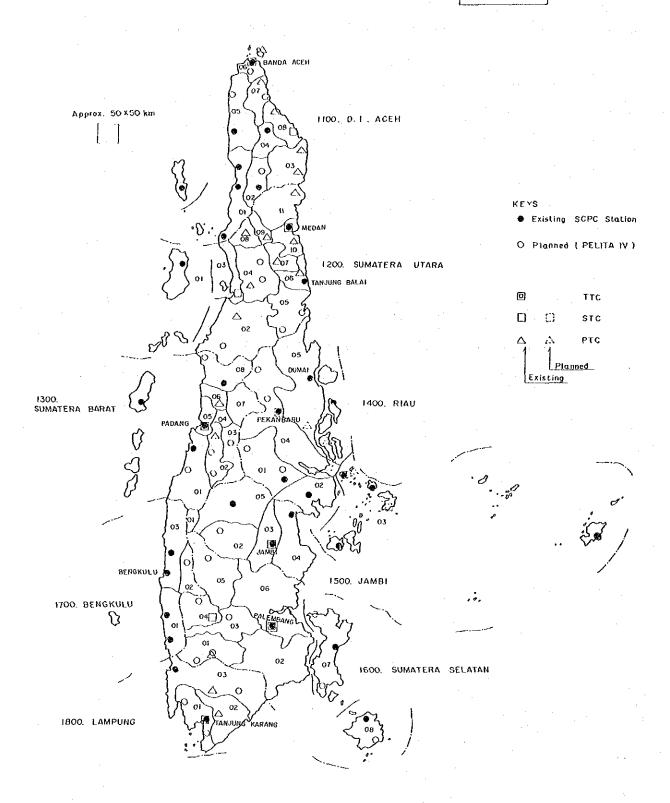
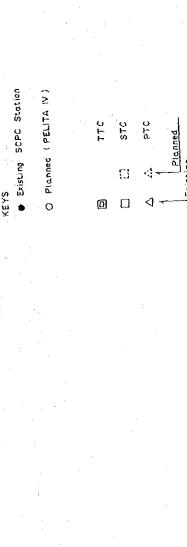
ANNEX 2-6-

Location Maps of SCPC Stations / superimposed on Terrestrial Network



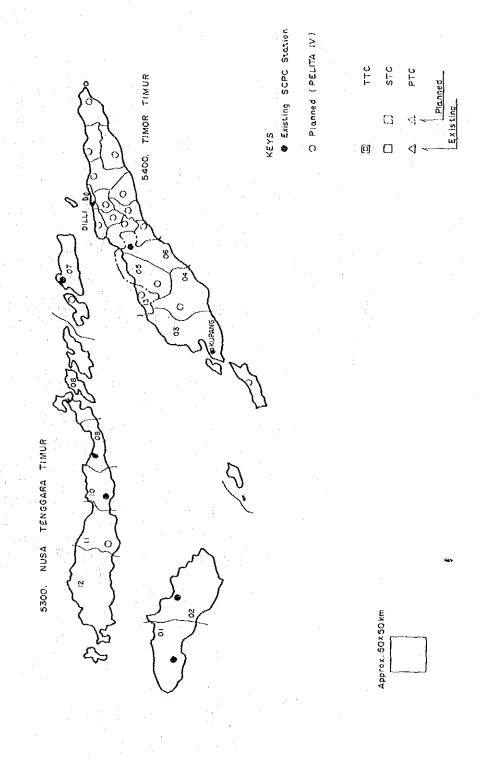
O Planned ( PELITA IV) 3500. JAWA TIMUR 3400. DI YOGYAKARTA 3300. JAWA TENGAH 3200. JAWA BARAT 3100. DKI JAKARTA

 $\sigma$ 



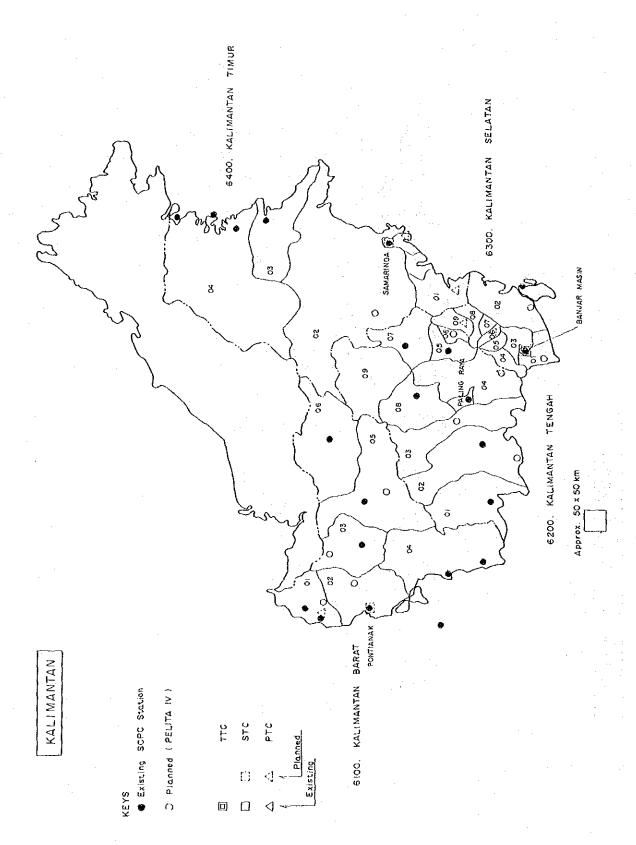
SIDO. BALI

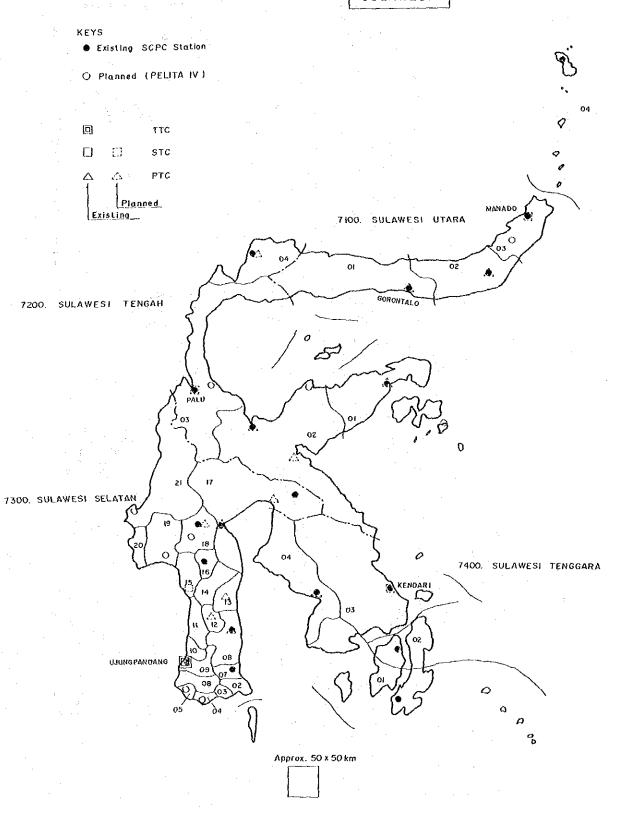
Approx. 50 x 50 km

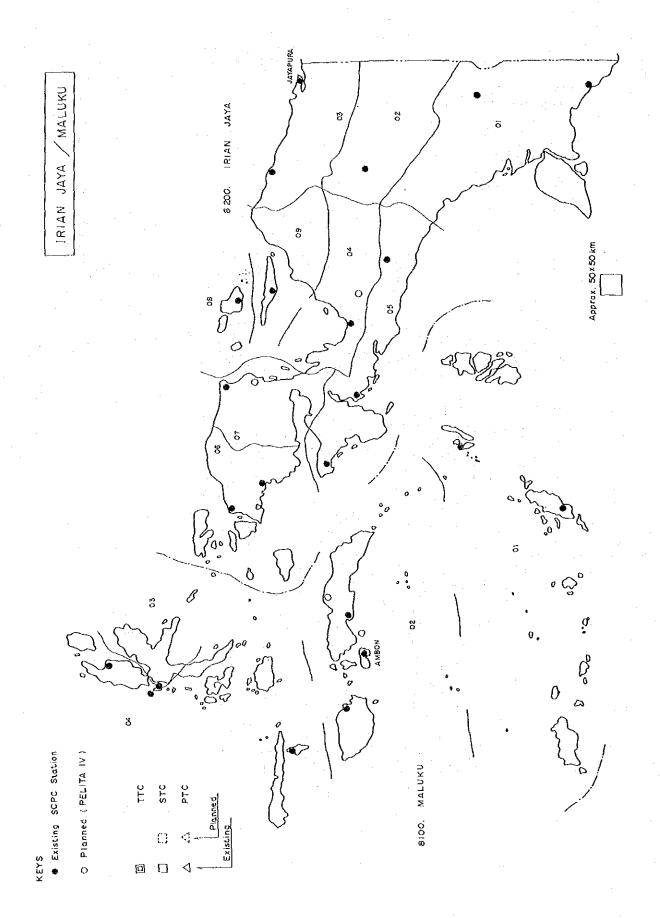


TIMOR TIMUR

TENGGARA TIMUR







ANNEX 2-6-4

Accessibilities of each KABUPATEN

t	1	ı	1											
		Road Condition		٥	*	*	*	٥	<b>a</b> .	*	*	٥	o	
Todioes	;	Access to PIC/IKK		×	×	٥	×	×	o	•	٥	0	0	
	,	Geo- graphical		130	100	75	65	135	40	09	87			
bacribers		Demand 1984/2000	15,907 41,646	3,914	940	8,074	1,311	4,350	3,175	2,050	13,728	· .		
Telephone Subscribers		ubscribers 1983	5,995	148	102	1,031	191	257	24	489	1,524	1,933	296	
tions	1 4	FDMA+TDMA S 1984/1989					-					108/138		
Satellite Compunications	No Se Modern	8CPC FD04cms NO. SCPC FDM. 1984/1989 198	71/161	9/27	3/14	, a	2/9	6/23	0/5.	5/0	ı	51/73		. 5/0
Satell	- 1 '	SCPC 1984/1989	8/13	3/3	1/2	0/0	1/1	2/3	1/0	0/1	0/0	1/1	0/0	1/0
		GROWIN POLE Industry		MEULABOH Rice Crop	TAKENGON	I.HOKSEUMAWE Industry	Pulp		Animel Husbandry	Fishery		BANDA ACEH Animal Hus.		JANTHOI
Demographic Data		/op. Densicy (/km <sup>2</sup> ) 1984/2000	62.9/94.2	33.2/48.4	51,1/83.2	52.7/82.9	32.0/35.8	47.9/72.9	80.7/120.6	91.6/129.1	147.8/226.9			
Demogr	,	Area (km²)	46,405	9,307	3,625	9,070	5,369	6,713	3,263	4,131	4,758	19	150	
		Population 1984/2000	2,920,992 4,371,500	309,325 450,265	185,228 301,634	477,957 751,898	171,997	321,573	263,170 393,435	378, 296 533, 323	$\frac{703,057}{1,079,761}$	131,145	28,678 48,087	
		Kabupacen/ Kodya	PROPINSI D.I. ACEH	KAB. ACEU SELATAN	KAB. ACEH TENGGARA	KAB. ACEH TIMUR	KAB. ACEH TENGAH	AGEH BARAT	KAB. ACEII BESAR	KAB. PIDIE	KAB. ACEN UTARA	71(06) KODYA BANDA ACEH (A)	72(06) KODYA SABANG (B)	
		Cod No.	1100	0 ,	03 ·	03	90	n S	90	0.0	08	71(06)	72(06)	

Subscribers	Access I II Demand Geo- 1984/2000 graphical PTC/IXK	37,5 <u>96</u> 98,923	2,379 75 x 5,616	4,457 11,772 108 o	1,580 52 o	3,847 72 × 8,395	$\frac{3.041}{8,572}$ 72 ×	4,618 13,809	4,330 50 o	$\frac{1,170}{2,508}$ 20 0	1011 2,035 55 o	7,762 20,586	4,184 75 o
relephone S	Cct. Existing DMA Subscribers 1989 1983	31,624	189	607		373	632	177	183	223	535	278	270
ite Communications	No. of Modems No. of Ccr SCPC FDMA+TDMA 1984/1989 1984/1989	82/167	3/6	5/0	•	0/10	01/0	1	•				1
Satellite	No. of St. SCPC 1984/1989	3/4	1/1	0/1	0/0	0/2	0/5	0/0	0/0	0/0	0/0	0/0	0/0
Demographic Data	Pop. Density GROWIH POLE (/km²) 1984/2000 Industry	140.9/199.9	107.5/146.5 Food Animal Hus.	87.3/119.9 Fishery Tourism	76.8/109.0	47.1/57.9 Plantation	85.7/129.4 Plantation	187.9/276.8 Food Fishery	171.0/234.8	78.4/111.3	167.5/228.1 Industry	304.1/384.2 Mining	134.6/201.5
Депод	Area (km <sup>2</sup> )	65,844	4,761	9,661	2,415	15,670	7,220	4,707	4,932	3,429	1,442	4,419	6,007
	Population 1984/2000	9,274,271 13,159,400	511,963	1,158,027	185,473 263,188	737,468 907,999	618,463	884,260 1,302,781	843,555 1,158,027	268,802	241,534	1,343,652	308,518
	Kabupaten/ Kodya	PROP. SUMATERA UTARA	KAB. NIAS	KAB. TAPANULI SELATAN	Kab. Tapanuli Tengah	KAB. TAPANULI UTARA	KAB. LABUIIAN BATU	KAB. ASAHAN	KAB. SIMALUNGUN	KAB, DAIRI	KAB. KARO	KAB. DELI SERDANG	KAB. LANGKAT
	Code	1200	10	05	03	40	90	90	0.5	80	60	10	11

{		,	Demographic Data		Satell	Satellite Communications		Telephone Subscribers	bscribers		Indices	
o. Kodya 1(01) KODYA SIBOLGA (A)			Pop. Density	SWYII POLE		Š.	No. of Ccc.		Access	1 000	II	III
71(01) KODYA SIBOLGA (A)	1984/2000	(km <sup>2</sup> )	198472000 I		1984/1989	1984/1989	1984/1989	1983	1984/2000	graphical	PTC/IKK	Koad Condition
	65,222 92,116	177	•		0/0	1		820	t .	ŧ	0	٥
72(05) KODYA TANJUNG BALAI (B)	46,391	51			1/1	3/10		430		ı	ø '	٥
73(04) KODYA KOTA SIANTAR (C)	159,450 210,550	vo			0/0	1		3,664	i	ı	٥	٥
74(10) KODYA TEBING TINGGI (D)	102,043	107			0/0	t		788	i		o	0
75(09) KODYA MEDAN (E)	1,530,123	789	1		1/1	96/92	240/870	20,924		i	٥	<b>o</b>
76(11) KODYA BINJAI (F)	83,736	51			0/0	,		937			o	0
				BACANSIA PIAPI STABAT DOLOC MARANGIR KUALA KEMBANG NUĎA PULAU RAKYAT	T 0/S 0/S 0/S 0/S 0/S 0/S 0/S 0/S							

Indices	I II III Geo- Access to Road	PTC/IKK	125 ×	87 ×	117 ×	41 ×	0 74	× 09	46 x	× 76	o	٥	*
Subscribers	Access Demand Geo-	9,739 17,517		1,307 2,359	1,607	1,090	1,627 2,605	1,337	1,476	1,392 2,820	ŧ	ı	. 1
Teluphone Su	Existing Subscribers	1983	120		87	141	155	168		130	5,088	920	ď
ations	S No. of Ccc.	1984/1989		*							24/84		
lite Communications	No. of Modems	1984/1989	3/14	0/10	\$/0		6/1	ŧ	ı	0/10	32/35	•	. 5/0
Sacellice	No. of St.	1984/1989	1/2	0/2	0/1	0/0	1/1	0/0	0/0	0/2	1/1	0/0	.,0
:	GROWTH POLE												
Demographic Data	Pop. Densiry (/km²)	53.3/67.2	58.8/74.0	52.7/63.7	40.4/54.1	243,1/293.3	71.0/74.2	205.3/244.9	79.0/85.9	41.0/54.7	1	1	
Demogr	Area	68,176	5,751	7,121	900,9	1,405	6,667	2,019	3,571	9,537	628	89	77
	Population	3,635,397	337,904 425,847	375,431	242,753 325,109	$\frac{341,598}{412,110}$	473,197	414,574	281,975 306,793	390,947	527,204 819,641	35,839	000
	Kabupaten/	PROP.	ISIR	KAB. SOLOK	KAB. SAWAH LUNTO/ SIJUNJUNG	KAB: TANAH DATAR	KAB. PADANG PARIAMAN	KAB. AGAM	KAB. LIMAPULUN KOTA	Xab. Pasaman	71(05) KODYA PADANG (A)	72(02) KODYA SOLOK (B)	200000
	Code	1300	01	02	03	70	92	90	07	80	71(05)	72(02)	7 0 0 0

		Demog	Demographic Data		Sucell	Sucellice Communications	ations	Telephone Subscribers	ubscribera		Indices	
Code Kabuparen/ No. Kodya	Population 1984/2000	Area (km <sup>2</sup> )	Pop. Densicy (/kπ <sup>2</sup> ) 1984/2000	GROWTH POLE Industry	No. of St. 1 SCPC 1984/1989	No. of Modems No. SCPC FDM 1984/1989 1984	s No. of Cct FDMA+TDMA 1984/1989	of Ccc. Existing 1+TDMA Subscribers 1/1989 1983	Access Demand 1984/2000	Ceo- graphical	Access to	111 Road Condition
74(04) KODYA PADANG PANJANG (D)	36,449	23			0/0	,		212	1		×	•
75(06) KODYA BUKIT TINGGI (E)	76,178 96,159	25,239	1		0/0	ŗ		1,242	ı		a	۰ .
76(07) KODYA PAYA KUMBUH (F)	86,616 119,054	88	•		0/0	ı		364	ŧ		*	o
				SUNCAI PENUN LUBUK BASUNG SUNCAI DAREN TALLI	0/5 0/5 0/5 0/5				e Leste			
								-				
	e e		·				e e					
								•				
												:
			:					:				
		÷.	j.		. !			•				

	:		Demog	Demographic Data		Satel	Satellite Communications	stions	Telephone Subscribers	abscribers		Indices	
				Pop. Density		No. of St.	No. of Modems No. of Ccc. Existing	No. of Cct.	Extering	Access	H	11	III
No.	Kabupaten/ Kodya	Population Area 1984/2000 (km <sup>2</sup> )		(/km <sup>2</sup> ) 1984/2000 Industry		SCPC 1984/1989	SCPC 1984/1989	FDMA+TDNA 1984/1989	. 1.	Demand 1984/2000	Geor graphical	Access to PTC/IKK	Road
1400	PROP. RIAU	2,456,206 3,847,900	94,032	26.1/40.9					5,403	9,905			
10	KAB. INDRAGIRI HULU	254,295 361,703	15,855	16.0/22.8	RENGAT Agriculture Industry	1/3	3/20		214	1,094	65	*	0
05	KAB. INDRAGIRI HILIR	465,474 781,124	11,606	40.1/67.3		ί/1	6/4		257	2,009	43	×	*
80	KAB. KEPULADAN RIAU	467,665	8,100	57.7/85.0	IG. PINANG Commerce Industry Tourism	7/7	65/85	(P. BATAM) 72/162	986	1,958	78	*	* Island
70	KAB. KAMPAR	402,468 619,512	28,291	14.2/21.9	P. PANCARAIAN Agriculture	4 0/2	0/10		116	3,867	100	×	*-
50	KAB. BENCKALIS	1,023,541	30,117	21.5/34.0	DUMAI Induscry Coumerce Mining	2/2	27/37		849	3,041	110	×	*
71(04	71(04) KODYA PEKAN BARU (A)	219,003 373,246	63	ı	PEKANBARU Agriculture	1/1	45/51	96/246	2,981	4 ·	ı	*	٥

.	8	1				·			
	III Road Condition		*	*	*	*	٥	0	٠
Indices	Access to PTC/IKK		×	×	Q.	×	×	0	
	I Geo- graphical							1	
bscribers	Access Demand 1984/2000	5,180	1,588	2,010	1,776	1,243	$\frac{1,109}{2,392}$	ı.	
Telephone Subscribers	Existing Subscribers 1983	3,414	476			20	0	2,918	
clons	No. of Cct. FDMA+TDMA S 1984/1989								
Satellite Communications	No. of St. No. of Modems SCPC SCPC 1984/1989 1984/1989		i	5/0	1 -	4/22	6/4	23/39	1/9 0/5
Satel	No. of St. SCPC 1984/1989		0/0 le	0/1	0/0	1/1	1/1	1/1	1/1 0/1
	Pop. Density GROWTH POLE (/km²) 1984/2000 Industry		SUNCAL PENUIL Food, Vegetable	BANGKO Rubber, Food	Industry	KUAIA TUNGKAL Food, Fishery	MUARA BUNGO Rubber	JAMBI Induscry	SEKAYU NUARA TEBO
Demographic Data	Pop. Density (/km <sup>2</sup> ) 1984/2000	31.4/53.7	62.8/95.0	18.3/33.0	22.8/37.7	32.4/59.4	22.5/40.8	. 1	
Demog	Area (km <sup>2</sup> )	53,435	4,200	14,200	11,200	10,200	13,500	135	
	Population area $1984/2000$ (km <sup>2</sup> )	1,677,692	263,862 399,055	259,855 467,957	254,917 422,022	330,640 605,760	304,244 551,213	260,125 424,893	- 1
	Kabupaten/ Kodya	PROP. JAMBI	KAB. KERINCI	KAB: SARKO	KAB. BATANG HARI	KAB. TANJUNG JABUNG	KAB. BUNGO TEBO	71(03) KODYA JAMBI (A)	
	Code No.	1500	01	02	03	70	50	71(03)	

