

Table F-1-1 Gross Regional Domestic Product (GRDP) by Study Province, 1994-1995

Province	At Current Market Price			At Constant 1993 Market Price		
	1994	1995	Per Capita GRDP in 1995 (Rp.)	1994	1995	Per Capita GRDP in 1995 (Rp.)
	(Billion Rp.)	(Billion Rp.)	(% in 1995)	(Billion Rp.)	(Billion Rp.)	(% in 1995)
<b>North Sumatra</b>						
- GRDP	21,678,595	24,686,430	(5.4)	19,941,331	21,802,508	(5.7)
- GRDP excluding oil and its products	21,267,229	24,231,989	(5.8)	19,535,021	21,353,907	(6.1)
<b>West Java</b>						
- GRDP	62,400,244	73,333,011	(16.1)	56,385,039	60,840,114	(15.9)
- GRDP excluding oil and its products	59,595,945	70,266,169	(16.8)	53,499,068	58,103,065	(16.6)
<b>East Java</b>						
- GRDP	57,146,453	66,212,568	(14.6)	52,727,481	57,047,812	(14.9)
- GRDP excluding oil and its products	57,132,627	66,191,134	(15.8)	52,713,234	57,028,430	(16.3)
<b>South Sulawesi</b>						
- GRDP	8,737,851	10,294,163	(2.3)	8,088,147	8,737,060	(2.3)
- GRDP excluding oil and its products	-	-	-	-	-	-
<b>Study Area</b>						
- GRDP	149,963,143	174,526,172	(38.4)	137,141,998	148,427,494	(38.7)
- GRDP excluding oil and its products	146,733,652	170,983,455	(40.9)	133,825,470	145,222,462	(41.5)
<b>D.K.I. Jakarta</b>						
- GRDP	58,785,331	69,846,959	(15.4)	55,505,268	60,638,217	(15.8)
- GRDP excluding oil and its products	-	-	-	-	-	-
<b>Indonesia</b>						
- GDP	382,219,600	454,514,100	(100.0)	354,640,800	383,792,300	(100.0)
- GDP excluding oil and its products	348,710,500	417,705,800	(100.0)	320,652,400	350,290,000	(100.0)

Source : Statistical Year Book of Indonesia, 1995 & 1996.

Table F-1-2 Fruit Production in the Study Area, 1994-1996

Major Fruits / Provinces	(Unit: Ton)							
	North Sumatra (%)	West Java (%)	East Java (%)	South Sulawesi (%)	Study Area (%)	Indonesia (%)		
Avocado (Alpokot)								
- 1994	3,451 (3.38)	43,975 (43.10)	22,322 (21.88)	6,119 (6.00)	75,867 (74.35)	102,037 (100.00)		
- 1995	2,793 (1.72)	76,268 (46.88)	35,090 (21.57)	5,666 (3.48)	119,817 (73.64)	162,697 (100.00)		
- 1996	3,271 (1.65)	77,890 (39.36)	51,867 (26.21)	21,576 (10.90)	154,604 (78.13)	197,871 (100.00)		
Average (1994-1996)	3,172 (2.06)	66,044 (42.83)	36,426 (23.62)	11,120 (7.21)	116,763 (75.72)	154,202 (100.00)		
Banana (Pisang)								
- 1994	108,409 (3.51)	919,895 (29.80)	496,643 (16.09)	234,396 (7.59)	1,759,343 (57.00)	3,086,557 (100.00)		
- 1995	102,646 (2.70)	1,130,741 (29.71)	676,352 (17.77)	194,668 (5.12)	2,104,407 (55.30)	3,805,430 (100.00)		
- 1996	147,833 (4.92)	851,154 (28.30)	609,351 (20.26)	214,126 (7.12)	1,822,464 (60.59)	3,007,743 (100.00)		
Average (1994-1996)	119,629 (3.63)	967,263 (29.31)	594,115 (18.00)	214,397 (6.50)	1,895,405 (57.44)	3,299,910 (100.00)		
Lanzon (Duku / Langsat)								
- 1994	2,337 (2.65)	12,281 (13.92)	4,453 (5.05)	3,632 (4.12)	22,705 (25.74)	88,214 (100.00)		
- 1995	3,892 (2.72)	14,780 (10.33)	8,367 (5.85)	19,401 (13.56)	46,440 (32.46)	143,059 (100.00)		
- 1996	2,532 (2.27)	12,118 (10.86)	3,468 (3.11)	19,069 (17.10)	37,187 (33.34)	111,542 (100.00)		
Average (1994-1996)	2,920 (2.56)	13,060 (11.43)	5,429 (4.75)	14,034 (12.28)	35,443 (31.02)	114,272 (100.00)		
Durian								
- 1994	38,737 (14.42)	48,148 (17.92)	12,945 (4.82)	7,331 (2.73)	107,161 (59.88)	268,716 (100.00)		
- 1995	47,116 (16.27)	30,318 (10.47)	31,643 (10.92)	12,844 (4.43)	121,921 (42.09)	289,648 (100.00)		
- 1996	26,929 (7.88)	54,080 (15.83)	16,118 (4.72)	10,159 (2.97)	107,286 (31.40)	341,635 (100.00)		
Average (1994-1996)	37,594 (12.53)	44,182 (14.73)	20,235 (6.75)	10,111 (3.37)	112,123 (37.37)	300,000 (100.00)		
Mango (Mangga)								
- 1994	5,223 (0.78)	161,445 (24.17)	248,923 (37.26)	35,555 (5.32)	451,146 (67.53)	668,048 (100.00)		
- 1995	5,795 (0.65)	136,426 (15.35)	396,599 (44.61)	56,703 (6.38)	595,523 (66.99)	888,960 (100.00)		
- 1996	6,022 (0.72)	97,353 (10.88)	352,172 (41.96)	81,453 (9.71)	531,000 (63.27)	839,285 (100.00)		
Average (1994-1996)	5,680 (0.71)	129,741 (16.24)	332,565 (41.63)	57,904 (7.25)	525,890 (65.84)	798,764 (100.00)		
Rambutan								
- 1994	12,406 (3.83)	115,357 (35.66)	44,585 (13.78)	5,934 (1.83)	178,282 (55.11)	323,495 (100.00)		
- 1995	9,460 (2.60)	61,167 (16.80)	49,246 (13.53)	6,353 (1.75)	126,226 (34.67)	364,036 (100.00)		
- 1996	8,038 (0.81)	112,369 (11.37)	101,698 (10.29)	7,512 (0.76)	229,617 (23.24)	987,953 (100.00)		
Average (1994-1996)	9,968 (1.78)	96,298 (17.24)	65,176 (11.67)	6,600 (1.18)	178,042 (31.88)	558,495 (100.00)		
Salak								
- 1994	110,242 (37.72)	69,132 (23.66)	8,737 (2.99)	9,217 (3.15)	197,328 (67.52)	292,246 (100.00)		
- 1995	120,491 (18.19)	379,022 (57.21)	23,840 (3.60)	18,255 (2.76)	541,608 (81.75)	662,547 (100.00)		
- 1996	55,461 (14.41)	64,003 (22.40)	12,124 (4.24)	8,799 (3.08)	140,387 (49.13)	285,745 (100.00)		
Average (1994-1996)	95,398 (23.07)	170,719 (41.29)	14,900 (3.60)	12,090 (2.92)	293,108 (70.88)	413,513 (100.00)		

Notes: No data on marquisa and mangosteen. Figures of the target fruits are in "bold" characters.

Source: Statistical Year Book of Indonesia, 1995 & 1996.

**Table F-2-1 Basic Data on the Administrative Division and Socio-economy in North Sumatra**

Districts (Kabupaten)/ Municipalities (Kodya)	Capitals	No. of Sub-districts	No. of Villages	Area (km <sup>2</sup> )	Population (1995)	No. of Households	Pop. Density (Pers./km <sup>2</sup> )	Population per Village
<i>(Kabupaten)</i>								
1. Nias	Gunung Sitoli	17	657	5,318	646,158	129,216	122	983
2. Tapanuli Selatan	Padang Sidempuan	23	1,542	18,897	1,053,056	228,992	56	683
3. Tapanuli Tengah	Sibolga	8	144	2,188	238,659	47,776	109	1,657
4. Tapanuli Utara	Tarutung	29	640	10,605	713,015	161,824	67	1,114
5. Labuhan Batu	Rantau Prapat	18	238	9,323	832,787	174,848	89	3,499
6. Asahan	Kisaran	17	246	4,581	925,920	193,536	202	3,764
7. Simalungun	Pematang Siantar	21	207	4,369	841,516	184,192	193	4,065
8. Dairi	Sidikalang	12	158	3,146	291,253	61,600	93	1,843
9. Karo	Kabanjabe	13	258	2,127	274,256	71,948	129	1,063
10. Deli Serdang	Lubuk Pakam	33	637	4,339	1,785,188	372,736	411	2,802
11. Langkat	Stabat	17	215	6,262	856,419	184,384	137	3,983
<i>(Municipality)</i>								
12. Sibolga	Sibolga	3	16	11	76,934	15,808	6,994	4,808
13. Tanjung Balai	Tanjung Balai	5	30	58	113,199	21,600	1,952	3,773
14. Pematang Siantar	Pematang Siantar	6	38	70	229,888	47,616	3,284	6,050
15. Tebing Tinggi	Tebing Tinggi	3	27	31	129,240	27,360	4,169	4,787
16. Medan	Medan	21	151	265	1,901,935	380,768	7,177	12,596
17. Sinjai	Sinjai	5	37	90	205,244	41,600	2,280	5,547
<b>Total</b>	-	<b>251</b>	<b>5,241</b>	<b>71,680</b>	<b>11,114,667</b>	<b>2,345,804</b>	<b>155</b>	<b>2,121</b>

Source : Sumatera Utara Dalam Angka 1995 (North Sumatra in Figure 1995), Statistical Office of North Sumatra and Results of the 1995 Intercensal Population Survey, Series S2.02, Central Bureau of Statistics, Indonesia

**Table F-2-2 Basic Data on the Administrative Division and Socio-economy in West Java**

Districts (Kabupaten)/ Municipalities (Kodya)	Capitals	No. of Sub-districts	No. of Villages	Area (km <sup>2</sup> )	Population (1995)	No. of Households	Pop. Density (Pers/km <sup>2</sup> )	Population per Village
<i>(Kabupaten)</i>								
1. Pandeglang	ditto	18	335	2,718.8	921,798	203,328	339.0	2,752
2. Lebak	"	19	300	3,186.9	954,088	217,624	299.4	3,180
3. Bogor	"	33	530	3,930.8	4,415,195	971,168	1,123.2	8,331
4. Sukabumi	"	31	356	4,161.2	1,970,170	507,744	473.5	5,534
5. Cianjur	"	24	313	3,649.2	1,757,430	436,704	481.6	5,615
6. Bandung	"	41	451	3,131.7	3,383,233	822,304	1,080.3	7,502
7. Garut	"	31	403	3,209.6	1,832,213	423,968	570.9	4,546
8. Tasikmalaya	"	30	412	2,815.4	1,869,619	469,792	664.1	4,538
9. Ciarnis	"	32	358	2,643.5	1,536,347	434,368	581.2	4,291
10. Kuningan	"	19	369	1,114.5	917,530	223,850	823.2	2,487
11. Cirebon	"	23	424	1,023.2	1,772,953	412,204	1,732.7	4,181
12. Majalengka	"	19	327	1,227.9	1,067,948	287,530	869.7	3,266
13. Sumedang	"	18	269	1,445.0	860,101	239,262	595.2	3,197
14. Indramayu	"	22	310	1,995.9	1,513,209	400,064	758.2	4,881
15. Subang	"	20	250	1,911.1	1,239,295	349,637	648.5	4,957
16. Purwakarta	"	11	192	1,012.8	602,711	157,967	595.1	3,139
17. Karawang	"	17	302	1,661.6	1,582,991	412,863	952.7	5,242
18. Bekasi	"	22	237	1,570.1	2,757,376	616,736	1,756.1	11,634
19. Tangerang	"	19	303	1,250.4	2,401,216	537,984	1,920.4	7,925
20. Serang	"	30	412	1,999.7	1,634,688	339,936	817.5	3,968
<i>(Municipality)</i>								
21. Bogor	ditto	6	22	24.4	285,114	64,752	11,704.3	12,960
22. Sukabumi	"	4	15	13.1	125,766	31,008	9,634.9	8,384
23. Bandung	"	26	135	217.9	2,356,120	559,360	10,810.4	17,453
24. Cirebon	"	5	22	38.7	261,574	57,344	6,767.5	11,890
25. Tangerang	"	6	57	205.4	1,188,102	275,136	5,784.9	20,844
Total	-	526	7,104	47,782.3	39,206,787	9,452,633	820.5	5,519

Source: Jawa Barat Dalam Angka 1995 (West Java in Figure 1995), Statistical Office of West Java  
Results of the 1995 Intercensal Population Survey, Series S2 10, Central Bureau of Statistics, Indonesia

**Table F-2-3 Basic Data on the Administrative Division and Socio-economy in East Java**

Districts (Kabupaten)/ Municipalities (Kodya)	Capitals	No. of Sub-districts	No. of Villages	Area (km <sup>2</sup> )	Population (1995)	No. of Households	Pop. Density (Pers./km <sup>2</sup> )	Population per Village
<i>(Kabupaten)</i>								
1. Pacitan	ditto	12	164	1,310.5	505,870	138,752	386	3,085
2. Ponorogo	"	19	303	1,311.1	852,494	221,728	650	2,814
3. Trenggalek	"	13	157	1,205.2	646,054	166,792	536	4,115
4. Tulungagung	"	19	271	1,055.0	906,587	236,704	859	3,345
5. Blitar	"	21	248	1,651.9	1,049,615	277,935	635	4,232
6. Kediri	"	21	344	963.2	1,378,720	340,544	1,431	4,008
7. Malang	"	35	406	4,728.8	2,331,018	564,201	493	5,741
8. Lumajang	"	18	198	1,790.9	936,289	244,079	523	4,729
9. Jember	"	28	240	2,948.9	2,105,503	578,873	714	8,773
10. Banyuwangi	"	19	179	5,782.5	1,472,638	406,544	255	8,227
11. Bondowoso	"	17	192	1,560.1	670,900	198,732	430	3,494
12. Situbondo	"	17	135	1,457.7	590,310	181,040	405	4,373
13. Probolinggo	"	24	330	1,397.5	958,435	257,720	686	2,904
14. Pasuruan	"	24	365	1,293.5	1,267,328	324,352	980	3,472
15. Sidoarjo	"	18	353	591.6	1,347,674	335,296	2,278	3,818
16. Mojokerto	"	17	304	826.7	829,315	203,040	1,003	2,728
17. Jombang	"	20	306	1,159.5	1,083,994	270,300	935	3,542
18. Nganjuk	"	20	277	1,182.6	964,589	251,330	816	3,482
19. Madiun	"	15	206	1,009.1	640,194	174,495	634	3,108
20. Magetan	"	13	235	672.7	629,678	160,308	936	2,679
21. Ngawi	"	16	215	1,245.7	805,726	225,970	647	3,748
22. Bojonegoro	"	23	430	2,384.0	1,142,088	289,595	479	2,656
23. Tuban	"	19	328	1,904.7	1,020,139	250,222	536	3,110
24. Lamongan	"	25	475	1,812.8	1,175,751	280,156	649	2,475
25. Gresik	"	18	357	1,137.1	914,838	213,792	805	2,563
26. Bangkalan	"	18	281	1,144.7	773,987	177,114	676	2,754
27. Sampang	"	12	186	1,152.0	746,856	163,008	648	4,015
28. Pamekasan	"	13	189	732.9	667,881	153,591	911	3,534
29. Sumenep	"	25	332	1,857.6	960,301	275,911	517	2,892
<i>(Municipality)</i>								
30. Kediri	ditto	3	46	63.4	260,575	61,408	4,110	5,665
31. Blitar	"	3	20	32.4	122,090	29,464	3,772	6,105
32. Malang	"	5	57	118.6	762,150	194,622	6,428	13,371
33. Probolinggo	"	3	29	56.7	189,250	44,837	3,340	6,526
34. Pasuruan	"	3	34	35.3	162,825	38,055	4,615	4,789
35. Mojokerto	"	2	18	16.5	106,254	24,259	6,455	5,903
36. Madiun	"	3	27	54.8	171,532	46,208	3,132	6,353
37. Surabaya	"	28	163	274.1	2,694,554	647,104	9,832	16,531
<b>Total</b>	-	<b>609</b>	<b>8,400</b>	<b>47,922.0</b>	<b>33,844,002</b>	<b>8,648,081</b>	<b>706</b>	<b>4,029</b>

Source: Jawa Timur Dalam Angka 1995 (East Java in Figure 1995), Statistical Office of East Java and Results of the 1995 Intercensal Population Survey, Series: S2.13, Central Bureau of Statistics, Indonesia

**Table F-2-4 Basic Data on the Administrative Division and Socio-economy in South Sulawesi**

Districts (Kabupaten)/ Municipalities (Kodya)	Capitals	No. of Sub-Districts	No. of Villages	Area (km <sup>2</sup> )	Population (1995)	No. of Households	Pop. Density (Pers./km <sup>2</sup> )	Population per Village
<i>(Kabupaten)</i>								
1. Selayar	Benteng	5	38	903.4	99,769	25,616	110	2,626
2. Bulukumba	Bulukumba	7	122	1,154.7	352,815	79,344	306	2,892
3. Bantaeng	Bantaeng	3	42	395.8	159,736	33,789	404	3,803
4. Jeneponto	Jeneponto	5	111	749.8	316,506	63,546	422	2,851
5. Takalar	Takalar	6	73	572.6	223,340	61,386	390	3,059
6. Gowa	Songguminasa	9	130	1,883.3	469,310	102,912	249	3,610
7. Sinjai	Sinjai	7	68	820.0	205,869	42,349	251	3,027
8. Maros	Maros	7	101	1,619.1	259,638	53,610	160	2,571
9. Pangkep	Pangkajene	9	97	1,112.3	259,012	54,296	233	2,670
10. Barru	Barru	5	54	1,174.7	152,957	35,579	130	2,833
11. Bone	Watampone	23	372	4,559.0	613,819	133,200	135	1,650
12. Soppeng	Watansoppeng	6	66	1,500.0	228,846	54,089	153	3,467
13. Wajo	Sengkang	10	176	2,506.2	364,155	85,740	145	2,069
14. Sidrap	Sidenreng	7	86	1,883.3	244,662	54,726	130	2,845
15. Pinrang	Pinrang	8	103	1,961.8	312,185	69,583	159	3,031
16. Enrekang	Enrekang	5	54	1,786.0	153,483	32,889	86	2,842
17. Luwu	Palopo	21	428	17,791.4	794,526	162,179	45	1,856
18. Tana Toraja	Makale	9	116	3,205.8	377,938	81,791	118	3,258
19. Polmas	Polewali	9	173	4,781.5	420,719	91,670	88	2,432
20. Majene	Majene	4	35	947.8	114,596	24,112	121	3,274
21. Mamuju	Mamuju	6	117	11,057.8	237,789	50,272	22	2,032
<i>(Municipality)</i>								
22. Ujung Pandang	Ujung Pandang	11	142	175.8	1,086,121	219,456	6,179	7,649
23. Parepare	Parepare	3	21	99.3	110,577	23,008	1,113	5,266
<b>Total</b>		<b>185</b>	<b>2,725</b>	<b>62,641</b>	<b>7,558,368</b>	<b>1,635,142</b>	<b>121</b>	<b>2,774</b>

