100.0
1706	BENDUNGAN HILIR	7.0	52.0	41.0	100.0
1707	GELORA	7.0	52.0	41.0	100.0
1700	TANAH ABANG	4.9	52.0	43.1	100.0
1000	JAKARTA PUSAT	4.7	47.1	48.2	100.0

Source : JICA

Table A.7 (2)   Populational Composition of Income Classes by Kelurahan in 1989

(Unit : %)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
2201	KAMAL MUARA	2.5	17.4	80.1	100.0
2202	KAPUK MUARA	2.5	17.4	80.1	100.0
2203	PEJAGALAN	9.0	48.2	42.8	100.0
2204	PENJARINGAN	9.0	48.2	42.8	100.0
2205	PLUIT (MANGGA DUA UTARA)	9.0	48.2	42.8	100.0
2206	PADEMANGAN BARAT	1.4	46.7	51.9	100.0
2207	PADEMANGAN TIMUR	0.5	55.4	44.1	100.0
2208	ANCOL	1.4	46.7	51.9	100.0
2200	PENJARINGAN	4.4	41.0	54.6	100.0
2301	SUNTER AGUNG	1.6	32.6	65.8	100.0
2302	PAPANGGO	1.7	42.1	56.2	100.0
2303	SUNGAI BAMBU	1.7	42.1	56.2	100.0
2304	KEBON BAWANG	1.7	42.1	56.2	100.0
2305	TANJUNG PRIOK	0.2	42.7	57.1	100.0
2306	SUNTER JAYA	1.6	32.6	65.8	100.0
2307	WARAKAS	1.7	42.1	56.2	100.0
2300	TANJUNG PRIOK	1.5	39.5	59.0	100.0
2401	KOJA UTARA	1.6	23.9	74.5	100.0
2402	LOGOA	1.2	37.2	61.6	100.0
2403	KOJA SELATAN	1.6	23.9	74.5	100.0
2404	TUGU SELATAN	1.2	37.2	61.6	100.0
2405	TUGU UTARA	1.2	37.2	61.6	100.0
2406	RAWA BADAK	1.2	37.2	61.6	100.0
2407	KELAPA GADING BARAT	4.7	72.6	22.7	100.0
2408	KELAPA GADING TIMUR	4.7	72.6	22.7	100.0
2409	PEGANGSAAN DUA	0.0	27.4	72.6	100.0
2400	KOJA	1.9	41.0	57.1	100.0
2501	KALI BARU	0.2	42.4	57.4	100.0
2502	CILINCING	0.3	28.0	71.7	100.0
2503	SEMPER BARAT	0.9	47.3	51.8	100.0
2504	SEMPER TIMUR	0.9	47.3	51.8	100.0
2505	MARUNDA	0.3	28.0	71.7	100.0
2506	SUKAPURA	0.1	29.9	70.0	100.0
2507	ROROTAN	0.1	29.9	70.0	100.0
2500	CILINCING	0.4	36.1	63.5	100.0
2000	JAKARTA UTARA	2.1	39.6	58.3	100.0
3101	SEMANAN	0.3	36.2	63.5	100.0
3102	KAMAL	0.1	16.5	83.4	100.0
3103	TEGAL ALUR	0.1	16.5	83.4	100.0
3104	PEGADUNGAN	0.1	16.5	83.4	100.0
3105	KALI DERES	0.3	36.2	63.5	100.0
3106	CENGKARENG TIMUR	1.5	33.9	64.6	100.0
3107	KAPUK	1.5	33.9	64.6	100.0
3108	KEDAUNG KALI ANGKE	1.4	50.4	48.2	100.0
3109	DURI KOSAMBI	1.4	50.4	48.2	100.0
3110	RAWA BUAYA	1.4	50.4	48.2	100.0
3111	CENGKARENG BARAT	1.5	33.9	64.6	100.0
3100	CENGKARENG	0.9	34.1	65.0	100.0

Source : JICA

Table A.7 (3)   Populational Composition of Income Classes by Kelurahan in 1989

(Unit : %)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
3201	GROGOL	7.5	53.5	39.0	100.0
3202	JELAMBAR	7.5	53.5	39.0	100.0
3203	TANJUNG DUREN	11.3	56.8	31.9	100.0
3204	TOMANG	11.3	56.8	31.9	100.0
3205	JATI PULO	4.9	40.7	54.4	100.0
3206	KOTA BAMBU	4.9	40.7	54.4	100.0
3207	SLIPI	4.9	40.7	54.4	100.0
3208	PAL MERAH	4.9	40.7	54.4	100.0
3209	KEMANGGISAN	4.9	40.7	54.4	100.0
3210	JELAMBAR BARU	7.5	53.5	39.0	100.0
3211	WIJAYA KUSUMA	7.5	53.5	39.0	100.0
3200	GROGOL PETAMBURAN	7.0	48.3	44.7	100.0
3301	PINANGSIA	2.8	55.3	41.9	100.0
3302	MANGGA BESAR	2.8	55.3	41.9	100.0
3303	TANGKI	2.8	55.3	41.9	100.0
3304	GLODOK	2.8	55.3	41.9	100.0
3305	KEAGUNGAN	2.8	55.3	41.9	100.0
3306	KRUKUT	2.8	55.3	41.9	100.0
3307	TAMAN SARI	2.8	55.3	41.9	100.0
3308	MAHPAR	2.8	55.3	41.9	100.0
3300	TAMAN SARI	2.8	55.3	41.9	100.0
3401	PEKOJAN	1.5	51.6	46.9	100.0
3402	ROA MALAKA	1.5	51.6	46.9	100.0
3403	TAMBORA	1.5	51.6	46.9	100.0
3404	JEMBATAN LIMA	1.5	51.6	46.9	100.0
3405	ANGKE	0.9	39.9	59.2	100.0
3406	JEMBATAN BESI	0.9	39.9	59.2	100.0
3407	KRENDANG	1.5	51.6	46.9	100.0
3408	TANAH SEREAL	1.5	51.6	46.9	100.0
3409	DURI UTARA	1.5	51.6	46.9	100.0
3410	KALI BARU	0.9	39.9	59.2	100.0
3411	DURI SELATAN	1.5	51.6	46.9	100.0
3400	TAMBORA	1.3	48.4	50.3	100.0
3501	KEMBANGAN	2.5	57.0	40.5	100.0
3502	KEDOYA	7.9	42.4	49.7	100.0
3503	DURI KEPA	7.9	42.4	49.7	100.0
3504	MARUYA ILIR	7.3	61.8	30.9	100.0
3505	MARUYA UDIK	4.3	49.2	46.5	100.0
3506	JOGLO	4.3	49.2	46.5	100.0
3507	SRENGSENG	4.3	49.2	46.5	100.0
3508	KEBON JERUK	25.9	48.4	25.7	100.0
3509	SUKABUMI ILIR	6.8	55.9	37.3	100.0
3510	KELAPA DUA	6.8	55.9	37.3	100.0
3511	SUKABUMI UDIK	6.8	55.9	37.3	100.0
3500	KEBON JERUK	7.7	51.6	40.7	100.0
3000	JAKARTA BARAT	4.0	47.1	48.9	100.0
4101	MENTENG DALAM	7.3	60.3	32.4	100.0
4102	TEBET BARAT	7.3	60.3	32.4	100.0
4103	TEBET TIMUR	7.3	60.3	32.4	100.0
4104	KEBON BARU	7.3	60.3	32.4	100.0
4105	BUKIT DURI	1.1	35.7	63.2	100.0
4106	MANGGARAI SELATAN	1.1	35.7	63.2	100.0
4107	MANGGARAI	1.1	35.7	63.2	100.0
4100	TEBET	4.6	49.8	45.6	100.0

Source : JICA

Table A.7 (4)   Populational Composition of Income Classes by Kelurahan in 1989

<div align="right">(Unit : %)</div>

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
4201	SETIA BUDI	2.8	40.0	57.2	100.0
4202	GUNTUR	3.4	58.1	38.5	100.0
4203	KARET	2.8	40.0	57.2	100.0
4204	KARET SEMANGGI	6.7	40.3	53.0	100.0
4205	KARET KUNINGAN	2.8	40.0	57.2	100.0
4206	KUNINGAN TIMUR	1.3	35.5	63.2	100.0
4207	PASAR MANGGIS	3.4	58.1	38.5	100.0
4208	MENTENG ATAS	3.4	58.1	38.5	100.0
4200	SETIA BUDI	3.3	46.3	50.4	100.0
4301	KUNINGAN BARAT	0.2	59.6	40.2	100.0
4302	MAMPANG PRAPATAN	4.1	45.3	50.6	100.0
4303	PELA MAMPANG	4.8	49.3	45.9	100.0
4304	TEGAL PARANG	4.1	45.3	50.6	100.0
4305	BANGKA	4.8	49.3	45.9	100.0
4306	PANCORAN	2.3	52.0	45.7	100.0
4307	DUREN TIGA	3.7	57.9	38.4	100.0
4308	KALI BATA	3.7	57.9	38.4	100.0
4309	CIKOKO	2.3	52.0	45.7	100.0
4310	PENGADEGAN	2.3	52.0	45.7	100.0
4311	RAWAJATI	3.7	57.9	38.4	100.0
4300	MAMPANG PRAPATAN	3.3	52.6	44.1	100.0
4401	PEJATEN BARAT	6.3	52.5	41.2	100.0
4402	PASAR MINGGU	3.6	52.4	44.0	100.0
4403	TANJUNG BARAT	3.6	52.4	44.0	100.0
4404	JATI PADANG	2.4	45.5	52.1	100.0
4405	RAGUNAN	2.4	45.5	52.1	100.0
4406	CILANDAK TIMUR	2.4	45.5	52.1	100.0
4407	JAGAKARSA	1.0	44.4	54.6	100.0
4408	LENTENG AGUNG	3.6	52.4	44.0	100.0
4409	SRENGSENG SAWAH	0.1	44.3	55.6	100.0
4410	CIGANJUR	1.0	44.4	54.6	100.0
4411	KEBAGUSAN	3.6	52.4	44.0	100.0
4412	PEJATEN TIMUR	6.3	52.5	41.2	100.0
4400	PASAR MINGGU	3.0	48.7	48.3	100.0
4501	SENAYAN	0.1	19.1	80.8	100.0
4502	RAWA BARAT	13.5	50.8	35.7	100.0
4503	SELONG	13.5	50.8	35.7	100.0
4504	GUNUNG	13.5	50.8	35.7	100.0
4505	KRAMAT PELA	13.5	50.8	35.7	100.0
4506	MELAWAI	13.5	50.8	35.7	100.0
4507	PETOGOGAN	13.5	50.8	35.7	100.0
4508	PULO	13.5	50.8	35.7	100.0
4509	GANDARIA UTARA	3.7	48.6	47.7	100.0
4510	CIPETE UTARA	3.7	48.6	47.7	100.0
4500	KABAYORAN BARU	10.2	47.2	42.6	100.0
4601	GROGOL UTARA	4.2	36.1	59.7	100.0
4602	GROGOL SELATAN	4.2	36.1	59.7	100.0
4603	CIPULIR	3.1	50.3	46.6	100.0
4604	KEBAYORAN LAMA UTARA	3.4	37.7	58.9	100.0
4605	PONDOK PINANG	5.4	46.1	48.5	100.0
4606	PETUKANGAN UTARA	3.1	50.3	46.6	100.0
4607	PETUKANAGN SELATAN	4.1	59.3	36.6	100.0
4608	ULUJAMI	3.1	50.3	46.6	100.0
4609	PESANGGARAHAN	4.1	59.3	36.6	100.0
4610	BINTARO	4.1	59.3	36.6	100.0
4611	KEBAYORAN LAMA SELATAN	3.4	37.7	58.9	100.0
4600	KEBAYORAN LAMA	3.8	47.5	48.7	100.0