			III Road Condition		*	*	o	.0	* <b>k</b>	*	o Island	o Island	·ø	•	
		Indices	Access to PTC/IKK		•	. <b>×</b>	×	•	×	×	×	×	ø	×	
			Geo- graphical		85	659	98	88	80	165	150	70	•		
		Subscribers	Access Demand 1984/2000	23,307 62,118	5,239	3,603	5,539	2,808	5,772	3,804 11,128	2,326	1, 831	ı	ι	
		Telephone Su	Existing Subscribers 1983	8,764	563	168	345	856	615	,en	0 M.1	125	5,178	608	
		tions	No. of Cct. FUNA+1DMA 1984/1989						÷		0/30 Only for PLM		72/372		
		lice Communications	No. of Modems No. SCPC FDM 1984/1989 198		0/10	•	· ·	5/0	5/0		65/70	6/7	52/131	: . •	0/5 0/5 0/5
		Satellite	No. of St. SCPC 1984/1989		0/2	0/0	0/0	0/1	0/1	0/0	1/2	1/1	1/1	0/0	ING
			GROWTH POLE Industry		BATURAJA Rice Crop	KAYU AGUNG	<u>LAHAT</u> Coffee	Vegetable	LUBUK LINGGAU Coffee, Veg-		BELITUNG		PALEMBANG		NANGGAR TOBOALI PENDOPO LINTANG
		Demographic Data	Pop. Density (/km <sup>2</sup> ) 1984/2000	51.9/83.1	66.5/111.5	24.6/38.0	48.3/69.1	114.6/179.4	32.5/54.7	41.9/70.7	43.4/67.7	23.2/37.1		ı .	
:		Депов	Area (km²)	101,591	13,169	25,775	6,899	4,798	13,117	16,120	10,470	7,969	263	11	
			Population 1984/2000	5,277,565 8,439,900	1,468,543	635,235 979,028	478,164 683,632	549,638 860,870	425,648	1,139,387	454,285 708,952	185,117 295,397	1,426,343	100,755 160,358	
	:		Kabupaten/ Kodya	PROP. SUMATERA SELATAN	KAB. OGAN KOMERING ULU	KAB. OGAN KOMERING ILIR	KAB. LEMATANG 1LIR OGAN TENGAH	KAB. LAHAT	KAB. MUSIRAWAS	KAB. MUSI BANYU ASIN	KAB. BANGKA	KAB. BELITUNG	71(06) KODYA PALEMBANG (A)	72(07) KODYA PANGKAL PINANG (B)	
	:		Code No.	1600	01	05	03	70	90	90	07	08	71(06)	72(07)	

ļ		uо	)											: 3
		Road		. 0	٥	٥	٥			*	*	*	٥	
Yndices	II	Access to PTC/IKK		×	×	×	*			•	٥	×	٥	
		graphical							٠	107	80	145		
scribers		1984/2000 g	2,804 5,620	1,848	$\frac{1,131}{2,329}$	1,443	i ·	·	17,782 44,362	17,077	7,205	3,500	· •	
Telephone Subscribers	Existing Subscribers		1,521	. 57	505	O	. 656		5,702	815	538	368	3,981	
rions		1984/1989												
Satellice Communications	No. of Modens	1984/1989	-	6/18	5/0	3/9	46/53			0/10	•	1/14	29/25	
Satell	1	1984/1989		2/2	1/0	1/1	1/1			0/5	0/0	1/2	1/1	0/5 0/5 0/5
							·			B. IAMPUNG Agriculture	METRO Agriculture	KOTABUNI Agriculture		PRING SEWU BANDAR JAYA WAY JEPARA
Demographic Data	Pop. Density GROWIN POLE	1984/2000	88.5/159.2	82.9/144.9	128.8/230.2	51.7/95.2			164.1/359.6	327.3/708.0 B. IAMPUNG Agricultur	241.0/540.0 METRO Agrica	54.8/119.7		
Demogr	, [	(ka <sub>1</sub> <sup>2</sup> )	10,225	3,372	2,659	4,004	190		34,857	6,621	8,913	19,271	52	
	Population	1984/2000	1,628,200	279,563 488,460	342,384 612,203	380,999	76,096 146,538		5,720,948 12,533,400	2,167,178	2,148,172 4,812,826	1,055,726	349,511	
	Kabupaten/	Kodya	PROP, BENGKULU	KAB. BENGKULU SELATAN	KAB. REJANG LEBONG	KAB. BENGKULU UTARA	KODYA BENGKULU (A)		PROP. LAMPUNG	Kab. Lampung Selatan	KAB. LAMPUNG TENGAH	KAB. LAMPUNG UTARA	71(01) KODYA TAMJUNG KARANG (A)	
	Code	No.	1700	01	0.5	03	71(03) KODYA BENGKI		1800	0.1	05	60	(10)12	

	1												
	•		Demogr	Demographic Data	-	Sacell	Sacellice Communications	icions	Telephone Subscribers	bscribers		Indices	
Kabupaten/ Kodya		Population Area 1984/2000 (km <sup>2</sup>		Pop. Density (/km <sup>2</sup> ) 1984/2000	GROWTH POLE Industry	No. of St. SCPC 1984/1989	No. of St. No. of Modems No. of Cct. Existing SCPC SCPC SCPC FDMA+TDMA Subscribe 1984/1989 1984/1989 1984/1989 1983	No. of Ccr FDMA+TDMA 1984/1989	Existing Subscribers 1983	Access Demand 1984/2000	Geo- graphical	II Access to PTC/IKK	III Road Condition
DKI. JAKARTA		7,591,157 2,795,400	658			1/11)	257/429	845/ 2,550	162,635				
JAKARTA SELATAN		1,771,824	147	<b>.</b>					35,080	1	<b>t</b>	o	•
JAKARTA TIMUR	Him	,851,456 1,825,825	185						21,859	1 .	* •	<b>o</b>	•
JAKARTA PUSAT		1,414,010 2,200,809	\$6	ı.					69,482	1	.1	o	o
JAKARTA BARAT		1,502,549 2,814,988	131	ı					14,649	1	ı	٥	. <b>O</b>
JAKARTA UTARA		1,317,926	139	1					21,565		. 1	٥	•
		V.		1): JAKARATA JAKARTA JAKARTA	A/GAMBIR								

	III	Road Condicton		•	*	*	*	0	*	, <b>*</b>	*	*	*	*	*
Indices	II	PIC/IKK C		٥	٥	o	O	o	٥	o ·		×		٥	
	1	Geo- graphical		63	63	38	75	78	37	20	20	55	32	0e .	25
Subscribers	Accesa	Demand 1984/2000	120,491 361,764	2,961	2,864 7,018	13,876	$\frac{7.530}{22,355}$	6,654 18,848	15,150 53,813	$\frac{7,243}{21,617}$	7,938 24,065	16,587	3,230	5,897 16,845	3,616 9,221
Telephone S	Existing	Subscribers 1983	45,122	388	603	492	2,217	1,083	1,110	1,135	207	3,305	261	224	273
tions		FDMA+TDMA 1984/1989					٠								
te Communications	No. of Modems	SCPC 1984/1989	-		•	77/(1/2	5/0	ı	22)/2	\$/0	ı	•		. 1	•
Satellite	1 .	SCPC 1984/1989		0/0	0/0	1/1	0/1	0/0	1/1	4/0	0/0	0/0	0/0	0/0	0/0
Data	Pop. Densicy GROWTH POLE	(/km²) 1984/2000 Industry		298.7/406.7 CILEGON Fishery	240.9/326.6 Tourism	79.8/ 1,270.6 Industry	394.5/535.6 Plantation	429,6/571.4 Commerce	67.8/ 1,211.1	556.8/756.7	553.9/752.6 Port	556.1/704.7	1/ 56.7 Industry	1.4/ 35.3	38.9/ 1,226.4
Demographic Data				2,618 298.3	3,134 240.9	3,126 879.8/ 1,270	4,281 394.	3,583 429.	3,381 867.8/ 1,211	2,976 556.	3,210 553.	2,673 556.	1,085 806.1/	1,109 1,311.4/	1,035 938.9/ 1,226.
٥	1	(km <sup>2</sup> )		2,6	ຕົ		4	ຕິ			์	,			
	Population	1984/2000	30,234,818 40,946,800	1,064,617	$\frac{755,109}{1,023,670}$	2,750,407	1,688,780	1,539,219	2,934,153	1,656,951	1,777,987	1,883,553	1,146,510	1,924,500	1,269,351
	Kabupaten/	Kodya	PROP. JAWA BARAT	KAB. PANDEGLANG	KAB. Lebak	KAB. BOGOR	KAB. SUKABUMI	KAB. CIANJUR	KAB. BANDUNG	KAB. Garut	KAB. TASIK MALAYA	KAB. CIAMIS	KAB. Kuningan	KAB. CIREBON	kab. Majalencka
	Code	No.	3200	0.	03	03	40	92	90	20	80	60	01	11	12

98	III Co Road K Condition	*	*	Ó	· •	•	*	•	0	•	0	•	o
Indices	Access D PTC/IKK	o	o	×	×	×	*	×	0	<b>o</b>	<b>o</b>	o	o
	Ceo- graphical	25	25	32	1.9	34	23	20	30		1	1 .	•
Subscribers	Access Demand 1984/2000	2,897 6,892	5,437 14,952	4,681	1,784	5,539 15,402	4,917	7,202 23,108	13,433		1.		, I
Telephone S	Sxisting Subscribers 1983	344	521		808	1,706	I,		1,347	6,328		18,464	4,305
icions	FDNA+TDNA 1984/1989											72/582	
ite Communications	No. of Modems SCPC 1984/1989	ì		1.	•.	1	ì	)	1	1		31/78	i
Sarelline	No. of St. 1 SCPC 1984/1989	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0
	GROWTH POLE Industry			CIKAMPEK Agriculture							SUKABUMI	BANDUNG	CIREGON
Demographic Data	Pop. Densicy (/km <sup>2</sup> ) 1984/2000	514.9/668.6	631.5/831.7	601.3/794.3	513.6/698.2	793.0/ 1,049.9	803.2/	1,226.5/	654,7/884.9	· .	ı	1	1
Demogra	Area (km <sup>2</sup> )	1,531	2,117	1,959	997	1,716	1,498	1,379	1,851	22	14	86	<b>†</b>
	Population 1984/2000	1,023,670	1,336,781	1,177,995	512,065 696,096	1,360,862	1,243,571	1,691,312	1,211,845	272,185 368,521	120,979 163,787	1,604,116	242,785 327,574
:	Kabupacen/ Kodya	KAB. SUNEDANG	KAB. INDRAMAYU	KAB. SUBANG	KAB. PURWAKARTA	Kab. Karawang	KAB. BEKASI	Kab. Tangerang	Kab. Serang	KODYA BOGOR	72(04) KODYA SUKABUMI (B)	73(06) KODYA BANDUNG (C)	74(11) KODYA GIREBON (D)
	Code No.	13	14	15	16	17	18	19	20	71(03)	72(04)	73(06)	74(11)

1	a	1												_
	111 Road Condition		*.	*	k	*	*	*	*	o	* .	*	k	*
Indices	Access to		o	o	o	o	٥	o ·	o o	. <b>o</b>	×	٥	0	. 0
	I Geo- graphical		8	25	15	30	23	38	22	23	0 7	16	56	37
Subscribers	Access Demand 1984/2000	72,353	11,959	3,873	1,965	2,009	3,183 7,105	2,084	3,871	2,898 6,579	2,398 5,171	3,243	3,800	2,896 5,946
Telephone Su	Extering Subscribers 1983	38,093	1,001	1,635	283	583	691	524		187	120	859	86	183
cions	No. of Ccc. FDMA+TDNA 1984/1989													
Satellite Communications	No. of Modems SCPC 1984/1989		3/29	t	١.		•	1	ı	ı	ı	1	t	•
Satell	No. of St. SCPC 1984/1989	7	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	CROWTH POLE Induscry		CILACAP Heavy Ind.	Agriculture	p 0 0 84			Industry	Commerce	Tourism	Bacik	Industry	Tourism	Plantation
Demographic Data	Pop. Density (/km <sup>2</sup> ) 1984/2000		606.1/746.9	982.5/ 1,139.2	912.0/ 1,037.6	617.2/728.0	785.7/882.0	651.4/741.0	665.4/791.3	866.9/ 1,000.9	751.7/863.6	1,613.9/	1,317.0/	505.1/546.3
Demogr	Area (km <sup>2</sup> )		2,338	1,310	765	1,134	1,368	1,114	596	1,142	1,103	697	486	1,918
	Population 1984/2000	26,780,706 31,750,900	1,416,969	1,287,069	697, 654 793, 773	699,862	1,074,858	725,643	640,756	1,143,032	829,156 952,527	1,301,787	640,072	1,047,780
	Kabupacen/ Kodya	PROP. JAWA TENGAH	KAB. CILACAP	KAB. BANYUMAS	KAB. PURBALINGGA	KAB. BANJAR NEGARA	KAB. KEBUNEN	KAB. PURWOREJO	KAB. WONOSOBO	Kab. Magelang	KAB. BOYOLALI	KAB. Klaten	Kab. Sukoharjo	KAB. WONOGIRI
	Code No.	3300	01	0.5	03	70	50	0.0	07	80	60	10	<b>T</b> .	12

Demographic Data	phic Data	:	Sacellice	ice Communications	ations	Telephone Su	Subscribers		Indices	
Pop. Density <u>GROWT</u> (/km <sup>2</sup> ) 1984/2000 Indu	ot	ROWTH POLE Industry	No. of St. SCPC 1984/1989	No. of Modems SCPC 1984/1989	No. of Cct. FDMA+TDMA 1984/1989	Existing Subscribers 1983	Access Demand 1984/2000	Geo- graphical	Access to PTC/IKK	Road Condition
430.2/510.7	430.2/510.7		0/0	1		217	1,875 3,922	38	· o	×
802.0/983.3	802.0/983.3		0/0	ı		213	2,307	20	×	×
531.9/646.7	531.9/646.7		0/0	ı		373	3,245	32	o	*
284.6/326.7 KAD Tob	≈t∺	ADUS	0/0	1		813	2,264	30	o	a
462.8/552.2 Mining		ıng	0/0	I		356	1,383	36	0	0
608.3/723.3 Nome		Nome Industry	0/0 .y			682	3,128	32	٥	٥
1,387.1/ 1,720.5	1,387.1/ 1,720.5		0/0			941	3,389	13	o	ŧ
721.7/858.1	721.7/858.1		0/1	5/0		276	2,152	22	<b>o</b> .	٥
678.6/807.2	578.6/807.2		0/0			217	2,075	19	×	*
721.7/819.0	721.7/819.0		0/0	t		333	2,074	20	0	×
706.8/876.7	706.8/876.7		0/0	1	·	727	3,652	20	0	×
849.1/973.1	849.1/973.1		0/0	•		620	2,133	30	×	*
747.2/886.7	1		0/0	ı		147	1 584	32	o	×

Safellite Communications		Demographic Data Sarellite
No. of St. No. of Modeus SCPC SCPC 1984/1989 1984/1989	No. of St. SCPC 1984/1989	COWTH POLE SOPC SCROLAGERY 1984/1989
0/0	Agriculture	
0/0	0/0	1,047 947.8/ 0/0
0/0	0/0	861 1,397.7/ 0/0 1,622.6
0/0		1,677 797.9/946.7 0/0
0/0	0/0	17 - 0/0
0/0	SURAKARTA 0/0	
0/0	0/0	19 - 6/0
1/1	SEMARANG 1/1	
0/0	PEKALONGAN 0/0	
0/0	0/0	13 - 0/0

	:		Депов	Demographic Data	***************************************	Satell	Satellite Communications	cions	Telephone Subscribers	bscribers		Indices	
Code No.	Kabupaten/ Kodya	Population Area 1984/2000 (km <sup>2</sup> )	Area (km <sup>2</sup> )	Pop. Density (/km <sup>2</sup> ) 1984/2000	OROWTH POLE Industry	No. of St. 1 SCPC 1984/1989	No. of St. No. of Modems No. of Cct. Existing SCPC SCPC FDMA+TDMA Subscribe 1984/1989 1984/1989 1984	: No. of Cc.c. FDMA+TDMA 1984/1989	Existing Subscribers 1983	Access Demand 1984/2000	Geo- graphical	11 Access to PTC/IKK	III Road Condicion
3400	D.I. YOCYAKARTA	2,940,318	8,020	366.6/472.3		1,4				16,165			
G	KAB, KULON PROGO	401,283	244	737.7/905.1		0/0	š			$\frac{1,150}{2,143}$	20	×	å
0.50	KAB. BANTUL	683,708 897,638	476	1,436.4/		0/0				1,944	17	×	o
୍ଟ	KAB, GUNUNG KIDUL	700,827 871,125	6,437	108.9/135.3		0/0				2,298	7	×	Ō
20	KAB. SLEMAN	728,163	530	1,373.9/		0/0	i			2,085	22	ò	٥
71(04	71(04) KODYA YOGYAKARTA	426,316	33			1/1	3/107	60/240	3,812	ı	·.	•	o
	( <del>8</del> )									ŧ			

		nd noi:													
	III	Road Condition		*	٥.	٥	*	*	o	0	٥	*	*	*	• 0
Indices	11	Access to PTC/IKK		×	0	*	o	٥	o	o O	٥	٥	0	٥	<b>x</b>
	н	Geo- graphical		28	23	37	24	22	32	97	32	38	53	30	38
Subscribers	Access	Demand 1984/2000	104,523 278,450	3,172	2,9196,164	2,042	3,134	$\frac{4}{10,731}$	5,094 14,613	10,114	3,413	8,828	6,298	2,274	1,956
Telephone Si	. Existing	Subscribers 1983	75,924	167	548	146	904	222	3,116	1,575	1,047	2,399	1,785	836	6,250
ations		FDMA+11DMA 1984/1989													,
ite Communications	No. of Modens	SCPC 1984/1989		5/0	t	1	ı		ı	ı		1	1		1
Sacellice		SCPC 1984/1989		1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	GROWTH POLE	Industry		Mining	Agriculture	Plantation				Food Process	Commerce	JEMBER Plantacion	BANYUWANG		. :
Demographic Daca		(/km <sup>2</sup> ) 1984/2000		360.4/377.7	555.2/587.3	535.3/641.9	798.5/923.0	678.6/790.9	926.9/	696.5/852.1	721.1/868.1	687.5/800.4 JENBER Plantetion	577.8/696.2	584.0/669.6	353.0/401.2
Demogr		(km <sup>2</sup> )		1,376	1,454	1,099	1,086	1,596	1,400	3,137	1,283	2,876	2,613	1,109	1,573
	Population	1	30,850,905 37,127,100	495,921 519,779	807,231 853,923	588,256 705,415	1,002,432	1,083,069	$\frac{1,297,705}{1,559,338}$	2,184,790 2,673,151	1,113,813	1,977,199	1,509,698	647,699	555,242 631,161
	Kabupaten/	Kodya	PROF. JAWA TIMUR	KAB. PACITAN	KAB. PONOROGO	KAB. TRENGGALEK	KAB. Tulung agung	KAB. BLITAR	KAB. KEDIRI	KAB. MALANG	Kab. Lumajang	Kab. Jember	KAB. BANYUWANGI	KAB. BONDOWOSO	KAB. SITUBONDO
	9	700	3500	01	02	03	40	50	90	02	80	60	10	11	12

			,	•											
	111	Road	ł	*	* .	*	¥	, <b>*</b>	*	*	*	٥	٥	o	0
Indices	II	Access to PIC/IKK	0	•	×	0	×	×	<b>o</b> .	×	×	0	o		o
	I	Geo- graphical	35	90	16	30	22	20	18	13	29	73	47	30	45
Subscribers	Access	Demand 1984/2000	3,446	4,225 12,107	3,317 9,683	2, 595 6, 830	10,194	$\frac{3,403}{8,912}$	2,387 5,402	2, 132 5, 021	2,912	$\frac{4,181}{11,267}$	3,471 8,998	4,279	2,654 5,421
lelephone Su	Existing	Subacribers 1983		1,042	129	152	696	499		269	233	726	392	333	
cions	No. of Cet.	FDMA+TDMA 1984/1989									•				
ite Communications	No. of Modems No.	SCPC 1984/1989	. •	ŧ			,	1		. 1	ı	r	1	1	:
 Sacellice		SCPC 1984/1989	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	GROWIN POLE			Industry	Commerce	Services	•					TUBAN Agriculture	Commerce		
Demographic Daca		(/km <sup>2</sup> ) 1984/2000	568.3/662.6	831.3/	1,452.6/	968.0/ 1,211.7	1,045.3/	786.3/944.7	635.8/730.7	778.7/929.3	578.2/694.0	475.9/575.2	480.1/578.3	617.9/743.8	598.3/620.3
Demogr	Area	(km <sup>2</sup> )	1,625	1,332	634	766	946	1,179	1,067	799	1,391	2,259	1,926	1,797	1,257
	Population	1984/2000	1,076,686	1,107,266	920,966 1,188,067	741,489 928,178	988,903 1,225,194	1,113,813	678,383 779,669	622,223 742,542	804,305 965,305	1,299,449	1,113,813	1,110,454	746,352
	Kabuparen/	Kodya	Kab. Probolinggo	KAB. Pasuruan	KAB. SIDOARJO	KAB. MOJOKERTO	Kab. Jonbang	Kab. nganjuk	Kab. Madiun	Kab. Magetan	XAB. NGAWI	Kab. Bojonegoro	KAB. TUBAN	KAB. LANONGAN	KAB. GRESIK (SURABYAY)
	Code	No.	13	14	15	16	17	18	19	70	23	22	23	24	25