Source: Sulawesi Selatan Dalam Angka, South Sulawesi in Figure 1995, Statistical Office of South Sulawesi and Results of the 1995 Intercensal Population Survey, Series: S2 24, Central Bureau of Statistics, Indonesia

Table F-2.5 Population Data in the Study Area

Province	Area (km <sup>2</sup> )	Population (1,000)		Population Density in 1996 (Persons /km <sup>2</sup> )	Annual Growth Rate 1990-96 (%)	No. of Households 1995 (%)	Average Household Member (96)	Working Population		No. of Workers in Primary Sector*		Migrant Status in 1996***	
		1990	1996 (%)					No. in 1996	(%)	1996	(%)**	Migrant	(%)***
- North Sumatra	70,787	10,252	11,306 (5.70)	160	(1.64)	2,346,000 (5.14)	4.8	4,607,166 (5.38)	2,506,947 (2.93)	1,025,451 (9.07)			
- West Java	46,300	35,382	40,118 (20.23)	866	(2.12)	9,453,000 (20.71)	4.2	15,176,561 (17.71)	4,672,419 (5.45)	1,891,615 (4.72)			
- East Java	47,921	32,488	34,124 (17.20)	712	(0.82)	8,648,000 (18.94)	3.9	16,414,278 (19.15)	7,024,451 (8.20)	2,879,369 (8.44)			
- South Sulawesi	72,781	6,980	7,693 (3.88)	106	(1.63)	1,635,000 (3.58)	4.7	3,031,873 (3.54)	1,751,904 (2.04)	792,342 (10.30)			
Study Area (% to Total)	237,789 (12.39)	85,102 (47.48)	93,241 (47.01)	392 (388.24)	(1.53)	22,082,000 (48.37)	4.2	39,229,878 (45.77)	15,955,701 (42.30)	6,588,797 (36.74)			
Indonesia	1,919,317	179,248	198,343 (100.00)	101	(1.70)	45,653,000 (100.00)	4.3	85,701,813 (100.00)	37,720,251 (44.01)	17,935,599 (9.04)			

Note : \* Population aged 10 years and over who are working in Primary Sector including Agriculture, Forestry, Hunting and Fishery.

\*\* % to the total working population.

\*\*\* % to the national total population in 1996.

Source : Statistical Year Book of Indonesia, 1995 & 1996.

Table F-2-6 Land Utilized for Agricultural Development, 1995

Land Use / Province	North Sumatra	West Java	East Java	South Sulawesi	Study Area	Indonesia (by Category)
	(ha) (%)	(ha) (%)	(ha) (%)	(ha) (%)	(ha) (%)	(ha) (%)
House compounds and Surroundings (% to Indonesia Total)	309,186 (7.36) (6.0)	466,015 (13.83) (9.0)	587,984 (18.38) (11.4)	167,517 (5.50) (3.2)	1,530,702 (11.08) (29.7)	5,155,422 (8.91) (100.0)
Dryland & garden for crop cultivation (% to Indonesia Total)	663,205 (15.78) (5.8)	997,590 (29.60) (8.8)	1,164,452 (36.40) (10.2)	662,960 (21.79) (5.8)	3,488,207 (25.25) (80.7)	11,268,507 (19.65) (100.0)
Grass land (% to Indonesia Total)	197,953 (4.71) (10.5)	38,619 (1.15) (2.0)	2,872 (0.09) (0.2)	285,569 (9.38) (15.1)	525,013 (3.80) (27.8)	1,889,399 (3.27) (100.0)
Dyke (Brackish fishery) (% to Indonesia Total)	9,653 (0.23) (2.3)	35,212 (1.04) (8.3)	51,914 (1.62) (12.3)	107,298 (3.53) (23.4)	204,077 (1.48) (48.3)	422,564 (0.73) (100.0)
Water pond (Inland fishery) (% to Indonesia Total)	7,570 (0.18) (4.1)	30,853 (0.92) (16.9)	2,012 (0.06) (1.1)	12,858 (0.42) (7.1)	53,253 (0.39) (29.2)	182,156 (0.31) (100.0)
Temporarily fallow land (% to Indonesia Total)	400,089 (9.52) (5.7)	50,959 (1.51) (10.7)	20,095 (0.63) (0.3)	178,166 (5.85) (2.6)	649,309 (4.70) (9.3)	6,967,938 (12.04) (100.0)
Wood land (% to Indonesia Total)	429,593 (10.22) (4.5)	212,900 (6.32) (2.2)	54,409 (1.70) (0.6)	490,718 (16.13) (5.1)	1,187,620 (8.60) (12.4)	9,555,010 (16.51) (100.0)
Agricultural estates (% to Indonesia Total)	1,643,920 (39.13) (11.9)	385,057 (11.43) (2.8)	167,498 (5.24) (1.2)	507,217 (16.67) (3.7)	2,703,692 (19.57) (79.3)	13,835,746 (23.91) (100.0)
Wetland (Paddy field) (% to Indonesia Total)	540,576 (12.87) (6.4)	1,152,753 (34.21) (11.6)	1,147,539 (35.87) (13.5)	630,798 (20.73) (7.4)	3,471,666 (25.13) (40.9)	8,484,687 (14.66) (100.0)
Total Agricultural Land (% to Indonesia Total)	4,201,705 (100.00) (7.3)	3,369,958 (100.00) (5.8)	3,198,775 (100.00) (5.5)	3,043,101 (100.00) (3.3)	13,813,539 (100.00) (23.9)	57,861,429 (100.00) (100.0)
% to Total Land Area	- (58.6)	- (78.1)	- (66.7)	- (48.7)	- (61.3)	- (29.9)

Source : Statistical Year Book of Indonesia, 1995 & 1996.



Table F-2-7 Average per Capita Monthly Expenditure by Commodity Group, 1996

(Unit : Rupiah)

Commodity Group	Urban		Rural		Urban + Rural	
	Per Capita Average	(%)	Per Capita Average	(%)	Per Capita Average	(%)
1. Cereales	8,526	(17.66)	9,197	(27.58)	8,955	(23.12)
2. Tubers	418	(0.87)	503	(1.51)	472	(1.22)
3. Fish	4,058	(8.41)	2,919	(8.84)	3,348	(8.65)
4. Meat	3,727	(7.72)	1,412	(4.32)	2,265	(5.85)
5. Eggs and milk	3,223	(6.68)	1,422	(4.26)	2,070	(5.35)
6. Vegetables	4,104	(8.50)	3,112	(9.33)	3,469	(8.96)
7. Legumes	1,683	(3.49)	1,174	(3.52)	1,358	(3.51)
8. Fruits	3,000	(6.21)	1,469	(4.41)	2,021	(5.22)
9. Oil and fats	1,857	(3.85)	1,578	(4.73)	1,679	(4.34)
10. Beverage stuffs	2,327	(4.82)	1,963	(5.89)	2,094	(5.41)
11. Spices	1,160	(2.40)	887	(2.66)	985	(2.54)
12. Miscellaneous food items	1,430	(2.96)	603	(1.81)	901	(2.33)
13. Prepared food and beverages	9,250	(19.16)	4,081	(12.24)	5,943	(15.35)
14. Alcoholic beverages	67	(0.14)	46	(0.14)	54	(0.14)
15. Tobacco and Betel	3,450	(7.15)	2,919	(8.75)	3,110	(8.03)
Total	48,278	(100.00)	33,345	(100.00)	38,725	(100.00)

Source : Expenditure for Consumption of Indonesia 1996, National Socio-Economic Survey , Biro Pusat Statistik (BPS).

Table F-2-8 Monthly per Capita Expenditure of the Fruits in Rural Area, 1996

(Unit : kilogram)

Monthly per Capita Expenditure Class (Rp.)	Durian	Mango	Avocado	Duku (Lanzon)	Salak (Salacia)	Rambutan	Ambon Banana	Raja Banana	Other Banana	Canned Fruit
- Less than 15,000	-	0.002	-	-	-	-	0.002	0.004	0.091	-
- 15,000 - 19,999	-	0.016	0.000	0.000	0.003	0.002	0.015	0.008	0.063	-
- 20,000 - 29,999	0.001	0.018	0.002	0.000	0.005	0.007	0.025	0.024	0.072	-
- 30,000 - 39,999	0.002	0.024	0.002	0.000	0.011	0.016	0.040	0.030	0.087	-
- 40,000 - 59,999	0.009	0.038	0.003	0.001	0.021	0.035	0.057	0.039	0.108	-
- 60,000 - 79,999	0.016	0.054	0.004	0.003	0.032	0.057	0.071	0.044	0.147	0.000
- 80,000 - 99,999	0.019	0.075	0.007	0.004	0.046	0.088	0.094	0.051	0.143	0.000
- 100,000 - 149,999	0.035	0.091	0.007	0.007	0.055	0.122	0.107	0.055	0.141	0.000
- 150,000 - 199,999	0.055	0.099	0.014	0.008	0.076	0.201	0.168	0.052	0.128	-
- 200,000 - 299,999	0.061	0.120	0.021	0.003	0.058	0.171	0.134	0.064	0.115	-
- 300,000 and Over	0.137	0.057	0.045	0.016	0.088	0.251	0.101	0.108	0.113	0.003
- Per Capita Average	0.010	0.039	0.003	0.002	0.021	0.039	0.055	0.037	0.106	0.000
• Rural Area	(0.011)	(0.044)	(0.006)	(0.005)	(0.028)	(0.062)	(0.059)	(0.018)	(0.054)	(0.000)
• Urban Area										

Source : Expenditure for Consumption of Indonesia, National Socio-Economic Survey 1996, Biro Pusat Statistik (BPS).

Table F-2-9 Per Capita Food Consumption, 1994-1995

Commodity	Per Capita Consumption									
	Kg / Year		Grams / Day		Calorie / Day (%)		Proteins Grams / Day		Fats Grams / Day	
	1994	1995	1994	1995	1994	1995 (%)	1994	1995	1994	1995
<b>1. Cereales</b>										
- White flour	12.50	14.60	34.28	40.01	1.757	(63.6)	35.86	39.69	6.16	6.74
- Unhusked rice / Rice	136.86	142.13	374.97	416.81	125		3.05	3.56	0.45	0.52
- Maize	32.06	34.16	87.82	93.60	1,350		25.50	28.34	2.62	2.92
- Others					281		7.27	7.75	3.08	3.29
					1		0.04	0.04	0.01	0.01
<b>2. Starchy food</b>										
- Sweet potatoes	8.54	9.69	23.39	26.54	178	(6.4)	1.57	1.72	0.44	0.49
- Cassava	48.57	52.76	133.07	144.54	25		0.36	0.41	0.14	0.16
- Others					146		1.20	1.30	0.30	0.33
					7		0.01	0	0.00	0
<b>3. Sugar</b>										
					129	(4.7)	0.04	0.04	0.14	0.14
<b>4. Pulses, nuts and oil seed</b>										
- Groundnuts (shelled)	3.42	4.00	9.38	10.96	289	(10.5)	14.86	14.90	22.60	17.19
- Soybeans	10.64	11.01	29.97	30.17	42		2.37	2.77	4.01	4.69
- Coconut in husk / Fresh coconut	13.80	13.88	37.80	38.03	100		10.46	10.53	5.43	5.46
- Others					12		1.29	0.68	13.12	6.99
					40	(1.4)	0.74	0.92	0.04	0.05
<b>5. Fruits</b>										
- Avocado (Alpukat)	0.45	0.75	1.22	2.05	1		0.43	0.63	0.16	0.22
- Orange (Jarak)	1.35	2.96	3.71	8.12	1		0.01	0.01	0.05	0.08
- Lanzon Duku langsat	0.28	1.18	0.78	3.24	0		0.02	0.04	0.01	0.01
- Durian	0.81	1.51	2.21	4.13	1		0.00	0.02	0.00	0.00
- Waterapple (Jambu)	1.50	1.04	4.11	2.86	1		0.01	0.01	0.01	0.01
- Mango (Mangga)	2.17	3.37	5.93	9.23	2		0.02	0.02	0.01	0.01
- Pineapple (Nanas)	2.17	2.66	5.93	7.30	2		0.01	0.01	0.01	0.01
- Papaya (Pepaya)	1.99	2.25	5.46	6.17	2		0.02	0.02	0.00	0.00
- Banana (Pisang)	12.32	14.21	33.77	38.92	25		0.03	0.39	0.06	0.06
- Rambutan	1.31	1.69	3.59	4.62	1		0.01	0.01	0.00	0.00
- Salacia (Salak)	1.65	3.77	4.51	10.32	2		0.01	0.02	0.00	0.00
- Sapodilla (Sawo)	0.33	0.40	0.91	1.10	1		0.00	0.00	0.01	0.01
- Others	0.21	0.65	0.58	1.77	0		0.00	0.01	0.09	0.00
					30	(1.1)	1.37	1.65	0.31	0.45
<b>6. Vegetables</b>										
- Beans	2.23	2.94	6.11	8.04	2		0.12	0.29	0.01	0.03
- Potatoes	3.43	4.07	9.39	11.16	7		0.16	0.19	0.01	0.01
- Cabbage	5.65	6.48	15.48	17.75	3		0.16	0.19	0.02	0.03
- Chilli	3.65	5.52	10.00	15.13	3		0.20	0.06	0.20	0.31
- Others					9		0.53	0.92	0.07	0.07
					37	(1.3)	2.53	2.60	2.83	2.02
<b>7. Meat</b>										
					11	(0.4)	0.84	1.04	0.79	0.97
<b>8. Eggs</b>										
					8	(0.3)	0.41	0.61	0.44	0.67
<b>9. Milk</b>										
					33	(1.2)	6.12	6.78	0.76	0.82
<b>10. Fish</b>										
					252	(9.1)	0.05	0.09	28.10	28.33
<b>11. Oils &amp; fats</b>										
					2,764	(100.0)	64.08	69.75	62.73	69.04
<b>Total</b>										
					3,082	(100.0)				

Source : Statistical Year Book of Indonesia, 1995.