Source : JICA

Table A.7 (5)　　　Populational　Composition of Income Classes by Kelurahan in 1989

(Unit : %)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
4701	GANDARIA SELATAN	9.8	57.3	32.9	100.0
4702	CIPETE SELATAN	9.8	57.3	32.9	100.0
4703	CILANDAK BARAT	8.5	58.6	32.9	100.0
4704	LEBAK BULUS	8.5	58.6	32.9	100.0
4705	PONDOK LABU	8.5	58.6	32.9	100.0
4700	CILANDAK	9.0	58.1	32.9	100.0
4000	JAKARTA SELATAN	5.0	49.5	45.5	100.0
5101	KEBON MANGGIS	3.3	54.7	42.0	100.0
5102	PAL MERIAM	3.3	54.7	42.0	100.0
5103	KAYUMANIS	1.8	55.8	42.4	100.0
5104	UTAN KAYU UTARA	1.8	55.8	42.4	100.0
5105	PISANGAN BARU	1.8	55.8	42.4	100.0
5106	UTAN KAYU SELATAN	1.8	55.8	42.4	100.0
5100	MATRAMAN	2.3	55.4	42.3	100.0
5201	KAYU PUTIH	16.0	44.2	39.8	100.0
5202	JATI	3.4	56.9	39.7	100.0
5203	PISANGAN TIMUR	3.4	56.9	39.7	100.0
5204	CIPINANG	3.4	56.9	39.7	100.0
5205	PULO GADUNG	16.0	44.2	39.8	100.0
5206	JATINEGARA KAUM	3.4	56.9	39.7	100.0
5207	RAWAMANGUN	3.4	56.9	39.7	100.0
5200	PULO GADUNG	7.0	53.3	39.7	100.0
5301	KAMPUNG MELAYU	2.9	60.6	36.5	100.0
5302	BALI MESTER	2.9	60.6	36.5	100.0
5303	BIDARA CINA	2.9	60.6	36.5	100.0
5304	CIPINANG CEMPEDAK	2.9	60.6	36.5	100.0
5305	RAWA BUNGA	1.0	62.1	36.9	100.0
5306	CIPINANG MUARA	3.5	48.2	48.3	100.0
5307	CIPINANG BESAR UTARA	3.5	48.2	48.3	100.0
5308	PONDOK BAMBU	9.5	63.0	27.5	100.0
5309	KLENDER	9.5	63.0	27.5	100.0
5310	DUREN SAWIT	4.9	76.1	19.0	100.0
5311	MALAKA SARI	4.9	76.1	19.0	100.0
5312	PONDOK KELAPA	4.9	76.1	19.0	100.0
5313	CIPINANG BESAR SELATAN	3.5	48.2	48.3	100.0
5314	MALAKA JAYA	4.9	76.1	19.0	100.0
5315	PONDOK KOPI	4.9	76.1	19.0	100.0
5300	JATINEGARA	4.4	63.7	31.9	100.0
5401	CAWANG	2.0	58.1	39.9	100.0
5402	CIPINANG MELAYU	2.5	71.4	26.1	100.0
5403	CILILITAN	2.0	58.1	39.9	100.0
5404	KRAMAT JATI	2.6	55.0	42.4	100.0
5405	KEBON PALA	2.0	58.1	39.9	100.0
5406	HALIM PERDANA KUSUMA	2.5	71.4	26.1	100.0
5407	BATU AMPAR	3.4	63.3	33.3	100.0
5408	BALE KAMBANG	3.4	63.3	33.3	100.0
5409	MAKASSAR	2.6	55.0	42.4	100.0
5410	KAMPUNG TENGAH	3.4	63.3	33.3	100.0
5411	DUKUH	5.9	57.8	36.3	100.0
5412	PINANG RANTE	5.9	57.8	36.3	100.0
5400	KRAMAT JATI	3.2	61.1	35.7	100.0

Source : JICA

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Table A.7 (6)   Populational Composition of Income Classes by Kelurahan in 1989

(Unit : %)

CODE NUMBER	NAME OF KELURAHAN & KECAMATAN	HIGH INCOME CLASS	MIDDLE INCOME CLASS	LOW INCOME CLASS	TOTAL
5501	LUBANG BUAYA	0.2	35.3	64.5	100.0
5502	GEDONG	1.5	56.7	41.8	100.0
5503	RAMBUTAN	1.5	56.7	41.8	100.0
5504	CEGER	0.2	35.3	64.5	100.0
5505	BAMBU APUS	0.2	35.3	64.5	100.0
5506	SETU	0.2	35.3	64.5	100.0
5507	CIPAYUNG	0.5	45.4	54.1	100.0
5508	SUSUKAN	1.5	56.7	41.8	100.0
5509	CIRACAS	1.5	56.7	41.8	100.0
5510	CIJANTUNG	1.5	56.7	41.8	100.0
5511	BARU	1.5	56.7	41.8	100.0
5512	KALI SARI	1.0	62.1	36.9	100.0
5513	PEKAYON	1.0	62.1	36.9	100.0
5514	KELAPA DUA WETAN	0.5	45.4	54.1	100.0
5515	MUNJUL	0.5	45.4	54.1	100.0
5516	CILANGKAP	0.5	45.4	54.1	100.0
5517	CIBUBUR	0.5	45.4	54.1	100.0
5518	PONDOK RANGON	0.5	45.4	54.1	100.0
5500	PASAR REBO	0.8	48.8	50.4	100.0
5601	RAWA TERATE	0.0	27.4	72.6	100.0
5602	JATI NEGARA	2.5	25.6	71.9	100.0
5603	PENGGILINGAN	0.4	48.4	51.2	100.0
5604	CAKUNG BARAT	0.7	36.2	63.1	100.0
5605	UJUNG MENTENG	0.7	36.2	63.1	100.0
5606	PULO GEBANG	0.4	48.4	51.2	100.0
5607	CAKUNG TIMUR	0.7	36.2	63.1	100.0
5600	CAKUNG	0.8	36.9	62.3	100.0
5000	JAKARTA TIMUR	2.9	54.3	42.8	100.0
10000	JAKARTA	3.9	48.6	47.5	100.0

Source : JICA

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Table A.8   Estimation of GDP and per Capita GDP for DKI Jakarta 1988 to 2010

1.   Past Performances of GDP

(Unit : billion at 1990 prices)

Year	1980	1981	1982	1983	1984
GDP	9,214	10,890	11,512	12,812	14,170
Year	1985	1986	1987	1988	1989
GDP	14,766	15,474	16,480	17,713	18,864

Note :   Figures for 1988 and 1989 are the estimates.

2.   Future Projection of GDP

Average annual growth rate of GDP 1989 to 2010 = 6 %

3.   Estimation of per Capita GDP and its Growth Rate

Item	1988	2010
Population (A)	8,786,016	12,800,000
GDP (Rp. billion) (B)	17,713	64,129
Per Capita GDP (Rp.) (C= B/A)	2,016,045	5,010,078
Average Annual Growth Rate of C 1988 to 2010	-	4.2246%

Source :   DKI Jakarta & JICA

North (UTARA)

East (TIMUR)

Central (PUSAT)

South (SELATAN)

West (BARAT)

NOTATION:
Provincia Boundary
Wilayah Boundary
Kecamatan Boundary
Kelurahan Boundary