		Demog	Demographic Data		1 1		9 9 9	, ,	Subscribers		Indices	
Population Area Pop. (/ 1984/2000 (km²) 198		Pop.		GROWTH POLE Industry	No. of St. SCPC 1984/1989	No. of Modems SCPC 1984/1989	No. of Cce. FUMA+TUMA 1984/1989	Existing Subscribers 1983	Access Demand 1984/2000	Geo- graphical	Access to PIC/IKK	III Road Condition
713,132 816,796 10,796		566.07	648.3		0/0	1		sóı	2,529	35	٥	*
621,346 742,542 1,234 503.5/601.7		503.5/6		SUMENEP Animal Hus.	0/0			164	2,171 5,069	38	×	¥
558,173 705,415 705,415		720.2/9		Fishery, Salt	0/0	·4		961	1,899	31	٥	٥
896,455 2,397 374.0/418.2 1,002,432		374.0/4	18.2		0/0	1		372	3,376	84	×	*
219,537 297,017		1		KEDIRI				1,493	, 1	ı	o	0
9 <u>0,552</u> 111,381								952			9	٥
<u>552,407</u> 78 - 705,415		ı						6,572			o	0
95,099 61 - 148,508		ı						963			o .	<b>o</b> .
118,632 111,381		1							1		0	9
63.772 74,254		1						1,615	Ĭ		0	0
155,219 185,636	25 -	. •						1,957	٠.		0	0
2,254,342 3,118,676	384				11//1	120/216	408/1,530 36,635	36,635	<b>1</b>	i i ș	٥	,o
		•		KANGEAN		5/0			-			
				1) SURABAYA	1 + SURABAXA	A 2					-	

	* .		Demogr	Demographic Data		Satellite	lite Communications	cions	Telephone Su	Subscribers		Indices	
				Pop. Density		No. of St.	No. of Modems	No. of Cct	Existing	Accesa	I	11	III
Code.	Kabupaten/ Kodya	Population 1984/2000	Area (km²)	1984/2000	GROWTH POLE Industry	2PC 4/1989	ശരം	FDMA+TDMA 1984/1989	Subscribers 1983	Demand 1984/2000	Geo- graphical	Access to PTC/IKK	Road
5100	PROPINSI BALI	2,619,668 3,303,300	4,829	542.5/684.1				·	189'9	20,701	:		
10	Kab. Jembrana	221,605 293,994	572	387.4/514.0 JENBRANA Tourism	JEMBRANA Tourism	0/0	1		235	1,614	55	×	۰
02	KAB. Tabanan	359,832 432,732	796	452.1/543.6	TABANAN Fishery	0/0	1		344	1,294	29	×	٥
03	KAB. BADUNG	547,061 736,636	384	1,424.6/	BADUNG Graft	1/1	12/149	84/294	4,720	5,213	26	٥	٥
2	KAB. GIANJAR	322,712 396,396	417	773.9/950.6	GIANJAR	0/0	1		6 8	$\frac{1}{2}, \frac{131}{304}$	13	×	٥
05	KAB. KLUNGKUNG	155,196 178,378	315	492.7/566.3	KI, UNCKUNG Agriculture	0/0	1		189	<u>560</u> 908	. 5	×	<b>o</b> ;
90	KAB. HANGLI	168,388	453	371.7/452.1 BANGLI Tourism	BANGLI Tourism	1/0	5/0		0	1,065	32	×	. •
	KAB. KARANG ASEM	320,199	808	395.8/465.5 KARANG Craft	KARANG ASEM Craft	0/0	·			2,196	30	×	O
80	KAB. BULELENG	524,533 683,783	971	540.2/704.2 Fishery Tourism	Fishery Tourism	0/0	t		1,064	1,950	. 40	×	٥
5200	PROPINSI NUSA TENGGARA BARAT	2,998,066 4,074,100	20,160	147.8/202.1					4,845	14,480			
01	KAB. Lonbok barat	1,002,229	1,641	441.6/610.7	441.6/610.7 MATARAM Industry (Transmigra- tion)	0/0			2,727	3,554	28	٥	<b>o</b>
02	KAB. LONBOK TENGAH	633,054	1,428	44.2/596,3	9 2 2 3	0/1	0/5		182	1,556	11	×	0

									***************************************				
			Demogr	Demographic Data		Sarell	Sarellire Communications	ions	Telephone Subscribers	becribers		Indices	
Code No.	Kabupaten/ Kodya	Population Area 1984/2000 (km <sup>2</sup>		Pop. Density GROWIN POLE (/km²) 1984/2000 Industry		No. of St. 1 SCPC 1984/1989	No. of St. No. of Modems No. of Cct. Existing SCPC SCPC FDMA+TDMA Subscriber 1984/1989 1984/1989 1983	No. of Cct. FUMA+TDMA 1984/1989	No. of Ccr. Existing Access FDMA+TDMA Subscribers Demand Cco- 1984/1989 1983 1984/2000 graph	Access Demand 1984/2000	I nical	Access to Road	III Road ondition
63	KAB. LOMBOK TIMUR	795,235	1,607	1,607 494.9/666.8		0/1	. \$/0		222	3,834	188	×	0
70	Kab. Sumbawa	335,614 464,447	8,492	39.5/54.7	SUNBAWA Agriculture Fishery Animal Hus.	1/0	5/0		837	1,706	6.4 6.4	•	o o
0.5	KAB. DOMPU	150,7428	2,324	46.2/64.9	RABA Fishery Animal Hus.	0/0	1		239	354	44	0	0
90	KAB. BIMA	402,100 533,707	4,598	87.5/116.1	Plantacion	0/0	1		638	1,116	17	×	0

		III Road Condition		*	*	*	0	٥	٥			*	*	* .	×
	Indices	II Access to PIC/IKK Cor		*	×	×	×	· *	×	×	×	×	×	<b>×</b>	×
		I Geo- graphical	8,533	1,232	433 653	1,233	1,489	448 689	568 914	416 577	1,265	1,036	606 931	900	1,241
	Subscribers	Access Demand 1984/2000		42	55	06	57	35	20	84	7.5	09	38	40	885
	Telephone Su	Extering Subscribers 1983	2,119			1,382	67	99		78		265			261
·	tions	No. of Ccc. FDMA+TDMA 1984/1989				0/120									
	ite Communications	No. of Modems SCPC 1984/1989		3/9 0	2/2	70/75	5/0	5/0	3/6	1/9	3/6	5/8	3/25	5/0	
	Sarellite	No. of SE. SCPC 1984/1989		1/1	1/1	1/2 in	0/1	0/1	1/1	1/1	1/1	1/1	1/1	0/1	0/0
		GROWTH POLE Industry		WAINGAPU Agriculture	Animal Hus.	KUPANG Administration Education	Industry	Commerce	Agriculture	ENDEH					
	Demographic Data	Pop. Densicy (/km <sup>2</sup> ) 1984/2000	63.4/97.9	61.7/87.8	22.7/30.7	60.4/86.7	78.8/110.4	53.2/72.4	78.4/108.8	44.4/54.2	91.2/123.8	133.7/180.3	99.2/129.5	61.0/85.9	59.4/86.2
	Demog	Area (km <sup>2</sup> )	47,142	4,153	5,816	7,314	4,017	2,750	2,516	2,985	3,080	1,770	2,177	3,087	7,451
		Population 1984/2000	2,986,810	256,142 364,822	131,992	441,625 634,292	316,496 443,590	146,347	197,221 273,616	132,390	280,846 381,404	236,699 319,219	216,030 281,908	188,198 265,325	442,761
	:	Kabupaten/ Kodya	PROPINSI NUSA TENGGARA TIMUR	KAB. SUMBAWA BARAT	KAB. SUNBAWA BARAT	KAB. KUPANG	KAB. TIMOR TENGAH SELATAN	KAB. TIMOR TENGAH UTARA	KAB. BELU	KAB. ALOR	KAB. FLORES TIMUR	KAB. SIKKA	KAB. ENDEN	KAB. NGADA	KAB. MANGGARAI
		Code No.	5300.	01	03	03	70	90	90	03	80	60	10	11	12

	III Road Condition		*	*	٥	٥	٥	o	o	<b>o</b>	o	o .	<b>o</b>	*	* · :
Indices	Access to		×	<b>×</b> .	*	×	×	×	×	×	×	<b>x</b> .	× ,	×	×
	Geo- Braphical		33	35	30	8	37	e e	43	20	38	16	23	26	7.5
Subscribers	Access Demand 1984/2000	1,393	1113	113	111	136	105	162 227	73 99	140 196	56	107	126	144 201	97 136
Telephone	Exfecing Subscribers 1983														
aciona	of Modems No. of Cct CPC FDMA+TDMA 84/1989 1984/1989								0/150						
Sarellice Communications	No. of Modems SCPC 1984/1989		5/0	5/0	5/0	5/0	\$/0	5/0	5/0	5/41	5/0	5/0	5/0	5/0	5/0
1	No. of St. 1 SCPC 1984/1989		0/1	0/1	1/0	0/1	0/1	0/1	1/0	1/1	0/1	0/1	1/0	0/1	0/1
	GROWTH POLE Induscry														
Demographic Data	Pop. Density (/km <sup>2</sup> ) 1984/2000	39.1/55.2	21.8/41.3	41.0/57.9	26.9/38.2	33.1/46.8	21.7/30.7	56.5/79.1	12.5/17.4	154.9/218.4	23.9/34.4	51.1/71.4	91.6/129.1	43.2/60.8	63.1/90.0
Demogr	Area (km²)	15,708	1,385	1,197	1,133	1,850	1,975	1,423	1,994	476	755	607	671	1,568	674
	Population 1984/2000	613,683	30, 200 43, 315	49,046 69,304	30,465 43,315	61,166 86,630	42,785	80,352	25,021 34,652	73,730	18,067 25,989	31,025	61,489 86,630	67,701 95,293	42,561 60,641
	Kabupaten/ Kodya	PROPINSI TIMOR TIMUR	KAB, COVALIMA	KAB. AINARO	KAB. SAME (MANUFAHI)	KAB. VIQUE QUE	KAB. LAUTEM	KAB. BAUCAU	KAB. MANA TUTU	KAB. DILI	KAB, AILEU	KAB, LIKUICA	KAB. ERNERA	KAB. BOBONARO	KAB. AMBENO
	Code	2400	0.1	03	63	70	05	90	07	08	.60	70	7	12	13

			Demog	Demographic Data		Sucell	Satellite Communications		Telephone Subscribers	bscribers		Indices	
e C	/ contact	Popular ton	9	Pop. Densicy Chourn porm	arod Bundas	No. of St.	St. No. of Modems No. of Gct. Existing	No. of Gct.	Existing	Access	Ţ	11	III
No ox	Kodya	1984/2000		(/km <sup>2</sup> ) 1984/2000	Industry	SCPC 1984/1989	SCPC 1984/1989	FDMA+TDMA 1984/1989	Subscribers 1983	Demand 1984/2000	Geo- graphical	Access to PIC/IKK	Road Condition
6100	PROP. KALIMANTAN BARAT	2,763,370 4,016,200	149,178	18.5/26.9					2,750	10,487 22,592			
01	KAB. SAMBAS	666,850 943,807	15,253	43.7/61.9	River Dev.	2/3	6/24		495	286 <u>1</u> 6,558	100	*	Q
0.5	KAB, PONTIANAK	668,126 979,953	24,277	27.5/40.4		0/1	5/0		157	$\frac{2}{7},\frac{948}{013}$	110	*	*
63	KAB. SANGGAU	359,307 510,057	27,053	13.3/18.9		1/2	2/14		10	3,081	80	× ,	o
70	KAB. KETAPANG	281,919 413,669	28,836	9.8/14.3	KETAPANG River Dev.	3/3	9/21		86	$\frac{1,219}{2,412}$	140	*	0
05	KAB. SINTANG	292,872 417,685	31,648	9.3/13.2	SINTANG River Dev.	1/2	2/29		49	1,274	135	×	*
90	KAB. KAPUAS HULU	143,555	21,990	6.5/9.1		1/1	3/9		Ø	1,078	130	×	¥
71(02	71(02) KODYA PONTIANAK (A)	350,672 550,219	121		PONTIANAK .	1/1	56/100	84/294	1,929	ι	•	*	0
		-			NGABANG		9/0						
					SUKAMARA		5/0						

		III Road Condition			×	×	×	*	۰.	٥	*		
	Indices	Access to PTC/IKK		*	×	×	*	×	×	×	×	×	×
		I Geo- graphical		135	230	165	182	70	35	53	70	75	t
he are the area	DECLIDERS	Access Demand 1984/2000	10,251	1,070	1,919	413	1,491	414 784	314 575	389	346 603	319	•
and the second of the second o	rerephone of	. Existing Subscribers 1983	1,624		385		141	1,000		98			.: 4 - <sup>1</sup>
ar i one	artous	s No. of Ccr. FDMA+TDMA 1984/1989			SAMPIT 0/90								
Sate lite Commissions	Transport of the state of the s	No. of Modems SCPC 1984/1989		2/22	4/36	5/0	5/0	2/22	5/0	3/9	3/9	ı	74/39
8.00	11333	No. of St. SCPC 1984/1989		1/1	1/2	0/1	0/1	1/1	0/1	1/1	1/1	0/0	1/1
		GROWTH POLE Industry	·	PANCKALABUUN		SAMPIT	-	BUNTAK					PALANGKA RAYA
Demoorant Dara	apine nord	Pop. Density (/km²) 1984/2000	6.9/11.7	5.2/8.8	6.2/9.4	4.4/7.8	10.8/17.8	9.2/16.1	14.9/26.3	9.1/16.7	4.8/8.0	2.4/3.3	1
Democ	Soma C	Area (km²)	159,850	21,000	32,950	17,800	27,400	8,380	4,070	8,300	13,400	23,700	2,400
		Population 1984/2000	1,106,820	108,703	309,408	$\frac{78,178}{138,765}$	294,588 487,552	81,529 142,515	60,575 106,886	138,765	84,353 106,886	<u>57,164</u> 78,758	80,253 180,019
		Kabupaten/ Kodya	PROP. KALIMANTAN TENGAH	KAB. KOTAWARINCIN SARAT	KAB. KOTAWARINGIN TIMUR	Kab. Kalingan	KAB. KAPUAS	KAB. BARITO SELATAN	KAB. BARITO TIMUR	KAB. BARITO UTARA	KAB. KAHAYAN HULU/G. MAS	KAB. MURUNG RAYA	KODYA PALANCKA RAYA (A).
		Code No.	6200	03	03	03	70	05	90	07	80	60	71(-)

					٠							
	III Road Condition		0	*	*		o ·	o	*	*	o	•
Indices	II Access to PTC/IKK		×	×	*	× ·	×	<b>*</b> ¢	×	×	*	0
	I Geo- graphical		45	104	37	55	28	25	10	40	07	•
bscribers	Access Demand 1984/2000	8,113 16,020	1,339	2,715	$\frac{828}{1,617}$	526 961	910	783	1,702	\$68 873	1,543	1
Telephone Subscribers	Existing Subscribers 1983	3,991	37	. 11	432			203	186	102		2,954
tions	No. of Ccc. FDMA+TDMA 1984/1989											72/612
Satellite Communications	No. of Modems SCPC 1984/1989		9/0	6/4	5/0				t .	1	1	52/123
Satelli	No. of St. 1 SCPC 1984/1989		0/1	1/2	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1
			Сошлетсе	K <u>OTA BARU</u> Agriculture Mining Transmigration	Industry	Fishery	KANDANGAN Agriculture	Fishery	Forestry			BANJAR MASIN
Demographic Data	Pop. Density GROWTH POLE (/km²) 1984/2000 Industry	8.5/11.9	68.7/121.4	25.4/35.2	37.2/50.0	41.0/57.4	•	121.0/149.5	180.1/238.1	55.0/62.4	80.0/151.0	1
Demog	Area (km <sup>2</sup> )	265,173	2,149	12,845	5,972	3,284	:	1,703	1,373	2,770	4,246	73
1	Population 1984/2000	2,255,885 3,143,100	147,618 260,877	325,995 452,606	221,902 298,595	134,494	169,256 232,589	206,121 254,591	247,287 326,882	152,370 172,871	339,514 641,192	244,780 314,310
	Kabupaten/ Kodya	KALIMANTAN SELATAN	KAB. TANAH LAUT	KAB. KOTA BARU	KAB. BANJAR	KAB. BARITO KUALA	KAB. TAPIN	KAB. HULU SEI SELATAN	KAB. HULU SEI TANGAH	KAB, HULU SEIUTARA	KAB. TABALONG	KODYA BANJAR MASIN (A)
	Code No.	6300	01	05	e 0	40	90	90	07	88 :	60	71(-)

								***************************************	***************************************				
			Demog	Demographic Data		Sarell	Sacellice Communications	actons	Telephone Subscribers	bscribers		Indices	
Code No.	Kabupaten/ Kodya	Population Area 1984/2000 (km <sup>2</sup>	Area (km²)	Pop. Density GROWTH POLE (/km <sup>2</sup> ) 1984/2000 Industry	GROWTH POLE Industry	No. of St. SCPC 1984/1989	No. of St. No. of Modems No. of Cct. Existing SCPC SCPC FUNA+TUMA Subscribe 1984/1989 1984/1989 1984/1989	6 No. of Cct. FDMA+TDMA 1984/1989	8	Access Demand 1984/2000	I Geo- graphical	II Access to PTC/IKK	III Road Condition
9700	KALIMANTAN TIMUR	1,476,748 2,918,600	206,443	7.2/14.1					4,509	18,828			
0.1	KAB, PASIR	97,685	20,040	4.9/9.2	Oil, Coal Fishery	0/0	•			1,525	118	*	•
02	KAB. KUTAI	435,469	81,027	5.4/9.8	Agriculture Chemical	0/0	•			12,140	320	×	×
03	KAB. BERAU	53,652 99,232	32,700	1.6/3.0	BERAU Agriculture	1/1	2/10			394	170	×	×
70	KAB. BULONGAN	211,837	64,000	3.3/6.2	địng	3/3	37/62			1,730	290	×	×
71(-)	KODYA BALIK PAPAN (A)	344,500	946	•	BALIK PAPAN	0/0	•		1,917		1	*	a
72(-)	KODYA SAMARINDA (B)	333,488	2,727	, .	SAMARINDA	1/1	76/113	120/390	2,592		1	*	a
					KUALA KUAYAN NELAK		2/9					· .	
					:								٠

-	- L L	Road	·	0	0	<b>o</b>	×	ø	o			*	o	0	0
Indices		SA		*	*	*	×	*	.*			*	*	*	*
	,	Geo- graphical		175	110	75	136	1 .	<b>.</b>			\$\$ \$\$	228	190	118
bacribers		Denand 1984/2000	8, 565 20, 791	2,443	1,394	3,739	1,741	1		٠.	9,838	1,024 1,925	1,067	2,262 4,773	1,266
Telephone Subscribers		existing Subscribers 1983	2,385		173	799	<b>ν</b> ,	D 16	1,392		1,797		909	1,177	20
		FDMA+TDMA						Only to MND 0/60	361)/396					PALU 0/120	
te Communications		No. of modells SCPC 1984/1989		1	3/7	\$/0	۲/۶	3/18	47/152			3/50	3/14	53/73	2/9
Sarelline	- (	SCPC SCPC 1984/1989		0/0	1/1	0/0	1/1	1/1	1/1		·	1/2	1/2	1/2	1/1
		GROWTH POLE Industry		Agriculture Plantation	Commerce	Plantation	TAHNA Fishery	CRONTALO	MANADO			LUWUK Plantation	POSO Plantation	PALU Commerce Plantation	TOLITOLI Agriculture Fishery
Democraphic Data		rop. Densicy (/km <sup>2</sup> ) 1984/2000	84.8/121.4	45.9/65.7	39.5/60.1	195.3/283.8	112.3/141.6 TAHNA Fishery	· i			22.1/37.4	24.7/41.8	12.2/19.4	29.9/51.7	28.5/49.5
Demoor	0	Area (km²)	27,529	12,102	8,448	4,321	2,265	65	25		67,766	12,487	24,883	22,706	7,160
		Population 1984/2000	2,335,173	555,602 795,301	333,309	844,005 1,226,367	320,794	105,615	242,227 350,868	:	1,495,107 2,533,200	308,578 521,839	304,637	677,914 1,172,872	203,958 354,648
- ·		Kabupaten/ Kodya	PROPINSI SULAWESI UTARA	KAB, GORONTALO	KAB. BOLANG MANGONDOW	KAB. MINAHASA	KAB. SANCINE TALAUT	KODYA GORONTALO (A)	KODYA MANADO (B)	٠	PROPONSI SULAWESI TENGAH	KAB. LUWUK/ BANGGAI	KAB. POSO	KAB. DONGGALA	KAB. BUAL TOLI TOLI
		Code No.	7100	.01	05	03	40	71(01)	72(03) KODYA MANADO		7200	10	02	03	70