Table F-2-10 General Socio-Economic Data of the Study Provinces

No.	Major Items / Study Area	(Unit)	North Sumatr.	West Java	East Java	South Sulawesi	Study Area	Indonesia
<b>1. Administration (1995)</b>								
1.1	No. of Districts (Kabupaten)	(no.)	11	20	29	21	81	247
1.2	No. of Municipalities (Kota/madya)	(no.)	6	5	8	2	21	63
	• Provincial Capital		Medan	Bandung	Surabaya	Ujung Pandang	-	Jakarta
1.3	No. of Sub-districts (Kecamatan)	(no.)	252	529	615	185	1,581	4,022
1.4	No. of Villages (Desa)	(no.)	5,242	7,166	8,426	2,878	23,712	66,158
<b>2. Natural Conditions</b>								
2.1	Land Area (1996)	(km <sup>2</sup> )	70,787	46,300	47,921	72,781	237,789	1,919,317
	• National Weight	(%)	(3.69)	(2.41)	(2.50)	(3.79)	(12.39)	(100.00)
2.2	Physiographic Regions	(kinds)	<ul style="list-style-type: none"> <li>Western foothills</li> <li>Barrisan mountains</li> <li>Eastern plains &amp; hills</li> <li>Eastern coastal swamp land</li> </ul>	<ul style="list-style-type: none"> <li>Northern alluvial plains</li> <li>Northern foothills &amp; plains</li> <li>Central volcanic mountains</li> <li>Southern dissected plateaus &amp; plains</li> </ul>	<ul style="list-style-type: none"> <li>Central mountains</li> <li>Eastern mountains &amp; Karst</li> <li>Southwestern plains &amp; mountains</li> <li>Southeastern mountains &amp; plains</li> </ul>	<ul style="list-style-type: none"> <li>Central mountains</li> <li>Eastern mountains &amp; Karst</li> <li>Southwestern plains &amp; mountains</li> <li>Southeastern mountains &amp; plains</li> </ul>		
2.3	Mean Annual Rainfall (by Island)	(mm)	2,821 (Sumatra)	2,576 (Java)	2,576 (Java)	2,339 (Sulawesi)	-	-
<b>3. Agricultural Land (1995)</b>								
3.1	Land for Agricultural Development	(hectare)	4,201,705	3,369,958	3,198,775	3,043,101	13,813,539	57,861,429
	- House compounds & surroundings		309,186	466,015	587,934	167,517	1,530,702	5,155,422
	- Dryland/ gardens for crop cultivation		663,205	997,590	1,164,452	662,960	3,488,707	11,368,507
	- Meadow		197,953	38,619	2,872	285,569	525,013	1,889,399
	- Dyke (Brackish fishery)		9,653	35,212	51,914	107,298	204,077	422,564
	- Water pond (Inland fishery)		7,530	30,853	2,012	12,858	53,253	182,156
	- Temporarily fallow land		400,089	50,959	20,095	178,166	649,309	6,967,938
	- Wood land		429,593	212,900	54,409	490,718	1,187,620	9,555,010
	- Agricultural estates		1,643,920	385,057	167,498	507,217	2,703,692	13,835,746
	- Wetland (Paddy field)		540,576	1,152,753	1,147,539	630,798	3,471,666	8,484,687
3.2	Share to the Total Land Area	(%)	58.62	78.05	66.75	48.70	61.23	29.87
<b>4. Population</b>								
4.1	Total Population (1996)	(persons)	11,306,000	40,118,000	34,124,000	7,693,000	93,241,000	198,343,000
	• National Weight	(%)	(5.70)	(20.23)	(17.20)	(3.88)	(47.01)	(100.00)
4.2	Population Density (1996)	(persons/km <sup>2</sup> )	160	866	712	106	392	101
4.3	Annual Growth Rate (1990-1996)	(%)	1.64	2.12	0.82	1.63	1.53	1.70
4.4	No. of Households (1995)	(no.)	2,346,000	9,453,000	8,648,000	1,635,000	22,082,000	45,653,000
4.5	Average Household Member (1995)	(persons)	4.8	4.2	3.9	4.7	4.2	4.3
4.6	Working Population (1996)	(persons)	4,607,166	15,176,561	16,414,278	3,031,873	39,229,878	85,701,813
4.7	Workers in Primary Sector (1996)	(persons)	250,947	4,672,419	7,024,431	1,751,904	15,955,701	37,720,251
4.8	Urban / Rural Distribution (1995)	(% / %)	41.1 - 58.9	42.7 - 57.3	32.1 - 67.9	28.3 - 71.7	37.4 - 62.6	35.9 - 64.1
4.9	Growth Rates by Urban / Rural	(%)						
	- Urban Pop. Growth Rate (1990-1995)		4.65	6.51	4.06	4.86	5.33	4.77
	- Rural Pop. Growth Rate (1990-1995)		-0.20	-0.61	-0.50	0.47	-0.42	0.16
<b>5. Gross Domestic Product (GDP)</b>								
5.1	GRDP (at Current Prices in 1995)	(billion Rp.)	24,686,430	73,333,011	66,212,568	10,294,163	174,526,172	454,514,100
	• National Weight	(%)	(5.40)	(16.10)	(14.60)	(2.30)	(38.40)	(100.00)
5.2	Per Capita GRDP in 1995	(Rp.)	2,231,401	1,882,791	1,961,154	1,368,896	1,911,686	2,345,879
<b>6. Socio-Economy</b>								
6.1	Landholding Farm Household (93)	(no.)	1,017,915	3,172,219	3,813,763	860,758	8,864,655	19,713,806
6.2	Horticulture Household (1993)	(no.)	191,452	768,712	849,068	191,273	2,000,505	4,817,636
	• National Weight	(%)	(4.00)	(16.00)	(17.60)	(4.00)	(43.80)	(100.00)
6.3	Population below Poverty Line (96)	(persons)	1,234,184	3,962,111	4,046,529	617,131	9,859,955	22,500,000
	• National Weight	(%)	(5.50)	(17.60)	(18.00)	(2.70)	(43.80)	(100.00)
6.4	Daily Per Capita Consumption (1996)	(calorie)	2,046	2,119	1,850	2,115	1,985	2,016
<b>7. Road Condition</b>								
7.1	Road Length (1995)	(km)	29,924	27,396	32,010	27,263	116,593	372,414
	• National Weight	(%)	(8.00)	(7.40)	(8.60)	(7.30)	(31.30)	(100.00)
7.2	Road Density (1995)	(no./km <sup>2</sup> )	417	635	668	436	518	192
7.3	Road Ratio per 1,000 persons (1995)	(km)	2.7	0.7	0.9	3.6	1.3	1.9
<b>8. Agricultural Production</b>								
8.1	Food Crops Production in 1995 (paddy, maize, cassava, potato, peanuts and soyabean)	(1,000 tons)	4,078.5	13,457.6	15,647.2	5,323.6	38,506.9	78,042.6
8.2	Fruit Production (1994-96 Average)	(ton)						
	- Durian		37,594	44,182	20,235	10,111	112,122	300,000
	- Mango		5,680	129,741	332,565	57,904	525,890	798,764
	- Avocado		3,172	66,044	36,426	11,120	116,762	154,202
	- Lanzon (Duku / Langsat)		2,920	13,060	5,429	14,034	35,443	114,272
	- Salacia (Salak)		95,398	170,719	14,900	12,090	293,107	413,513
	- Rambutan		9,968	96,298	65,176	6,600	178,042	558,495
	- Banana		119,629	967,263	594,115	214,397	1,895,404	3,299,910

Source : This summary table is prepared based on the key data attached in this Report

**Table F-3-1 Number of Horticulture Farm-Households in North Sumatra, 1983&1993**

District / Municipality	1983		1993		Growth Ratio (1983=100)
	Total	(%)	Total	(%)	
1. Nias	19,504	(7.64)	41,665	(17.43)	113.62
2. Tapanuli Selatan	26,527	(10.39)	29,513	(12.34)	11.26
3. Tapanuli Tengah	3,303	(1.29)	5,424	(2.27)	64.21
4. Tapanuli Utara	41,059	(16.09)	31,126	(13.02)	-24.19
5. Labuan Batu	17,444	(6.84)	8,698	(3.64)	-50.14
6. Asahan	17,434	(6.83)	7,999	(3.35)	-54.12
7. Simalungun	35,448	(13.89)	16,110	(6.74)	-54.55
8. Dairi	6,681	(2.62)	11,409	(4.77)	70.77
9. Karo	14,693	(5.76)	22,988	(9.61)	56.46
10. Deli Serdang	45,207	(17.71)	36,804	(15.39)	-18.59
11. Langkat	21,142	(8.28)	22,737	(9.51)	7.54
12. Sibolga	80	(0.03)	41	(0.02)	-48.75
13. Tanjung Balai	182	(0.07)	345	(0.14)	89.56
14. Pematang Siantar	329	(0.13)	103	(0.04)	-68.69
15. Tebing Tinggi	868	(0.34)	1,118	(0.47)	28.80
16. Medan	4,668	(1.83)	1,778	(0.74)	-61.91
17. Binjai	638	(0.25)	1,231	(0.51)	92.95
<b>Total</b>	<b>255,207</b>	<b>(100.00)</b>	<b>239,089</b>	<b>(100.00)</b>	<b>-6.32</b>

Source : Biro Pusat Statistik Jakarta, Sensus Pertanian 1993, Seri H.2 North Sumatra, 1993.

Table F-3-2 Number of Horticulture Farm-Households in West Java, 1983&1993

District / Municipality	1983		1993		Growth Ratio (1983=100)
	Total	(%)	Total	(%)	
1. Pandeglang	55,803	(3.92)	37,522	(4.44)	-32.76
2. Lebak	80,550	(5.66)	36,855	(4.36)	-54.25
3. Bogor	128,997	(9.07)	69,612	(8.23)	-46.04
4. Sukabumi	90,113	(6.34)	64,950	(7.68)	-27.92
5. Cianjur	107,593	(7.57)	50,197	(5.93)	-53.35
6. Bandung	99,861	(7.02)	63,876	(7.55)	-36.04
7. Garut	111,767	(7.86)	66,712	(7.89)	-40.31
8. Tasikmalaya	93,875	(6.60)	54,361	(6.43)	-42.09
9. Ciamis	133,385	(9.38)	57,866	(6.84)	-56.62
10. Kuningan	59,761	(4.20)	24,897	(2.94)	-58.34
11. Cirebon	28,170	(1.98)	21,347	(2.52)	-24.22
12. Majalengka	68,248	(4.80)	35,607	(4.21)	-47.83
13. Sumedang	66,817	(4.70)	40,090	(4.74)	-40.00
14. Indramayu	31,541	(2.22)	32,390	(3.83)	2.69
15. Subang	60,308	(4.24)	38,541	(4.56)	-36.09
16. Purwakarta	26,201	(1.84)	14,367	(1.70)	-45.17
17. Karawang	38,716	(2.72)	20,979	(2.48)	-45.81
18. Bekasi	55,663	(3.91)	34,931	(4.13)	-37.25
19. Tangerang	31,958	(2.25)	25,061	(2.96)	-21.58
20. Serang	48,130	(3.38)	52,202	(6.17)	8.46
21. Kodya Bogor	301	(0.02)	451	(0.05)	49.83
22. Kodya Sukabumi	571	(0.04)	161	(0.02)	-71.80
23. Kodya Bandung	2,234	(0.16)	2,405	(0.28)	7.65
24. Kodya Cirebon	1,369	(0.10)	559	(0.07)	-59.17
25. Kodya Tangerang	0	(0.00)	0	(0.00)	-
Total	1,421,932	(100.00)	845,939	(100.00)	-40.51

Source : Biro Pusat Statistik Jakarta, Sensus Pertanian 1993, West Java Province.

**Table F-3-3 Number of Horticulture Farm-Households in East Java, 1993**

District / Municipality	1993			% of Hort. Farmers to Total Farm Households
	Total Farm Households	No. of Horticulture Farmers	(%)	
1. Pacitan	115,311	35,055	(4.29)	30.40
2. Ponorogo	152,556	26,896	(3.30)	17.63
3. Trenggalek	117,985	8,920	(1.09)	7.56
4. Tulungagung	121,884	14,553	(1.78)	11.94
5. Blitar	154,511	33,637	(4.12)	21.77
6. Kediri	149,958	43,788	(5.36)	29.20
7. Malang	277,539	75,768	(9.28)	27.30
8. Lumajang	128,832	35,854	(4.39)	27.83
9. Jember	234,144	37,159	(4.55)	15.87
10. Banyuwangi	165,759	30,500	(3.74)	18.40
11. Bondowoso	121,252	19,667	(2.41)	16.22
12. Situbondo	89,463	17,365	(2.13)	19.41
13. Probolinggo	155,007	47,866	(5.86)	30.88
14. Pasuruan	157,823	39,992	(4.90)	25.34
15. Sidoarjo	55,102	8,447	(1.03)	15.33
16. Mojokerto	90,245	20,034	(2.45)	22.20
17. Jombang	98,431	12,294	(1.51)	12.49
18. Nganjuk	123,278	30,856	(3.78)	25.03
19. Madiun	94,114	13,656	(1.67)	14.51
20. Magetan	98,383	23,258	(2.85)	23.64
21. Ngawi	138,052	10,409	(1.28)	7.54
22. Bojonegoro	189,249	26,627	(3.26)	14.07
23. Tuban	157,087	45,744	(5.60)	29.12
24. Lamongan	178,579	20,287	(2.49)	11.36
25. Gresik	94,069	20,215	(2.48)	21.49
26. Bangkalan	120,740	32,141	(3.94)	26.62
27. Sampang	131,187	33,479	(4.10)	25.52
28. Pamekasan	109,813	19,195	(2.35)	17.48
29. Sumenep	221,349	32,538	(3.99)	14.70
<b>Total</b>	<b>4,041,702</b>	<b>816,200</b>	<b>(100.00)</b>	<b>20.19</b>

Source : Biro Pusat Statistik Jakarta, Sensus Pertanian 1993, Seri H.13, East Java, 1993.

**Table F-3-4 Number of Horticulture Farm-Households in South Sulawesi, 1993**

District / Municipality	1993			% of Hort. Farmers to Total Farm Households
	Total Farm Households	No. of Horti- culture Farmers	(%)	
1. Selayar	16,443	3,496	(1.75)	21.26
2. Bulukumba	54,898	16,516	(8.26)	30.08
3. Bantaeng	22,095	8,130	(4.07)	36.80
4. Jenepono	48,427	14,884	(7.45)	30.73
5. Takalar	25,657	7,429	(3.72)	28.96
6. Gowa	63,638	21,702	(10.86)	34.10
7. Sinjai	28,471	7,775	(3.89)	27.31
8. Maros	33,893	6,381	(3.19)	18.83
9. Pangkep	28,807	3,088	(1.54)	10.72
10. Barru	17,153	3,112	(1.56)	18.14
11. Bone	94,972	18,296	(9.15)	19.26
12. Soppeng	35,295	6,707	(3.36)	19.00
13. Wajo	53,889	13,932	(6.97)	25.85
14. Sidrap	30,366	6,833	(3.42)	22.50
15. Pinrang	38,531	7,194	(3.60)	18.67
16. Enrekang	23,169	8,719	(4.36)	37.63
17. Luwu	108,882	20,972	(10.49)	19.26
18. Tator	62,467	2,770	(1.39)	4.43
19. Polmas	58,237	10,378	(5.19)	17.82
20. Majene	14,958	3,164	(1.58)	21.15
21. Mamuju	32,017	5,836	(2.92)	18.23
22. Ujung Pandang	7,120	1,812	(0.91)	25.45
23. Pare-Pare	2,532	757	(0.38)	29.90
<b>Total</b>	<b>901,917</b>	<b>199,883</b>	<b>(100.00)</b>	<b>22.16</b>

Source : Biro Pusat Statistik Jakarta, Sensus Pertanian 1993, South Sulawesi Province.



Table F-3-5 Number and Percentage of Population below the Poverty Line, 1993 & 1996

Province	Urban Area				Rural Area				Urban and Rural Area				
	No. of Population Below Poverty Line		Poverty Line (Rp./Cap./Month)		No. of Population Below Poverty Line		Poverty Line (Rp./Cap./Month)		No. of Population Below Poverty Line		Poverty Line (Rp./Cap./Month)		% to the Total Population ('96)
	1993 (%)	1996 (%)	1993	1996	1993 (%)	1996 (%)	1993	1996	1993 (%)	1996 (%)	1993	1996	
- North Sumatra	494,479 (5.7)	457,037 (6.3)	26,822	40,356	837,152 (4.9)	777,157 (5.1)	19,117	30,091	1,331,631 (5.1)	1,234,184 (5.5)			10.92
- West Java	2,327,139 (26.7)	1,879,653 (26.1)	30,559	41,688	2,285,213 (13.3)	2,082,458 (13.6)	20,497	30,356	4,612,352 (17.8)	3,962,111 (17.6)			9.88
- East Java	1,704,433 (19.6)	1,520,902 (21.1)	26,680	36,452	2,719,276 (15.8)	2,525,627 (16.5)	16,924	25,519	4,423,709 (17.1)	4,046,529 (18.0)			11.86
- South Sulawesi	257,162 (3.0)	241,230 (3.4)	25,024	36,281	401,990 (2.3)	375,901 (2.5)	16,053	21,614	659,152 (2.5)	617,131 (2.7)			8.02
Study Area	4,783,213 (55.0)	4,098,822 (56.9)	-	-	6,243,631 (36.3)	5,761,143 (37.7)	-	-	11,026,844 (42.6)	9,859,955 (43.8)			10.57
Indonesia	8,700,000 (100.0)	7,200,000 (100.0)	27,905	38,246	17,200,000 (100.0)	15,300,000 (100.0)	18,244	27,413	25,900,000 (100.0)	22,500,000 (100.0)			11.34

Source : Statistical Year Book of Indonesia 1996.

Table F-3-6 Less Developed Villages in the Study Area, 1994 (1/2)