0 1 2 3 4 5 Km
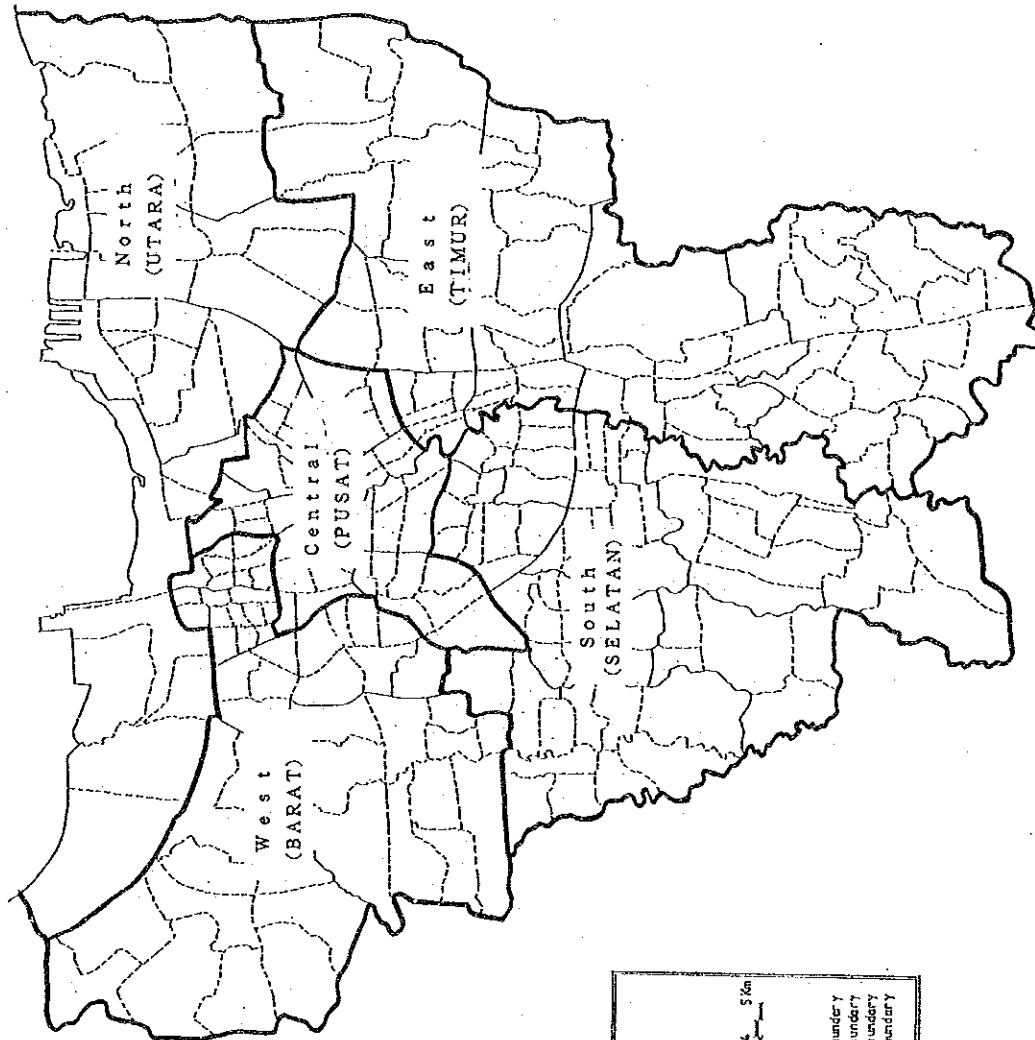
ADMINISTRATIVE BOUNDARY

FIG. A.1

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991
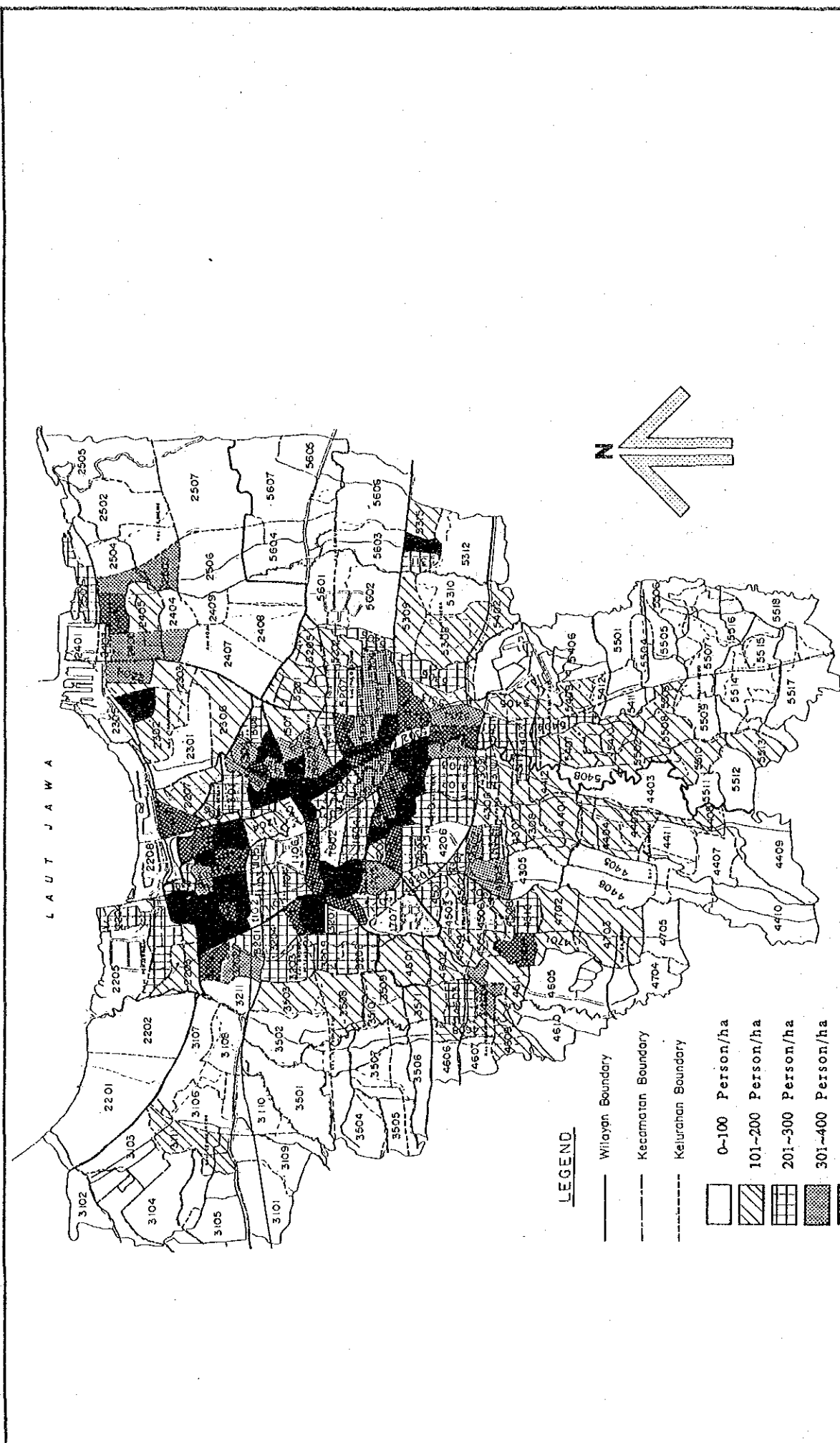
FIG. A.2   EXISTING POPULATION DENSITY BY KELURAHAN (1988)

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

LEGEND

—————— Wilayan Boundary
— · — · — Kecamatan Boundary
— — — — Kelurahan Boundary

0~100 Person/ha
101~200 Person/ha
201~300 Person/ha
301~400 Person/ha
401~500 Person/ha
500 < Person/ha

JICA A.D 1991
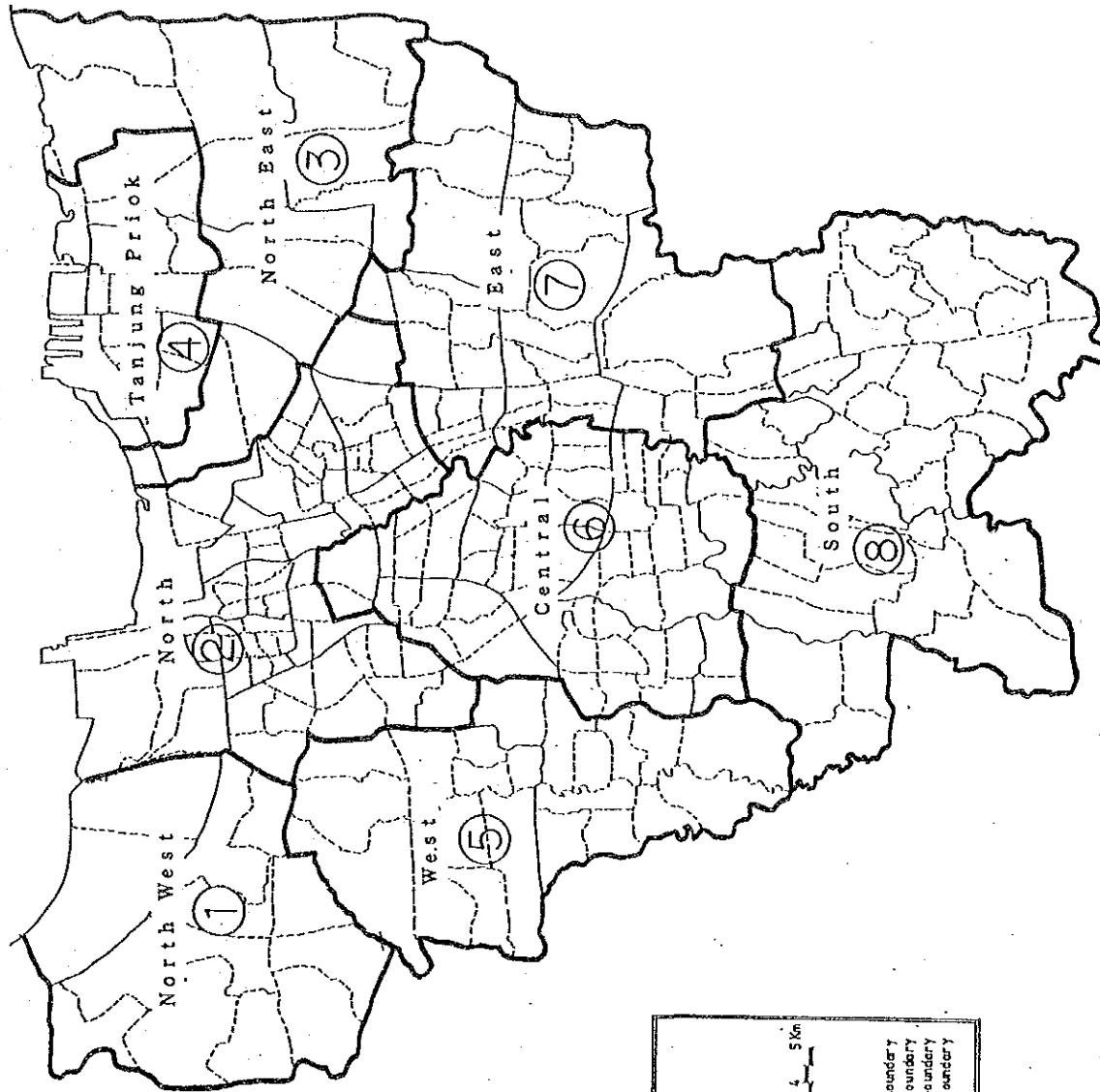
FIG. A.3 | DIVISION OF DEVELOPMENT DISTRICT IN JAKARTA 2005 PLAN

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991

ESTIMATION OF FUTURE POPULATION

Population (million)

$Y = 32.657 \ X^{0.839}$

12.8
12.0
8.8
8.0 (0.0)