		Road		٥	٥	٥	o	۰	o	o	•	o	: <b>Q</b> .	; o ;	0
. ]	Indices	Access to	1	×	×	*	×	*	*	*	*	*	× .	×	*
		Geor Graphical		35	30	10	20	12	55	30	70	32	30	20	20
1,000	Subscribers	Access Demand 1984/2000	20,739 40,152	392 586	1,150 2,368	467 832	1,415	1,131	1,332	1,288	2,489	$\frac{752}{1,382}$	1,529	534 780	1,539
Tolumbone C.		Existing Subscribers 1983	6,504		197			62	207	124	367	277	961	899	139
ríons	51113	FDMA+TDMA 1984/1989													
tra Comminatourions		No. of Modems SCPC 1984/1989		ı	ı	,	5/0	5/0	<b>1</b> 7,	1/10	1/10	1			į
Satifates	44782	No. of St. SCPC 1984/1989		0/0	0/0 on	0/0	0/1	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0
and Apro	pure para	Pop. Density GROWTH POLE (/km²) 1984/2000 Industry	87.8/114.1	51.0/61.3	214.0/285.3 Administration	277.2/380.9 Education	305.8/352.4 Industry	325/409.1	176.8/217.3	176.1/246.6	145.3/177.6 WAMEPONE Agriculture	193.0/250 <sub>p</sub> 5	193.7/251.5	94.8/106.0 Agriculture	1,511 164.7/202.2 Commerce Fishery
Characasa	Demogra	Area P (km <sup>2</sup> )	74,401	1,938	1,547	468	819	581	2,148	1,067	4,589	1,118	1,215	1,521	1,511
		Population 1984/2000	6,529,072 8,487,900	118,898	331,127 441,371	129,714	250,484 288,589	188,825 237,661	379,737 466,835	187,891 263,125	666,950 814,838	215,813	235,359 305,564	144,223	248,872 305,564
		Kabupaten/ Kodya	PROPINSI SULAWESI SELATAN	KAB. SELAYAR	КАВ. ВИГИКИМВА	KAB. BANTAENG	KAB. JENEPONTO	KAB. TAKALAR	KAB, GOWA	KAB. SINJAI	KAB. BONE	KAB. MAROS	Kab. Panckajene Kep	KAB. BARRU	KAB. SOPPENG
		Code No.	7300	01	05	03	70	\$0	90	00	80	60	10	11	12

		Denog	Demographic Data		Sacellice	ite Communications	ctons	Telephone St	Subscribers		Indices	
			Pop. Density		No. of St.	No. of Modenis	No. of Ccc.	Existing	Access	I	11	LII
Kabupacen/ Kodya	Fopulation 1984/2000	Area (km <sup>2</sup> )		Industry	SCPC 1984/1989	SCPC 1984/1989	FDMA+TI 1984/19		Demand 1984/2000	Ceo- graphical	Access CO PTC/IKK	Road Condition
KAB. WAJO	388,322 441,371	2,610	148.8/169.1	Animal Nus.	0/0	t		161	1,371 2,408	35	*	*
KAB. SINDERENG RAPPANG	305,564	2,681	85.0/114.0		0/0	í		380	1,570	65	**	٥
KAB. PINRANG	287,641	2,508	114.7/145.5		0/0	1.		133	1,923	28	*	· <b>Q</b>
KAB. ENREKANG	143,294	1,579	90.7/107.5		1/1	1/10		42	533 822	25	×	٥
KAB. LUWU	542,041 763,911	22,895	23.7/33.4	PALOPO Agriculture	2/2	6/13		200	2,209 5,187	140	*	<b>o</b> .
KAB. IANA TORAJA	353,474	3,854	91.7/110.1	Animal Hus. Mining	1/2	3/15		228	2,327	35	*	0
KAB. POLEWALI MAMASA	401,414 551,714	8,561	46.9/64.4	MAJENE Commerce Fishery	1/0	\$/0		116	1,531 3,302	09	×	,0
KAB. MAJENE	140,831	1,803	78.1/122.4	Craft	0/0	• .		87	1,084	. 09	×	o
KAB. MAMUJU	110,283	8,749	12.6/17.5		0/1	5/0			793	173	×	٥
KODYA UJUNG PANDANG (A)	763,849 1,111,915	675	1	UJUNG PANDANG	1/1	74/110	180/600	3,681		1	٥	°o
KODYA PARE-PARE (B)	91,744	190	1	Pare pare	0/0	•		5	t .	3	٥	٥

		III Road	Condition	Ö	o	0	o ·		*	o	<b>*</b>	×	o Island
	Indices	II Access co	ţ	*	×	*	*		×	×	×	×	×
			Property of the second of the	142	52	145	120		802	290	420	225	ι
	Subscribers	Access Demand		$\frac{1,261}{2,239}$	1,326	2,753	1,440	6,181 13,132	1,199 2,105	2,320 5,070	501 952	2,161 5,005	•
(1)	le lephone Su	Existing Subscribers	,	25	33 11	938	15	3,730.	250	330		1,150	2,000
		No. of Cct. FDMA+TDMA				0/120						TERNATE 0/60	241)/324
Corollary Orange Language	re communica	No. of Modems SCPC 1984/1989		3/9	3/9	65/07	3/6		6/49	2/30	1/10	39/72	37/77
Serolls	3816111	No. of St. N SCPC 1984/1989		1/1	1/1	1/1	1/1		2/2	2/4	1/1	3/4	1/1
		GROWEN POLE Industry		BAU BAU Fishery	RANA Food, Agr. Animal Hus.	KENDARI Commerce Administration	KOLAKA Plantation Minining		TUAL Fishery, Agr.	Commerce Agriculture	TERNATE Fishery Agriculture		
nace of the	nemographic nata	Pop. Density (/km <sup>2</sup> ) 1984/2000	27.8/43.5	54.1/75.0	40.5/61.8	21.0/34.2	16.5/30.6	20.8/32.0	12.5/16.9	20.0/29.6	12.1/20.0	22.9/35.6	f .
2000	180EST	Area (km²)	38,139	6,463	4,886	16,320	10,310	76,849	21,504	25,092	9,116	20,778	359
		Population 1984/2000	1,060,191	349,535	197,769 302,138	342,961 557,794	169,863 315,419	1,595,674	269,859 363,858	<u>502,518</u> 742,467	110,579 181,929	475,219	237,451 430,238
		Kabupaten/ Kodya	PROPINSI SULAWESI TENGGARA	KAB, BUTON	KAB. MUNA	KAB, KENDARI	KAB. KOLAKA	PROPINSI MALUKU	KAB. MALUKU TENGGARA	KAB. MALUKU TENGAH	Kab. Halmaheka Tengah	KAB. MALUKU UTARA	KODYA AMBON (A)
		Code No.	2400	01	05	63	70	8100	0)	03	03	70	11,

•	III Road Condition		*	*	×	×.	×	*	*	*	×
Indices	II Access to PTC/IKK Co		×	×	×	×	· *	×	× .	×	×
	Geo- A graphical P		760	260	320	275	009	210	215	130	265
ubșcribers	Access Demand 1984/2000	19,904 28,660	3,110	9,851	1,395	1,560 3,548	1,125	1,231	1,718	486 904	548 1,092
Telephone Subscribers	Extating Subscribers 1983	4,726	378	17	1,705	10	327	858	867	289	759
	of Cct. +TDNA -/1989		Only to JYP 0/30		96/246				· .	Only to JYP 0/30	
Sacellite Communications	No. of Modems No. SCPC FDM 1984/1989 1982		32/44	2/7	51/74	2/11	11/19	43/54	30/41	2/10	35/35
Sacelli	No. of St. N SCPC 1984/1989		2/2	1/1	2/2	1/2	3/3	2/2	1/2	1/1	1/1
	GROWTH POLE Industry		# # # **	JAYA PURA		P. BIAK	SORONG		:		
Demographic Data	Pop. Density (/km <sup>2</sup> ) 1984/2000	4.4/6.9	1.5/2.0	34.6/61.0	51.9/91.9	15.7/22.2	1.4/2.2	3.5/5.5	2.4/4.0	3.5/5.1	30.3/45.2
Demogr	Area (km <sup>2</sup> )	303,116	123,240	8,779	3,460	12,338	50,592	43,120	40,000	18,994	2,593
	Population 1984/2000	1,326,530 2,090,900	184, 335 240, 454	303,345 535,270	179,532	193,993 273,908	112,909	152,515 238,363	96,624 158,908	65,547 96,181	78,659
	Kabupaten/ Kodya	PROPINSI IRIAN JAYA	KAB. MERAUKE	KAB. PEG-JAYA WIJAYA	KAB. JAYAPURA	KAB. PANIAI	KAB. FAK FAK	KAB. SORONG	Kab. Manokwari	KAB. TEL- CENDERAWASIH	KAB. YAPEN WAROPEN
	Code No.	8200	010	02	03	70	.05	90	0.	80	60

ANNEX 3-1-1 THE NUMBER OF HOUSEHOLDS (1980) ANNEX 3-1-2 THE NUMBER OF EMPLOYEES (1980)

ANNEX 3-1-3

PENETRATION RATES OF CONSUMER DURABLES PER HOUSEHOLDS IN URBAN AREAS (1980)

ANNEX 3-1-4

PENETRATION RATES OF CONSUMER DURABLES PER **HOUSEHOLDS IN RURAL AREAS (1980)** 

**ANNEX 3-1-5** 

**ELEMENTARY SCHOOL EDUCATION EXPERIENCE RATE** (1980)

**ANNEX 3-1-6** 

INDONESIAN SPEAKING POPULATION RATE (1980)

ANNEX 3-1-7 LITERACY RATE (1980)

**ANNEX 3-1-8** 

FLOOR SPACE PER HOUSEHOLD IN URBAN AREAS (1980)

ANNEX 3-1-9

FLOOR SPACE PER HOUSEHOLD IN RURAL AREAS (1980)

ANNEX 3-1-1 The Number of Households (1980)

Code	Province	Total	Urban	Rural
12	Sumatera Utara	1,548,323	362,607	1,185,716
13	Sumatera Barat	704,010	78,976	625,034
14	Riau	413,384	98,119	315,265
15	Jambi.	300,076	32,617	267,459
16	Sumatera Selatan	457,338	217,473	637,865
17	Bengkulu	150,218	14,397	135,821
18	Lampug	871,666	94,997	776,669
31	Dki Jakarta	1,224,936	1,138,301	86,635
32	Jawa Barat	6,100,713	1,122,766	4,977,947
33	Jawa Tengah	5,286,220	936,698	4,349,522
34	D.I. Tigtajara	592,563	127,604	464,959
35	Jawa Timur	6,478,680	1,171,515	5,307,165
51	Bali	485,201	67,093	418,108
52	Nusa Tengara Barat	594,192	79,105	515,087
53	Nusa Tenggara Timu	r 495,942	29,926	466,016
54	Timor Tunyr		-	
61	Kalimantan Barat	442,083	57,765	384,318
62	Kalimantan Tengah	185,528	18,381	167,147
63	Kalimantan Selatan	44,435	86,987	357,448
64	Kalimantan Timur	234,557	90,693	143,864
71	Sulawesi Utra	398,993	65,819	333,174
72	Sulawesi Tengah	233,121	18,505	214,616
73	Sulawesi Selatan	1,117,330	177,531	939,799
74	Sulawesi Tenggara	173,598	14,379	159,219
81	Maluku	228,689	24,038	204,651
82	Irian Jaya	215,525	40,233	175,290

ANNEX 3-1-2 The Number of Employees (1980) (%)

Code	e Province	E-P/Lab.	Force	Lab Force	e/Pop
		Urban	Rural	Urban	Rural
11	D. I. Aceh	96.74	98.45	36.44	47.64
12	Sumatera Utara	97.47	99.04	39.93	58.02
13	Sumatera Barat	97.04	99.03	33.35	48.23
14	Riau	97.35	98.47	38.54	49.84
15	Jambi	97.40	39.73	36.30	53.08
16	Sumatera Selatan	97.51	99.13	36.99	57.64
17	Bengkulu	97.83	98.54	34.90	57.01
18	Lampung	97.23	99.33	38.78	51.74
31	Dki Jakarta	96.10	97.00	42.86	40.33
32	Jawa Barat	97.14	98.04	38.33	46.91
33	Jawa Tengah	97.74	98.78	47.26	56.47
34	D. I. Yogyakarta	97.63	99.19	42.43	63.37
35	Jawa Timur	97.73	98.69	45.03	54.67
51	Bali	99.19	98.07	44.46	55.12
52	Nusa Tengara Barat	97.49	97.81	39.77	51.43
53	Nusa Tenggara Timur	98.27	99.45	32.03	54.61
54	Timor Timur	<u></u>	_	·	-
61	Kalimantan Barat	96.65	99.26	37.28	62.02
62	Kalimantan Tengah	97.94	99.40	42.08	59.40
63	Kalimantan Selatan	97.07	97.16	39.34	54.95
64	Kalimantan Timur	97.50	98.82	37.90	49.00
71	Sulawesi Utra	95.69	97.23	39.61	46.10
72	Sulawesi Tengah	98.91	96.43	36.14	50.64
73	Sulawesi Selatan	97.31	96.78	34.23	40.31
74	Sulawesi Tenggara	98.45	98.18	36.46	45.33
81	Maluku	97.17	98.64	31.61	43.33
8,2	Irian Jaya	96.78	98.42	34.9	51.94

ANNEX 3-1-3 Penetration Rates of Consumer Durable per Households in Urban Areas (1980)

Code	e Province S	ideboard	Stove	Bicycle	Radio Cassette Recorder	TV Set
11	D.I. Aceh	60.30	74.22	62.43	60.27	50.90
12	Sumatera Utara	65.24	80.50	54.62	60.72	38.12
13	Sumatera Barat	55.84	87.82	42.17	57.97	34.80
14	Riau	68.85	89.22	48.11	63.78	40.34
15	Jambi Selatan	68.39	80.60	42.06	64.59	35.25
16	Sumatera	64.13	76.59	36.59	57.66	36.81
17	Bengkulu	69.71	74.90	31.44	49.89	22.69
18	Lampung	65.57	68.17	23.60	54.39	29.28
31	Dki Jakarta	69.46	97.36	20.47	66.37	47.71
32	Jawa Barat	66.22	87.50	18.94	57.05	30.86
33	Jawa Tengah	47.35	71.60	50.36	57.03	24.72
34	D.I. YOgyakarta	45.51	71.92	57.99	64.87	28.28
35	Jawa Timur	58.09	85.99	46.96	52.14	28.42
51	Bali	62.33	77.86	46.61	56.81	31.78
52	Nusa Tengara Barat	43.78	59.15	20.03	35.67	15.43
53	Nusa Tenggara Timur	60.32	59.65	13.24	55.99	20.85
54	Timor Timur	-	-	-	_	
61	Kalimantan Barat	58.24	77.30	56.27	58.62	39.36
62	Kalimantan Tengah	56.66	47.21	61.80	60.53	34.56
63	Kalimantan Selatan	74.54	42.09	37.37	54.08	41.73
64	Kalimantan Timur	62.31	45.90	24.73	54.29	22.99
71	Sulawesi Utra	68.13	79.58	17.57	54.79	32.71
72	Sulawesi Tengah	67.16	65.86	22.72	54.22	29.36
73	sulawesi	7.278	78.85	40.53	51.66	31.81
	Selatan					
74	Sulawesi	59.17	46.28	17.03	45.68	20.84
	Tenggara					
81	Maluku	59.91	82.30	6.39	61.38	39.01
82	Irian Jaya	50.17	66.96	13.16	53.97	17.17

ANNEX 3-1-4 Penetration Rates of Comsumer Durables per Households in Rural Areas (1980)

Code	e Province	Sideboard	Stove	Bicycle	Radio Cassette TV Set Recorder
11	D.I. Aceh	38.04	18.02	61.43	38.01 7.31
12	Sumatera Utara	54.27	18.18	54.19	42.37 5.82
13	Sumatera Barat	45.01	31.57	37.72	41.91 5.33
14	Riau	44.30	24.03	54.59	51.74 9.74
15	Jambi	41.48	18.59	40.35	48.34 6.14
16	Sumatera Selatan	43.28	15.49	37.55	44.10 5.37
17	Bengkulu	46.77	13.01	26.61	40.99 5.37
18	Lampung	40.87	8.94	42.70	41.40 3.11
31	Dki Jakarta	4.96	4.24	1.90	9.41 0.56
32	Jawa Barat	53.77	37.93	19.45	38.48 4.47
33	Jawa Tengah	30.18	16.01	36.05	35.87 2.25
34	D.I. Yogyakarta	28.46	12.62	56.62	53.84 4.13
35	Jawa Timur	42.35	29.80	43.09	33.34 2.82
51	Bali	45.67	26.08	29.83	44.71 4.38
52	Nusa Tengara Barat	22.59	11.84	6.94	14.62 1.02
53	Nusa Tenggara Timu	r 12.48	2.25	2.14	11.20 0.51
54	Timor Timur		-	<del>-</del>	<del>-</del>
61	Kalimantan Barat	28.52	15.49	34.33	41.52 4.88
62	Kalimantan Tengah	54.38	8.32	17.11	47.71 4.51
63	Kalimantan Selatan	65.02	9.58	46.93	46.25 7.66
64	Kalimantan Timur	52.60	22.60	23.11	49.05 8.15
.71	Sulawesi Utra	51.32	31.27	11.46	32.58 7.04
72	Sulawesi Tengah	28.67	8.21	14.92	24.91 1.36
73	sulawesi Selatan	51.25	16.01	25.90	25.77 2.38
74	Sulawesi Tenggara	25.50	9.57	19.56	21.20 2.25
81	Maluku	31.34	20.12	5.85	35.35 3.88
82	Irian Jaya	4.96	4.24	1.90	9.41 0.56

ANNEX 3-1-5 Elementary School Education Experience Rate (1980) %

0-1-	They would be the second	Url	oan		1	Rural	
Code		No Edu- cation	Elem. School	More	No Edu- cation	Elem. School	More
11	D. I. Aceh	29.73	28.32	41.91	55.99	30.84	13.14
12	Sumatera Utara	34.21	32.63	33.13	59.28	28.81	11.89
13	Sumatera Barat	32.53	28.01	39.45	62.72	25.49	11.76
15	Jambi	40.12	34.51		65.22	24.60	10.16
16	Sumatera Selatan		32.56	26.70	67.34	25.21	7.43
17	Bengkulu	39.87	31.68	28.45	65.63	23.68	10.64
18	Lampung	44.11	29.43	26.41	70.98	22.85	6.12
	Dki Jakarta	33.34	29.57	37.07	47.93	27.23	24.79
32		40.77	31.54	27.66	63.84	29.65	6.47
33	Jawa Tengah	40.30	30.47	29.19	67.18	25.48	7.25
34	D.I. Vogyakarta		25.84	46.08	48.14	33.25	18.55
35	Jawa Timur	37.58	31.83	30.56	64.03	28.66	7.26
51	Bali	35.06	30.64	34.28	57.91		9.91
52	Nusa Tenggara Barat	39.93	29.16	31.39	66.18	25.45	8.31
53	Nusa Tenggara Timur	28.81	28.18	42.97	62.29	30.42	7.22
54	Timor Timur	-	<b>-</b>	<del>-</del>	<del>-</del>	-	
61	Kalimanta Barat	45.56	28.35	26.08	76.56	16.93	6.46
62	Kalimantan Tengah	26.16	27.66	46.19	60.77	29.25	10.10
63	Kalimantan Selatan		30.92	26.58	67.07	23.99	8.90
64	Kalimantan Timur	37.75	29.15	33.06	64.53	25.44	10.00
71		36.79	27.58	35.54	60.26	26.82	12.89
	Sulawesi Tengah			41.59	58.23	32.01	9.73
73	Sulawesi Selatan	35.44	27.77	36.76	61.85	27.82	10.29
74		35.36	29.70	34.91	57.03	30.40	12.53
81		24.74	31.30	43.92	55.16	32.07	12.75
82	Irian Jaya	36.48	33.37	30.10	62.11	27.21	10.48