Kabupaten/ Kotamadya	Village Status (Urban + Rural)						Village Status (Rural)					
	Less Developed	(%)	Not Less Developed	(%)	Total	(%)	Less Developed	(%)	Not Less Developed	(%)	Total	(%)
(1) North Sumatra												
1) Nias	478	(34.7)	179	(4.7)	657	(12.6)	478	(73.3)	174	(26.7)	652	(13.8)
2) Tapanuli Selatan	379	(27.5)	1,150	(30.0)	1,529	(29.4)	377	(25.0)	1,134	(75.0)	1,511	(32.1)
3) Tapanuli Tengah	31	(2.3)	113	(2.9)	144	(2.8)	30	(21.4)	110	(78.6)	140	(3.0)
4) Tapanuli Utara	277	(20.1)	363	(9.5)	640	(12.3)	277	(44.6)	344	(55.4)	621	(13.2)
5) Labuhan Batu	27	(2.0)	211	(5.5)	238	(4.6)	14	(6.8)	193	(93.2)	207	(4.4)
6) Asahan	12	(0.9)	234	(6.1)	246	(4.7)	3	(1.4)	205	(98.6)	208	(4.4)
7) Simalungun	9	(0.7)	198	(5.2)	207	(4.0)	5	(2.6)	189	(97.4)	194	(4.1)
8) Dairi	55	(4.0)	102	(2.7)	157	(3.0)	55	(35.3)	101	(64.7)	156	(3.3)
9) Karo	24	(1.7)	234	(6.1)	258	(5.0)	24	(9.6)	225	(90.4)	249	(5.3)
10) Deli Serdang	60	(4.4)	574	(15.0)	634	(12.2)	46	(8.5)	496	(91.5)	542	(11.5)
11) Langkat	9	(0.7)	207	(5.4)	216	(4.1)	8	(3.9)	198	(96.1)	206	(4.4)
12) Sibolga	0	(0.0)	16	(0.4)	16	(0.3)	-	-	-	-	-	-
13) Tanjung Balai	9	(0.7)	21	(0.5)	30	(0.6)	0	(0.0)	3	(100.0)	3	(0.1)
14) Kota Pematang Siantar	0	(0.0)	38	(1.0)	38	(0.7)	0	(0.0)	6	(100.0)	6	(0.1)
15) Tebing Tinggi	0	(0.0)	17	(0.4)	17	(0.3)	-	-	-	-	-	-
16) Medan	6	(0.4)	138	(3.6)	144	(2.8)	0	(0.0)	5	(100.0)	5	(0.1)
17) Binjai	0	(0.0)	37	(1.0)	37	(0.7)	0	(0.0)	11	(100.0)	11	(0.2)
<b>Total</b>	<b>1,376</b>	<b>(100.0)</b>	<b>3,832</b>	<b>(100.0)</b>	<b>5,208</b>	<b>(100.0)</b>	<b>1,317</b>	<b>(28.0)</b>	<b>3,394</b>	<b>(72.0)</b>	<b>4,711</b>	<b>(100.0)</b>
(2) West Java												
1) Pandeglang	172	(10.6)	163	(3.0)	335	(4.7)	170	(51.8)	158	(48.2)	328	(5.6)
2) Lebak	190	(11.7)	110	(2.0)	300	(4.2)	189	(64.5)	104	(35.5)	293	(6.2)
3) Bogor	60	(5.6)	440	(8.0)	500	(7.4)	55	(16.5)	279	(83.5)	334	(7.1)
4) Sukabumi	95	(4.0)	291	(5.3)	356	(5.0)	63	(20.0)	252	(80.0)	315	(6.7)
5) Cianjur	108	(6.7)	205	(3.7)	313	(4.4)	104	(36.0)	185	(64.0)	289	(6.1)
6) Bandung	63	(3.9)	388	(7.0)	451	(6.3)	43	(12.8)	294	(87.2)	337	(7.2)
7) Garut	70	(4.3)	333	(6.0)	403	(5.7)	63	(17.5)	296	(82.5)	359	(7.6)
8) Tasikmalaya	57	(3.5)	355	(6.4)	412	(5.8)	46	(12.7)	317	(87.3)	363	(7.7)
9) Ciamis	40	(2.5)	318	(5.8)	358	(5.0)	39	(11.4)	304	(88.6)	343	(7.3)
10) Kuningan	56	(3.5)	313	(5.7)	369	(5.2)	53	(15.7)	284	(84.3)	337	(7.2)
11) Cirebon	123	(6.2)	301	(5.5)	424	(6.0)	50	(17.5)	235	(82.5)	285	(6.0)
12) Majalengka	77	(4.8)	251	(4.6)	328	(4.6)	68	(23.1)	227	(76.9)	295	(6.3)
13) Sumedang	49	(3.0)	220	(4.0)	269	(3.8)	48	(19.2)	202	(80.8)	250	(5.3)
14) Indramayu	101	(6.2)	209	(3.8)	310	(4.4)	90	(32.8)	184	(67.2)	274	(5.8)
15) Subang	37	(2.3)	213	(3.9)	250	(3.5)	35	(15.2)	195	(84.8)	230	(4.9)
16) Purwakarta	29	(1.8)	163	(3.0)	192	(2.7)	28	(16.0)	147	(84.0)	175	(3.7)
17) Karawang	66	(4.1)	237	(4.3)	303	(4.3)	64	(23.6)	207	(76.4)	271	(5.8)
18) Bekasi	23	(1.4)	214	(3.9)	237	(3.3)	18	(10.3)	157	(89.7)	175	(3.7)
19) Tangerang	50	(3.1)	266	(4.8)	316	(4.4)	39	(15.7)	209	(84.3)	248	(5.3)
20) Serang	148	(9.1)	264	(4.8)	412	(5.8)	146	(38.6)	232	(61.4)	378	(8.0)
21) Bogor	0	(0.0)	22	(0.4)	22	(0.3)	-	-	-	-	-	-
22) Sukabumi	0	(0.0)	15	(0.3)	15	(0.2)	-	-	-	-	-	-
23) Bandung	3	(0.2)	132	(2.4)	135	(1.9)	0	(0.0)	5	(100.0)	5	(0.1)
24) Cirebon	0	(0.0)	22	(0.4)	22	(0.3)	0	(0.0)	1	(100.0)	1	(0.0)
25) Tangerang	2	(0.1)	60	(1.1)	62	(0.9)	0	(0.0)	2	(100.0)	2	(0.0)
<b>Total</b>	<b>1,619</b>	<b>(100.0)</b>	<b>5,505</b>	<b>(100.0)</b>	<b>7,124</b>	<b>(100.0)</b>	<b>1,411</b>	<b>(24.0)</b>	<b>4,476</b>	<b>(76.0)</b>	<b>5,887</b>	<b>(100.0)</b>
(3) East Java												
1) Pacitan	46	(2.2)	118	(1.9)	164	(2.0)	46	(28.8)	114	(71.3)	160	(2.2)
2) Ponorogo	114	(5.6)	189	(3.0)	303	(3.6)	102	(37.5)	170	(62.5)	272	(3.8)
3) Trenggalek	40	(2.0)	117	(1.8)	157	(1.9)	40	(26.5)	111	(73.5)	151	(2.1)
4) Tulungagung	59	(2.9)	212	(3.3)	271	(3.2)	40	(18.4)	177	(81.6)	217	(3.0)
5) Blitar	49	(2.4)	199	(3.1)	248	(3.0)	38	(17.5)	179	(82.5)	217	(3.0)
6) Kediri	60	(2.9)	284	(4.5)	344	(4.1)	49	(16.2)	254	(83.8)	303	(4.2)
7) Malang	70	(3.4)	338	(5.3)	408	(4.9)	62	(17.6)	291	(82.4)	353	(4.9)
8) Lumajang	51	(2.5)	148	(2.3)	199	(2.4)	47	(26.3)	132	(73.7)	179	(2.5)
9) Jember	21	(1.0)	212	(3.3)	233	(2.8)	20	(9.8)	184	(90.2)	204	(2.9)
10) Banyuwangi	9	(0.4)	166	(2.6)	175	(2.1)	5	(3.6)	133	(95.4)	138	(1.9)
11) Bondowoso	52	(2.5)	140	(2.2)	192	(2.3)	51	(28.3)	129	(71.7)	180	(2.5)
12) Situbondo	41	(2.0)	95	(1.5)	136	(1.6)	34	(30.4)	78	(69.6)	112	(1.6)
13) Probolinggo	107	(5.2)	223	(3.5)	330	(3.9)	100	(32.9)	204	(67.1)	304	(4.3)
14) Pasuruan	116	(5.7)	249	(3.9)	365	(4.3)	103	(32.7)	212	(67.3)	315	(4.4)
15) Sidoarjo	24	(1.2)	329	(5.2)	353	(4.2)	1	(0.4)	235	(99.6)	236	(3.3)
16) Mojokerto	47	(2.3)	257	(4.1)	304	(3.6)	32	(12.6)	222	(87.4)	254	(3.6)
17) Jombang	59	(2.9)	247	(3.9)	306	(3.6)	47	(18.3)	210	(81.7)	257	(3.6)
18) Nganjuk	58	(4.8)	179	(2.8)	277	(3.3)	85	(35.9)	152	(64.1)	237	(3.3)
19) Madiun	45	(2.2)	161	(2.5)	206	(2.5)	40	(21.2)	149	(78.8)	189	(2.7)
20) Magetan	18	(0.9)	217	(3.4)	235	(2.8)	16	(7.4)	201	(92.6)	217	(3.0)
21) Ngawi	54	(2.6)	161	(2.5)	215	(2.6)	52	(25.1)	155	(74.9)	207	(2.9)
22) Bojonegoro	150	(7.3)	280	(4.4)	430	(5.1)	149	(36.9)	255	(63.1)	404	(5.7)
23) Tuban	101	(4.9)	227	(3.6)	328	(3.9)	92	(30.4)	211	(69.6)	303	(4.2)
24) Lamongan	70	(3.4)	405	(6.4)	475	(5.7)	66	(14.6)	385	(85.4)	451	(6.3)
25) Gresik	43	(2.1)	314	(4.9)	357	(4.3)	34	(11.6)	258	(88.4)	292	(4.1)
26) Bangkalan	176	(8.6)	105	(1.7)	281	(3.3)	167	(64.5)	92	(35.5)	259	(3.6)
27) Sampang	113	(5.5)	73	(1.2)	186	(2.2)	108	(61.7)	67	(38.3)	175	(2.5)
28) Pamekasan	60	(2.9)	129	(2.0)	189	(2.3)	58	(32.6)	120	(67.4)	178	(2.5)
29) Sumenep	132	(6.4)	200	(3.2)	332	(4.0)	128	(41.0)	184	(59.0)	312	(4.4)
30) Kediri	7	(0.3)	39	(0.6)	46	(0.5)	0	(0.0)	4	(100.0)	4	(0.1)
31) Blitar	2	(0.1)	18	(0.3)	20	(0.2)	0	(0.0)	2	(100.0)	2	(0.0)
32) Malang	1	(0.0)	56	(0.9)	57	(0.7)	0	(0.0)	9	(100.0)	9	(0.1)
33) Probolinggo	1	(0.0)	28	(0.4)	29	(0.3)	0	(0.0)	13	(100.0)	13	(0.2)
34) Pasuruan	3	(0.1)	31	(0.5)	34	(0.4)	1	(14.3)	6	(85.7)	7	(0.1)
35) Mojokerto	3	(0.1)	15	(0.2)	18	(0.2)	0	(0.0)	1	(100.0)	1	(0.0)
36) Madiun	2	(0.1)	25	(0.4)	27	(0.3)	0	(0.0)	2	(100.0)	2	(0.0)
37) Surabaya	4	(0.2)	159	(2.5)	163	(1.9)	0	(0.0)	18	(100.0)	18	(0.3)
<b>Total</b>	<b>2,048</b>	<b>(100.0)</b>	<b>6,345</b>	<b>(100.0)</b>	<b>8,393</b>	<b>(100.0)</b>	<b>1,813</b>	<b>(25.4)</b>	<b>5,319</b>	<b>(74.6)</b>	<b>7,132</b>	<b>(100.0)</b>

Tab F-3-6 Less Developed Villages in the Study Area, 1994 (2/2)

Kabupaten/ Kotamadya	Village Status (Urban + Rural)						Village Status (Rural)					
	Less Developed	(%)	Not Less Developed	(%)	Total	(%)	Less Developed	(%)	Not Less Developed	(%)	Total	(%)
(4) South Sulawesi												
1) Selayar	4	(0.5)	34	(1.8)	38	(1.4)	4	(11.4)	31	(89.6)	35	(1.5)
2) Bulukumba	28	(3.7)	86	(4.6)	114	(4.3)	25	(23.6)	81	(76.4)	106	(4.5)
3) Bantaeng	7	(0.9)	35	(1.9)	42	(1.6)	4	(10.8)	33	(89.2)	37	(1.6)
4) Jeneponto	47	(6.3)	64	(3.4)	111	(4.2)	46	(42.2)	63	(57.8)	109	(4.7)
5) Takalar	15	(2.0)	58	(3.1)	73	(2.8)	13	(19.7)	53	(80.3)	66	(2.8)
6) Gowa	33	(4.4)	97	(5.1)	130	(4.9)	28	(24.6)	86	(75.4)	114	(4.9)
7) Sinjai	7	(0.9)	61	(3.2)	68	(2.6)	7	(10.6)	59	(89.4)	66	(2.8)
8) Maros	33	(4.4)	68	(3.6)	101	(3.8)	32	(34.0)	62	(66.0)	94	(4.0)
9) Pangkajene Kepulauan	25	(3.3)	72	(3.8)	97	(3.7)	25	(26.9)	68	(73.1)	93	(4.0)
10) Barru	13	(1.7)	41	(2.2)	54	(2.0)	10	(21.3)	37	(78.7)	47	(2.0)
11) Bone	86	(11.4)	286	(15.2)	372	(14.1)	86	(23.8)	275	(76.2)	361	(15.5)
12) Soppeng	1	(0.1)	65	(3.4)	66	(2.5)	1	(1.6)	61	(98.4)	62	(2.7)
13) Wajo	43	(5.7)	105	(5.6)	148	(5.6)	28	(22.4)	97	(77.6)	125	(5.4)
14) Sidenreng Rappang	1	(0.1)	65	(3.4)	66	(2.5)	1	(1.7)	59	(98.3)	60	(2.6)
15) Pinrang	18	(2.4)	85	(4.5)	103	(3.9)	18	(18.4)	80	(81.6)	98	(4.2)
16) Enrekang	9	(1.2)	40	(2.1)	49	(1.9)	9	(19.1)	38	(80.9)	47	(2.0)
17) Luwu	194	(25.8)	219	(11.6)	413	(15.6)	194	(48.5)	206	(51.5)	400	(17.1)
18) Tana Toraja	32	(4.3)	81	(4.3)	113	(4.3)	31	(29.0)	76	(71.0)	107	(4.6)
19) Polewali Mamasa	96	(12.8)	73	(3.9)	169	(6.4)	87	(52.2)	65	(42.8)	152	(6.5)
20) Majene	10	(1.3)	25	(1.3)	35	(1.3)	10	(32.3)	21	(67.7)	31	(1.3)
21) Mamuju	37	(4.9)	77	(4.1)	114	(4.3)	36	(32.1)	76	(67.9)	112	(4.8)
22) Ujung Pandang	11	(1.5)	131	(6.9)	142	(5.4)	3	(50.0)	3	(50.0)	6	(0.3)
23) Pare-Pare	2	(0.3)	19	(1.0)	21	(0.8)	1	(20.0)	4	(80.0)	5	(0.2)
Total	752	(100.0)	1,837	(100.0)	2,639	(100.0)	699	(30.0)	1,634	(70.0)	2,333	(100.0)

Source : Ringkasan Desa Tertinggal 1994, Sumatera Utara, Jawa Barat, Jawa Timur and Sulawesi Selatan, Biro Pusat Statistik (BPS)

Table F-3-7 Number of Food Crops Households, Controlled Land and Average Land Size, 1983 & 1993

Controlled Land Size	1983 Agricultural Census			1993 Agricultural Census			Average Size of Land (ha)
	Number of Food Crops Household (%)	Controlled Land Area (ha)	Average Size of Land (ha)	Number of Food Crops Household (%)	Controlled Land Area (ha)	Average Size of Land (ha)	
< 0.10	179,974 (1.1)	14,967.1 (0.1)	0.08	1,081,006 (6.0)	66,327.2 (0.4)	0.06	
0.10 - 0.19	1,751,539 (11.0)	247,378.0 (1.5)	0.14	2,294,537 (12.8)	329,398.2 (2.1)	0.14	
0.20 - 0.49	4,563,552 (28.7)	1,448,005.3 (8.7)	0.32	5,350,891 (29.8)	1,703,695.2 (11.0)	0.32	
0.50 - 0.74	2,614,275 (16.4)	1,513,236.1 (9.1)	0.58	2,767,251 (15.4)	1,615,178.0 (10.5)	0.58	
0.75 - 0.99	1,372,601 (8.6)	1,133,576.5 (6.8)	0.83	1,363,020 (7.6)	1,134,764.9 (7.3)	0.83	
1.00 - 1.99	3,166,465 (19.9)	4,070,805.1 (24.4)	1.29	2,991,747 (16.6)	3,859,118.7 (25.0)	1.29	
2.00 - 2.99	1,202,733 (7.6)	2,689,203.9 (16.1)	2.24	1,293,272 (7.2)	2,871,133.0 (18.6)	2.22	
3.00 - 3.99	467,247 (2.9)	1,510,595.8 (9.1)	3.23	423,631 (2.4)	1,370,469.6 (8.9)	3.24	
4.00 - 4.99	225,926 (1.4)	953,155.5 (5.7)	4.22	183,865 (1.0)	778,347.5 (5.0)	4.23	
5.00 - 7.49	240,025 (1.5)	1,376,935.7 (8.3)	5.74	151,122 (0.9)	922,771.1 (6.0)	5.73	
7.50 - 9.99	60,619 (0.4)	508,304.1 (3.0)	8.39	36,968 (0.2)	309,557.3 (2.0)	8.37	
10.00 - 14.99	51,446 (0.3)	580,795.2 (3.5)	11.29	19,630 (0.1)	225,149.5 (1.5)	11.47	
≥ 15.00	31,038 (0.2)	642,494.0 (3.8)	20.70	11,487 (0.1)	254,710.5 (1.6)	22.17	
Not Reported	-	-	-	24	-	-	
Total	15,927,440 (100.0)	16,689,452.4 (100.0)	1.05	17,978,451 (100.0)	15,440,620.7 (100.0)	0.86	

Source : Land Holding Farmers Sample Census (1993 Agricultural Census), Biro Pusat Statistik (BPS)

**Table F-3-8 Socio-Cultural & Gender Indicators of the Study Area, 1995**

No.	Major Items / Study Area	(Unit)	North Sumatra	West Java	East Java	South Sulawesi	Indonesia
<b>1. Labor Force Participation Ratios</b>		(%)					
- Urban							
• Female			40.14	37.25	48.47	34.37	42.35
• Male			77.64	79.51	80.03	72.89	78.58
- Rural							
• Female			66.24	43.05	57.26	36.09	54.84
• Male			85.68	88.09	90.04	87.17	88.78
- Urban + Rural							
• Female			55.00	40.55	54.41	35.59	50.24
• Male			82.26	84.40	86.84	83.02	85.04
<b>2. Illiterate Population (10 years old and over)</b>		(%)					
- Urban							
• Female			4.51	8.50	15.80	11.70	10.41
• Male			1.38	3.56	5.45	6.60	3.82
- Rural							
• Female			9.55	18.39	34.90	26.28	23.25
• Male			3.85	8.73	16.81	19.36	14.52
- Urban + Rural							
• Female			7.43	14.20	28.74	22.20	18.60
• Male			2.83	6.52	13.19	15.76	8.74
<b>3. Life Expectancy</b>		(years)					
- Female			66.42	62.59	66.42	65.75	65.31
- Male			63.00	58.93	62.60	61.95	61.54
- Total			64.56	60.81	64.56	63.90	63.48
<b>4. Infant Mortality Rate (IMR)</b>		(%)					
- Female			41	60	41	47	49
- Male			57	74	57	59	61
- Total			50	66	50	53	55
<b>5. Well Nourished Population (5 years old and over)</b>		(%)					
- Urban							
• Female			68.34	74.57	75.95	70.08	72.30
• Male			59.62	67.07	65.93	60.96	65.33
- Rural							
• Female			63.86	66.34	64.07	61.86	64.07
• Male			59.72	61.22	60.07	54.42	58.89
- Urban + Rural							
• Female			65.57	69.46	67.64	64.16	66.77
• Male			59.68	63.40	61.87	56.15	61.00
<b>6. Population Listened to Radio (10 years old and over)</b>		(%)					
- Urban							
• Female			53.91	59.75	54.43	50.36	57.35
• Male			47.85	60.20	57.57	58.29	58.79
- Rural							
• Female			34.70	59.85	47.26	44.28	47.86
• Male			34.67	62.11	55.21	43.90	53.12
- Urban + Rural							
• Female			42.76	59.81	49.57	45.99	51.30
• Male			40.12	61.30	55.96	51.56	55.17
<b>7. Population Watched Television (10 years old and over)</b>		(%)					
- Urban							
• Female			87.62	86.93	81.80	78.46	85.51
• Male			88.07	86.75	83.36	78.68	85.16
- Rural							
• Female			54.55	57.63	54.55	39.57	53.30
• Male			64.47	62.73	62.25	43.25	59.81
- Urban + Rural							
• Female			68.43	70.05	63.35	50.51	61.97
• Male			74.23	72.98	68.97	53.27	69.32
<b>8. Population Read Newspaper/ Magazine (10 years old and over)</b>		(%)					
- Urban							
• Female			26.55	28.42	15.27	27.55	28.94
• Male			38.69	36.76	22.18	34.29	37.91
- Rural							
• Female			6.97	6.48	5.66	7.03	6.42
• Male			14.19	11.13	8.05	8.60	10.06
- Urban + Rural							
• Female			15.19	15.78	6.50	12.80	14.59
• Male			24.33	22.07	9.47	15.87	20.14
<b>9. No. of Beds per 1,000 people (1994)</b>		(no.)	107.3	35.5	51.1	69.1	60.8

Sources : Social Indicators on Women in Indonesia 1995. BPS and Environmental Statistics of Indonesia 1996. BPS.