Year

1970   1980   1990   2000   2010
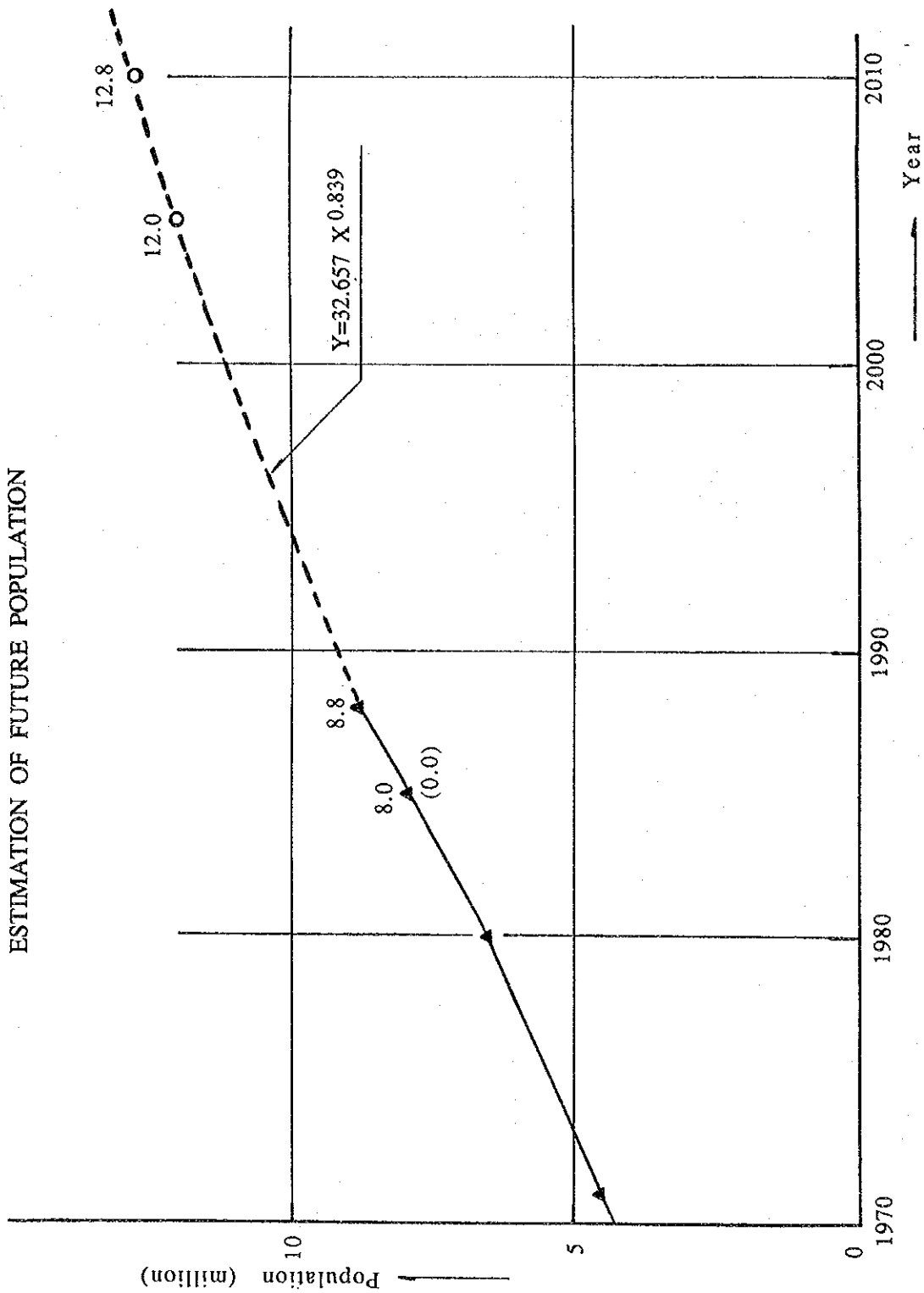
PROJECTION OF FUTURE POPULATION

FIG. A.4

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

LEGEND

————— Wilayan Boundary

—·—·— Kecamatan Boundary

—-—-— Kelurahan Boundary

	0~100 Person/ha
	101~200 Person/ha
	201~300 Person/ha
	301~400 Person/ha
	401~500 Person/ha
	500< Person/ha
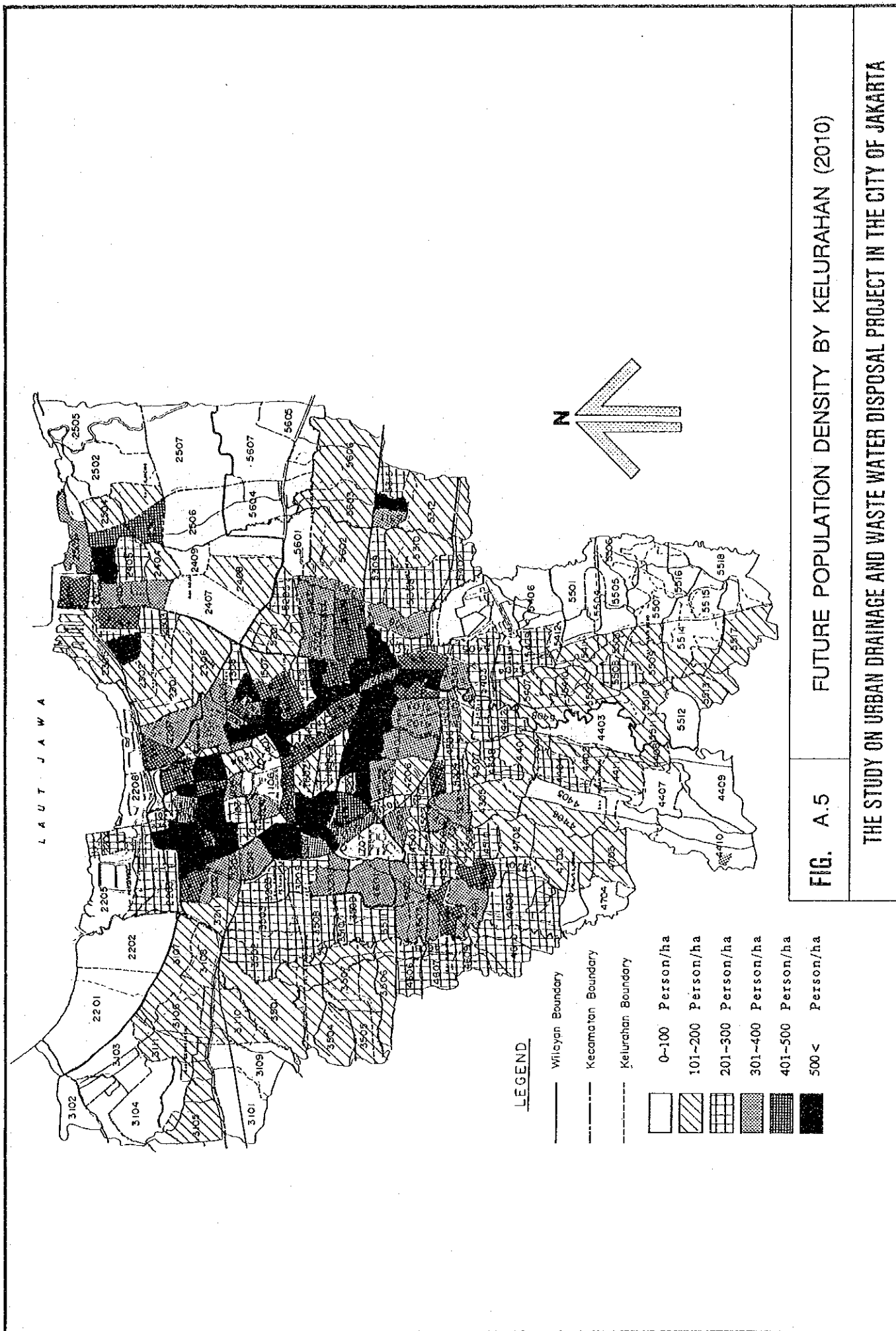
FUTURE POPULATION DENSITY BY KELURAHAN (2010)

FIG. A.5

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991

N

LEGEND

Wilayah Boundary
Kecamatan Boundary
Kelurahan Boundary

	:	0 - 20 %
	:	21 - 40 %
	:	41 - 60 %
	:	61 - 80 %
	:	81 - 100 %
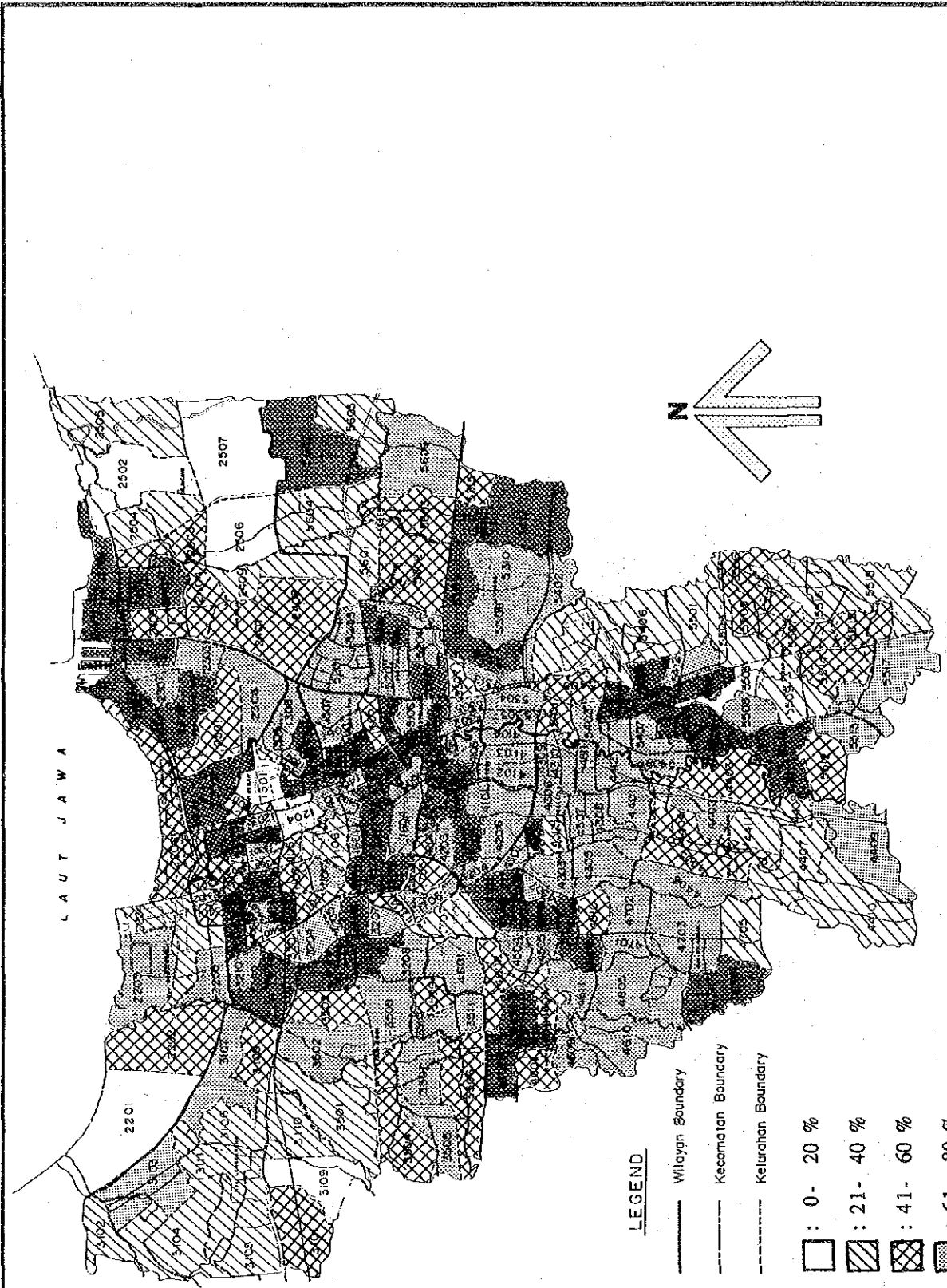
FIG. A.6   SHARE OF EXISTING RESIDENTIAL USE BY KELURAHAN