ANNEX 3-1-6 Indonesian Speaking Population Rate (1980) %

Code	Province	U:	rban	1	Rural
		Speak	Not Speak	Speak	Not Speak
11	D.I. Aceh	89.47	10.53	61.19	38.81
12	Sumatera Utara	95.05	4.95	71.79	28.21
13	Sumatera Barat	78.73	21.27	61.55	38.45
14	Riau	83.93	16.07	69.46	30.54
15	Jambi	82.71	17.29	66.18	33.82
16	Sumatera Selatan	82.72	17.28	64.94	35.06
17	Bengkulu	76.97	23.03	61.79	38.21
18	Lampung	88.95	11.05	64.41	35.59
31	Dki Jakara	99.48	0.52	99.48	0.52
32	Jawa Barat	76.53	23.47	57.18	42.82
33	Jawa Tengah	65.86	34.14	46.90	52.10
34	D.I. Yogyakarta	62.87	37.13	54.07	45.93
35	Jawa Timur	71.41	28.59	45.89	54.11
51	Bali	75.61	24.39	48.29	51.71
52	Nusa Tenggara Barat	71.09	28.91	42.61	57.39
53	Nusa Tenggara Timur	97.02	2.98	53.98	46.02
54	Timor Timur			-	
61	Kalimantan Barat	82.25	17.75	59.60	40.40
62	Kalimantan Tengah	77.20	22.80	60.01	39.99
63	Kalimantan Selatan	74.63	25.37	56.81	43.19
64	Kalimantan Timur	91.26	8.74	69.96	30.04
71	Sulawesi Utra	96.45	3.55	79.04	20.96
72	Sulawesi Tengah	93.84	6.16	75.55	24.45
73	Sulawesi Selatan	80.00	20.00	44.85	55.15
74	Sulawesi Tenggara	92.59	7.41	58.23	41.77
81	Maluku	98.95	1.05	87.21	12.79
82	Irian Jaya	96.69	3.31	54.76	45.24

ANNEX 3-1-7 Literacy Rate (1980) %

Code	Province	Ur	ban	R	ural
		Read	Not Read	Read	Not Read
11	D.I. Aceh	92.86	7.20	72.65	27.29
12	Sumatera Utara	92.91	7.05	81.08	18.88
13	Sumatera Barat	92.81	7.16	80.09	19.86
14	Riau	87.87	12.07	73.23	26.70
15	Jambi	89.52	10.45	74.25	25.75
16	Sumatera Selatan	88.98	11.00	78.42	21.54
17	Bengkulu	91.46	8.50	72.48	27.41
18	Lampung	88.37	11.59	75.90	24.05
H. L	A STATE OF THE STATE				
31	Dki Jakara	89.05	10.89	74.77	25.14
32	Jawa Barat	87.74	12.14	71.33	28.54
33	Jawa Tengah	79.53	20.31	63.21	36.73
34	D.I. Yogyakarta	84.49	15.45	65.07	34.84
35	Jawa Timur	78.89	29.96	58.95	41.00
51	Bali	97.77	20.12	58.96	40.97
52	Nusa Tenggara Barat	73.84	26.11	51.75	48.19
53	Nusa Tenggara Timur	92.08	7.93	62.63	37.29
54	Timor Timur		·	·	<u>-</u>
No.		: .	· · · · · · · · · · · · · · · · · · ·		
61	Kalimantan Barat	77.39	22.58	:	
62	Kalimantan Tengah	87.02	12.93	77.94	21.98
64	Kalimantan Timur	89.19	10.76	66.79	33.12
			4	of Contract	. *
71	Sulawesi Utra	95.60	4.35	89.99	9.90
72	Sulawesi Tengah	93.49	6.50	80.88	19.05
73	Sulawesi Selatan	82.26	17.70	57.18	42.77
74	Sulawesi Tenggara	88.02	11,91	66.37	33.58
81	Maluku	94.55	5.30	81.44	18.50
82	Irian Jaya	88.67	11.26	41.56	58.37

ANNEX 3-1-8 Floor Space per Household in Urban Areas (1980)

		er e	
	District	Urban	Rural
Code	Province	upto upto 49m <sup>2</sup> 50-99m <sup>2</sup>	upto more than 100-199m <sup>2</sup> 200m <sup>2</sup>
11	D.I. Aceh	58.76 33.04	6.33 1.39
12	Sumatera Utara	53.21 34.38	9.56 2.39
13	Sumatera Barat	59.40 31.57	6.82 1.57
14	Riau	53.35 32.61	11.40 2.59
15	Jambi	59.39 32.40	6.50 1.08
16	Sumatera Selatan	57.87 32.25	7.89
18	Lampung	42.34 45.56	9.68 2.28
31	Dki Jakara	58.18 27.03	10.36 4.19
32	Jawa Barat	64.94 25.78	6.77
34	D.I. Yogyakarta	42.90 35.15	15.65 5.74
35	Jawa Timur	53.58 30.93	9.86 3.67
51	Bali	55.72 29.09	11.93 2.81
52	Nusa Tenggara Barat	77.01 15.67	5.22 1.91
			1000 A
61	Kalimantan Barat	52.42 36.55	8.74 1.82
63	Kalimantan Selatan	62.10 26.13	9.51 1.75
64	Kalimantan Timur	54.58 33.91	8.09 2.41
71	Sulawesi Utra	61.86 26.63	7.70
72	Sulawesi Tengah	46.27 33.13	16.15 3.57
73	Sulawesi Selatan	60.14 30.79	6.92 1.92
74	Sulawesi Tenggara	64.44 29.17	
0.1	Malaka	6E E2 0E 0E	6.50
81	Maluku	65.53 25.25	6.50 1.96
82	Irian Jaya	62.76 31.49	4.10 1.22

ANNEX 3-1-9 Floor Space per Household in Rural Areas (1980)

Codo	Duord n ac	U:	rban	Rura	al
Code	Province	upto 49m <sup>2</sup>	upto 50-99m <sup>2</sup>	upto 100-199m <sup>2</sup>	more than
11	D.I. Aceh	69.82	26.40	3.20	0.36
12	Sumatera Utara	79.42	18.57	1.40	0.38
13	Sumatera Barat	62.75	31.93	4.48	0.62
14	Riau	67.96	25.86	5.06	0.92
15	Jambi	67.34	27.82	3.67	0.98
16	Sumatera Selatan	58.75	34.81	5.36	0.78
17	Bengkulu	60.89	35.48	2.92	0.55
18	Lampung	50.59	41.77	6.73	0.73
31	Dki Jakara	49.38	40.21	9.05	1.21
32	Jawa Barat	70.18	26.34	2.52	0.54
33	Jawa Tengah	27.30	44.37	22.98	5.19
34	D.I. Yogyakarta	13.37	39.78	34.37	12.17
35	Jawa Timur	42.01	35.96	13.16	3.00
51	Bali	73.57	22.41	3.09	0.80
52	Nusa Tenggara Barat	88.64	10.10	0.69	0.44
53	Nusa Tenggara Timur	83.59	13.69	1.74	0.48
54	Timor Timur		<b>-</b> .	-	-
61	Kalimantan Barat	81.42	15.38	2.30	0.56
62	Kalimantan Tengah	78.21	18.58	2.38	0.44
63	Kalimantan Selatan	74.75	22.35	2.40	0.38
64	Kalimantan Timur	72.70	23.31	2.96	0.55
71	Sulawesi Utra	73.93	20.57	3.98	1.07
72	Sulawesi Tengah	77.86	17.89	3.00	0.43
73	Sulawesi Selatan	68.85	28.24	2.17	0.53
74	Sulawesi Tenggara	79.05		1.44	0.53
81	Maluku	62 50	22 63	2 42	0.59
82	Irian Jaya	62.59 87.83		3.43 0.82	0.39

# ANNEX 3-2-1 RURAL ELECTRIFICATION PROGRAM OF PLN IN PELITA IV

( Literal to PLN Original )

ANNEX 3-2-1

Rural Electrification Program of PLN in PELITA IV

The background and the policy of PLN for Rural electrification program are as follows:

## Background

- The total number of the electrified Desas (villages) at the end of PELITA II (the Second Five-year Development 1974 1978) was 2244 Desas. The electrified rate of Desas was 3.5%.
- PELITA III (1979 1983) target was about 3700 Desas.
- Hence, at the end of PELITA III the total electrified Desas will be estimated of 5944 Desas.
- Realization of the new Desas that have just been energized in PELITA III are about 5771 Desas, so the target of 3700 Desas have already reached.
- Realization of the electrified Desas in Indonesia up to the end of PELITA III are 8015 Desas.
- With Funds given by the Government (APBN fund) and PLN's funds (APLN fund) for 1984/1985 period (the first year of the PELITA IV), estimation of the new electrified Desas will be increased up to 9070 Desas.

#### 2. Policy

In confirmity with the village economic development, the village could be grouped into Swasembada villages, as the highest level, followed by Swakarya villages and Swadaya villages.

The main target of PELITA IV is to electrify all of the Swasembada villages, where the capital of the Kecamatan is included, and a part of the Swakarya villages as well as the Swadaya villages which are covered by PLN existing network of the extent of distribution line program.

The policy used in the electric power supply for the rural is giving priority through the existing distribution line, then non fuel energy resources which is available in the area will be used first, including microhydro power generation, wood, agriculture, waste and geothermal.

For villages which are given priority to be electrified, but are not yet reached by the existing and planned distribution line and non fuel energy resources are not available around them, the villages mentioned could be electrified by using diesel generator sets.

To enlighten the expenses and to speed up the installation of the distribution line and rural electrification installation, simplification of the used standard is still tried, without disregarding the general safety and materials used for electric power.

The supply of electric power in the rural areas is directed to push the improvement of productive uses to develop the industrial business in the villages involved.

With the consideration to the development of PLN's power capacity planning, and seeing the number of villages which are able to electrify in the year of PELITA III, Rural Electrification program in PELITA IV has a target to electrify approximately 1400 villages in a year.

So in PELITA IV, the total number of villages which could be electrified is about 7000 Desas.

#### 3. Program

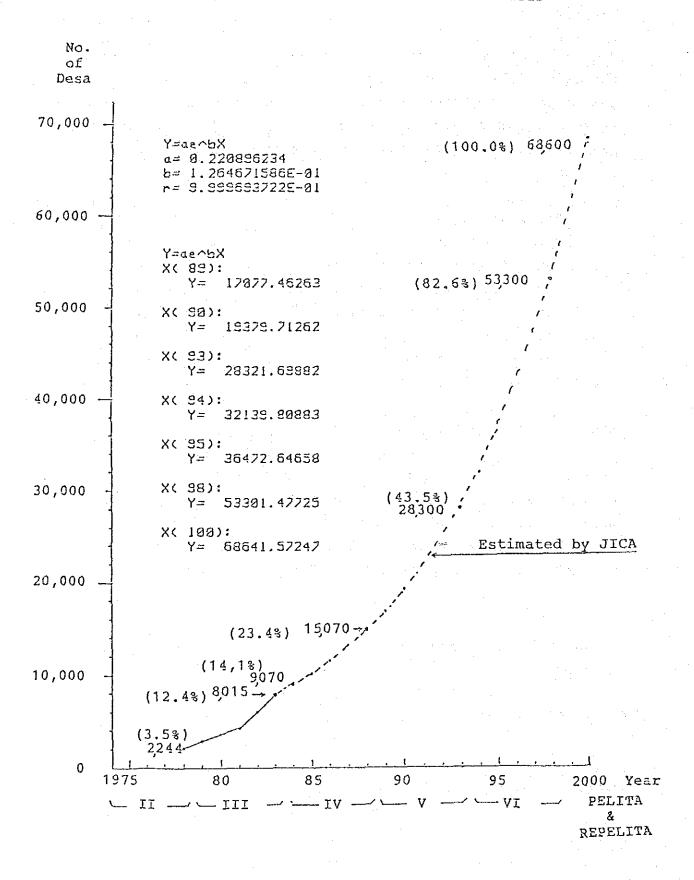
Regarding to the electrical distribution network, not only the existed lines but also which are still in planning, and the policy for giving priority to the Swasembada villages especially which are covered by the PLN's distribution lines, also observing whether some Microhydro potentials could be utilized, then plan of PELITA IV is than made as follows:

Total villages 7,000 villages 1. 2. Total consumers 1,600,000 consumers Total Diesel generator sets 132 MW 4 Total Microhydro generator sets: 50 MW 5. Distribution Transformers 877 MVA Medium voltage networks 21,000 KM 6. 7. Low voltage network 21,000 KM 8. In cooperation with KUD 226 villages

KUD: Village unit cooperations

Considering the rural peoples affordability which is generally low, so in order to get the number of consumers which is mentioned above the consumers house connection cost (Rp.110,580 per connection) will be assisted in paying through the credit given by the Government Bank.

### The total number of the electrified Desas



ANNEX 4-1-1

DATA OF 10 KABUPATENS FOR REGRESSION MODEL (1984)

ANNEX 4-1-2

RESULTS OF PROVINCE DEMAND AGGREGATED FROM KABUPATEN

**ANNEX 4-1-3** 

RESULTS OF DEMAND ESTIMATE CALCULATED BY KABUPATEN MODEL

ANNEX 4-1-1 describes the survey results of demand in the sample and reference areas in 1984, and basic data for the estimation of subscriber demand by Kabupaten in the year 2000.

The abbreviation in Annex 4-1-1, 2, 3 stand for the followings.

POP : Population INDUST : Industry

RESID : Residence

PDA : Public Demand A
PDB : Public Demand B
ID : Industrial Demand
RD : Residential Demand

SUMMED: Summation of PDA, PDB, ID and RD

DENSITY: Telephone Demand Density

Data of 10 Sampled Kabupatens for Regression Model (as of 1984) ANNEX 4-1-1

FILE: REG-KAB (IR 41)

NAME of KAB and KEC	TOTAL	POP	POP DENSITY	REGIONAL INCOME MRP	PUBLIC . DEMAND A	PUBLIC DEMAND B	INDUST	RESID DEMAND	TOTAL
INDRAGIRI HULU	15855	254260	1 00 1	29091.23	361	101	430	240	1132
CILACAP		1416891	608	109393.46	813 813	175	1709	1762	4453
BANYUMAS		1286886	982.4	99073,32	1090	186	1961	2153	5390
PRUBALINGGA		697596	911.9	53664.72	343	69	821	362	1595
HULU SEI SELATAN		206100	121	20241.13	267	19	503	148	937
HULU SEI TENGAH		247259	180.1	22956.4	276	16	447	134	873
SINJAI		173066	162.2	18742.29	111	20	295	89	515
PANGKEP		235386	193.7	23266.29	132	37	875	259	1303
MALUKU TENGAH		502575	20	59465.34	787	118	687	798	2390
		111111111					11111111111	1111111111	11111111

ANNEX 4-1-2 Results of Province Demand Agreegated from Kabupatens

FILE: DEM-PRO

DENSITY (2000)	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.555 0.555 0.855 0.85	0.627 0.355 0.341 0.224 0.414	0.652 0.605 0.566 1.272 0.715	0.729 0.388 0.553 0.467 0.549	0.647 1.371 1.015 0.68
DENSITY (1984)	0.545 0.333 0.333 0.345 0.345 0.333 0.333	0.43 0.293 0.297 0.383 0.383	0.361 0.259 0.226 0.227 0.227	0.435 0.514 0.417 0.904 0.503	0.431 0.337 0.366 0.375	0.455 0.822 0.636 0.392
SUMMED (2000)	41646 98953 17517 22404 10376 62118 5620 44362	361764 164906 16165 278450 821285	20701 14480 14150 1938 51269	22592 10251 16020 18828 67691	20791 9838 40152 7758 78539	13132 28660 41792 1363542
(2000)	27732 70024 7156 11605 3262 41055 1762 22371	0 275892 97813 8519 198457 580681	11296 5175 3004 19480	11313 3440 6533 12435 33721	12535 2881 17636 2661 35713	6393 18817 25210 879772
ID (2000)	18584 6605 6136 4049 12717 2376 10892	56833 45476 5167 55152 162628	6976 5691 6666 1050 20383	6344 4272 6131 3769 20516	5191 3556 15089 3027 26863	3867 6795 10662 311741
PDB (2000)	1829 1871 1872 1873 1578 221 221 8829	5151 3240 366 3919 12676	298 552 656 84 1590	932 397 514 527 2370	525 640 1087 336 2588	530 484 1014 29067
PDA (2000)	2000 2000 2000 2000 2000 2000 2000 200	23888 18377 2113 20922 65300	2131 3062 3824 799 9816	4003 2142 2842 2097 11084	2540 2761 6340 1734 13375	2342 2564 4906 142962
SUMMED (1984)		120491 72353 7477 104523	9467 7753 8533 1393 27146	10487 5279 8113 7223	8565 5037 20739 3980 38321	6181 10904 17085 540718
RD (1984)	1061 1961 1961 2982 873 10174 489 6572	0 62637 22969 2077 46081 133764	2779 1304 790 4873	2892 962 1730 3499 9083	3066 774 4595 713 9148	1721 4583 6304 210950
1D (1984)	1 1 5 8 6 6 1 1 5 8 6 6 8 7 5 8 6 6 8 7 5 8 6 8 7 6 8 4 9 8 7 6 8 4 9 8 8 8 6 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8	35368 30559 3330 36915 106232	4691 3682 4405 750 13528	4050 2724 3980 2257 13011	3275 2152 10209 1899 17535	2466 4292 6758 200315
PDB (1984)	1320 1320 486 549 282 960 119 1143	3823 2758 287 3314 10182	236 404 461 56	630 226 343 263 1462	359 364 827 205 1755	344 298 642 20525
	2730 2730 2714 2579 1576 4519 766 4507 25864	18663 16067 1723 18213 5466	1761 2363 2877 587 7538	2915 1367 2060 1204 7546	1865 1747 5108 1163 9883	1650 1731 3381 108928
NAM	ו שממצבמשחור	DKI. JAKARTA JAWA BARAT JAWA TENGAH D.I. YOGYAKARTA JAWA TIMUR TOTAL (JAWA)	BALI NUSA TENGGARA BARAT NUA TENGGARA TIMUR TIMOR TIMUR TOTAL (NUSA TENGGARA)	KALIMANTAN BARAT KALIMANTAN TENGAH KELIMANTAN SELATAN KALIMANTAN TIMUR TOTAL (KALIMANTAN)	SULAWESI UTARA SULAWESI TENGAH SULAWESI SELATAN SULAWESI TENGGARA TOTAL (SULAWESI)	MALUKU IRIAN JAYA TOTAL (MALUKUBIRIAN) WHOLE INDONESIA
ы П	1100 PROP 1300 PROP 1300 PROP 1500 PROP 1500 PROP 1700 PROP 1700 PROP 1700 PROP	3100 3200 PROP 3300 PROP 3400 3500 PROP	5100 PROP 5200 PROP 5300 PROP 5400 PROP	6100 PROP 6200 PROP 6300 PROP 6400 PROP	7100 PROP 7200 PROP 7300 PROP 7400 PROP	8100 PROP 8200 PROP

ANNEX 4-1-3 (1/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-ESTI (IR 41)

RD SUMMED (2000)	27732 41646	2307 1149 5620 5246 525 1311 2666 4350 1825 3175 3095 13728		70024 98923	3519 8388 8388 11772 663 5532 8395 5813 10268 1252 1252 2035 16169 12448	7156 17517	869 2175
1D (2000)	9330	1048 770 1576 552 1119 944 1197		18584	1374 6481 1702 1702 1702 1702 2087 2081 2085 160	6605	822
PDB (2000)	741	91 455 155 31 31 85 86 86 185		1829	2003 2003 2003 2003 2003 2003 2003 2003	571	74
PDA (2000)	3843	427724848 882724848 87287448		8486	0.001 0.002 0.000	3185	410
: 2≅ 00	15907	1689 940 2810 872 1737 1351 2050 4458		37596	224 424 424 430 440 440 440 440 440 440 440 440 44	9739	1169
RD (1984)	6825	616 2636 12853 2233 6555 8468 8568 2459		17902	2031 1292 1292 1292 2344 2444 2444 253 253 253 303 303 303 303	1961	222
1D (1984)	5866	675 466 938 438 694 589 771		11901	1330 1425 1130 1330 1330 1555 1555 1633 1633	4596	533
PDB (1984)	486	61 27 27 27 58 58 60 119		1320	178 178 179 185 185 185 185 185 185 185 185 185 185	468	50
PDA (1984)	2730	337 184 184 330 340 350 609		6473	465 807 173 173 738 738 715 1035 1035	2714	336
NAME (KAB.KOD.)	D.I. ACEH	ACEH SELATAN ACEH TEHGGRA ACEH TIMUR ACEH BARAT ACEH BARAT PIDIE ACEH UTARA	BAND ACEH (A) SABANG (B)	SUMATERA UTARA	NIAS: TAPANULI SELATAN TAPANULI TENGAH TAPANULI UTARA LABUHAN BATU SIMALUNGUN DAIRI KARO DELI SERDANG LANGKAT SIBOLGA (A) TANJUNG BALA! (B) TANJUNG BALA! (C) TEBING TINGG! (D) MEDAN (E) BINJA! (F)	SUMATERA BARAT	NATA 192 GIRIRA
CODE CLASS	1100 PROP	1102 KAB 1102 KAB 1103 KAB 1104 KAB 1105 KAB 1106 KAB 1107 KAB	1171 KODYA 1172 KODYA	1200 PROP	1201 KAB 1202 KAB 1203 KAB 1204 KAB 1205 KAB 1206 KAB 1207 KAB 1209 KAB 1210 KAB 1211 KAB 1271 KODYA 1273 KODYA 1275 KODYA 1275 KODYA 1275 KODYA 1275 KODYA	1300 PORP	1301 KAB