**THE STUDY ON THE IMPROVEMENT  
IN QUALITY OF THE TROPICAL FRUITS**

**Appendix G**  
*Rural Community and Gender*

**APPENDIX G  
RURAL COMMUNITY AND GENDER**

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## APPENDIX G RURAL SOCIETY AND GENDER

### 1. POPULATION AND SOCIETY ECOLOGY

#### 1.1 Approach and Limitation

The terms of community and society are often used ambiguously in sociology. Mostly, they are used interchangeably to refer simply to any aggregation of people living together who share a common culture. But, attention is paid to the specific kinds of comprehensive social groupings. When the population cluster or community is relatively small, focus will be on individual residences and places of work, and based on daily patterns of interaction such as daily trips for work, shopping, and school. Examples of community are villages, cities, suburbs, and metropolitan area, and the basic unit of the community is residence unit or household. While, a society is grouped out of all existing system units at particular time and place, it has the highest degree of self-sufficiency.

Consistent with the above context, the baseline survey was conducted for the community analysis in order to find out the alternatives in approaching the smallholding fruit growers in improving the quality of the tropical fruits in four Provinces: North Sumatra, West Java, East Java, and South Sulawesi. However, some analysis would be in the context of Indonesian society as a whole whenever it is needed in elaborating a comprehensive and sound understanding of nature of social phenomena.

Consistent with the objective of the Study, the primary aim of the baseline survey was to analyze the present farmers' conditions and farmers' intention of promoting fruits culture, and these survey results will be integrated into the Basic Development Policy and Plan. Given that all farmers households are living in the fruit farming, the fact that some tend to do better (economically and environmentally) than others has been an issue of concern. This survey was organized on the conviction that a clear understanding of the force underlying this disparity could shed light on some the presently intractable problems, leading to the formulation of effective follow up actions. Given such a principal objective, the questionnaire used focused on eliciting information relating to socio-economic background, farm performance, farm practices, off-farm employment and economic opportunities, and expenditure patterns of farmer households. Jointly, these data were intended to provide not only a representative socio-economic profile of farmer families in the village area but also to enable household income to be related to such fruit development scheme such as work aptitude, farm and labor inputs, access to off-farm opportunities, and external aid. To ensure that sufficient variations in socio-economic background and agriculture development could be captured, the survey adopted three approaches of sociology: Structural Functionalism, Conflict Theory, and Symbolic Interactionism.

#### 1.2 Total Population and Rural Community Type

##### (1) Population

Total population of potential Districts in North Sumatra is 3,426,658, accounting for about 30% of the total Provincial population. West Java is 12,062,495 or about 30.7%; East Java is 7,171,270 or about 21%; and South Sulawesi is 3,949,562 or about 52%. Female population in rural area is larger than the male population in all the Districts of North Sumatra, East Java, and South Sulawesi, while the female population of West Java is smaller than male as presented in Table G-1-1.

## (2) Rural Community

In Indonesia, there are six types of rural communities as categorized below:

- Food gathering community (Masyarakat Peramu)
- Fishing community (Masyarakat Nelayan)
- Rainfed agriculture community (Masyarakat Peladang)
- Pastoral community (Masyarakat Peternak)
- Garden and plantation community (Masyarakat Pekebun), and
- Irrigated cultivation community (Masyarakat Pertanian Sawah)

In the Study Area, most of the farmers or fruit growers belong to the types of communities of rainfed agriculture, garden and plantation, and irrigation cultivation.

With reference to USAID Agribusiness Development Project, Jakarta, 1995, some significant characters of those communities are clarified as follows:

Rainfed agriculture community;

- Reciprocity is a commonly practiced among members.
- Respect to mother is observed although the male is the main speaker in a family.
- "Gift" approach is a common practice among members.
- Indirect response is usual in communication especially when talking to higher group of community.
- Some specific places, trees, time, words, personality of certain members are considered as sacred.

Garden and plantation community; and

- Reciprocity is a commonly practiced among members.
- Respect of sharing labor and functions.
- A pioneer spirit is highly appreciated (e.g. opening the remote area).
- Clearness of the benefit in term of money is the most important consideration in adopting the innovation.

Irrigated cultivation community.

- Social compatibility is most important for members.
- Respect to uniqueness of functions, principle of groups, and religions.
- Ability in maintaining the good relation with upper community and respect of members.
- Informal hierarchy established by community members.

### 1.3 Present Situation of Fruit Growers

A summary of income, fruit share in income, and profile of farm households is presented in Table G-1-2. Income share of fruit sub-sector varies with the Districts, from 0.8% to 37.5%, greatly depending upon the total income, comparative advantage of area, and kind of fruit crop.

Most of development areas the proposed for fruit production have the positive potential in saving, except the areas of Simpang Empat (Karo District) and Sukadana (Ciamis District). Out of 16 sample areas of the baseline survey, only 6 areas have 100% of family members staying at home throughout a year.

Table G-1-3 shows the major fruit trees being cultivated by farmers in the proposed areas. Most of farmers are engaged in fruit growing including target fruit crops, and they are mixed plantings. Most of fruit growings are practiced by typical smallholding fruit growers in the survey areas, except for those in Districts Karo and Jenepono. The fruit crops are solely

produced for family consumption, and not yet cultivated for commercial purpose. Some crops are naturally grown in their field without any special cares.

The development areas proposed for fruit production are facing the natural disaster and livelihood problems as presented in Table G-1-4. Low income is the most significant livelihood problem of these areas. Unfortunately they often meet serious natural disasters like erosion, flood, and drought. All of these need high technology and a lot of money to reduce their damages.

#### 1.4 Social Mobility of Family Members

With reference to Table G-1-5, mobility of family members in the fruit growing areas is high, especially the husband and elder children getting job in off-farming period or going to school. Wife is used to stay at home throughout a year to take care of baby, children, house, and farming as well. The husband usually stays at home during the times of land preparation, planting, and harvesting. The family income source is not only from their own farm land but also from off farm jobs. This situation is significant in Cianis District. Out of 16 survey areas, only 8 areas have 100% of household head who is a full-time farmer, and the rest are farm labors, blue collar labors in cities or carpenter, mason, etc.

## 2. COMMUNITY PROFILE OF THE POTENTIAL DISTRICTS FOR FRUIT PRODUCTION DEVELOPMENT

### 2.1 Communication among Members

At least seven races of Batak, Melayu, Sunda, Java, Madura, Bugis, and Toraja as shown in Table G-2-1 will involve in fruit production development of the Study Area. Each race uses own language at homes and in markets. Comprehension of the local dialect is not a serious problem in the area because almost all people has ability to speak and understand the national language (Indonesian) as indicated in Table G2.1.

Table G2.1 Literate Rate (5 years old and over) by Four Provinces, 1995

Province	Urban		Rural		Urban + Rural	
	Female	Male	Female	Male	Female	Male
North Sumatra	99.37	99.35	89.89	92.82	93.76	95.45
West Java	93.55	95.69	77.89	85.53	84.43	89.91
East Java	86.36	93.70	63.21	78.48	70.59	83.24
South Sulawesi	93.70	95.50	75.64	80.96	80.64	85.03
Overall Indonesia	92.52	95.97	76.82	85.54	82.40	89.22

Source: Social Indicators on Women in Indonesia, 1995

In Indonesia, there is no minority or majority ethnic group in term of society cluster. In National Philosophy of "Pancasila", the pluralistic community is recognized, but unified by common national language, nationalism, and unity of territory.

Cultural pluralism is the dominant pattern in Indonesia. Most people groups are allowed to maintain their own religious affiliations and other cultural traditions. To function as a unit, a society must have a high degree of cultural unity. This is maintained by Indonesian language to make every ethnic function in framework of nation and character building.

## **2.2 Spatial Planning and Sustainability of the Project**

The broad process of urbanization entails much a shift of population from rural to urban and suburbs; it also involves a restructuring of behavior, values, and patterns of social organization. The living patterns of rural areas and small towns give way to the patterns of large metropolitan areas; rural cultural values are replaced by the culture of urbanism. These changes would be greatly depend upon the distance between rural and urban area, intensity of communication, and intensity and mobility of community. Mobility of the community for fruit production development is indicated by the presence at home of family members as presented in Table G-1-4.

As shown in Table G-2-2, the distance of fruit production potential area to town ranges from 1.5 to 13 km, and as a result the culture of urbanism will easily affect the rural community behavior and also the change of land use. Interpersonal change would be marked by increasing fragmentation and specialization of activity and relationships. More and more relationships are separated from the web of community life as a whole or take place in specialized organizations. Organization in the community have become more complex and specialization. Through implementation of fruit production development in the potential areas, the amenities of rural life will be improved and attract the urban people to invest their money in the promising areas, then in turn the fruit growers participants will come back to another end of development process, and finally the benefit of the project will fruit the urban community. Therefore a spatial planning of Districts is necessary to be enforced

Amenities of rural life were measured by electrical communication media and modes of transportation in the survey area. Table G-2-3 shows the total electrical communication media belonging to the interested farmers. Positive impact of these existing electrical communication media will be useful for disseminating the information to the beneficiary-farmers. Radio and TV set are also the most popular electrical communication media among farmers in the rural areas.

The existing road condition varies depending on the mode of transportation that is available in the respective areas. Out of the total sample potential areas, 10 areas have a small passenger public transportation system, but the rest are served only by motor bike. In some areas road condition is very bad, so walking is the only way to reach the potential area. Although the distance to town is relatively near, some project sites are located in an isolated area. Details are presented in Table G-2-4.

Through promotion of fruit production development in a community that has relatively good public services and infrastructure, the open society in the area will be created, and then in turn the social mobility will be turned upward and horizontal. The upward mobility will be created by creation of job and skill, and horizontal mobility will be activated by better income. Consequent to the horizontal social mobility, the second activity will be generated such as improvement the house, change of land value, fragmentation, and specialization of jobs. All of them would be managed by a spatial planning instrument.

## **2.3 Family Size and Estimated Working Hours**

Family is a group of kin who lives together and functions as a cooperative unit for economic and other purposes. In twenty years ago, the Indonesian family was a big including the nuclear and extended members or some times called three generation family stay in one house, but at present as shown in Table G-2-5, the average family member ranges from 4 to 5, consisting of husband, wife, and children.

Most of communities investigated by the baseline survey belong to the "patriarchy", in which the eldest male dominates, sometimes wielding authority in arbitrary ways. The patriarch has the final word in all decisions regarding family members -- whether family should invest money in new equipment for the family farm. However, this is a basic arrangement of family

but, as it was stated in previous chapter, the behavior of family will be influenced by community character. They respect the mother but in formal the male is the representative of family. All important decisions should be consulted firstly to mother before the decision is made.

For rural community, total working-days per year are estimated at about 52 days for regular religious duties, 20 days for formal and informal holidays, and about 28 days for social interaction including the PKK program, so the total is about 100 working-days. On average each family member, husband and wife, has about 260 effective working-days. Working-hour in farming of husband and wife is different, some husbands work 10 hours for farming, while wives work 7 hours or it could be reversed depending upon the folk usage in each communities. In some communities, the wife spent 10 hours for farming while husband work only 5 hours. Estimated working-hours available of each household is presented in Table G-2-5.

## **2.4 Farmers' Intention and Fruit Preference**

Table G-2-6 indicates that the target fruit crops mostly suit the farmer's intention and preference. The farmers' assessments on the overall target fruit crops in four Provinces are presented in Table G-2-7. Farmers in North Sumatra support the cultivation and production on rambutan and marquisa; farmers in West Java are for mango and banana; farmers in East Java for avocado and duku; and farmers in South Sulawesi for rambutan. Farmers' prefer to only one or two specific fruits, but it does not mean the other fruit is not suitable for the area. It might be a stereotype opinion of farmers due to limited experience in fruit cultivation.

Table G-2-8 indicates the major premise of farmers in response to the target fruit, how they look it for their land. The first premise have been analyzed into the group of market oriented, agronomic oriented, financial oriented, and skill or extension oriented. The result of analysis revealed that five areas have market oriented, 8 areas have agronomic oriented, 3 areas have financial oriented, and only one area has skill or extension oriented. This could be caused by different experiences of farmers about fruit cultivation and also the existing fruit development in the area. However, most of farmers are comprehensive oriented on fruit cultivation, and it could be changed if the farmers have a look on the real fruit development area.

The farmers' experiences in growing the target fruit crops are different from one area to another. The average years of farmers' experiences presented in Table G-2-9 indicate that the farmers of Jenepono and Majalengka Districts have the lowest rate of experience in mango, which could predict that the farmers in these two Districts have no skill and experience in target fruit crop cultivation.

## **3. WOMEN IN DEVELOPMENT AND FAMILY SPENDING BEHAVIOR**

### **3.1 Female Participation in Labor Force and Responsibility in Making a Decision**

Table G3.1 indicates that the female workers in formal sector increase, while decrease in informal sector during the period of 1980 to 1990. However, the informal sector absorbs the larger portion of both female and male labor force.

**Table G3.1 Percentage of Working Female**

Sector	Female		Male	
	1980	1990	1980	1990
Informal	74.3	68.2	66.6	60.1
Formal	25.7	31.8	33.4	39.9
Total Percentage	100	100	100	100
Total Absolute	16,705,483	25,788,997	34,486,029	46,194,882

Source: BPS, Statistical Profile of Women, Mother and Children in Indonesia, 1994

In 1990, the share of female workers in formal sector was 31.8% and that of male was 39.9%, while in 1980, the female and male workers in formal sector was accounted for 25.7% and 33.4%, respectively. These changes are still in a sociocultural evolution process. The sociocultural evolution process could be influenced by job opportunities to be created in Indonesia for four Provinces where the female could participate in development as presented in Table G-3-1.

Agriculture, manufacturing, and trading industries are the most important for female to involve in development. The fruit development project would be a promising alternative to expand the job opportunity for female in future, and the fruit production development will create the jobs in upstream to downstream areas. In the interview, a women farmer in Karo District of North Sumatra gave the answer that they are very happy if the fruit production plan can create the new jobs for the area. Total employment in agriculture of target Districts of four Provinces are presented in Table G-3-2. The role of female in economic activity is presented in Table G-3-3. For a comprehensive understanding on women in development, there is a trend that the female role in formal sector is significantly increasing year by year (see Table G-3-4). However, the labor participation rate of female group is still lower than the male group either in urban area or rural area as shown in Table G-3-5.

According to the sociocultural evolution theory, societies and cultures change and develop over time from simpler to more complex forms. Therefore there are three major evolutionary trends of community in Indonesia:

1. Social concern about the environment is increasing due to technological development: Table G3.1 shows the changes in job sectors and by female and male as well, and Table G-3-1 indicates that agriculture, manufacturing, and trading give the employment opportunity for female group. However, among four Provinces, situation is different as shown in Table G-3-2, as it depends on the regional development stage. This implies that there was improvement of the ability of both group and also it might change environment due to macro economic development of Indonesia.
2. Increasing division and specialization of social and cultural units such as groups, organizations, and institutions, a process called social differentiation: Table G-3-3 shows the role of women in economic activities and Table G-3-4 indicates employment opportunities of rural male and female workers in agriculture and overall industries in respective target Districts, this varied from one District to another District of certain Province. In Karo District, female workers in agriculture as well in all industries were larger than male group, but in the Districts of Tapanuli Tengah, Tapanuli Utara, Tapanuli Selatan, and Langkat, rural male is larger than female group. All target Districts of West Java, East Java, and South Sulawesi rural male workers in agriculture and all industries was larger than female group. However the labor participation of female is lower than male in urban area and rural area as well as shown in Table G-3-5.

3. Increasing interdependence of social units, with each unit relying more on other units to help it perform its task:

One factor (probably the main factor) of interdependence of social units is specialization level. The specialization depends upon education level. The education level was measured by the level of illiterate as shown in Table G-3-6. Urban society of Indonesia both female and male could be toward specialization process but at certain degree the rural male and female are still at stage of traditional arrangement. However, at some degree the division of labor and share of responsibility in making decision of farming activity is not significant differentiated. Table G-3-7 indicates that the working hours between male and female is not significant different, but due to a stereotype opinion of traditional society, the reward given to males usually higher than female both in formal and informal sectors as shown in Table G-3-8.

### **3.2 Family Welfare and Social Activity**

The family welfare can be measured by Infant Mortality Rate (IMR), Nourish level of Kids, and Expected Life. According to Table G-3-9, the IMR of four Provinces revealed that male IMR is larger than female, which could be caused by the nutrition condition that female is better than male as per Table G-3-10. Consequent to well nourished at the early stage, the expected life of female was higher than that of male as shown in Table G-3-11.

In general, the fruit growers have a good interaction among themselves, which could lead to a conducive condition in launching the learning and extension program. The entry points could be the existing farmers groups, "Arisan" activity, and religious activity. Detailed data on the farmers' social participation is presented Table G-3-12.

### **3.3 Spending Behaviors of Farm Households**

Spending behavior of farm households varies from Districts, greatly depending upon the present total income as shown in Tables G-1-2 and G-3-13. In general, the lower income for livelihood, the higher expectation to buy the consumption goods. This phenomena is logic and understandable that the family with very low income is more sensitive to have many items going to buy when they have better income. Therefore, it is important to pay attention to the financial management at farm-households' level in order to increase their welfare.

## **4. GRASSROOTS INSTITUTION BUILDING FOR COMMUNITY EMPOWERMENT**

### **4.1 Farmers' Group, KUD, and Fruit Marketing Association**

Both Farmers' Group and KUD are in process of sociocultural change at grassroots level. Their evolution at village level is still concentrated on supporting the paddy intensification program with some modification as it is needed. Most of Farmers' Group and KUD are familiar with paddy cultivation, but have limited knowledge in fruit business. Total number of Farmers' Groups and KUDs engaging in food crops production and marketing is presented in Table G-4-1. Marketing Association is established in East Java by a certain exporters, but their role is not significant yet.