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA   A.D 1991

LAUT JAWA

LEGEND

——— Wilayan Boundary

– – – Kecamatan Boundary

----- Kelurahan Boundary

LEGEND

Shared by Commercial and
Institutional Use

more than 40%

N
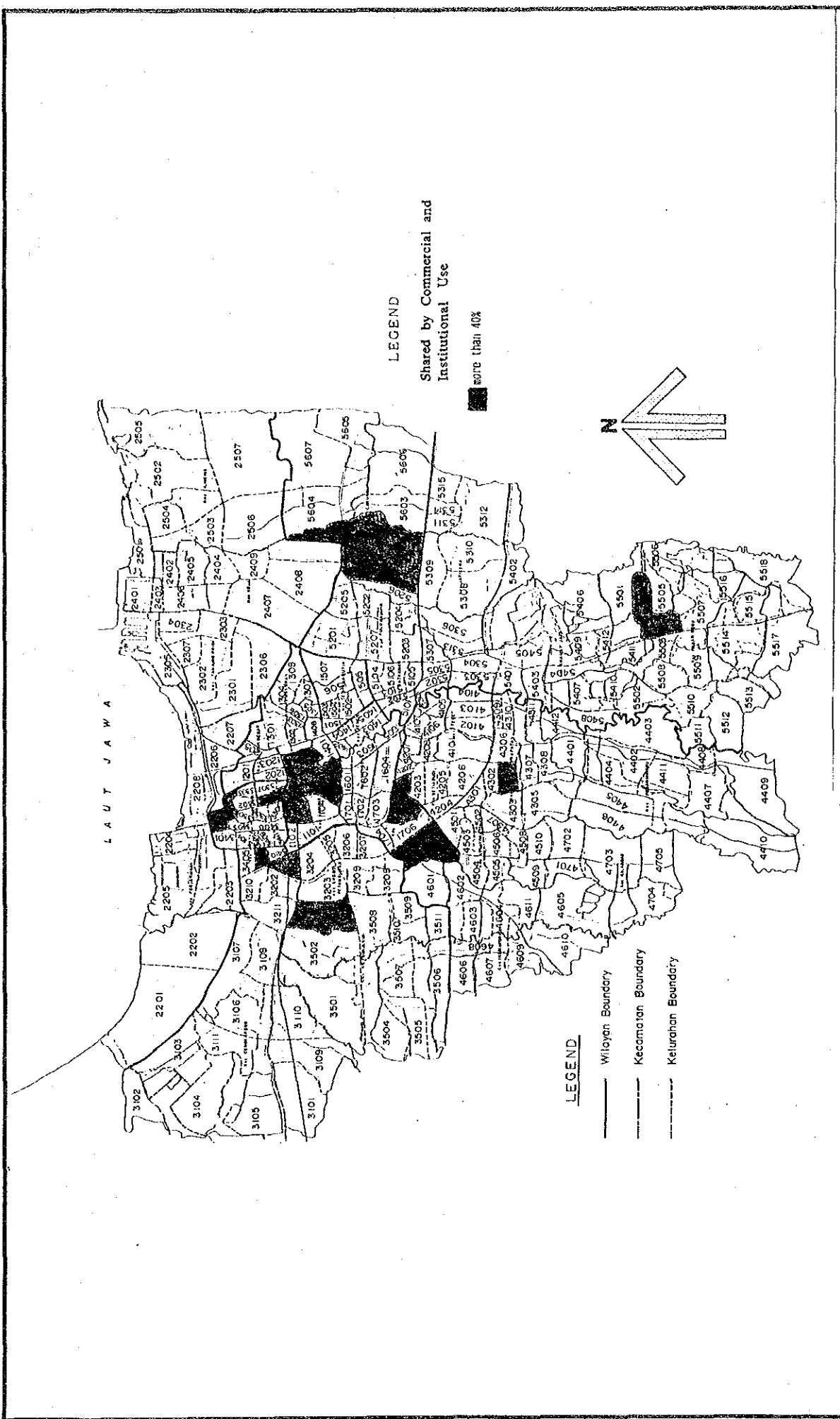
FIG. A.7   EXISTING COMMERCIAL AND INSTITUTIONAL AREA

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

LEGEND

Shared by Industrial Use

	0 ~ 20%
	21 ~ 40%

LEGEND

——— Wilayah Boundary
- - - Kecamatan Boundary
----- Kelurahan Boundary

L A U T   J A W A
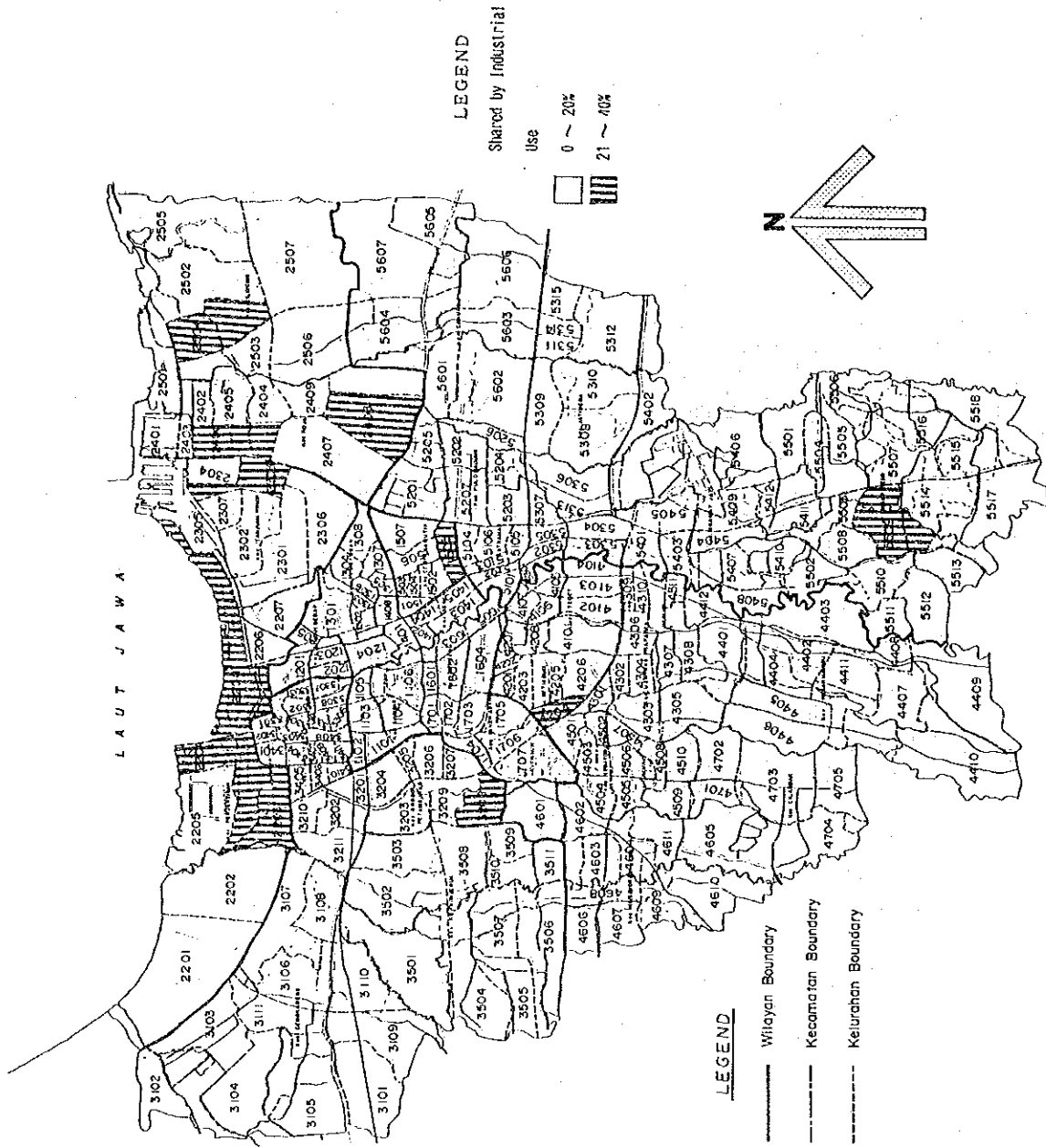
FIG. A.8   EXISTING INDUSTRIAL AREA