ANNEX 4-1-3 (2/13) Results of Demand Estimate Calculated by Kabupaten Model

1607 1986 2605 2489 1476 2820	22404 1986 4983 4188 3867 7380	10376 1588 2010 1776 2610 2392	62118 16068 9081 5359 7233 7233 11128 5646
553 822 1114 1114 502 1219	11605 735 2674 2168 1814 4214	3262 462 539 783 783	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
671 802 9022 9643 61	6136 744 1354 1125 1127 1686	4049 695 7284 725 8956 889	2507 1786 1786 1334 1607 1607 1387 2025 1374
88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	883 84 174 174 310	513 63 107 89 128 126	1578 348 282 144 147 152 152 553
88 4 8 8 2 8 6 4 4 8 8 8 8 7 4 8 8 8 8 8	3780 423 781 658 748 1170	2552 368 4520 514 594	6768 1094 677 724 1144 706
862 1090 1337 1337 1395 1395	9900 1009 19009 1903 3041 1904	5180 911 937 937 1243 1109	23307 5239 3603 2451 2808 2304 2326 883
131 225 372 306 164 281	2982 226 620 608 477 1051	873 150 152 141 249 181	2726 1570 972 1237 1237 1750 901 202
4843 705 705 705 705 705 705 705 705 705 705	3795 502 789 787 703 1014	2449 463 463 463 564 564 509	7654 1102 882 884 984 984 981 1158 850 439
4 8 8 8 4 7 1 6 8 8 6 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	549 001 1111 180	282 282 356 672 667	960 204 178 99 92 94 165 33
2 2 4 8 8 4 8 8 8 8 8 4 8 8 - 8 8 8 1	22 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1576 257 310 363 363 353	4 5 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
KAB. SAWAH LUNTO/SIJUNJUNG KAB TANAH DATAR KAB AGAM KAB AGAM KAB LIMAPULUH KOTA KAB PASAMAN KODYA PADANG (A) KODYA SAWAH LUNTO (C) KODYA PADANG (P) KODYA PADANG TINGGI (E) KODYA PAYAK KUMBUH (F)	PROP RIAU KAB INDRAGIRI HULU KAB INDRAGIRI HILIR KAB KEMULAUAN RIAU KAB KAMPAR KAB BENGKALIS KODYA PEKAN BARU (A)	PROP JAMBI. KAB KERINCI KAB SARKO KAB BATANG HARI KAB TANJUNG JABUNG KAB BUNGO TEBO	PORP SUMATERA SELATAN KAB OGAN KOMERING ULU KAB OGAN KOMERING ILIR KAB LEMATANG ILIR OGAN TENGAH KAB LAHAT KAB MUSIRAWAS KAB BANGKA KAB BANGKA
1303 KA 1305 KA 1305 KA 1306 KA 1307 KA 1371 KC 1372 KC 1373 KC 1375 KC	1400 PR 1401 KA 1402 KA 1403 KA 1405 KA 1405 KA	1500 PR 1501 KA 1502 KA 1503 KA 1504 KA 1505 KA	1600 PC 1601 KA 1602 KA 1603 KA 1604 KA 1606 KA 1606 KA 1607 KA 1607 KA

ANNEX 4-1-3 (3/13) Results of Demand Estimate Calculated by Kabupaten Model

302966	184967	70689	8829	38481	122220	47778	43251	5327	25864	GRAND TOTAL (SUMATERA)	1 1 1 1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1	             	 		1 1 1 1 1 1 1 1	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	                 		1871 KODYA TANJUNG KARANG (A)	1871 KODYA
8170	3108	2296	623	2143	3200	906	1207	279	1108	LAMPUNG UTARA	1803 KAB
18543	9835	4349	992	3364	7205	2839	2173	451	1742	LAMPUNG TENGAH	1802 KAB
17649	9428	4247	875	3099	7.077	2827	2180	413	1657	LAMPUNG SELATAN	1801 KAB
44362	22371	10892	2493	8608	17782	6572	5560	1143	4507	LAMPUNG	1800 PROP LAMPUNG
										1771 KODYA BENGKULU (A)	1771 KODYA
1443	379	653	90	351	726	100	හ ල	31	206	BENGKULU UTARA	1703 KAB
1848 2329	566 817	787 936	74 87	421	947	163 226	482 559	441	261 299	BENGKULU SELATAN REJANG LEBONG	1701 KAB 1702 KAB
5620	1762	2376	221	1261	2804	489	1430	119	766	BENGKULU	1700 PROP BENGKULU
										16/1 KODYA FALEMBANG (A) 1672 KODYA PANGKAL PINANG (B)	1671 KUDYA 1672 KODYA

ANNEX 4-1-3 (4/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-EST3 (IR 41)

CODE CLASS	S NAME (KAB.KOD.)	PDA (1984)	PDB (1984)	(1984)	RD (1984)	SUMMED (1984)	PDA (2000)	PDB (2000)	1D. (2000)	RD (2000)	SUMMED (2000)
3100	DKI. JAKARTA					i					i
3171 3172 3173 3174 3175	JAKARTA SELATAN JAKARTA TIMUR PAKARTA PUSAT JAKARTA BARAT JAKARTA UTARA										
3200 PROP	JAWA BARAT	18663	3823	35368	62637	120491	23888	5151	56833	275892	361764
3201 KAB 3202 KAB 3203 KAB 3203 KAB 3205 KAB 3205 KAB 3207 KAB 3209 KAB 3209 KAB 3211 KAB 3211 KAB 3212 KAB 3213 KAB 3211 KAB 3215 KAB 3215 KAB 3217 KAB	PANDEGLANG LEBAK BOGOR SUKABUMI CIANJUR BANDUNG GARUT TASIK MALAYA CIAMIS KUNINGAN CIREBON MAJALENGKA SUMEDANG INDRAMAYU SUBANG FURWAKARTA KARAWANG FURWAKARTA KARAWANG SURBANG A BOGOR (A) A CIREBON (D)	0.00	11149242999 11 11 1111111111111111111111	2010 2010 2010 2010 2010 2010 2010 2010	1113 880 880 880 880 880 880 880 880 880 88	2220 8220 8220 835 8420 8520 8520 8520 8520 850 850 850 850 850 850 850 850 850 85	00044011100000000000000000000000000000	1110 80 80 110 80 110 80 110 80 110 80 110 80 110 80 110 80 110 80 110 80 80 80 80 80 80 80 80 80 80 80 80 80	1757 1767 1767 1767 1767 1767 1767 1767	4684 4287 4287 17017 17017 18513 18513 12638 6298 6298 12678 11346 11346 11346 11346 11346	7367 7018 51315 52355 18848 53818 53817 76587 16845 16845 16845 17495 17
3300 PROP	JAWA TENGAH	16067	2758	30559	22969	72353	18377	3240	45476	97813	164906
3301 KAB	CILACAP	096	194	1591	1707	4452	1139	238	2493	8089	11959

ANNEX 4-1-3 (5/13) Results of Demand Estimate Calculated by Kabupaten Model

9489 4049 4305 4305 4305 4306 6579 6579 7448 7589 7402 7402 7402 7402 7402 7402 7402 7402		16165	2143 4445 4656 4921		278450
0.0242222222222222222222222222222222222		8519	911 2464 2345 2799		198457
22114111111111111111111111111111111111		5167	879 1410 1377 1501		55152
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0		366	43 76 163 84		3919
889 7540 7540 7552 7552 7553 7	; ;	2113	310 495 771 537		20922
22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		7477	1150 1944 2298 2085		104523
41 40 40 40 40 40 40 40 40 40 40	4	2077	248 583 603 643		46081
11 8 8 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3390	606 907 953		36915
100 100 100 100 100 100 100 100 100 100		287	35 58 130 64		3314
$\begin{array}{c} L 4404400000000000000000000000000000000$		1723	261 396 641 425		18213
					-
3302 KAB BANYUMAS 3303 KAB PURBALINGGA 3305 KAB BANJAR NEGARA 3306 KAB BANJAR NEGARA 3306 KAB WONOSOBO 3308 KAB MAGELANG 3310 KAB BOYOLALI 3311 KAB BOYOLALI 3313 KAB SUKOHARJO 3314 KAB SUKOHARJO 3315 KAB SUKOHARJO 3315 KAB BLORA 3316 KAB BLORA 3319 KAB BLORA 3319 KAB BLORA 3319 KAB REMBANG 3319 KAB REMBANG 3321 KAB REMBANG 3321 KAB REMBANG 3322 KAB SEMARANG 3324 KAB BENARA 3324 KAB BENARANG 3325 KAB SEMARANG 3326 KAB PERALONGAN 3326 KAB BENARANG 3326 KAB BENARANG 3328 KAB BENARANG 3329 KAB BENALANG	3371 KODYA MAGELANG (A) 3372 KODYA SURAKARTA (B) 3373 KODYA SALATIGA (C) 3374 KODYA SEMARANG (D) 3375 KODYA PEKALONGAN (E) 3376 KODYA TENGAL (F)	3400 D.I. YOGYAKARTA	3401 KAB KULON PROGO 3402 KAB BANTUL 3403 KAB GUNUNG KIDUL 3404 KAB SLEMAN	3471 KODYA YOGYAKARTA (A)	3500 PROP JAWA TIMUR

Results of Demand Estimate Calculated by Kabupaten Model ANNEX 4-1-3 (6/13)

5.00 00 00 00 00 00 00 00 00 00 00 00 00	1285	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1698 2854 10956 10956 10956 27339 6185 14727 14727 14727 14727 14727 14727 14727 14727 14727 14727 1853 1853 1853 1853 1853 1853 1853 1853	0681	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	628	[
0.00 110 100 100 100 100 100 100 100 100	12676	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
60000000000000000000000000000000000000	5300	,
1.020 1.020	04844	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
11 11 12 12 12 12 12 12 12 12 12 12 12 1	133764	( i
7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	106232	 
	1018	 
88888888888888888888888888888888888888		
PACITAN PONORGALEK TULUNG AGUNG BLITAR KEDIRI MALANG LUMAJANG JEMBER BANYUWANGI BONDOWOSO SITUBONDO PROBOLINGGO PROBOLINGGO PROBOLINGGO PROBOLINGGO PROBOLINGGO PROBOLINGGO PROBOLINGGO PROBOLINGGO TUBAN MAGETAN NGAWI MAGELAN NGAWI MAGELAN NGAWI MAGELAN NGAWI MAGELAN NGAWI MAGELINGGO TUBAN CRESIK (8) A MALANG (C) A MADJUN (G) A MADJUN (G) A MADJUN (G)	[ 2	
3501 KAB 3502 KAB 3503 KAB 3505 KAB 3505 KAB 3506 KAB 3507 KAB 3512 KAB 3512 KAB 3513 KAB 3513 KAB 3514 KAB 3515 KAB 3515 KAB 3515 KAB 3515 KAB 3517 KAB 3528 KAB 3528 KAB 3529 KAB 3529 KAB 3521 KAB 3521 KAB 3521 KAB 3521 KAB 3523 KAB 3524 KAB 3525 KAB 3527 KAB 3526 KAB 3527 KAB 3528 KAB 3529 KAB 3527 KAB 3527 KAB 3572 KAB 3573 KODYA 3573 KODYA 3573 KODYA 3577 KODYA 3577 KODYA 3577 KODYA 3577 KODYA 3577 KODYA 3577 KODYA	       	1 1 1 1 1 1 1 1 1 1

ANNEX 4-1-3 (7/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-ESTS (IR 41)

1 0	NAME (KAB.KOD.)	PDA (1984)	84)	10 1984)	RD 9841	MMED 984)	DA 0003	90)	10(2000)	RD (2000)	MMED 000)
5100 PROP	BALI	1761	236	4691	2779	9467	2131	298	9269	11296	20701
5102 KAB 5102 KAB 5103 KAB 5104 KAB 5105 KAB 5106 KAB 5107 KAB	JEMBRANA TABANAN BADUNG GIANJAR KLUNGKUNG BANGLI KARANG ASEM BULELENG	350 3154 3154 322 323 361	0 8 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 60 90 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	798 1294 1977 1131 560 612 1145	202 204 204 204 204 448 605 605 605 605 605 605 605 605 605 605	26 58 32 32 13 17 72 72	683 1391 856 874 874 823 1310	1358 3358 1169 300 1031 2001 2001	1614 2613 5213 2304 908 1065 4788
5200 PROP	NUSA TENGGARA BARAT	2363	404	3682	1304	7753	3062	552	2691	5175	14480
5201 KAB 5202 KAB 5203 KAB 5204 KAB 5205 KAB 5206 KAB	LOMBOK BARAT LOMBOK TENGAH LOMBOK TIMUR SUMBAWA DOMPU BIMA	517 451 557 356 376	89 74 70 60 60 60 60	829 747 747 889 916 833	350 284 1073 141	1785 1556 1956 9946 3596 1116	677 577 713 473 479	100 100 130 130 88	1311 1351 1383 722 802 802	1443 1111 1607 420 69 625 525	3554 2939 3834 1706 553 1894
5300 PROP	NUA TENGGARA TIMUR	2877	40.1	4405	790	8533	3824	656	9999	3004	14150
5301 KAB 5302 KAB 5303 KAB 5304 KAB 5305 KAB 5308 KAB 5308 KAB 5309 KAB 5311 KAB 5312 KAB	SUMBAWA BARAT SUMBA TIMUR KUPANG TIMOR. TENGAH UTARA BELU ALOR FLORES TIMUR SIKKA ENDEH NGADA	24 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	80084-4142008 8000804 8000804	64044466666 646446466666666666666666666	024004407444 024004444444 00004464444444444444444	7.33 1.233 1.233 1.241 1.241 1.241 1.241 1.241 1.241 1.241	6.16414.64444 4000647.64441	22 122 122 27 27 27 38 38 38 38	9352 9352 9352 9353 9353 9353 9353 9353	20 08 1 22 1 36 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1232 653 2216 1489 689 914 577 1265 1036 931 931
5400 PROP	TIMOR TIMUR	587	55	750	٥	1393	799	84	1050	ເດ	1938

Results of Demand Estimate Calculated by Kabupaten Model ANNEX 4-1-3 (8/13)

113 111 111 124 227 227 196 196 107 177 177 177 177	51269
000000	19480
@ & & @ & C = 1 & C = 1 & & C = 2 & C	20383
4r40r <u>0</u> 48008000	1590
449 478 478 478 478 478 478 478 478 478 478	9816
113 113 113 1140 126 126 126 126 144 144	27146
00000000000	4873
4040274764076 70779864764076	13528
<b>ωυων-4∞0Φ→0πν</b> ω	1157
	7588
COVALIMA AINARO SAME (MANUFAHI) VIQUE QUE LAUTEM BAUCAU MANA TUTU DILI AILEU LIKUICA ERMERA BOBONARO	TOTAL DEMAND (NUSATENGARA
401 KAB 402 KAB 403 KAB 403 KAB 405 KAB 406 KAB 407 KAB 409 KAB 410 KAB 411 KAB 411 KAB	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

ANNEX 4-1-3 (9/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-EST6 (IR 41)

CLASS NAME (KAB.KOD.)	PDA (1984	B 84)	1D 1984)	RD (1984)	SUMMED (1984)	A	i	ì_o	RD (2000)	MME
6100 PROP KALIMANTAN BARAT	2915	630	4050	2892	10487	4003	932	6344	11313	22592
6101 KAB SAMBAS 6102 KAB PONTIANAK 8103 KAB SANGGAU 6104 KAB KETAPANG 6105 KAB SINTANG 6106 KAB KAPUAS HULU	717 777 777 3374 993 993	150 150 757 331 331	1000 1010 631 5228 3243 329	0000 0000 0000 0000 0000 0000 0000 0000 0000	2861 2948 1547 1219 1274 638	10 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	2331 11422 11152 48	158 1036 073 828 488 486	3775 4017 1340 943 958 280	6558 7013 3081 2412 2450 1078
6171 KODYA PONTIANAK (A)										
8200 PROP KALIMANTAN TENGAH	1367	226	2724	962	5279	2142	397	4272	3440	10251
6201 KAB KOTAWARINGIN BARAT 6202 KAB KOTAWARINGIN TIMUR 6203 KAB KATINGAN 6204 KAB KAPUAS 6205 KAB BARITO SELATAN 6206 KAB BARITO UTARA 6207 KAB BARITO UTARA 6208 KAB KAHAYAN HULU/G.MAS 6209 KAB MURUNG RAYA			304 446 6443 6443 6444 6444 6444 6444	08 24 4 4 6 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6	48001 48014 48014 4800 4800 4800 4800 48	44-000	236 136 136 125 125 17	23333388888888888888888888888888888888	302 1184 1554 1954 1184 118	1070 1919 3289 7881 784 762 603
6271 KODYA PALANGKA RAYA (A)						٠				
6300 KELIMANTAN SELATAN	2060	343	3980	1730	8113	2842	514	6131	6533	16020
6301 KAB TANAH LAUT 6302 KAB KOTA BARU 6303 KAB BANJAR 6304 KAB BARITO KUALA 6305 KAB TAPIN 6306 KAB HULU SEI SELATAN 6308 KAB JULU SEI TENGAH 6308 KAB TABALONG	- 62 - 62 - 62 - 62 - 62 - 62 - 62 - 62		0048884889 4-140884489 0-440878829	0 5 5 0 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	24 8 - 4 4 2 2 1 8 8 8 8 8 4 4 - 70 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	33 100 108 108 31 23 104	000 800 800 800 800 10 800 10 10 10	2211 2211 200 200 393 393 238 238 238	1339 2715 1617 961 1293 1702 1702 873
6371 KODYA BANJAR MASIN (A)										

ANNEX 4-1-3 (10/13) Results of Demand Estimate Calculated by Kabupaten Model

18828	1525 12140 768 4395	· · · · ·	67691
12435	669 8903 225 2638		33721
3769	574 1792 371 1032		20516
527	42 321 24 140		2370
2097	240 1124 148 585		11084
7223	694 4405 394 1730		31102
3499	186 2528 64 721		9083
2257	353 1056 236 612		13011
263	20 164 11 68		1462
1204	135 657 83 329		7546
PROP KALIMANTAN TIMUR	KAB PASIR KAB KUTAI KAB BERAU KAB BULONGAN	6471 KODYA BALIK PAPAN (A) 6472 KODYA SAMARINDA (B)	GRAND TOTAL (KALIMANTAN)
6400 PROP	6401 K 6402 K 6403 K 6404 K	6471 K 6472 K	

ANNEX 4-1-3 (11/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-EST7 (IR 41)

		1865 359 3275 3066 8565 2540 525 5191 12535 20791	587         123         903         830         2443         799         179         1433         3326         5737           354         64         615         361         1394         510         100         1005         1558         3173           699         139         1254         1647         3739         956         204         2045         6935         10140           225         33         503         228         989         275         42         708         716         1741		1747 364 2152 774 5037 2761 640 3556 2881 9838	353         66         475         130         1024         559         116         776         474         1925           391         79         470         127         1067         590         131         733         420         1874           779         183         852         448         2262         1249         328         1465         1731         4773           224         36         63         684         363         65         582         256         1266	5108 827 10209 4595 20739 6340 1087 15089 17636 40152	1.0.1.4.1.0.1.0.1.1.0.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.1.0.1.
	84) (1984) (198	59 3275 306	903 615 1254 503		64 2152	8 475 1 1 3 3 3 3 5 5 5 4 4 4 4 4 4 4 4 4 4 4 4 4	27 10209 459	11 24 39 12 24 25 27 27 27 27 27 27 27 27 27 27
	(4)	SULAWESI UTARA 1865	GGRONTALO BALANG MANGONDOW 354 MINAHASA SANGIHE TALAUT 225	GORONTALO (A) MANADO (B)	SULAWESI TENGAH	LUWUK/BANGGAI 353 POSO 391 DONGGALA 779 BUAL TOLI TOLI 224	SULAWESI SELATAN 5108	SELAYAR SELAYAR BULUKUMBA BANTAENG JENEPONTO 188 178 170 188 153 155 150 174 174 174 174 174 174 174 175 177 178 178 178 178 178 178 178 178 178
	CODE CLASS N	0 PROP	7101 KAB G 7102 KAB B 7103 KAB M 7104 KAB S	7171 KODYA G 7172 KODYA M	7200 PROP S	7201 KAB L 7202 KAB P 7203 KAB D 7204 KAB B	7300 PROP S	7302 KAAB 7302 KAAB 7302 KAAB 7302 KAAB 7304 KAAB 7307 KAAB 7310 KAAB 7311 KAAB 7313 KAB 7315 KAB 7315 KAB 7315 KAB

ANNEX 4-1-3 (12/13) Results of Demand Estimate Calculated by Kabupaten Model

321 KAB	MAMUJU	133	19	267	46	465	178	27	404	184	793
71 KODY 72	371 KODYA UJUNG PANDANG (A) 7372 PARE-PARE (B)										. •
400 PROP	SULAWESI TENGGARA	1163	205	1899	713	3980	1734	336	3027	2861	7758
01 KAB		352	62	583	264	1261	468	88	855	828	2239
02 KAB		205		388	107	732	297	40	600	380	1326
O3 KAB		405	80	576	257	1318	620	135	953	1045	2753
404 KAB		201	32	351	ខ្ល	699	349	64	619	408	1440
; ; ; ;	GRAND TOTAL (SULAWESI)	9883	1755	17535	9148	38321	13375	2588	26863	35713	78539

ANNEX 4-1-3 (13/13) Results of Demand Estimate Calculated by Kabupaten Model

FILE: DEM-EST8 (IR 41)

CODE CLASS	CODE CLASS NAME (KAB.KOD.)	PDA (1984)	PDB (1984)	(1984)	RD (1984)		PDA (2000)	PDB (2000)	ID (2000)	RD (2000)	
8100 PROP	MALUKU	1650	344	2466	1721	i	2342	1	3867	6393	1
8101 KAB 8102 KAB 8103 KAB 8104 KAB	MALUKU TENGGARA MALUKU TENGAH HALMAHERA TENGAH MALUKU UTARA	343 134 134 563	66 137 19 122	529 843 808	261 730 62 668	2320 2320 501 2161	858 210 827	92 208 34 196	761 1326 458 1322	805 2678 250 250 260	2105 5070 952 5005
8171 KODYA	8171 KODYA AMBON (A)										
8200 PROP	8200 PROP IRIAN JAYA	1731	298	4292	4583	10904	2564	484	6795	18817	28660
8201 KAB 8202 KAB	MERAUKE PEG-JAYA WIJAYA	322	69 08 08	567 830	632 1584	1590	411	94	788 1474	1817	3110
	JAYAPURA Bantai	178	22	562 790	630	1395	292	7.47 C.R.	976	3009	4324
	FAK	117	8 -	282	122	552	178	. E	453	463	1125
	SORONG	229	42	497	463	1231	344	70	783	1791	2988
	MANOKWARI	149	24	361	208	742	235	4.0	580	860	1718
	YAFEN WAROFEN TELUK CENDERAWASIH	85 S	10	313	143	4486 548	132	120	405	347 495	904 1092
; ; ; ; ; ; ; ;	GRAND TOTAL (MLK, IRIAN)	3381	642	6758	6304	17085	4906	1014	10662	25210	41792

#### **ANNEX 4-2-1**

## LIST OF COUNTRIES SAMPLED FOR INTERNATIONAL MODEL

### **ANNEX 4-2-2**

## DATA USED FOR INTERNATIONAL MODEL (1973-1982)

## **ANNEX 4-2-3**

# TELEPHONE DEMAND ESTIMATED RESULTS OF WHOLE INDONESIA SIMULATED BY INTERNATIONAL MODEL

These data are prepared for the estimation of the nationalwide subscriber demand.