### **4.2 NGOs and Proposed Business Development Units (BDU)**

Developing and introducing a model of "social engineering" for fruit development should be based on the existing landholding size, existing social engineering, and the existing channel. Table G-4-2 indicates the average landholding size of farmers ranges from 0.5 to 2.7 ha. As Ownership Title Certificate is required to utilize bank credit, most of the lands in sample are not

eligible for credit scheme according to the assessment on the existing legal documents as shown in Table G-4-3.

Table G-4-4 shows the total number of extension workers (PPS and PPL) of each proposed District, and according to a decree of Ministry of Agriculture and Home Affairs, all PPS and PPL are under jurisdiction of Bupati (Head of District). PPS is a highly specialized extension worker who graduated from university and PPL is required to be with senior agriculture high school background, and both of them are under the command of Bupati and technically under the supervision of the respective Dinas. Both are strategic personnel in empowerment of the community at grassroots level. Bupati has sufficient authority in supervising both "Dinas" and extension workers. Therefore, the Project Management Unit should be established paying attention to such organizational structure at District level.

## **5. LESSONS FROM PRIVATE SECTOR IN AGRICULTURAL EXTENSION PROGRAM**

Table G-5-1 showed a summary of the case of private extension program, and a lot of lesson could be learnt.

### **5.1 Experiences of the Private Sector**

#### **(1) Extension Service borne by Farmer**

A special transaction and payment system was introduced by NGO of Yayasan Mitra Desa at Simalungun District of North Sumatra Province. Yayasan Mitra Desa in collaboration with Bupati Office set a program of Agricultural Extension for cabbage growers. The growers should pay the fee of Rp.20 per kg of sold cabbage to a company or a trader which is arranged by Yayasan Mitra Desa. Out of Rp.20, Rp.7 is paid to the District government or Bupati office, Rp.3 to Extension Worker who has responsibility in supervision the cabbage growers to have the good quality cabbage, and Rp.10 to NGO. In discussion with participants at Simalungun District, they showed interest to follow this arrangement. Before this arrangement, farmers sell their cabbage through "agent or third person" who charge them Rp.70 per kg cabbage sold without any agriculture extension service. However, this model is good for the beginning stage, and the sustainability of this service greatly depends upon the skill of the NGO staff and extension workers in creating the markets.

#### **(2) Extension Service borne by the Project**

This type of arrangement is practiced by NGO of LEPPSEM (Lembaga Pengembangan dan Pembinaan Sosial Ekonomi) for Small Scale Irrigation Management Project (SSIMP) in South Sulawesi Province. Water User Association Organizer (NGO) is paid by the Project to conduct the extension service at village level, and their activity is stated in contract between NGO and the Project. Such arrangement just follows the existing government system for extension services, and the difference is the NGO paid by the Project and existing extension worker paid by MOA. The sustainability of this service depends on establishment of mechanism to continue the activity whenever the SSIMP terminated.

#### **(3) Rural Credit and NGO's guidance**

According to the Dinas Pertanian staff of West Java, Yayasan Mandiri (NGO) conducted the Feasibility Study (F/S), then proposing the F/S to a bank for a credit supply to farmers, then after credit has been approved, the farmers will sign the credit contract to Bank. The service of NGO is covered by Government Project. The problem is the sustainability of activity whenever project terminated.



#### (4) Integration of Smallholder, Village Trader and Professional Staff in one Organization

This type of management is introduced by PT Sarana Yogya Ventura (SYV) to organize all the subjects related to "Salak Pondoh" program. SYV provides the financial and management service in agribusiness through a cooperative of GAMADIN. The cooperative organizes the village traders in buying the salak from farmers, and village traders sell the salak to GAMADIN in cash. GAMADIN sell the salak to supermarkets. A supermarket chain buys the salak in term of 14 days paid after delivery. The role of SYV is to provide cash money to buy the salak from farmers, and GAMADIN is to take the responsibility to organize the business and pay back the money to PT SYV. This is not credit basis, but sharing basis. PT SYV has 10% of profit and cooperative has 90% of profit projection. According to the staff of PT SYV, the cooperative GAMADIN has managed the capital of about Rp.200 million during the last two years, and has paid back capital to SYV about Rp.30 million. The problem is not availability of capital, but is how to expand the market of salak business. GAMADIN members are composed of 4,500 farmers and village traders, and Gajah Mada University staff. Lesson learnt from the above is the need to empower the farmers, village traders, and professionals so as to integrate them into one workable organization.

## 6. BUSINESS DEVELOPMENT UNIT (BDU) MODEL FOR FRUIT PRODUCTION DEVELOPMENT

A rule of thumb in social engineering process is to start a new model based on the existing model of community. Based on those experiences learned from the existing model which is presented in the previous section, the following assumptions are derived:

- Fruit farmers are willing to pay for the technology; and
- Farmers, village traders, and professionals can work together to make a good business.

Studies in four Provinces indicate the following major problems for fruit production development:

#### Farmers' Problems:

From the marketing point of view:

- lack of technology;
- lack of fund for fruit processing;
- fruits is not known by community;
- price fluctuation;
- lack of transportation;
- poor market facility; and
- a few middlemen traders.

From the fruit development point of view:

- insufficient fund for starting;
- poor farming technology;
- water shortage;
- lack of land to have efficiency;
- high mobility to look the off-farm jobs;
- wild grazing cattle practice; and
- manpower shortage.

#### Village Traders' problems:

- deficiency of working capital;
- no bank can provide capital;
- high interest money lender for working capital; and
- delay payment system of big company/supermarket/hotel etc.

From the sociological point of view, the problems of both farmers and village traders are derived from their functional interdependence. One unit relying more on the other unit to help it perform its task. The problem is how to arrange both parties in one viable institution.

The partnership mode between the two parties could be in forms of:

- (1) Farmers' individual based activities: Farmers require the technology and financial assistance for management of orchard and marketing activity on individual basis. Consequently, all the added value will belong to farmers, and nobody can claim to share in it. This premise requires a sound skill in business including bio-technology, working capital, and time for marketing operation. The agricultural extension agency just provides the services, and the decision is made by farmers themselves without any assistance. This could be feasible in fruit estate plantation system, but it is very hard to practice this system for smallholders.
- (2) Nucleus Estate of Smallholders (NES): The NES is established for fruit production development. This institution has a specific market channel of products, but they are processed in other factories because this estate is not equipped with proper facility. In fact, in spite that the NES was introduced in the last two decades, no significant success has been achieved so far.
- (3) Syndicate of fruit growing farmers and nursery farmers: Nursery farmers who are engaging in supply of planting materials could provide the technical assistance to fruit growers in term of fruit cultivation techniques. In fact, at the production level, it is a sound institution, but it is not functional at the harvesting and marketing stage. Nursery farmers have no access to fruit market channel.
- (4) Syndicate of fruit growers, nursery farmers and village traders: These three parties constitute a commercial management system in binding the common actions. The village traders have the market accessibility, and nursery farmers have good planting materials. The fruit growers produce crops and their activities are closely interrelated with other partners. The problem is lack of working capital.
- (5) Business Development Unit (BDU) Model: This institution is set up to promote the "small syndicate" based on the profit and risk management among the parties concerned. This concept was elaborated from the lesson of existing extension service organized by private organization such as NGO, private firms, and farmers' group. Four parties such as farmers, village traders, financial agency, and professional concerned are organized into one grassroots commercial institution. The BDU includes a number of farmers who own fruit trees equivalent to about 10 ha unit, 5-10 village traders, 0.20 professional staff, and financial agency. This estimation was made based on the field experience of GAMADIN Cooperative and PT Sarana Yogya Ventura in Salak Pondok business development. The unit measurement is not by hectare but the total number of fruit trees. In case of 500 ha as the economic scale of fruit project, a BDU consists of 1,000 farm-households (estimated at 0.5 ha/household), 25-50 village traders, and five professional staff, and one financial agency. The professional staff who are selected and proposed by financial agency will be hired and paid by BDU. The income of professional staff greatly depends upon the value added by him. BDU could be upgraded to a cooperative, but if not consolidated yet, it is recommended to start with a grassroots organization.

**Table G-1-1 Population by District, Urban/Rural, and Gender in Target Districts**

No	Province/ District	Urban			Rural			Urban + Rural		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	<b>NORTH SUMATRA</b>									
	Dairi	6,106	6,532	12,638	137,093	141,522	278,615	143,199	148,054	291,253
	Tapanuli Tengah	9,625	11,750	21,375	108,604	108,680	217,284	118,229	120,430	238,659
	Tapanuli Utara	34,177	35,850	70,027	315,951	327,037	642,988	350,128	362,887	713,015
	Tapanuli Selatan	54,432	58,464	112,896	464,000	476,160	940,160	518,432	534,624	1,053,056
	Karo	26,928	26,928	53,856	107,416	112,984	220,400	134,344	139,912	274,256
	Langkat	41,273	47,090	88,363	382,664	385,392	768,056	423,937	432,482	865,419
	<b>Total 6 districts</b>	<b>172,541</b>	<b>186,614</b>	<b>359,155</b>	<b>1,515,728</b>	<b>1,551,775</b>	<b>3,067,503</b>	<b>1,688,269</b>	<b>1,738,389</b>	<b>3,426,658</b>
<b>Total whole Province</b>	<b>2,272,850</b>	<b>2,294,684</b>	<b>4,567,534</b>	<b>3,263,367</b>	<b>3,283,766</b>	<b>6,547,133</b>	<b>5,536,217</b>	<b>5,578,450</b>	<b>11,114,667</b>	
2	<b>WEST JAVA</b>									
	Bandung	837,438	831,943	1,669,381	855,792	858,060	1,713,852	1,693,230	1,690,003	3,383,233
	Cianjur	88,680	83,507	172,187	675,584	688,576	1,364,160	764,264	772,083	1,536,347
	Bogor	1,434,487	1,454,392	2,888,879	772,110	754,206	1,526,316	2,206,597	2,208,598	4,415,195
	Sumedang	64,914	72,941	137,855	361,284	360,962	722,246	426,198	433,903	860,101
	Tasikmalaya	216,186	228,021	444,207	713,167	712,245	1,425,412	929,353	940,266	1,869,619
	<b>Total 5 districts</b>	<b>2,641,705</b>	<b>2,670,804</b>	<b>5,312,509</b>	<b>3,377,937</b>	<b>3,373,449</b>	<b>6,751,386</b>	<b>6,019,642</b>	<b>6,042,853</b>	<b>12,062,495</b>
<b>Total whole Province</b>	<b>8,382,722</b>	<b>8,355,104</b>	<b>16,737,826</b>	<b>11,301,103</b>	<b>11,167,859</b>	<b>22,468,961</b>	<b>19,683,824</b>	<b>19,522,963</b>	<b>39,206,787</b>	
3	<b>EAST JAVA</b>									
	Lumajang	115,668	120,582	236,250	347,635	352,404	700,039	463,303	472,986	936,289
	Jombang	173,428	189,318	362,746	352,176	369,072	721,248	525,604	558,390	1,083,994
	Tulungagung	126,290	137,708	263,998	315,191	327,398	642,589	441,481	465,106	906,587
	Trenggalek	24,440	22,184	46,624	299,185	300,245	599,430	323,625	322,429	646,054
	Pasuruan	160,576	151,424	312,000	466,048	489,280	955,328	626,624	640,704	1,267,328
	Malang	291,600	286,497	578,097	882,792	870,129	1,752,921	1,174,392	1,156,626	2,331,018
	<b>Total 6 districts</b>	<b>892,002</b>	<b>907,711</b>	<b>1,799,713</b>	<b>2,663,037</b>	<b>2,708,526</b>	<b>5,371,563</b>	<b>3,555,029</b>	<b>3,616,241</b>	<b>7,171,270</b>
<b>Total whole province</b>	<b>5,279,651</b>	<b>5,570,754</b>	<b>10,850,404</b>	<b>11,318,545</b>	<b>11,675,068</b>	<b>22,993,609</b>	<b>16,598,197</b>	<b>17,245,822</b>	<b>33,844,019</b>	
4	<b>SOUTH SULAWESI</b>									
	Gowa	49,500	51,750	101,250	181,412	186,648	368,060	230,912	238,398	469,308
	Soppeng	13,860	14,850	28,710	92,814	107,322	200,136	106,674	122,172	228,846
	Sidandere	17,550	21,960	39,510	95,712	109,440	205,152	113,262	131,400	244,662
	Rappang									
	Majene	15,210	16,470	31,680	40,014	42,902	82,916	55,224	59,372	114,596
	Bone	39,875	49,225	89,100	251,771	272,948	524,719	291,646	322,173	613,819
	Maros	23,375	24,875	48,250	102,340	109,048	211,388	125,715	133,398	259,113
	Wajo	45,594	52,020	97,614	126,444	140,097	266,541	172,038	192,117	364,155
	Tana Toraja	14,673	14,874	29,547	178,374	170,017	348,391	193,047	184,891	377,938
	Polewali Mamasa	54,696	63,282	117,978	146,589	156,152	302,741	201,285	219,434	420,719
	Mamuju	10,458	10,836	21,294	114,920	101,575	216,495	125,378	112,411	237,789
	Enrekang	4,795	5,480	10,275	72,738	70,470	143,208	77,533	75,950	153,483
	Pinrang	20,833	26,576	47,414	128,349	136,422	264,771	149,187	162,998	312,185
Baru	12,992	14,976	27,968	58,987	66,002	124,989	71,979	80,978	152,957	
<b>Total 13 districts</b>	<b>323,416</b>	<b>367,174</b>	<b>690,590</b>	<b>1,590,444</b>	<b>1,669,043</b>	<b>3,259,487</b>	<b>1,913,876</b>	<b>2,035,686</b>	<b>3,949,562</b>	
<b>Total whole province</b>	<b>1,037,576</b>	<b>1,098,935</b>	<b>2,136,511</b>	<b>2,642,364</b>	<b>2,779,493</b>	<b>5,421,857</b>	<b>3,679,940</b>	<b>3,878,428</b>	<b>7,558,368</b>	

Source: BPS, Results of the 1995 Intercensal Population Survey, Jakarta, 1996

**Table G-1-2 Total Income, Fruit Income Share, and Socio-Economy of Farm Households**

No	District/ Subdistrict	Target Fruit	Income Rp 1000	Cost of Living Rp 1000	Saving Potential Rp 1000	% Fruit to Total Income	Family size	% of Family member presence	Farmer as main job of HH Head (%)	No Formal Education (%)	Elementary Education (%)	High School Education (%)
1	<b>NORTH SUMATRA</b>											
	Langkat:											
	Setabab	Rambutan	2963.5	2598.857	364.72	37.5	4.68	87.93	100	0	84	16
	Binjai	Rambutan	4558.6	3284.420	1274.1	31.6	5.2	89	100	4	68	28
	Karo:											
Sunpang Empat	Marquisa	4051.200	4100.514	-49.314	5.9	3.24	96.1	100	52	32	16	
Barus Jahe	Marquisa	2951.480	2468.640	482.84	0.8	4.56	100	100	0	80	20	
2	<b>WEST JAVA</b>											
	Purwakarta:											
	Mangosteen		5363.743	3069.148	2294.595	7.5	4.28	64.48	92	0	96	4
	Wanayasa											
Majalengka:												
Kertajati	Mango	1909.032	1424.6	484.432	1.6	2.48	100	40	52	48	0	
Ciamis:												
SukaJana	Duku	1529.025	1878.086	-349.061	13.58	3.2	77	72	16	80	4	
3	<b>EAST JAVA</b>											
	Mojokerto:											
	Banana		5859.9	2993.1	2866.8	8	4.4	93.64	76	0	68	20
	Godang											
	Malang:											
	Batulawang & Tojiman	Salak	6367.564 7	4063.909	2303.655 7	20	3.88	100	100	0	64	36
Pasuruan:												
Grati & Nguling	Mango	4000.99	2331.138	1669.852	11.9	3.96	96.07	100	28	32	40	
Trenggalek:												
Bendungan	Durian	2615.378	1341.979	1273.399	4.588	4.75	100	95.8	0	95.8	4.2	
Lumajang:												
Ronoyoso	Avocado & Banana	2039.924	844.652	1195.272	19.244	5.92	100	100	52	48		
4	<b>SOUTH SULAWESI</b>											
	Jeneponto:											
	Bangkala	Mango	2557.310	2539.923	17.387	36.212	3.16	77	77	16	68	16
	Sinjai:											
	West Sinjai	Marquisa	2175.845	1169.484	1006.361	2.284	5.44	96.1	100	52	32	16
	Luwu:											
Masaniba	Rambutan	2939.360	1546.091	1393.269	3.3	5.13	100	92	16	44	36	
Tanah Toraja:												
Mangkudoh	Mangosteen	5812.574	3609.228	2203.346	9.9	5.28	86.08	92	0	24	60	

Source: Baseline Survey, JICA Study Team, 1997

**Table G-1-3 Major Fruit Income**

No.	District/ Subdistrict	Target Fruit	Ranking of fruit					
			First (name)	Second (name)	Third (name)	Fourth (name)	Fifth (name)	Sixth (name)
1	NORTH SUMATRA Langkat: Setabat Binjai	Rambutan Rambutan	Rambutan Rambutan	Durian Durian	Mangosteen Banana			
	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa	Marquisa Marquisa	none none				
2	WEST JAVA Purwakarta: Wanayasa	Mangosteen	Mangosteen	Banana	Rambutan	Avocado	Mango	Durian
	Majalengka: Kertajati	Mango	Mango	Banana				
	Ciamis: Sukadana	Duku	duku	Banana	Avocado	Mangosteen	Salak	
3.	ESAT JAVA Mojokerto: Godang	Banana	Mango	Rambutan	Banana			
	Malang: Batulawang & Tojiman	Salak	Avocado	Salak	Banana	Papaya		
	Pasuruan: Grati & Nguling	Mango	Mango					
	Trenggalek: Bendungan	Durian	Banana	Avocado	Rambutan	Mango		
	Lumajang: Ronoyoso	Avocado & Banana	Mango	Avocado	Banana			
4.	SOUTH SULAWESI Jeneponto: Bangkala	Mango	Mango					
	Sinjai: West Sinjai	Marquisa	Marquisa	Avocado	Mango	Banana	Mangosteen	
	Luwu: Masamba	Rambutan	Rambutan	Durian	Mango	Banana	Salak	
	Tanah Toraja: Mangkudeh	Mangosteen	others	Mangosteen	Rambutan	Durian	Marquisa	