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991

LEGEND

———— Wilayah Boundary

– – – Kecamatan Boundary

– – – Kelurahan Boundary

☐ : 0 - 20 %

▨ : 21 - 40 %

▩ : 41 - 60 %

▦ : 61 - 80 %

▦ : 81 - 100 %
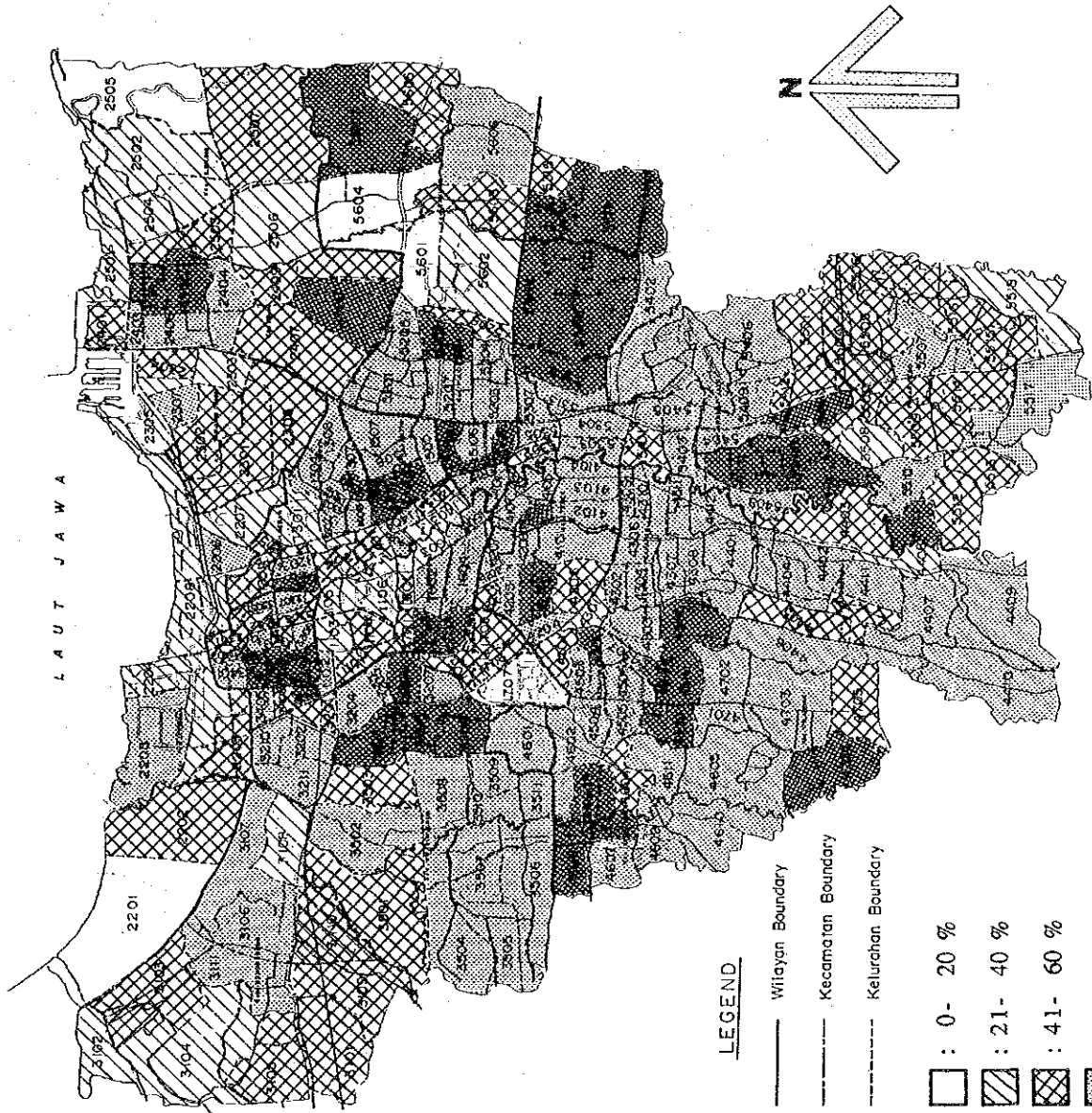
FIG. A.9 SHARE OF FUTURE RESIDENTIAL USE BY KELURAHAN

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991
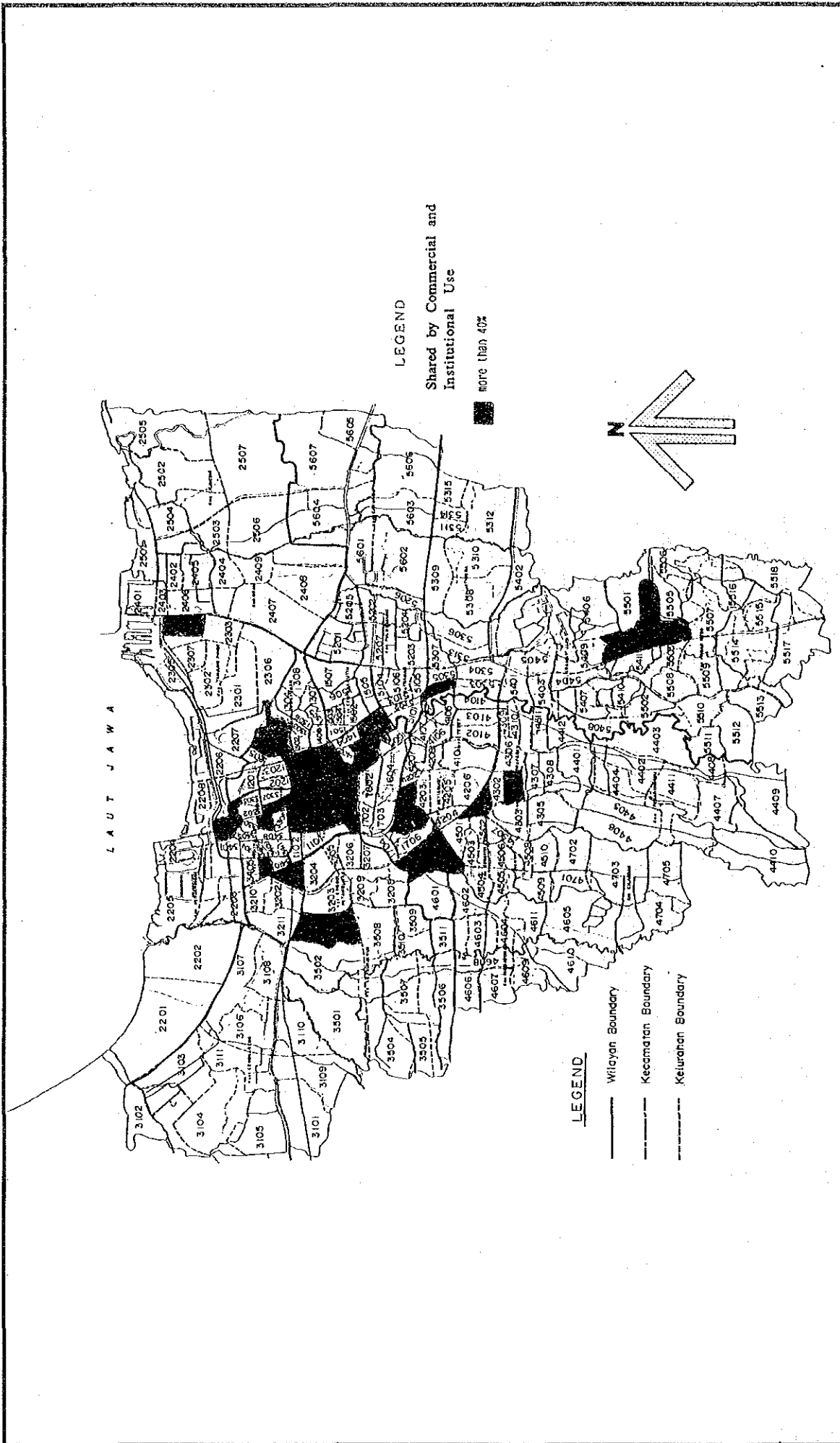
FIG. A.10 FUTURE COMMERCIAL AND INSTITUTIONAL AREA

LEGEND

Shared by Commercial and
Institutional Use

■ more than 40%

LEGEND

—— Wilayah Boundary
——— Kecamatan Boundary
- - - - Kelurahan Boundary

L A U T   J A W A

N

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

LAUT JAWA

LEGEND
——— Wilayah Boundary
— — — Kecamatan Boundary
- - - - Kelurahan Boundary

LEGEND
Shared by Industrial
Use
☐ 0 ~ 20%
▥ 21 ~ 40%
▨ > 40%

N

FUTURE INDUSTRIAL AREA

FIG. A.11

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

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JICA A.D 1991

LEGEND

☐	< Rp. 40.000
▤	Rp. 40,000 - Rp. 44,999
▨	Rp. 45,000 - Rp. 49,999
▥	Rp. 50,000 - Rp. 54,999
▦	> Rp. 55,000

FIG. A.12 PER CAPITA PER MONTH INCOME BY KELURAHAN IN 1989

THE STUDY ON URBAN DRAINAGE AND WASTE WATER DISPOSAL PROJECT IN THE CITY OF JAKARTA

JICA A.D 1991

APPENDIX B

HYDROLOGY, FLOODS AND FLOOD DAMAGES

APPENDIX B   HYDROLOGY, FLOODS AND FLOOD DAMAGES

1.   River and Channel Networks

The Study Area (651 km^2) is drained by many rivers and drainage channels connecting with the rivers.   Among them, eleven (11) rivers are large and originate in the southern mountainous or hilly areas located outside the Study Area.   They are:

- Mookervart, Angke, Pesanggrahan,Grogol, Krukut, Ciliwung, Cipinang, Sunter, Buaran, Jati Kramat and Cakung

While, the remaining small rivers and drainage channels collect local rainfall within the Study Area.

The Study Area has been affected by floods of the rivers and water logging of local rainfall due to insufficient capacity of the rivers and drainage channels, and tide effects of the Jakarta Bay.   In 1920, a flood way called the   Banjir Canal (West Banjir Canal) was constructed to divert floods of the five (5) rivers located in the western part of the Study Area into the Bay of Jakarta.   The diverted rivers are:

- Krukut, Cideng, Kali Baru Barat/Ps.Minggu, Kali Bata and Ciliwung.

In 1983, the Cengkareng Flood way was also completed to divert the floods of the Mookervart, Angke, Pesanggrahan and Grogol Rivers. Further, the Government is preparing for construction of the East Banjir Canal to divert the floods of the Cipinang, Sunter, Buaran, Jati Kramat and Cakung Rivers into the Bay of Jakarta.

In the future, the upper catchments of all the rivers existing towards the east from the West Banjir Canal, except the Sentiong River, are to be cut off.   The inner area of the Banjir Canals (northern low-lying area encompassed by both Banjir Canals including the whole drainage basin of the Sentiong River) will cover 275 km^2.   The rivers

and channels in the inner areas of the both Banjir Canals will drain only local rainfall in rainy season. While in dry season, run-offs from the upper catchments of the Banjir Canals are expected to be introduced into the inner areas.

The name and location of the existing river and channel networks are shown in Fig.B.1.

The total drainage area of 651 km^2 of the Study Area is divided into 27 sub-drainage areas as shown in Fig.B.2 and also total basin map including outside of the Study Area is shown in Fig.B.3. The catchment area of each sub-basin is shown in Table B.1.

2. Hydrological Observation Networks

(1) Rainfall Station

There are 43 rain gauge stations in and around the Study Area, of which six (6) are of automatic type and the others are of manual type. The above six (6) automatic stations are :

- Tanjung Priok, Jakarta - BMG, Kemayoran, Tangerang Geofisika, Pondok Betung and Halim Perdanakusuma.

The most representative station is the Jakarta - BMG located in the center of the Study Area. It was installed in 1942.

Location of the above 43 existing rainfall stations is shown in Fig. B.4.

Available period of daily rainfall data at 43 stations and continuous rainfall data at six (6) stations are shown in Table B.2 and Table B.3 respectively.

(2) Water Level Gauging Station

There are nine (9) automatic water level gauging stations in the Study Area. The JICA Study Team installed five (5)

automatic stations in the course of this Study. Furthermore, the Jakarta Flood Control Office plans to install additional 12 automatic stations.

Location of the above 26 water level gauging stations are also shown in Fig. B.5.

3. Rainfall Intensity

A relationship between rainfall intensity and its duration in the Study Area has been studied in Master Plan for Drainage and Flood Control of Jakarta in 1973 as shown in Table B.4, and the intensity duration curve is presented in Fig. B.6. All the plans for flood control and drainage works in the Study Area have been made on the basis of this relationship, since the publication of this report.