The abbrevations in Annex 4-2-1, 2,3 stand for the following.

M/L ADD : New subscriber in the objective year

NA + W : New subscribers and waiting applicants in the

objective year

POP : Population

REAL GDP : Gross Domestic Products in the constant price at

1975 (US\$)

REAL SUB FEE: Average Subscription Fee in the constant price

at 1975 (US\$)

SPL : Telephone Supply Volume

SF : Real Sub Fee

SPL-1 : 10% increment of telephone supply per year

SPL-II : 10% increment in PELITA IV, 12.5% and 15%

increment in REPELITA V and VI

SPL-III : 10% increment in PELITA IV, 15% and 20%

increment in REPELITA V and VI

SF(-20%) : The case when the subscription fee is decreased

by 20%

SF(+20%) : The case when the subscription fee is increased

by 20%

ANNEX 4-2-1 List of Countries Sampled for International Model

NAME OF COUNTRY	COUNTRY	NO.
you have been some man and also also been been been used used also		
GERMANY		1
BELGIUM		2
AUSTRALIA		3
BOTSWANA		4
CHILE		5
DENMARK		6
U.S.A		7
GREECE		8
INDONESIA		9
ITALY		10
JAPAN		11
MALAYSIA		12
MALTA		13
PARAGUAY		14
NETHERLANDS		15
PHILIPPINE		16
UNITED KINGDOM		17
SINGAPORE		18
THAILAND		19
URUGUAY		20

ANNEX 4-2-2 (1/4) Data Used for International Model (1973-1982)

FILE: INTER-1 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

		CSOURC	R: LEFECO	MMUNICATIO	N STATISTI	CS OF TIDE	٠,
CONTI	VEADI	MAIN LINE	M/L ADD	NA+W	POF	REAL GDP	REAL SUB
CONTI	YEARI	MAIN LINE (10^6)	(10^6)	(10^6)	(10^6)	(10^6)	FEE
NO.1		(10 0)	(10.0)	(10 0)	(10 07	(10 0)	
1 1	73 1	11.482	0.703	1.625	61.98	385311	122.08
1 1	74	12.167	0.685	1.321	62.05	434356	153.14
1 1	75		0.667				
1 1	76	14.212	1.378	2.204	61.53	453071	141.63
1 :	77 1	15.748	1.536	2.251	61.4		160.52
1	78	17.305	1.557	2.455	61.32	632988	178.59
1 1	79	18.917	1.612	2,437	61.44	695823	172.49
ii	80 1	20.535	1.618	2.309	61.5	621053	109.43
ii	81	21.769	1.234	1.9765	61.7	521954	
ii	82 1	22.713	0.944	1.758841	61.6	490469	58.86
2	73	3.147	0.259	0.6344	13.38	72261	101.45
2 1	74		0.214	0.675	13 599	79132	168.01
2 1	75		0.178	0.5768	13.771		159.39
2 1	76	3.7	0.161	0.4064	13.916	69584	187.3
2 1	77	3,907	0.207	0.4647	14.074	64077	149.07
2 1	78	4.166	0.259	0.5196	14.249	66478	128.65
2   2	79 i	4.449	0.283	0.5852	14.422	66639	106.11
2	80	4.743	0.294	0.6463	14.616	70125	101.65
2 1	81 1	5.213	0.47	0.616521	15.0495	85850	147.62
2 1	82	5.48	0.267	0.548841	15.2761		260.04
3	73	1.652	0.1	0.2	9.756	51001	120.56
3	74	1.766	0.114	0.232	9.788	53976	102.07
3 1	75	1.871	0.105	0.159	9.813	52972	157.32
3	76	1.941	0.07	0.214	9.823	55227	272.4
3 1	77		0.109	0.203	9.837		259.82
3 1	78	2.178		0.241	9.842	77777	282.38
3 1	79 1	2.317	0.139	0.281	9.855	81557	265.95
3	80	2.463	0.146	0.269	9.863	68269	225.56
šі	81 1		0.146	0.2745	9.868	57476	172.98
3 1	82 1		0.136273	0.244325	9.867953	47294	139.65
4 1	73	0.0039	0.0004	0.00068	0.653	225	164
4	74	0.0043	0.0004	0.000803	0.672	391	188.17
4	75 1	0.0047	0.0004	0.000968	0.696	354	121.79
4	76 1	0.005	0.0003	0.001449	0.719	366	199.95
4	77	0.0055	0.0005	0.001321	0.739	321	67.91
4	78 1	0.0059	0.0004	0.001481	0.767	358	72.76
4	79 1	0.0064	0.0005	0.001812	0.797	339	126.86
4	80 1	0.0068	0.0004	0.002841	0.846	290	193.36
4	81 1	0.0072	0.0004	0.00387	0.925	275	226.22
4 1	82 1	0.008564	0.001364	0.004898	0.943	251	72.43
5	73 1	0.282	0.006	0.165	9.899	114815	3348.77
5 1	74	0.289	0.007	0.164	10.076	24972	1133.66
5 1	75	0.297	0.008	0.143	10.253	4688	350.95
5 1	76 1	0.308	0.011	0.137	10.555	3304	129.53
5 1	77 1	0.325	0.017	0.148	10.756	1915	59.73
5 1	78 1	0.345	0.02	0.138	10.801	1573	65.96
5 1	79 1	0.351	0.006	0.139	11.104	1543	128.33
5 ‡	80 !	0.363	0.012	0.15	11,1865	1404	87.14
5 1	81 1	0.3836	0.0206	0.1315	11.269	966	31.22
5	82 1	0.404196	0.020596		11.27544	324	9.58

ANNEX 4-2-2 (2/4) Data Used for International Model (1973-1982)

FILE: INTER-2 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

	- 1	CSOURC	E: TELECO	MMUNICATIO	N STATISTI	CS OF TIU)	
CONT I	YEARI		M/L ADD (10^6)	NA+W (10^6)	POP (10^6)	REAL GDP	REAL SUB FEE
6 I	73 1	1.501	0.094	0.001027	5.034	302	3,16
6 1	74		0.099	0.001234	5.053	331	3.09
6				0.001593	5.06	308	2.6
6 1	76 1		0.128	0.002652	5.075	351	2.52
6 1	77		0.119	0.001591	5.092	348	2.45
6	78 I	· ·	0.101	0.00085	5.112	395	2.99
6 1	79	2.155	0.1	0.000617	5.122	374	2,96
6 1	80 l	2.226	0.071	0.000366		321	3.71
6	81 1	2.289	0.063	0.000114		259	2.78
6 1	82 1	and the second s		0.000012	5.116	278	2.32
7 1	73 1	77.58	0.557	0.058	212.932	1428692	1882.27
7 L		78.744	1.164	0.046	214.931	1389301	875.99
.71	75 1	80.515	1.771	0.038	217.095	1361600	583.29
7 1	76 l	82.802	2.287	0.036	219.179	1462382	489.33
7 1	77 1	85.426	2.624	0.038	221.477	1537300	463
7 1	78 l	88.431	3.005	0.036	223.88	1599422	434.92
7 1	79 l	91.265	2.834	0.072	226.444	1622461	484.95
7	80 1	94.282	3.017	0.065	228.83	1583932	479.54
7 1	81	94.429	0.147	0.057	230.508	1723254	9089.08
7	82 1	94.90585	0.47685	0.049	231.99	1679810	2615.23
8 !	.73	1.413	0.125	0.433	8.945	20568	65.71
8, 1	74 ¦	1.573	0.16	0.5	8.99	19173	31.89
8	75	1.687	0.114	0.467	9.08	16477	32.89
8 1	· 76 I		0.119	0.679	9.15	17622	30.28
8 1			0.099	0.885	9.25	18952	30.82
8 !	78 1		0.12	0.932	9.37	20002	29.84
8 1	79 1		0.131		9.48	19357	36.78
8 1	80 (	2.27	0.114	1.036	9.68	15686	42.09
8 !	81		0.13116	1.13648	9.78	12147	34.16
8 1	~- ,	2.53441	0.13325	1.122765	9.82	10043	23.23
9 - 1	73		0.012	0.0752	125.549	27258	440.96
9 1	74 1		0.0142	0.07856	128.636	30717	311.1
9 1	•		0.0099	0.0747	131.799	30464	1474.02
9 1	76		0.0119	0.08566	135.04	31084	752.71
9 † 9 †	77   78	-,	0.0216	0.13153	138.361	34417	1020.7
9	79 1		0.0341	0.11946	141.755	24425	439.5
9	80 1	0.3171 0.3758	0.042 0.0587	0.13144	143.457	28234 26021	290,66 200,99
9	81 1	0.42706	0.05126		150.421	37436	188.74
9	82	0.475459	0.048399	0.5244	150.421	23774	150.83
10	73	the state of the s	0.695	1.125	55.199	173471	171.57
10 (	74		0.649	1.433	55.665	165476	133.25
10	75	9.66	0.57	0.703	56.034	171730	177.02
10	76 1	10.166	0.506		56.343	143222	166.87
10 1	77	10.778	0.612		56.621	145818	151.44
ÎÕ	78	11.456	0.678	1.54		159915	147.89
10	79 1		0.716		57.02	174650	138.3
10 1	80 1	13.017	0.845	1.832	57.162	154976	119.41
10	81		0.843	1.664	56.266	118992	97.44
10	82		0.83778		56.76438	105369	81.21

ANNEX 4-2-2 (3/4) Data Used for International Model (1973-1982)

FILE: INTER-3 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

		Caopic	E. IELECON	MONICATIO			
acrim.	UMADI	MAIN LINE	M/L ADD	NA+W	POP	REAL GDP	REAL SUB
CONTI					(10^6)	(10^6)	FEE
NO.1	* * * .	(10^6)	(10^6)	(10^6)	(in n)	(10 0)	
					100 200	535547	223,27
11 1		26.274	3.581	4.446	109.789		195.96
11	75 1	29.502	3.228	3.311		491423	
11 1	76 h	32.377	2.875		112.464	480711	179.22
11 1	77	34.444	2.067	1.971	113.566	502832	196.25
11 1	78 1	35.837	1.393	1.422	114.624	688645	368.16
ii i	79	37.214	1.377	1.427	115.622	771752	392.42
11		38.611	1.397	1.449	116.541	660803	312.09
11	81 ;	39.934	1.323	1.321	117.415	836006	347.26
			1.256	1.28	117.009	802394	332.72
11		41.19			117.777	719907	284.43
11	83	42.429	1.239	1.342		9309	383.25
12		0.136	0.006	0.0567	11.443	10040	
12 ¦	74	0.149		0.0775	11.795	10342	114.85
12.1		0.169	0.02	0.1003	12.187	8630	86.95
12 1	76 \	0.194	0.025	0.1263	12.579	10772	66.13
12		0.228	0.034	0.1484	12.972	12728	45.14
12		0.271	0.043	0.1712	13.332	14616	48.56
12		0.325		0.2187	17.706	17361	87.58
.12	80	0.396	0.071	0.277	13.436	18651	37.69
12		0.48867	0.09267	0.32684	13.436	18202	
12		0.58539	0.09672	0.39049	13.704	32502	160.06
13	73	0.0264	0.0002	0.0169	0.321	323	288.36
	74	0.0269	0.0002	0.0168	0.318	347	105.19
				0.0067	0.31	347	51.55
13	75	0.0277	0.0008		0.301	371	43.06
13	76	0.0285	0.0008	0.0249		405	15.36
13		0.0338	0.0053	0.0259	0.305		
13	78	0.0426	0.0088	0.0294	0.309	469	15.2
13	79	0.0465	0.0039	0.0309	0.312	564	
13 1	1 08	0.0511	0.0046	0.0313	0.312	579	
13.1		0.0605	0.0094	0.0415	0.3187	94	4.01
13	82 1	0.0656	0.0051	0.04	0.32272	103	7.83
14	73 ¦	0.0238	0.004	1000.0	2.516	1261	160.85
14 !	74 l	0.0274	0.0036	0.0001	2.608	1365	475.48
14 1	75 1	0.03	0.0026	0.0001	2.686	1449	404.76
4	76	0.032	0.002	0.0001	2.765	1558	571.85
14		0.0353	0.0033	0.0001	2.846	1761	450.23
4		0.0401	0.0048	0.0001	2.971	1923	456.46
14	79	0.0458	0.0057	0.0001	3.108	1974	395
14	80	0.0495	0.0037	0.0001	3.218	2184	799.25
14		0.05474	0.00524		3.3144	2403	557.25
14	82	0.05998	0.00524	0.0001	3.4108	2572	552.03
15		2.8136	0.276	0.31	13.49	63801	270.01
15 1	74 1	3.0636	0.25	0.3778	13.598	75097	354.33
15	75	3.3355	0.2719	0.4264	13.734	70212	304.89
15 1	76 l	3.6121	0.2766	0.4686	13.815	78870	324.97
15		3,9328	0.3207	0.5192	13.898	92172	328,21
15 i	78	4.2799	0.3471	0.4786	13.986		374.83
1 <b>5</b>   1	79	4.6048	0.3249	0.4222	14.091	115815	408.6
15 1	80	4.8921	0.2873	0.3637	14.209	103201	430.88
15 1	81 1	5.1033	0.2112	0.3063	14,286	87109	452.93
15 1	82 1	5.291	0.1877	0.3144	14.338	82373	423.12
		-~,			~~~		

ANNEX 4-2-2 (4/4) Data Used for International Model (1973-1982)

FILE: INTER-4 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

		CSOUR	TE IELECO	MMUNICALIU	IIGIIAIG N	CS UF 1101	
CONTI	YEARI	MAIN LINE	M/L ADD	NA+W	POP	REAL GDP	REAL SUB
CONT			(10^6)	(10^6)	(10^6)	(10^6)	FEE
NO.1	1	(10^6)	(10 0)	(10.0)		(10.0)	FEE
16 1	73	0.239	0.027	and the second s		13904	1.23
16		0.265	0.027	0.622	41.116	13505	2.09
16		0.284	01010		42.216	13670	5.65
16		0.304	0.02	0.819	43.4		5.62
16		0.364	0.06	0.1092	44.54	15980	1.3
16		0.371	0.007	0.1363	45.771	16952	15_95
6 1		0.389	0.018	0.1832	47.005		5.9
16 f		0.42	0.031	0.2041	48.054	17809	4.43
.16	81 1	0.44284	0.02284	0.1982	49.1066	17197	146.53
16 1	82	0.48074	0.0379	0.194319	50.28847	28737	170.12
17 1	74.1	12.007	0.838	1.466	. 55.915	226798	151.19
17 3	75 1	12.807	8.0	3.443	55.917	236981	170.18
17 1	76 1	13.341	0.534	1.213	55.897	189595	186.91
17	77 1	14.074	0.733	1.463	55,877	168026	153.8
7.1		15.184	1.11	1.987	55.844	189925	111.32
17		16.479	1.295	2.391	55.835	218069	109.1
17		17.717	1.238	2.163	55.883	224243	102.92
17			0.826	1.68		324624	249.4
17		19.08854	0.54554	1.589	55.992	261299	349.56
17	~	19.54938	0.46084	1.58	56.252	76801	129.66
18			0.0163		2.193	4934	93.01
		0.100.	0.0100	0.0479		5016	63.88
		0.1761	0.0194	0.0626	2.2298		
18		0.2016	0.0255		2.2626	5525	62.36
18		0.2496	0.048	0.0759	2.2933	5577	39.34
18		0.3226	0.073	0.0764	2.3253		36.25
8 1		0.3969	0.0743	0.0884	2.3536	6675	42.77
. 8 1		0.4648	0.0679	0.0903	2.3835	7772	49.88
18		0.5234	0.0586	0.0934	2.4139		52.5
18		0.57548	0.05208	0.09013	2.4433	9478	62.76
18		0.630357	0.054877	0.091514	2.48782	10039	60.18
19 l		0.255	0.03	0.002	39.95	13764	33.49
19		0.271	0.016	0.002	41.334	14035	66.79
19 1	75 l	0.312	0.041	0.002	42.391	14509	70
19	76 1	0.334	0.022	0.032	43.214	15899	89.51
19 -	77	0.367	0.022 0.033	0.092	44.273	17217	71.68
19 1	78 1	0.409	0.042	0.152	45.222	19128	66.67
. 19 1	79 I	0.451	0.042	0.333	46.114	20511	70.38
19 1	80	0.497	0.046		46.995	21043	46.75
19 1			0.03211		47.875	20934	53.77
19 1		0.56122	0.03211	0.48836	48.8469	22183	225.16
20		0.167	0.007		2.74	22143	545.19
20	74	0.177	0.01	0.227	2.76	6927	160.81
20		0.187	0.01	0.241	2.783	2604	67.77
20 1		0.193	0.006		2.803	1804	68.76
20 l						1333	27
		0.202		0.28	2.803		131.76
0 1		0.204	0.002		2.803	1068	
20		0.212	0.008	0.302		976	22.86
20 1		0.22		0.346		820	18.66
20		0.22645	0.00645	0.37606	2.92574	2782	103.8
20	82	0.229	0.00255	0.406	2.93	2452	263.55
							~

Telephone Demand Estimate Results of Whole Indonesia Simulated by International Model ANNEX 4-2-3

FILE: INT-INDO (IR 41)

	<pre></pre>	<pre><dp>&lt; 3% PER ANNUM&gt;</dp></pre>	ANNUM	AGD>	5% PER ANNUMS	NNNNN	-GD>	<gdp: 7%="" annum="" per=""></gdp:>	ANNOW	GDP: 5% F	GDP: 5% PER ANNUM (SPL-1)	(SPL-1)
YEAR	SPL-1	SPL-1 SPL-11 SPL-111	SPL-III	SPL-I	SPL-11	SPL-111	SPL-1	SPL-II	SPL-11 SPL-111	SF(-20%)		SF(+20%)
985	1,3957	1.3957	1.3957	1.4014	1.4014	1.4014	1.4071	1.4071	1.4071	1.4754	1.4014	1.3458
066	2.2776	2.3174	2.3571	2.3298	2.3703	2.4106	2.3833	2,4245	2,4655	2.4446	2.3298	2.2435
995	3,14	3.4072	3.6705	3.2682	3.5432	3.8139	3.4045	3.6877	3.9664	3.4248	3.2682	3.1504
2000	4.0037	4.6362	5.2534	4.2393	4.8978	5.5391	4.4991	5.1863	5.8542	4.4408	4.2393	4.0878

NOTE: SPL-I 0.1/ANNUM UP TO YEAR 2000 (x10~6) SPL-II IV:0.1. V:0.125. 0.15/ANNUM UP TO YEAR 2000 (x10~6) SPL-III IV:0.1. V:0.15. 0.2/ANNUM UP TO YEAR 2000 (x10~6)

**ANNEX 4-3-1** 

NUMBER OF SUCCESSFUL CALLS AND TOTAL CHARGING MINUTES FOR MANUAL EXCHANGE INTERLOCAL CALL

ANNEX 4-3-2

ANALYSIS OF TRAFFIC DATA (MANUAL EXCHANGE)

**ANNEX 4-3-3** 

TRAFFIC DISTRIBUTION

ANNEX 4-3-4

DATA USED IN TRAFFIC ANALYSIS

**ANNEX 4-3-5** 

A STUDY OF THE FREQUENCY OF PHONE CALLS PER SUBSCRIPTION

Number of Successful Calls and Total Charging Minutes for Manual Exchange Interlocal Call ANNEX 4-3-1