Source: Baseline Survey, JICA Study Team, 1997

**Table G-1-4 Percentage of Family Member Presence at Home throughout a Year**

No.	District/Subdistrict	Target Fruit	All over the years stay at home (%)	Three months or more stay outside village (%)	Remark
1.	Langkat: Setabat Binjai	Rambutan	87.9	12.1	Students
		Rambutan	89.0	11.0	
2.	Karo: Simpang Empat Barus Jabe	Marquisa	96.1	3.9	Student
		Marquisa	100.0	0	
3.	Purwakarta: Wanayasa	Mangosteen	64.5	35.5	Kid, in School
4.	Majalengka: Kertajati	Mango	100.0	0	
5.	Ciamis: Sukadana	Duku	77.0	23.0	Most of husbands, do off farm in Jakarta
6.	Mojokerto: Godang	Banana	93.6	6.4	
7.	Malang: Batulawang & Tojiman	Salak	100.0	0	
8.	Pasuruan: Grati & Nguling	Mango	96.1	3.9	
9.	Trenggalek: Bendungan	Durian	100.0	0	
10.	Lumajang: Ronoyoso	Avocado & Banana	100.0	0	
11.	Jeneponto: Bangkala	Mango	77.0	23.0	
12.	Sinjai: West Sinjai	Marquisa	96.1	3.9	
13.	Luwu: Masamba	Rambutan	100.0	0	
14.	Tanah Toraja: Mangkudch	Mangosteen	86.1	13.9	

Source: Baseline Survey, JICA Study Team, 1997

**Table G-1-5 Natural Disasters and Main Livelihood Problems**

No.	District/ Subdistrict	Target Fruit	Natural Disasters				Main Livelihood Problems										
			First	Second	Third	Fourth	First	Second	Third	Fourth							
	<b>NORTH SUMATRA</b> Langkat:	Rambutan Rambutan	erosion flood	wind wind	landslide drought	flood shadow	low income lack of land	sanitation technology	poor trans't low income	technology marketing							
	Karo: Simpang Empat Barus Jabe										Marquisa Marquisa	wind drought	shadow	landslide	erosion	lack of land low income	lack of job off market
2	<b>WEST JAVA</b> Purwakarta:	Mangosteen	Landslide	Winds	Erosion	Drought	low income	lack of Tech.	lack of land	sanitation							
	Wanayasa:	Mango	Flood	Winds	Drought		Lack of Land	Sanitation	lack of job opportunity	poor transporta- tion							
	Kertajati:	Duku	erosion	landslide drought flood			lack of job opportunity	low income	lack of land	lack of know how							
3	<b>EAST JAVA</b> Mojokerto:	Banana	erosion	drought			lack of sanitation facilities	poor transportation	lack of job opportunity	lack of know how/ technology							
	Godang:	Salak	landslide	lack of sunshine	winds damage		poor transporta- tion	lack of sanitation facilities	marketing problem	lack of land							
	Malang:	Mango	flood	drought	winds damage		lack of job opportunity	lack of sanitation facilities	poor transportation	lack of know- how/ technology							
	Batulawang & Tojiman:	Durian	drought	landslide	erosion		lack of sanitation facilities	lack of land	marketing problem	poor transporta-tion							
	Pasuruan: Grati & Nguling:	Avocado & Banana	landslide	lack of sunshine	erosion		lack of sanitation facilities	lack of job opportunity	lack of land	poor transporta-tion							
4	<b>SOUTH SULAWESI</b> Jenepono:	Mango	drought	wind			low income	lack of tech.	lack of land	market							
	Bangkala:										erosion or lack of sunshine	flood	drought		lack of sanitation	poor transportation	marketing problem
	Sinjai:										wind damage or lack of sunshine	flood or erosion or landslide	drought		lack of land	lack of sanitation	marketing problem
	West Sinjai:										landslide	erosion	lack of sunshine		lack of sanitation	poor transportation	marketing problem

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-1 Race and Local Dialect**

	Province/District	Population	Household	Ethnicity	Local Dialect	Usage language in trading/market
1	<b>NORTH SUMATRA</b>					
	Dairi	291,253	61,600	Batak	Batak	Batak/Indonesia
	Tapanuli Tengah	238,659	47,776	Batak	Batak	Batak/Indonesia
	Tapanuli Utara	713,015	161,824	Batak	Batak	Batak/Indonesia
	Tapanuli Selatan	1,053,056	228,992	Batak	Batak	Batak/Indonesia
	Karo	274,256	71,948	Batak	Batak	Batak/Indonesia
	Langkat	856,419	184,384	Java/Melayu	Java/Melayu	Indonesia
	Total 6 districts	3,429,658	756,524			
Total whole Province	11,114,667	2,345,804				
2	<b>WEST JAVA</b>					
	Bandung	3,383,233	822,304	Sunda	Sunda	Sunda/Indonesia
	Ciamis	1,536,347	434,368	Sunda	Sunda	Sunda/Indonesia
	Bogor	4,415,195	971,168	Sunda	Sunda	Indonesia/Sunda
	Sumedang	860,101	239,262	Sunda	Sunda	Sunda/Indonesia
	Fasikmalaya	1,869,619	469,792	Sunda	Sunda	Sunda/Indonesia
	Total 5 districts	12,064,495	2,936,894			
	Total whole Province	39,206,787	9,452,633			
3	<b>EAST JAVA</b>					
	Lumajang	936,289	244,079	Madura	Madura	Madura/Indonesia
	Jombang	1,083,994	270,300	Java	Java	Java/Indonesia
	Tulungagung	906,587	236,704	Java	Java	Java/Indonesia
	Trenggalek	646,054	166,792	Java	Java	Java/Indonesia
	Pasuruan	1,267,328	324,352	Madura	Madura	Madura/Indonesia
	Malang	2,331,018	564,201	Java	Java	Java/Indonesia
	Total 6 districts	7,171,270	1,806,428			
Total whole province	33,844,002	8,648,081				
4	<b>SOUTH SULAWESI</b>					
	Gowa	469,310	102,912	Bugis	Bugis	Bugis/Indonesia
	Soppeng	228,846	54,089	Bugis	Bugis	Bugis/Indonesia
	Sidengreng Rappang	244,662	54,726	Bugis	Bugis	Bugis/Indonesia
	Majene	114,596	24,112	Bugis	Bugis	Bugis/Indonesia
	Bone	613,819	133,200	Bugis/Bone	Bugis	Bugis/Indonesia
	Maros	259,638	53,610	Bugis	Bugis	Bugis/Indonesia
	Wajo	364,155	85,740	Bugis	Bugis	Bugis/Indonesia
	Tana Toraja	377,938	81,791	Toraja	Toraja	Toraja/Indonesia
	Polewali Mamasa	420,719	91,670	Toraja/Bugis	Toraja/Bugis	Toraja/Indonesia
	Mamuju	237,789	50,272	Bugis	Bugis	Bugis/Indonesia
	Enrekang	153,483	32,889	Bugis	Bugis	Bugis/Indonesia
	Pinrang	312,185	69,583	Bugis	Bugis	Bugis/Indonesia
	Baru	152,957	35,579	Bugis	Bugis	Bugis/Indonesia
	Total 13 districts	3,950,097	870,173			
Total whole province	7,558,368	1,635,142				

Source: Baseline Survey, JICA Study Team, 1997



**Table G-2-2 Distance and Road Condition to Nearest Town**

No.	District/ Subdistrict	Proposed Fruit	Name of Town	Distance	Road Condition
1.	Langkat: Setabat Binjai	Rambutan	Setabat	4.2 km	fair
		Rambutan	Binjai	7.86 km	fair
2.	Karo: Simpang Empat Barus Jahe	Marquisa	Kabanjabe	5 km	good
		Marquisa	Kabanjabe	8 km	good
3.	Purwakarta: Wanayasa	Mangosteen	Wanayasa	4.6 km	fair
4.	Majalengka: Kertajati	Mango	Kadipaten	10.28 km	good
5.	Ciamis: Sukadana	Duku	Banjar	10.6 km	fair
6.	Mojokerto: Godang	Banana	Pohjejer	3.664 km	fair
7.	Malang: Batulawang & Tojiman	Salak	Malang	6.92 km	good = 2% fair = 44% bad = 52%
8.	Pasuruan: Grati & Nguling	Mango	Nguling	11.6 km	fair
9.	Trenggalek: Bendungan	Durian	Trenggalek	8.6 km	fair
10.	Lumajang: Ronoyoso	Avocado & Banana	Ranuyoso	4.72 km	good
11.	Jeneponto: Bangkala	Mango	Allu Bangkala	7 km	fair
12.	Sinjai: West Sinjai	Marquisa	Sinjai	13 km	fair
13.	Luwu: Masamba	Rambutan	Masamba	2.3 km	fair
14.	Tanah Toraja: Mangkudch	Mangosteen	Banjar	9.76 km	good

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-3 Percentage of Farmers having Communication Media Set at Home**

No.	District/ Subdistrict	Proposed Fruit	Radio	TV Set	Video set
1.	Langkat: Setabat Binjai	Rambutan	72	74	4
		Rambutan	76	80	0
2.	Karo: Simpang Empat Barus Jabe	Marquisa	72	16	0
		Marquisa	76	8	0
3.	Purwakarta: Wanayasa	Mangosteen	80	76	0
4.	Majalengka: Kertajati	Mango	80	28	0
5.	Ciamis: Sukadana	Duku	76	36	4
6.	Mojokerto: Godang	Banana	25	25	0
7.	Malang: Batulawang & Tojiman				
		Salak	21	23	1
8.	Pasuruan: Grati & Nguling	Mango	16	17	3
9.	Trenggalek: Bendungan	Durian	17	4	2
10.	Lumajang: Ronoyoso				
		Avocado & Banana	8	9	0
11.	Jeneponto: Bangkala	Mango	40	32	0
12.	Sinjai: West Sinjai	Marquisa	0	0	0
13.	Luwu: Masamba	Rambutan	52	0	0
14.	Tanah Toraja: Mangkudch	Mangosteen	92	44	4

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-4 Three Main Modes of Transportation to Nearest Town in the Sampling Areas**

No.	District/ Subdistrict	Proposed Fruit	Mode of Transportation		
			The first	The Second	The third
1.	Langkat: Setabat Binjai	Rambutan Rambutan	bicycle public trans't	motorbike bicycle	walk by foot motorbike
2.	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa	public trans't	motorbike	
3.	Purwakarta: Wanayasa	Mangosteen	Public Trans't	Motorbike	
4.	Majalengka: Kertajati	Mango	Public Trans't	Bicycle	motorbike
5.	Ciamis: Sukadana	Duku	Public Trans't	Walk by foot	motorbike
6.	Mojokerto: Godang	Banana	motorbike	bicycle	walk by foot
7.	Malang: Batulawang & Tojiman	Salak	motorbike	public transportation	bicycle
8.	Pasuruan: Grati & Nguling	Mango	public transportation	motorbike	bicycle/ walk by foot
9.	Trenggalek: Bendungan	Durian	public transportation	bicycle	motorbike
10.	Lumajang: Ronoyoso	Avocado & Banana	motorbike	walk by foot	bicycle
11.	Jeneponto: Bangkala	Mango	motorbike	public trans'rt	
12.	Sinjai: West Sinjai	Marquisa	public trans'rt	motorbike	public truck
13.	Luwu: Masamba	Rambutan	public trans'rt	bicycle or walk by foot	motorbike
14.	Tanah Toraja: Mangkudch	Mangosteen	public trans'rt	walk by foot	public truck

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-5 Family Size and Estimated Working Hours**

	Province / District	Population	Household	Members per Household	*Average husband's working hours /day in farming, 260 days/year	*Average wife's working hours /day in farming, 260 days/year	Available working hours/Household (Hours / year)
1.	<b>NORTH SUMATRA</b>						
	Dairi	291,253	61,600	5	2600	2000	4600
	Tapanuli Tengah	238,659	47,776	5	2600	2000	4600
	Tapanuli Utara	713,015	161,824	4	2600	2000	4600
	Tapanuli Selatan	1,053,056	228,992	5	2600	2000	4600
	Karo	274,256	71,948	4	1500	2600	4100
	Langkat	856,419	184,384	5	2600	1500	4100
	<b>Total 6 districts</b>	<b>3,429,658</b>	<b>756,524</b>				
	<b>Total whole Province</b>	<b>11,114,667</b>	<b>2,345,804</b>				
2.	<b>WEST JAVA</b>						
	Bandung	3,383,233	822,304	4	2600	1000	3600
	Ciamis	1,536,347	434,368	4	900	1500	2400
	Bogor	4,415,195	971,168	5	1500	1000	2500
	Sumedang	860,101	239,262	4	2600	1000	3600
	Tasikmalaya	1,869,619	469,792	4	1500	1000	2500
		<b>Total 5 districts</b>	<b>12,064,495</b>	<b>2,936,894</b>			
	<b>Total whole Province</b>	<b>39,206,787</b>	<b>9,452,633</b>				
3.	<b>EAST JAVA</b>						
	Lumajang	936,289	244,079	4	2600	1000	3600
	Jombang	1,083,994	270,300	4	2600	1000	3600
	Tulungagung	906,587	236,704	4	2600	1000	3600
	Trenggalek	646,054	166,792	4	1500	2600	4100
	Pasuruan	1,267,328	324,352	4	1000	2600	3600
	Malang	2,331,018	564,201	4	1500	1000	2500
	<b>Total 6 districts</b>	<b>7,171,270</b>	<b>1,806,428</b>				
	<b>Total whole province</b>	<b>33,844,002</b>	<b>8,648,081</b>				
4.	<b>SOUTH SULAWESI</b>						
	Gowa	469,310	102,912	5	2600	1000	3600
	Soppeng	228,846	54,089	4	2600	500	3100
	Sidengreng Rappang	244,662	54,726	4	2600	500	3100
	Majene	114,596	24,112	5	1500	2600	4100
	Bone	613,819	133,200	5	1500	2600	4100
	Maros	259,638	53,610	5	1500	2600	4100
	Wajo	364,155	85,740	4	1500	2600	4100
	Tana Toraja	377,938	81,791	5	2600	2600	5200
	Polewali Mamasa	420,719	91,670	5	2600	2600	5200
	Mamuju	237,789	50,272	5	1500	2600	4100
	Enrekang	153,483	32,889	5	1500	2600	4100
	Pinrang	312,185	69,583	4	2600	1000	3600
	Baru	152,957	35,579	4	1500	1000	2500
	<b>Total 13 districts</b>	<b>3,950,097</b>	<b>870,173</b>				
	<b>Total whole province</b>	<b>7,558,368</b>	<b>1,635,142</b>				

Note: \*Best estimated figure is based on the average hours working in farming as it was answer during the field survey; only 260 days per year working in farm, and the rest 100 days for holiday and religion ritual.

Source: BPS, Results of the 1995 Intercensal Population Survey, 1996.

**Table G-2-6 The Farmers' Preference on 'Target Fruit by Ranking**

No.	District/ Subdistrict	Target Fruit	Farmers' Preference					
			First	Second	Third	Fourth	Fifth	Sixth
1	NORTH SUMATRA							
	Langkat: Setabat Binjai	Rambutan Rambutan	Rambutan Rambutan	Durian Mang'steen	Salak Avocado	Mango Mango	Avocado Banana	Mang'teen Marquisa
	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa	Marquisa Marquisa	Mang'steen Avocado	Salak			
2	WEST JAVA		Mangosteen	Rambutan Banana	Durian Mango	Avocado		
	Purwakarta: Wanayasa	Mangosteen						
	Majalengka: Kertajati	Mango	Mango	Banana	Durian			
	Ciamis: Sukadana	Duku	Duku	Banana	Durian	Mango	Mangosteen	Marquisa
3.	ESAT JAVA							
	Mojoekerto: Godang	Banana	Banana	Mango	Rambutan	Durian	Avocado	
	Malang: Batulawang & Tojiman	Salak	Salak	Mango	Marquisa	Durian	Mangosteen	
	Pasuruan: Grati & Nguling	Mango	Avocado	Mango	Mangosteen	Salak	Banana	
	Trenggalek: Bendungan	Durian	Durian	Avocado	Mangosteen	Duku	Mango	
	Lumajang: Ronoyoso	Avocado & Banana	Salak	Avocado	Durian/ Rambutan	Banana		
4.	SOUTH SULAWESI							
	Jeneponto: Bangkala	Mango	Mango	Banana				
	Sinjai: West Sinjai	Marquisa	Marquisa	Avocado	Mango	Banana	Mangosteen	
	Luwu: Masamba	Rambutan	Rambutan	Durian	Mango	Banana	Salak	
	Tanah Toraja: Mangkuduh	Mangosteen	Others	Mangosteen	Rambutan	Durian	Marquisa	

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-7 Percentage of Farmers' Support on Target Fruit Crops**

No.	District/ Subdistrict	Target Fruit	Durian	Marquisa	Mango	Avocado	Duku	Mangos- teen	Salak	Ram- butan	Banana
1	<b>NORTH SUMATRA</b>										
	Langkat:										
	Setabat	Rambutan	64	20	36	20	48	60	36	84	60
	Binjai	Rambutan	64	0	0	0	0	0	0	100	60
	Karo:										
	Simpang Empat Barus Jahe	Marquisa Marquisa	16 0	100 100	0 0	0 0	0 0	0 0	0 0	20 20	0 0
2	<b>WEST JAVA</b>										
	Purwakarta:										
	Wanayasa	Mangosteen	28	0	4	24	0	68	0	8	36
	Majalengka:										
	Kertajati	Mango	16	0	100	0	0	0	0	0	100
	Ciamis:										
	Sukadana	Duku	36	4	16	16	76	36	12	20	16
3.	<b>EAST JAVA</b>										
	Mojokerto:										
	Godang	Banana	4	0	4	0	0	0	0	0	0
	Malang:										
	Batulawang & Tojiman	Salak	16	0	0	4	4	0	40	0	0
	Pasuruan:										
	Grati & Nguling	Mango	0	0	56	0	0	0	28	0	0
	Trenggalek:										
	Bendungan	Durian	92	0	0	100	100	92	12	0	0
	Lumajang:										
	Ronoyoso	Avocado & Banana	52	0	28	56	8	0	20	0	0
4.	<b>SOUTH SULAWESI</b>										
	Jeneponto:										
	Bangkala	Mango	0	0	72	0	0	0	0	0	28
	Sinjai:										
	West Sinjai	Marquisa	52	100	0	0	0	0	0	20	48
	Luwu:										
	Masamba	Rambutan	52	0	28	0	8	0	0	100	48
	Tanah Toraja:										
	Mangkudeli	Mangosteen	76	60	72	48	36	88	36		