For the purpose of confirmation of this relationship, rainfall data for several durations (e.g. 5, 10, 15, 30, 45 minutes and 1, 2, 3 hours) were collected at six (6) rainfall gauging stations. Only these six (6) stations have automatic rainfall recorders to record a hyetograph in addition to manual recorder to record daily rainfall. Their observation period are shown in Table B.3. Their location are shown in Fig. B.4.

The rainfall gauging station No.27 is located inside the Jakarta Observatory (BMG), at the center of Jakarta City as shown in Fig. B.4. The recorder at No. 27 is well managed directly by BMG and its data represents the average characteristics of rainfall in Jakarta Plain Area because of its location. Also, it has the longest series of observation among the six (6) stations. No.27 station is, then, selected as the most suitable rainfall station to grasp relationship between rainfall intensity and duration.

The rainfall observation period for each duration time mentioned above at No.27 station is 30 years from 1958 to 1962 and from 1964 to 1988. But the available period for annual maximum rainfall data is only 23 years. Seven (7) years data were taken out from the analysis because :

(1) The automatic recorder was not available on the day when the manual recorder recorded annual maximum daily rainfall.

or,

(2) Annual maximum 24 hour rainfall by automatic recorder was not confirmed by annual maximum daily rainfall of manual recorder.

The annual maximum rainfall of various duration time at No. 27 station for 23 years are presented in Table B.5.

The following typical three (3) methods are applied for the frequency analysis of the annual maximum rainfall data given in Table B.5.

(1) Iwai
(2) Pearson Type III
(3) Gumbel

The calculation results by the above methods for return periods in the range of 1.5- year to 25-year are shown in Table B.6 to Table B.8. The obtained rainfall-frequency curves of the above methods for various duration time are compared with the actual rainfall records as shown in Fig. B.7(1) to Fig. B.7(8).

As evident from the above figures, both the Iwai and Pearson methods show a better fitness than the Gumbel method. Their values are almost same.

Then, the relationship between rainfall intensity (mm/hour) and its duration for the above return periods are estimated , based on the result by Pearson Type III method. The result is presented in Table B.9.

The relationships between rainfall intensity and its duration for various return periods obtained in this Study is compared with that of the Master Plan Study by NEDECO in 1973 as shown below.

(Unit : mm/hr)

Duration	Return Period (year)							
(min.)	2		5		1 0		2 5	
	JICA	NEDECO	JICA	NEDECO	JICA	NEDECO	JICA	NEDECO
1 0	111	117	134	134	149	144	166	160
3 0	88	87	107	100	119	109	130	119
6 0	62	62	79	74	89	81	100	91
120	36	37	47	47	55	54	67	61
180	26	26	34	34	40	40	49	46

As evident from the above table, the difference in rainfall intensity between this Study and the Master Plan of 1973 is within several percents. Then, the relationship estimated in the Master Plan of 1973 can be used for the hydrological analysis in this Study as well.

The rainfall intensity-duration curves prepared in the Master Plan of 1973 are expressed by the following equations (See, Fig. B.6.).

For 2-year frequency ;

$$p = \frac{10490}{t^{1/0.90} + 76.3} \qquad \text{for } t \leq 180 \text{ min.}$$

$$p = \frac{12692}{t^{1/0.90} + 172.8} \qquad \text{for } t > 180 \text{ min.}$$

For 5-year frequency ;

$$p = \frac{7946}{t^{1/1.00} + 48.8} \qquad \text{for } t \leq 180 \text{ min.}$$

$$p = \frac{8756}{t^{1/1.00} + 93.5} \qquad \text{for } t > 180 \text{ min.}$$

For 10-year frequency ;

$$p = \frac{8571}{t^{1/1.02} + 50.1} \qquad \text{for } t \leq 180 \text{ min.}$$

$$p = \frac{8973}{t^{1/1.02} + 68.0} \qquad \text{for } t > 180 \text{ min.}$$

For 25-year frequency ;

$$p = \frac{6271}{t^{1/1.12} + 31.2} \qquad \text{for } t \leq 180 \text{ min.}$$

$$p = \frac{6090}{t^{1/1.12} + 31.5} \qquad \text{for } t > 180 \text{ min.}$$

where,

  p = Point rainfall intensity (mm/hr)

  t = Duration time (min.)

These equations of rainfall intensity-duration well coincide with the rainfall intensity-duration curves of 1973 as shown in Fig. B.8. The above equations will be used for digital simulation of flood run-off in this Study.

4   Flood Conditions

4.1   General

The rivers and channels causing flooding problems in the Study Area are classified into two (2) kinds by their functions, that is, (i) flood control river (ii) urban drainage channels. The classification of the rivers and channels for the two (2) kinds are described in details in Section 2.1 of Appendix E (Demarcation of Flood Control and Urban Drainage Systems) and depicted in Fig.E.1.

This Study covers only major urban drainage, excluding flood control and minor drainage. Hence, floods to be dealt within this Study are limited to the floods from the major urban drainage channels. Such floods are caused by local rainfall within the Study Area and high tide of the Bay of Jakarta. Flood waters from the flood control rivers and minor drainage channels are not considered.

Further, the following assumptions are made for establishing the existing flood conditions without project.

(1)   The East Banjir Canal (flood control project) which diverts floods from the upper catchments of the eastern Jakarta area directly into the Bay of Jakarta will be completed in the near future.   Therefore, the rivers and channels encompassed by the East Banjir Canal will collect only local rainfall in the downstream area.

(2)   Some major urban drainage projects are on-going by the Jakarta Flood Control Project (JFCP).   Among them, the Cakung Drain was completed in 1983.   The related pump drainage works are, however, still on-going.   Therefore, the existing flood conditions will be established under the conditions without the JCFP urban drainage projects.

4.2   Habitual Flood Conditions

The habitual floods are established in the following way.

(1)   A first draft of habitual flood map was made on the basis of available flood maps of 1987 and 1988.   These two (2) maps were prepared by DKI, containing all the flood affected areas in each of these two (2) years.   The first draft map was made to cover all the flood areas in these two (2) maps except the ones from flood control rivers.   The reasons why these two (2) maps are adopted for making the habitual flood map are:

(i)   They are the latest available data and represents actual hydraulic phenomenon under the present conditions of the Jakarta City.

(ii)   It is found from the annual maximum daily rainfall data that the year of 1987 or 1988 was not an year of abundant rainfall, instead an year of low rainfall.   So flood areas in these maps are considered to be the typical ones of normal scale.

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(2) The locations of the habitual flood areas of the first draft map are revised through interviews conducted at almost all of the Kecamatan Office. The frequency of the habitual flood is defined as the floods that occurs more than once a year. But in reality, it was found to be more than twice or three times a year, based on the interviews. Especially, some places in the northern part of the Jakarta City suffer from floods almost every day due to high tide. Hence, the frequency of floods in the habitual flood map seems to be in fact more than twice a year on average.

(3) The habitual flood map was finally constructed through the field survey for flood conditions such as location, duration and depth of inundation conducted based on the second draft map.

The habitual inundation areas are distributed at 79 locations as shown in Fig. B.9. The inundation area at each location is estimated as shown in Table B.10. They sum up to 3,835.3 ha or 5.9% of the Study Area.

The JICA Study Team conducted an interview survey on the flood conditions of habitual flood; inundation depth and duration, for the above 79 habitual flood areas in December 1989. The results of the survey are summarized in Table B.10.

The mean inundation depth of each flood area ranges from 0.10 m to 0.53 m and its mean duration time is in the range of one (1) hour and 48 hours. The mean inundation depth and duration time of each flood area are shown in Fig. B.10 and Fig. B.11.

4.3   Potential Flood Conditions

Large floods recorded in the past usually consist of a mixture of the floods from the flood control rivers and major urban drainage channels.

Separation of both flood components in the outside areas of the West Banjir Canal and East Banjir Canal is comparatively easy because the

boundaries between the flood control rivers and major urban drainage channels are distinct.

However, the separation is difficult in the inside areas of the on-going East Banjir Canal because the flood control rivers and major urban drainage channels are tangled.

No separation is necessary in the inside areas of the West Banjir Canal which was constructed in 1920. All the floods of these areas are ones from the major urban drainage channels.

The Study Area suffered from major floods on January 19/20 in 1977, January 18/19 in 1979 and December 24/25 in 1981. The flood maps of the above floods were prepared by DKI as shown in Fig. B.12 to Fig. B.14.

The rainfall of the 1979 flood concentrated in the inside areas of the Banjir Canals with a small distribution for the outside areas (See Table B.11). Therefore, the floods of January 18/19 in 1979 are considered mostly as the ones from the major urban drainage channels.

At the flood times of January 19/20, 1977 and December 24/25, 1981, high rainfall depths were recorded for the whole Study Area (See Table B.11). Those floods are considered as a combination of the floods both from the flood control rivers and major urban drainage channels.

Based on the above discussions, the 1979 flood map was employed as a base map in establishing the potential flood map for the whole Study Area. The 1977 and 1981 flood maps were utilized to supplement the 1979 flood map.

The potential flood map was prepared through the following manner.

(1)   The potential flood map for the areas other than the inner
       areas of the East Banjir Canal was prepared by overlaying the
       1977 and 1981 flood maps on the 1979 flood map to fill the
       shortage of flood area in the 1979 flood map. The shortage
       might have occurred mainly due to the deviation of the
       regional rainfall distribution.

       However, the potential flood map for the inside areas of the
       East Banjir Canal was represented by the 1979 flood map due to
       the reasons mentioned above.

(2)   The habitual flood areas, which were established in the
       previous Section 4.2, were incorporated into the potential
       flood map in case the habitual flood areas lie outside the
       potential flood areas.

(3)   The land use of the Study Area has undergone a considerable
       change since 1979, resulting in change of the flood conditions
       in many locations. Such changes in flood condition have
       been checked through the interviews at each Kecamatan
       Office.

(4)   The draft potential flood map drawn through the above
       processes was checked through the field survey.

The Potential flood areas are located at 96 places as shown in Fig.
B.15. The inundation area is estimated as shown in Table B.12. Its
total inundation area works out to 11,098.6 ha or 17.0 % of the Study
Area.

The inundation depth and duration of the potential flood areas were
estimated by the interview survey conducted along with that for
habitual flood areas. The results of the survey are shown in Table
B.12.

The mean inundation depth of each flood area ranges from 0.19 m to
2.02 m and its mean duration time is in the range of two (2) hours

and 238 hours. The mean inundation depth and duration time of each flood area are shown in Fig. B.16 and Fig. B.17 respectively.

Frequency of the above potential flood is estimated at approximately 40 years as described below.

The potential flood is prepared based on the above three (3) major floods : 1977, 1979 and 1981 floods. Return period of the potential flood is estimated based on basin average daily rainfalls of the Study Area during the days of these flooding.