}

	Pulse		6 1	1979	6 1	980	6 1	8 1	1 9	182	- 0 1 0 1	-1082
Zona	Inter-	<u>-</u> 2	No. of Calls	Minutes	No. of Calls	Hinutes	No. of Calls	Hinutes	No. of Calls	Muutes	No. of Calls	Minutes
	(Sac)											
	0.0	0 - 25	3.093.9	17.421.2	2.60.1	16.003.0	2.830.7	16.852.1	2.041.8	17.847.2	11.556.4	68,123.5
!			(25.54)	(24.78)	(24.77)	(25.34)	(27.72)	(32.32)	(27.67)	(88.38)	(20.31)	(25.03)
	ಛ	25 - 100	3.776.6	20.530.6	3,575.1	17.024.3	3.125.7	17.078.0	3.045.3	18.024.8	13.522.8	73.857.7
	,	,	(31.17)	(29.20)	(32.91)	(20.02)	(30.00)	(27.55)	(28.64)	(27.54)	(30.86)	(27.84)
=	7.	100 - 200	1.806.1	10.392.2	1.513.7	9.100.4	1.382.4	8.080.4	1.439.7	9.508.0	0.142.0	37.786.0
			(14.91)	(14.78)	(13.94)	(14.57)	(13.54)	(13.54)	(13.54)	(14.06)	(14.02)	(14.25)
=	~	260 - 300	312.2	1.592.9	201.2	1.531.4	209.5	1.483.3	256.3	1.389.6	979.1	5.007.2
			(2.58)	(92.20)	(1.85)	(2.42)	(2.05)	(3.31)	(3.41)	(2.07)	(2.23)	(2.20)
2	د <i>ت</i>	300 - 1000	2.413.6	14.652.9	2.140.1	13.907.9	2.100.5	14.410.6	2.339.6	14.607.7	8.894.8	57.579.1
			(19.92)	(20.84)	(19.70)	(22.03)	(19.60)	(22.45)	(22.00)	(21.60)	(20.30)	(11.11)
>	63	1000 -	712.6	5.726.4	742.3	5.492.8	1.200	5.064.1	0.000	5.034.2	2.727.2	21.917.4
			(5.88)	(8.14)	(6.83)	(8.70)	(6.40)	(1.89)	(5.74)	(8.34)	(8.22)	(8.26)
	T 0 L a		12.114.8	70.316.2	10.862.5	63. [58.8	10.212.0	64.174.5	10.032.3	07.021.5	43.822.2	265.270.9
			(100.0)	(100.0)	(100.0)	(0.001)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
	No. of	-	63.	63.419	50.540	540	53,893	193	56.202	202	77.4	224.054
	Subscribers	bers								9	· · · · · · · · · · · · · · · · · · ·	
												,

21917.4×60  $57579.1 \times 60$  $6007.2 \times 60$ 37780.0×60 73857.7 × 00 08123.5×00 -12.0 (pis) No. of putses per minute

- 549 -

ANNEX 4-3-2 (1/3) Analysis of Traffic Data (Manual Exchange)

Exchange	No. of Subscribers	Monthly Conversation Minutes (Sep. 1983)	Erlang Value Outgoing (Erl)	Trunk Traffic Calling Rate Outgoing (mErlang)
MAJALAYA	545	13,934	1.3934	2.56
PANDEGLANG	283	4,413	0.4413	1.56
RANGKASBITUNG	561	7,793	0.7593	1.35
SUBANG	217	3,305	0.3305	1.52
CIKAMPEK	171	4,832	0.4832	2.83
PAMANUKAN	95	1.159	0.1159	1.22
CIAMIS	667	17,563	1.7563	2.63
BANJAR	525	11,950	1.1940	2.27
CIKONENG	34	1,495	0.1495	4.40
BANJARSARI	141	1,421	0.1421	1.00
CLBALONG	21	1,170	0.1170	5.57
SINGAPARNA	184	2,336	0.2336	1.27
KUNINGAN	218	3,457	0.3457	1.59
MAJALENGKA	119	2,094	0.2094	1.76
INDRAMAYU	302	7,812	0.7812	2.59
UNGARAN	130	5,376	0.5376	2.99
AMBARAWA	153	4,653	0.4653	3.04
JEPARA	196	7,702	0.7702	3.93
WONOSOBO	330	8,223	0.8223	2.49
PURWOREJO	385	10,840	1.0840	2.82

Source : Anedatel's Data Traffic

ANNEX 4-3-2 (2/3) Analysis of Traffic Data (Manual Exchange)

Exchange	No. of Subscribers	Monthly Conversation Minutes (Sep. 1983)	Erlang Value Outgoing (Erl)	Trunk Traffic Calling Rate Outgoing (mErlang)
TEMANGGUNG	335	11,038	1.1038	3.29
SLAWI	149	10,103	1.103	6.78
WATES	109	5,329	0.5329	4.89
PALBAPANG	40	3,359	0.3359	8,40
GODEAN	27	1,605	0.1605	5.94
SLEMAN	47	3,979	0.3979	8.47
KALIURANG	55	1,017	0.1017	1.85
KALASAN	24	3,211	0.3211	* 13.38
WONOSARI	162	3,220	0.3220	1.99
SUKOHARJO	97	5,604	0.5604	5.78
BOYOLALI	113	1,068	0.1068	0.95
KARANGANYAR	124	6,435	0.6435	5.19
TAWANGMANJU	90	1,278	0.1278	1.42
SRAGEN	206	6,818	0.6818	3.31
BATURETNO	37	1,431	0.1431	3.87
WONOGIRI	143	4,366	0.4366	3.05
REMBANG	251	5,244	0.5244	2.09
BLORA	283	8,297	0.8297	2.93
BANGKALAN	277	9,094	0.9094	3.28
SAMPANG	158	2,030	0.2030	1.28

ANNEX 4-3-2 (3/3) Analysis of Traffic Data (Manual Exchange)

		Monthly	Erlang Value	Trunk Traffic
Exchange	No. of	Conversation	Outgoing	Calling Rate
	Subscribers	Minutes		Outgoing
		(Sep. 1983)	(Erl)	(mErlang)
PARE	293	8,017	0.8017	2.74
TRENGGALEK	146	5,209	0.5209	3.57
MAGETAN	182	9,622	0.9622	5.29
NGAWI	227	10,863	1.0863	4.79
TUBAN	343	7,724	0.7724	2.25
LAMONGAN	193	5,591	0.5591	2.90
BATU	450	11,278	1.1278	2.51
KRAKSSAN	175	4,656	0.4656	2.66
SEPANJANG	222	7,419	0.7419	3.34
	<u> </u>			
				* Exclud
				$\bar{x} = 3.21$ s = 1.79

## ANNEX 4-3-3 Traffic Distribution

No. of Calls , Sep. 1983

Distination	Primary	Area	Other	
Exchange	Primary Center	Other Exchanges	Areas	Total
АУАЈАЦАМ	3462 (79.4)	233 ( 5.3)	669 (15.3)	4362 (100)
CIKAMPAK	171 (10,6)	467 (29.0)	922 (57.4)	1607 (100)
PAMANUKAN	19	77 (18.1)	329 (77,4)	425 (100)
CIAMAS	1380 (26.6)	1835 (35,4)	1963 (37.9)	5178 (100)
BANJAR	599 (16.1)	1701 (45.8)	1415 (38.1)	3715 (100)
CIKONENG	109 (22.0)	333 (67,1)	54 (10.9)	496 (100)
UNGARAN	1275 (69.4)	112 ( 6.1)	451 (24.5)	1838
AMBARAWA	485 (31,6)	103 ( 6.7)	948 (61.7)	1536 (100)
Jepara	613 (27.0)	18 ( 0.7)	1643 (72.3)	2274 (100)
MAOS	407 (69.1)	16 ( 2.4)	156 (26-5)	589 (100)
KROYA	219 (26.7)	0 ( 0 )	601 (73.3)	820 (100)
MAJENANG	299 (19.8)	72 (4.8)	1137 (75.4)	1508 (100)
MELUWUNG	230 (22.5)	80 (7.7)	683 (66.8)	1022 (100)
BANYUMAS	739 (67.3)	13 <del>1</del> (11.9)	228 (20.8)	1098 (100)
JUKOREJO	139	67	264	470 (100)
PURBOLINGGO	(29.6) 1589 (48.5)	(14.2) 135 ( 4.1)	1554 (56.2)	3278 (100)
AIR MOLEK	14 (27.1)	0 ( 0 )	37 (72.5)	51 (100)
TANJUNG BALI	466 (27.0)	0 ( 0 )	1259 (73,0)	1725 (100)
BRASTAGI	833	0	1040 (55.5)	1873 (100)
PARIAMAN	(44.5) 327 (65.8)	0 ( 0 )	180	497 (100)
РАУАКИМВИН	453 (24.4)	0 ( 0 )	1403 (75.6)	1856 (100)
BATUSANGKAR	149 (21.5)	180 (25.9)	365 (52.6)	694 (100)
	,22.2,		x = 51.24	
Source : Anedatel's	Data Traffic		s = 21.73	

ANNEX 4-3-4 (1/3) Data Used in Traffic Analysis

	;			-			;		
NAME OF PROMINCE		8	е В	1 13	••• •	. ON	OF PULSES	(x1,000p	15)
ا ا ا	i 	1979	1980	1981	1982	1979	1980	1981	1982
;			į	; } ! ! !	: •• ! ! ! ! !				
ACEH		1,775	.26	8	.08	.30	3,70	7,76	2,94
SUMATERA UTARA	••	17,003	,70	80	88	4.88	4	7,19	3.80
		5.078	5,94	6.08	6.24	38	51,18	56.10	67,62
		2.979	4	1.6	29	4.76	0.95	0.92	7.47
JAMBI		2,679	87	87	83	2.04	6.59	9,75	0,59
SUMATERA SELATAN		4.505	83	78	8	2.42	2.47	7,97	4.97
		3,930	25	.80	94	9.70	9.64	0.42	57.57
BENGKULU	.,	858	921		686		~	3	5,458
					••				
JAKARTA		93,486	2,97	1,56	1,89	01,93	02,76	62,34	10.41
JAWA BARAT	٠.	29,742	,42	4	,02	7 22	8,69	8	
JAWA TENGAH	••	21,602	8,01	9,95	1,80	58,68	17,64	16,25	56,40
YOGYAKARTA	••	2,530	3,28	3,62	3,81	32,41	41,67	8,18	9,12
JAWA TIMUR		45,323	52,361	43	65,344 :		3	5,7	6,27
	٠.								٠
BALI		3,222	.16	.96	,25	70	,17	ó	7.73
TENGGARA	,.	1,902	2,458	3,083	3,426 :	4,011	6,1		ω
		808	0.4	,25	,32	, 20	5	, 4 I	1.47
TIMOR TIMUR	••	256	<b>(7)</b>	4	ω	ì	ŀ	t	•
	٠.				••				
KALIMANTAN BARAT		972	4	$\alpha$	σ		$\sim$	ω	
KALIMANTAN TENGAH		385	Ø	ŝ	<b>!~</b>	ø	4	1,40	2,91
	••	1.601	80	89	32	σ	.77	0,39	$\omega$
	••	1.357	2,443	4.262	5,333		1,2	,76	9,87
	<i>.</i> .				••				
SULAWESI UTARA	٠.	2,336	0	•			Ċ.	4	69,932
SULAWESI TENGAH		654	<b>!~</b>	$^{\circ}$	ć	w	~	,46	1,73
SULAWESI SELATAN	٠.	6,331		4	σ	O	$^{\circ}$	. 14	3,70
SULAWESI TENGGARA	••	501	999	839				;	91
MALUKU		1.521	50	28	.82	64	2.80	0,3	
IRIAN JAYA		359	1.674	3.173	3.614	6,310	12,826	22	ė.
TOTAL	; ; ; ;	253,696	319,303	375,424	420,518	2,505,739	3,353,442	4,296,924	4,942,76

SOURCE : POSTEL Annual Report from 1979 up to 1982 Report of TRAFFIC Dalam Angka' 1979-1980 and 1981-1982

ANNEX 4-3-4 (2/3) Data Used in Traffic Analysis

	1 1	Real	G.R.D.F	P (Billio	n Rp.)		G 0	U L A T I	0 N (X1,	000)	
ָב   	• ••	တ	80	198	1982	••	· ~	1980	1981	1982	
		l I	_	i	t		-				) 
	••	25.	254.	92.	.66		53	,61	$\infty$	,76	
SUMATERA UTARA		3g	80.	73.	.00	••	, 14	,36	, 88	.83	
SUMATERA BARAT		51.	79.	308.	15.	••	333	,40	,46	.51	
RIAU		11.	31.	49,	54.		, 10	.16	23	30	
JAMBI	••	127.9	134.1	134.3	137.3	••	1,389	1,446	1,501	1,558	
SUMATERA SELATAN	٠.	93.	62.	54.	71.	••	, 48	63	.78	94	
LAMPUNG	••	33.	40.	90.	99.	••	$\alpha$	S	Ø	~	
BENGKULU			_;	ထ်	6	••	ത	B	4	7	
	• •					•					
JAKARTA	••	27.	.686.	.949.	, 993.	••	. 25	50	76	. 62	
JAWA BARAT	••	4.	90.	.915.	.980.	••	6,74	7,45	8,12	8,81	
JAWA TENGAH		_	,71	92	1,972.5	٠.	ඛ	က	71	0	
YOGYAKARTA			83	199.	204	••	2,72	2,75	2,79	2,84	
JAWA TIMUR	••		74.	თ	•	••	28,760	18	29,596	30,008	
						••					
	••	33	75	O	<u>~</u>	••	4,	4	2,507	54	
TENGGARA E		132.1	4.	61.	65	••	2,662	2,725	O	2,858	
NUSA TENGGARA TIMUR		27.	44	ე მ	62.	••	. 58	73	, 79	83	
TIMOR TIMUR	••	ı	1	1	1	••.	1	TO.	9	$\infty$	
						• •					
	••	228.3	261.0	247.3	252.8	••	2,430	2,486	2,553	2,621	
KALIMANTAN TENGAH	•-	03	29.	ფ	4.	••	92	D D	60	,02	
		•	76.	97.	02;	••	02	90		. 15	
KALIMANTAN TIMUR	•	57.	დ	55.	63.		, 155 155	7	,27	.34	
SIII AMEST IITADA				Ć.	ď	٠.	G	**	4	00	
		. C		- 100	- 100 - 100 - 100		0,00	1 290	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7,17	
			) (	0 C			, 10	, 1 C		3 0	
AUACOMPE TOPICA TO		• • •		} -		• •	90	2 5	- 10	4 0	
	٠	•	·	-	ċ	٠	-	Ť	-	, ,	
MALUKU		140.4		196.6	01.	••	,37	4.	45	,50	
IRIAN JAYA		126.9	4	56.	160.3		1,143	1,174	1,210	1,248	
	;	; ; ; ; ;	1 		1	!	; ; ; ;			1	
TOTA		13,264.5	14,748.4	16,371.3	16,739.7		143,262	147,188	150,596	154,102	
	1	1 1 1 1 1 1 1 1 1 1		1111111	1111111	1	11111111			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!

REMARK : Calculated based on price indexes of 1975

Stastical Yearbook of INDONESIA 1983

SOURCE

al Calling Fee (RP.)  1980 1981 17.8 17.8 16.0 18.2 17.1 18.2 15.4 17.4 18.4 17.4 18.9 18.9 18.1 18.9 19.2 19.2 19.2 19.8 18.1 18.1 18.1 18.5 11.6 11.6 11.6 11.6 11.7 11.6 11.6 11.7 11.6 11.6	ANNEX 4-3-4 (3/3	Data Used	in Ti	ffic Anal	ysis
THOUSE THOSE THOSE TENDERS TO THOSE TENDERS TO THOSE TENDERS TENDERS TO THOSE TENDERS TENDERS TENDERS THOSE TENDERS TE	į.	Real	Calling	Fee (	(
UTARA  SELATAN  SELATAN  SELATAN  TT.  SELAT	5	979	1980	1981	1982
UTARA  SELATAN  SELATAN  SELATAN  SELATAN  SOCIARA BARAT  SCARA BARAT				 	 
UTARA SELATAN SELATAN SCARA BARAT SCARA BARAT SCARA TIMUR N SELATAN SE	ACEH		۲.	S	•
BARAT  SELATAN  N TENGAH  N TENGAH  SELATAN  TENGAH  SELATAN  SELATAN  SELATAN  SELATAN  TENGAH  SELATAN  SELAT		ςi	~	9	9
SELATAN 20.9 17.1 15.4 15.6 15.6 15.6 15.6 15.7 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17		N	00	S	Ŋ,
SELATAN  SELATAN  21.6  18.6  18.4  17.2  18.6  18.7			7	ഗ	'n
SELATAN  SELATAN  SELATAN  20.2  17.2  18.0  16.9  16.9  18.1  18.1  18.3  18.3  18.3  18.3  18.3  18.3  18.1  19.1  19.1  19.1  16.5  16.5  16.9  17.0  16.5  16.9  17.0  16.5  16.1	TAMBI		. 6	) LC	'n
TT. 20.2 17.2 16.9 16.1 16.2 16.9 16.3 18.1 18.3 16.9 19.8 19.1 18.3 16.9 19.8 19.1 18.3 16.9 19.8 18.3 17.2 17.1 18.3 17.2 17.2 17.2 18.3 17.2 17.2 17.3 18.3 17.2 17.3 18.3 17.2 17.3 18.3 18.3 18.3 18.3 18.3 18.3 18.3 18				~	~
Z3.2 19.0 19.8 19.1 16.2 16.2 18.0 16.2 18.3 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9		0	۲	Ф	ω
Z3.2 18.0 16.2 16.9 16.2 18.3 21.4 18.4 17.6 17.6 17.6 17.2 21.2 18.9 17.2 17.6 17.2 17.2 17.2 17.2 17.2 17.2 17.2 17.2	BENGKULU	က်	о О	S	တ်
RA BARAT 21.2 18.0 16.2 16.3 16.3 16.3 16.3 16.3 16.3 16.3 17.6 17.6 17.6 17.6 17.2 17.2 17.2 17.2 17.2 17.2 17.3 18.3 18.3 18.3 18.3 18.3 18.3 18.3 18					
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REMARK : Calculated based on price indexes of 1975

SOURCE : Stastical Yearbook of INDONESIA 1983

ANNEX 4-3-5 A Study of the Frequency of Phone Calls per Subscription

By utilizing the data accumulated from 1969 to 1983 (refer to the diagram on the next page), the nationwide frequency of phone calls per subscription was subjected to a regression analysis. The following formula was obtained.

$$ln(TRFC/SUB) = 4.516 + 1.788 ln (GDP/C) -0.348 ln (CF)$$
\*\* (8.59362) \* (-2.58319)

R = 0.964145

where TRFC/SUB: Annual frequency of phone calls per

subscription (1,000 pls)

GDP/C : Real GDP per capita (Rp. 1,000)

CF : Real phone call unit charge (Rp./pls)

R : Multiple correlation coefficient

() : T value

\*\* : Express that the coefficient is

significant to a value of .01.

\* : Expresses that the coefficient is

significant to a value of .05.

When rewritten:

TRFC/SUB = 
$$10.93 \times 10^{-3} \frac{(GDP/C)^{1.788}}{(CF)^{0.348}}$$

Therefore, the nationwide frequency of phone calls per subscription is inversely proportional to the real phone call unit charge to the third power.

Analysis	
Traffic	
นุ	
used	
Data	

· >-	Auto:	No. of Pulses (1,000 pls)	Pulses per : Auto SUB : ( Pls.)	Real : Calling : Fee (Rp) :	Consumer's: Price:	Real (6.0.P. (bil. Rp) (1)	Real GDP : per Capita : (1,000 Rp.) :
1969	65,691	231,698	3,527	20.16	0,496	5,507.80	47.79
1970	72.864	1	i	15.85	0.631	5,322.30	45.28
1971	72,832	r d	1	14.88	0.672	5,676.60 :	47.54
1972	91.016	ľ.	1	13.30	0.752	6,067.20	50.00
1973	102,197	631,209	6,176	10.00	1.000	6,753.40	54.19
1974	113,107	758.760	6,708	6.79	1.473	7,267.90 :	57.20
1975	129,791	875,007	6,742	12.07	1.657	7,630.80	58.20
1976	137,525	1,137,972	8,275	10.55	1.896	8,156.30 :	60.19
1977	156,358	1,543,184	9,870	9.37	2.135	8,761.00	63.39
1978	192,857	2,164,648	11,224	8.41	2.378	9,566.50	68.45
1979	253,696	2.504.542	9.872	12.69	3.151	10,164.90	70.92
1980	319,843	3,353,442	10.485	9.83	4.069	11,169.20	75.78
1981	362,800	4,297,047	11,844	8.92	4.482	12,054.60	79.75
1982	416.078	4,949,036	11,894	10.33	4.838	12,325.40	79.68
1983	455,957	5,384,294	11,809 :	9.76	5.123	12,695.20 :	80.46
REMARK :	: BASED ON 1973	3 PRICE	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	\ ! ! ! ! ! ! ! !		

SOURCE: POSTEL Annual Report from 1974 up to 1983 Statistical Yearbook of INDONESIA from 1973 up to 1983

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