In order to estimate the basin average daily rainfall, daily rainfall data were collected at all the stations in and around the Study Area. Their observation periods are shown in Table B.2 and their respective locations in Fig. B.4.

However, there are a lot of lack portions in the daily rainfall data, hence interpolation is necessary to supplement them. The premise conditions of interpolation are as follows.

(1) Estimation of correlation between rainfall stations is conducted based on the daily rainfall data with more than 30 mm/day on the same day.

(2) Interpolation is applied for those selected few rainfall stations where correlation of the data is relatively high, that is, correlation coefficient is more than 0.7.

(3) Only primary regression is applied to interpolate the daily rainfall data.

The basin average daily rainfall data is obtained from the interpolated daily rainfall data only in case that such interpolated data are available for more than 15 rainfall stations, which is 50% of total rainfall stations in the Study Area. In fact for certain years, such interpolated data are available for only a few stations, and the basin average rainfall calculated based on such a few data is not reliable.

As a result, the estimation of basin average annual maximum daily rainfall was made for 43 years between 1941 and 1988. These are shown in Table B.13 along with the total number of rainfall stations used for estimating the average.

The typical four (4) methods, (1) Iwai, (2) Pearson Type III, (3) Gumbel and (4) Hazen are applied to estimate return period of the potential floods by using the annual maximum basin average rainfall data.

The results of these calculations for return periods in the range of 1 to 200 years are shown in Table B.14. These are also presented in Fig. B.18(1) to Fig. B.18(4) with the annual maximum basin average rainfall data to select the most suitable method. As evident from the figures, the Hazen method shows a better fitness than the others, in particular in the range of high return period.

Hence, the return period of the potential flood is estimated based on the Hazen method. The basin average daily rainfall height in the Study Area during those days of the three (3) major floods and their return periods are shown below.

	Basin Average Daily Rainfall	Return Period
1977 Flood	143.5 mm/day	43 year
1979 Flood	119.9 mm/day	22 year
1981 Flood	109.8 mm/day	16 year

Since the potential flood covers the three (3) major floods, the maximum return period among them is determined to be of the potential flood. The return period of the potential flood is estimated at approximately 40 years.

5.   Flood Damage

5.1   Questionnaire Survey

A sampling questionnaire survey was carried out to collect the data
on flood damages to property in December 1989, along with the
sampling questionnaire survey for flood depth and duration
mentioned in the previous Section 4.

As property for the flood damage survey, houses, shops and factories
were selected.   The number of samples was 1,033 for houses, 204 for
shops and 120 for factories.   The number of samples for houses in
each inundation area was determined based on the population and
severity of inundation.   The number of samples by area number for
the potential flood year is shown in Table B.15.

Average inundation depth and duration by inundation area for the
habitual and potential floods are shown in Table B.10, Table B.12, Fig.
B.10, Fig. B.11, Fig. B.16 and Fig. B.17.

5.2   Relation between Inundation and Flood Damage

5.2.1   Relation between Inundation and Direct Flood Damages to Property

The relationships between inundation depths/durations and flood
damages for houses, shops and factories were analyzed based on the
answers from 1,357 samples.

On the assumptions that direct flood damages to houses, shops and
factories are the functions of inundation depths/durations, multiple
regression analysis was performed.   In formulating regression
equations, flood damage ratio was adopted as the dependent variable
instead of flood damages themselves.

The results are shown in Table B.16.   Three (3) regression equations
are formulated for each of the three (3) types of property.   The first
one is concerned with the habitual flood year, the second one with
the potential flood year, and the third one with the medium flood

year. Correlation coefficients are generally low because of the size of the samples. However, T-values show that all the regression equations are sufficiently dependable.

Average flood damage ratios for the habitual flood year range from 0.03% to 0.15% depending on the types of property. Likewise, average flood damage ratios for the potential flood year range from 1.89% to 4.13%.

Regarding a given type of property, say a house, average flood damage ratio is multiplied by the average property value of a house to get average flood damages per house. (Refer to Table B.17).

Damageable items for a house consist of the building and household possessions including furniture, household appliances/equipment, clothes, kitchen utensils/ware and vehicles. Damageable items for a shop are made up of the building(s), equipment/machines including display equipment, light & heat equipment and vehicles, and inventory, i.e. commodities on display and in stock. Likewise, damageable items for a factory comprise building(s), equipment/machines including manufacturing tools, equipment & machinery , light & heat equipment and vehicles, and inventory such as product, semi-product, materials and spare parts.

Average flood damages per property for the habitual flood year range from Rp.14,000 to Rp.53,000 depending on the types of property. Likewise, average flood damage per property for the potential flood year range from Rp. 296,000 to Rp. 2,959,000.

The three (3) regression equations for a given type of property in Table B.16 are incorporated into a single equation as shown in Table B.18. Newly formulated three (3) equations in Table B.18 express the ultimate quantitative relationships between inundation depths/durations and flood damage ratios for houses, shops and factories.

5.2.2 Relation between Inundation and Income Losses due to Shop Closure

When an area is inundated, it sometimes happens that people cannot commute and shops/factories are forced to stop operations. On the assumptions that the number of non-working (non-operating) days due to floods is the function of inundation depths/durations, multiple regression analysis was performed.

The results are shown in Table B.19. Three (3) regression equations are formulated for each item, the house (household) shop and factory. The first one is concerned with the habitual flood year, the second one with the potential flood year and the third one with the medium flood year. Correlation coefficients are generally low because of the size of samples. However, T-values show that all the regression equations are sufficiently dependable.

The average number of non-working days for the habitual flood year ranges from 0.21 to 1.05. Likewise, the average number of non-working days for the potential flood year range from 2.5 to 4.5.

Regarding a given type of establishment, say a shop, average non-working days are multiplied by the average daily gross profit of a shop to get average income loss per shop. (Refer to Table B.20). Average income losses for the habitual flood year are Rp.12,000 for a shop and Rp.114,000 for a factory. Likewise, average income losses for the potential flood year are Rp.92,000 for a shop and Rp.490,000 for a factory.

The three (3) regression equations for a given type of property in Table B.19 are incorporated into a single equation as shown in Table B.21. Newly formulated three (3) equations in Table B.21 express the ultimate quantitative relationships between inundation depths/durations and non-working days due to flooding of houses, shops and factories.

5.2.3 Relation between Inundation and Traffic damages

Once inundation hits the Study Area, vehicular traffic will be affected in various ways. Especially the driver may sometimes be forced to slow down vehicle operating speed and also it may take longer hours for him to reach destination due to slower vehicle operating speed and/or a roundabout route.

As a general rule, vehicle operating cost (VOC) per km will rise as vehicle operating speed is slowed down. That is to say, incremental VOC may arise during inundation due to higher VOC per km. At the same time, time cost will be incurred because additional hours required can be expressed in monetary terms.

Mathematically speaking, time cost per vehicle is the function of additional hours necessitated per vehicle per day, the number of inundated days in which traffic impediment is prevalent, the average number of passengers per vehicle and economic value per hour. Also, incremental VOC per vehicle is expressed as the function of additional VOC necessitated per vehicle per day and the number of inundated days in which traffic impediment is prevalent. (Refer to Table B.22).

A sampling questionnaire survey was carried out to obtain actual figures to use in the formulae in Table B.22. The number of samples was 100 each for households and companies. Those households and companies which own and utilize vehicles were selected. Vehicles were classified into four (4) types: passenger car, bus, truck and motor cycle.

Basic figures for estimation of traffic damages were worked out as a result of the questionnaire survey. (Refer to Table B.23.).

Mathematical formulae in Table B.22 and the figures in Table B.23 were combined to arrive at traffic damages per vehicle as presented in Table B.24. According to the Table B.24, traffic damages per vehicle are Rp.2,168 for the passenger car, Rp.8,313 for the bus, Rp.7,009 for the truck and Rp.360 for the motor cycle.

It was found out that traffic damages for the potential flood year are not discernibly different from those for the habitual flood year.

5.3   Habitual Flood Damage

Inundation depths/durations by inundation area for the habitual flood year (Table B.10), equations defining the relationships between inundation depths/durations and flood damage ratios for houses, shops and factories (Table B.18), average property value per house, shop and factory (Table B.17) and the number of the respective three (3) types of property by inundation area in 1988 and 2010 (Table B.25 and B.26) were combined together to arrive at direct flood damages to houses, shops and factories for 1988 and 2010. Direct flood damages to other types of property were also incorporated according to the method summarized in Table B.27.

In the same way, inundation depths/durations by inundation area for the habitual flood year, equations defining the relationships between inundation depths/durations and the number of non-working days due to flooding of shops and factories (Table B.21), the average daily gross profit per shop and factory (Table B.20) and the number of the respective two (2) types of establishments by inundation area in 1988 and 2010 were combined together to arrive at income losses due to shop closure for shops and factories for 1988 and 2010. Income losses for other types of establishments were also incorporated according to the method summarized in Table B.27.

Traffic damages per passenger car, bus, truck and motor cycle (Table B.24) and the estimated number of vehicles by inundation area in 1988 and 2010 (Table B.28 and B.29) were combined together to arrive at traffic damages for 1988 and 2010.

The number of vehicles by type for 2010 was estimated on the assumptions that it is a function of per capita GDP in D.K.I Jakarta. (ref. Table B.30 and B.31). The number of vehicles was distributed to each Kelurahan based on the existing road lengths in each Kelurahan. Then the number of vehicles in a Kelurahan was

assigned to an inundation area in proportion to the extent the inundation area occupies the Kelurahan.

It is assumed that a habitual flood occurs twice a year based on the past records. Thus flood damages calculated above are finally doubled.

The three (3) kinds of flood damages described above are added together, and the result is multiplied by 120% to reach the final total amount of flood damages. Twenty (20) percent addition is to incorporate all unspecified/unquantified flood damages including damages to roads and bridges.

Total habitual flood damages work out to Rp.13,845.1 million for 1988 and Rp.48,130.7 million for 2010. (Refer to Table B.32).

5.4   Potential Flood Damage

Potential flood damage is estimated essentially in the same manner as the habitual flood damage estimation is carried out in the above Section. Therefore, explanation is simplified to avoid redundancy.

In arriving at direct flood damages to houses, shops and factories for 1988 and 2010, inundation depths/durations by inundation area for the potential flood year (Table B.12) is employed instead of the corresponding data for the habitual flood year. Otherwise, exactly the same equations and data are used. Regarding direct flood damages to other types of property, the same method as in the preceding Section is employed.

Likewise, in arriving at income losses due to shop closure for shops and factories for 1988 to 2010, inundation depths/durations by inundation area for the potential flood year (Table B.12) is employed. Otherwise, exactly the same equations and data as in the preceding Section are used. Also, regarding income losses due to shop closure for other types of property, the same method as in the preceding Section is employed.