Source: Baseline Survey, JICA Study Team, 1997

**Table G-2-8 Major Premise to be Active in Fruit Production**

No.	District/Subdistrict	Target Fruit	Ranking			
			1st (name)	2nd (name)	3rd (name)	4th (name)
1	NORTH SUMATRA Langkat: Setabat Binjai	Rambutan Rambutan	market av'ble market av'ble	extension av'bl extension av'bl	land suitability land suitability	loan fund loan fund
	Karo: Simpang Empat Barus Jaha	Marquisa Marquisa	land suit'lity land suit'lity	market av'ble market av'ble	extension av'ble extention av'ble	others other
2	WEST JAVA Purwakarta: Wanayasa	Mangosteen	land suitability	available training	available market	available loan
	Majalengka: Kertajati	Mango	available market	available extension and fund	land suitability	
	Ciamis: Sukañana	Duku	land suitability	available market	available training	
3.	EAST JAVA Mojokerto: Godang	Banana	loan fund	land suitability	market av'ble	others
	Malang: Batulawang & Tojiman	Salak	land suitability	market av'ble	loan fund	extension
	Pasuruan: Grati & Nguling	Mango	loan fund	others		
	Trenggalek: Bendungan	Durian	land suitability	extension av'ble	others	
	Lumajang: Ronoyoso	Avocado & Banana	land suitability	market av'ble	extension av'ble	others
4.	SOUTH SULAWESI Jeneponto: Bangkala	Mango	market av'ble	extension av'ble	loan fund	land suitability
	Sinjai: West Sinjai	Marquisa	land suitability/ loan fund/ marketing	training and extension	others	
	Luwu: Masamba	Rambutan	land suitability	marketing system	training and extension	others
	Tanah Toraja: Mangkudch	Mangosteen	training and extension/ marketing	land suitability	loan fund	others

Source: Baseline Survey, JICA Team, 1997

**Table G-2-9 Average of Farmers' Experience on Target Fruit Crops (Years)**

No.	District/ Subdistrict	Target Fruit	Durian	Marquisa	Mango	Avocado	Duku	Mangos- teen	Salak	Ram- butan	Banana
1	NORTH SUMATRA Langkat: Setabat Binjai	Rambutan Rambutan								3.66 8.24	
	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa		6.7 6							
2	WEST JAVA Purwakarta: Wanayasa	Mangosteen						16.68			
	Majalengka: Kertajati	Mango			2						
	Ciamis: Sukadana	Duku					4.32				
3.	EAST JAVA Mojokerto: Godang	Banana									4.4
	Malang: Batulawang & Tojiman	Salak							6.7		
	Pasuruan: Grati & Nguling	Mango			4.7						
	Trenggalek: Bendungan	Durian	0								
	Lumajang: Ronoyoso	Avocado & Banana				13.4					
4.	SOUTH SULAWESI Jeneponto: Bangkala	Mango			0.72						
	Sinjai: West Sinjai	Marquisa		11.6							
	Luwu: Masamba	Rambutan								6.5	
	Tanah Toraja: Mangkudch	Mangosteen						4.32			

Source: Baseline Survey, JICA Study Team, 1997



**Table G-3-1 Rural Population 10 years of Age and over who Worked by Main Industry in Four Provinces, 1995**

Main Industry	North Sumatra		West Java		East Java		South Sulawesi	
	Male	Female	Male	Female	Male	Female	Male	Female
Agriculture, Hunting, Forestry, Fishery	1205901 (73.91)	561510 (78.52)	2577063 (42.00)	1157445 (37.91)	3982496 (58.15)	2149729 (52.38)	1028450 (72.65)	293627 (54.99)
Mining and Quarrying	6823 (0.42)	1514 (0.12)	77326 (1.28)	5823 (0.25)	80994 (1.18)	18539 (0.45)	7175 (0.51)	1538 (0.29)
Manufacturing	77584 (4.75)	48948 (4.00)	679053 (11.22)	566334 (24.00)	698604 (10.20)	629790 (15.34)	63500 (4.48)	59074 (11.06)
Electricity, gas, water	2969 (0.18)	1307 (0.11)	16270 (0.27)	2230 (0.10)	12188 (0.18)	2145 (0.05)	1438 (0.10)	272 (0.05)
Construction	53198 (3.26)	2696 (0.22)	6932558 (11.40)	7331 (0.32)	454577 (6.64)	6641 (0.16)	32943 (2.33)	180 (0.03)
Whole sale and retails trade, restaurant, and hotels	102777 (6.30)	116571 (9.53)	933906 (13.21)	621272 (27.00)	617854 (9.02)	965592 (23.53)	98327 (6.94)	111256 (20.83)
Transportation, storage and communication	61576 (3.77)	985 (0.07)	49020 (8.13)	3743 (0.10)	322762 (4.71)	7270 (0.18)	51128 (3.61)	336 (0.06)
Finances, insurances, property and business service	965 (0.06)	1085 (0.09)	3743 (0.10)	19244 (0.32)	27935 (0.41)	5604 (0.14)	609 (0.04)	0 (0.00)
Community, social, personal and other services	119916 (7.35)	88543 (7.34)	735271 (12.17)	234966 (10.00)	651066 (9.51)	319002 (7.77)	132311 (9.34)	67787 (12.69)
Others	0	0	0	0	0	0	0	0
Total	1631629 (100)	1223050 (100)	6841409 (100)	2293638 (100)	6848476 (100)	4104312 (100)	1415886 (100)	534070 (100)

Source: Biro Pusat Statistik, Stastical Profile of Women, Mother and Children in Indonesia, 1994; and Population Survey 1995, series 32.02, 32.10, 32.13, and 32.24

**Table G-3-2 Working Population in Agriculture Sector (10 years old and over), 1995**

	Province / District	Population	Total workers in all Industry		Total workers in Agriculture	
			Rural Male	Rural Female	Rural Male	Rural Female
1.	<b>NORTH SUMATRA</b>					
	Dairi	291,253	69422	67980	59740	62315
	Tapanuli Tengah	238,659	44916	41192	33060	33820
	Tapanuli Utara	713,015	146287	161952	120018	40021
	Tapanuli Selatan	1,053,056	221760	203520	185920	78240
	Karo	274,256	58580	61480	47328	54636
	Langkat	856,419	198896	109368	134664	73160
	Total 6 districts	3,429,658	739,861	645,492	580,730	342,192
	Total whole Province	11,114,667	1,631,629	1,223,090	1,205,901	561,510
2.	<b>WEST JAVA</b>					
	Bandung	3,383,233	426384	154980	156492	73322
	Ciamis	1,536,347	392896	211008	146048	112000
	Bogor	4,415,195	387920	107424	117122	27602
	Sumedang	860,101	220248	99498	87262	49588
	Tasikmalaya	1,869,619	404297	207450	168265	130463
	Total 5 districts	12,064,495	1,831,745	780,360	675,189	392,975
	Total whole Province	39,206,787	6,841,409	2,294,638	2,577,063	1,157,445
3.	<b>EAST JAVA</b>					
	Lumajang	936,289	218872	129767	133532	84336
	Jombang	1,083,994	194304	105072	80784	40656
	Tulungagung	906,587	190617	134277	101099	52897
	Trenggalek	646,054	190800	140450	134090	67045
	Pasuruan	1,267,328	279840	187616	121440	101024
	Malang	2,331,018	545112	219852	314766	140499
	Total 6 districts	7,171,270	1,619,545	917,034	885,711	486,547
	Total whole province	33,844,002	6,848,476	4,104,312	3,982,496	2,149,729
4.	<b>SOUTH SULAWESI</b>					
	Gowa	469,310	102872	36190	58674	23562
	Soppeng	228,846	52173	18972	38223	8649
	Sidendreg Rappang	244,662	50496	17472	34944	8256
	Majene	114,596	20102	10488	15656	5966
	Bone	613,819	144076	39639	116564	13937
	Maros	259,638	48590	14534	28982	5848
	Wajo	364,155	72447	31980	55719	8733
	Tana Toraja	377,938	82611	35346	72473	31510
	Polewali Mamasa	420,719	80041	52793	63273	33012
	Mamuju	237,789	62390	28135	49980	20570
	Enrekang	153,483	36180	14742	30132	9990
	Pinrang	312,185	65520	23517	53352	12285
	Baru	152,957	30012	9455	18788	3050
	Total 13 districts	3,950,097	847,510	333,263	636,760	155,368
	Total whole province	7,558,368	1,415,886	534,070	1,028,450	293,627

Source: BPS, Results of Intercensal Population, 1995

**Table G-3-3 Role of Women in Various Economic Activities**

Sector	Activity done by Women
Farm Management	-seed selection -nursery preparation -planting -weeding -harvesting -post harvesting
Estate plantation	- planting materials preparation & maintenance - planting - crop maintenance - harvesting (rubber tapping, tea leaf picking etc.) - processing
Marine Fishery	- mending the net - selling the fish - fish processing - fishing in some areas
Retailing traders	- most of this done by women
Home Handicraft	- most of this done by women
Industry	- labor with low payment

Source: Chamsiah Djamal, *Membantu Suami, Mengurus Rumah Tangga Perempuan di Sektor Informal, Perempuan Indonesia: Dulu dan Kini*, 1996, page 234.

**Table G-3-4 Position Trend of Women in Indonesia by Formal Jobs and by Years**

Jobs	1980	1990
Professional, Technician, Manager / Director	600,000	1,100,000
Manager Position	5,000	15,000
Business Women	183,000	223,000

Source: Chrysanti Hasibuan - Sedyono, *Perempuan di Sektor Formal: Kerja Ya, Karier Tidak in Perempuan Indonesia: Dulu dan Kini*, 1996, page 213

**Table G-3-5 Labor Force Participation Rate by Target Province, 1995**

(Unit: %)

Province	Urban		Rural		Urban + Rural	
	Female	Male	Female	Male	Female	Male
North Sumatra	40.14	77.64	66.24	85.68	55.00	82.26
West Java	37.25	79.51	43.05	88.09	40.56	84.40
East Java	48.47	80.03	57.26	90.04	54.41	86.84
South Sulawesi	34.37	72.89	36.09	87.17	35.59	83.02
Overall Indonesia	42.35	78.58	54.84	88.78	50.24	85.04

Source: Social Indicators on Women in Indonesia, 1995

**Table G-3-6 Illiterate Population Rate in Four Provinces (10 years old and over) , 1995**

(Unit: %)

Province	Urban		Rural		Urban + Rural	
	Female	Male	Female	Male	Female	Male
North Sumatra	4.51	1.38	9.55	3.85	7.43	2.83
West Java	8.5	3.56	18.39	8.73	14.2	6.52
East Java	15.8	5.45	34.9	16.81	28.2	13.19
South Sulawesi	11.7	6.6	26.28	19.36	22.2	15.76
Overall Indonesia	10.41	3.82	23.25	11.52	18.6	8.74

Source: Social Indicators on Women in Indonesia, 1995

**Table G-3-7 Working Hour per day of Wife and Husband and Percentage of Responsibility in Making Decision of Farming Activity**

No.	District / Subdistrict	Proposed Fruit	Working Hour		Decision Making	
			Wife (hour / day)	Husband (hour / day)	Wife (%)	Husband (%)
1.	Langkat: Setabat Binjai	Rambutan	8.08	10.8	40	60
		Rambutan	8.29	8.52	40	60
2.	Karo: Simpang Empat Barus Jabe	Marquisa	7.18	11.96	30	70
		Marquisa	10.46	12.68	30	70
3.	Purwakarta: Wanayasa	Mangosteen	10.7	13.06	33.8	65.2
4.	Majalengka: Kertajati	Mango	7	7	100	100
5.	Ciamis: Sukadana	Duku	6.48	11.04	30	70
6.	Mojokerto: Godang	Banana	5.04	9.5	44	56
7.	Malang: Batulawang & Tojiman					
		Salak	11.58	8.18	36	64
8.	Pasuruan: Grati & Nguling	Mango	16.3	15.56	44	56
9.	Trenggalek: Bendungan	Durian	7.38	11.5	30	70
10.	Lumajang: Ronoyoso	Avocado & Banana	3.48	6.26	30	70
11.	Jeneponto: Bangkala	Mango	7.6	12	30	70
12.	Sinjai: West Sinjai	Marquisa	4.04	8.72	46	54
13.	Luwu: Masamba	Rambutan	7.55	9.89	76	24
14.	Tanah Toraja: Mangkuduh	Mangosteen	3.2	5	64	36

Source: Baseline Survey, JICA Study Team, 1997

**Table G-3-8 Comparison of Average Monthly Salary 1995**

(Unit : Rp.)

Jobs	Female worker	Male worker
Professional, Technician, Manager / Director	155,564	203,934
Farm worker	11,362	22,625
University Graduate	85,840	128,038

Source: Chrysanti Hasibuan - Sedyono, *Perempuan di Sektor Formal: Kerja Ya, Kuiter Tidak in Perempuan Indonesia: Dulu dan Kini*, 1996, page 213

**Table G-3-9 Infant Mortality Rate (IMR) by Four Provinces, 1995**

(Unit: %)

Province	1994			1995		
	Female	Male	Total	Female	Male	Total
North Sumatra	45	58	51	44	57	50
West Java	62	76	69	60	74	66
East Java	46	58	52	44	57	50
South Sulawesi	49	61	55	47	59	53
Overall Indonesia	50	63	57	49	61	55

Source: Social Indicator on Women in Indonesia, 1995

**Table G-3-10 Population Rate Well Nourished in Four Provinces (5 years old and over), 1995**

(Unit: %)

Province	Urban		Rural		Urban + Rural	
	Female	Male	Female	Male	Female	Male
North Sumatra	68.34	59.62	63.86	59.72	65.57	59.68
West Java	74.57	67.07	66.34	61.22	69.46	63.40
East Java	75.95	65.93	64.07	60.07	67.64	61.87
South Sulawesi	70.08	60.96	61.86	54.42	64.16	56.15
Overall Indonesia	72.30	65.33	64.07	58.89	66.77	61.00

Source: Social Indicator on Women in Indonesia, 1995

**Table G-3-11 Expected Life (years) in Four Provinces, 1995**

Province	1994			1995		
	Female	Male	Total	Female	Male	Total
North Sumatra	n.a	n.a	n.a	66.42	63.00	64.56
West Java	n.a	n.a	n.a	62.59	58.93	60.81
East Java	n.a	n.a	n.a	66.42	62.60	64.56
South Sulawesi	n.a	n.a	n.a	65.75	61.95	63.90
Overall Indonesia	n.a	n.a	n.a	65.31	61.54	63.48

Source: Social Indicator on Women in Indonesia, 1995,  
n.a = data not available

**Table G-3-12 Percentage of Farmers' participation in Social Interaction at Rural Community Level**

No.	District/ Subdistrict	Target Fruit	Participation in Farmers' Group	Participation in " Arisan"	One week Participation in Religious ritual (%)
1.	Langkat: Setabat Binjai	Rambutan Rambutan	96 100	16 40	76 88
2.	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa	100 100	100 100	100 100
3.	Purwakarta: Wanayasa	Mangosteen	100	44	88
4.	Majalengka: Kertajati	Mango	100	100	84
5.	Ciamis: Sukadana	Duku	100	72	44
6.	Mojokerto: Godang	Banana	100	92	100
7.	Malang: Batulawang & Tojiman	Salak	100	72	100
8.	Pasuruan: Grati & Nguling	Mango	72	92	24
9.	Trenggalek: Bendungan	Durian	100	80	100
10.	Lumajang: Ronoyoso	Avocado & Banana	92	40	76
11.	Jenepono: Bangkala	Mango	100	8	48
12.	Sinjai: West Sinjai	Marquisa	100	0	25
13.	Luwu: Masamba	Rambutan	100	52	16
14.	Tanah Toraja: Mangkudeh	Mangosteen	100	96	100

Source: Baseline Survey, JICA Study Team, 1997

Table G-3-13 Spending Behavior of Family

No.	District/Subdistrict	Target Fruit	Going to buy consumption items (%)	Going to buy production items (%)	Remarks
1.	Langkat: Setabat Binjai	Rambutan Rambutan	28 100	72 0	
2.	Karo: Simpang Empat Barus Jahe	Marquisa Marquisa	96 4	4 96	
3.	Purwakarta: Wanayasa	Mangosteen	96	4	
4.	Majalengka: Kertajati	Mango	100	0	
5.	Ciamis: Sukadana	Duku	100	0	
6.	Mojokerto: Godang	Banana	0	3	
7.	Malang: Batulawang & Tojiman	Salak	0	12	
8.	Pasuruan: Grati & Nguling	Mango	3	11	
9.	Trenggalek: Bendungan	Durian	25	0	
10.	Lumajang: Ronoyoso	Avocado & Banana	22	3	
11.	Jeneponto: Bangkala	Mango	100	0	
12.	Sinjai: West Sinjai	Marquisa	64	36	
13.	Luwu: Masamba	Rambutan	88	12	
14.	Tanah Toraja: Mangkudeh	Mangosteen	76	4	

Source: Baseline Survey, JICA Study Team, 1997



**Table G-4-1 Number of Existing Farmers' Groups and KUDs in Four Provinces**

No.	Province/District	Food Crop Farmers' Group			KUD
		Farmers Group	Women Group	Youth Farmers Group	
1	NORTH SUMATERA				
	Dairi	649	16	5	25
	Tapanuli Tengah	667	214	120	5
	Tapanuli Utara	1,998	86	31	19
	Tapanuli Selatan	2,353	683	558	90
	Karo	816	816	327	35
	Langkat	1,315	444	319	34
	Total 6 districts	7,798	2,259	1,360	208
Total whole Province	14,225	2,789	2,185	581	
2	WEST JAVA				
	Bandung	2,720	268	186	46
	Ciamis	2,624	562	168	47
	Bogor	2,400	734	387	46
	Sumedang	1,312	263	132	28
	Tasikmalaya	1,996	234	224	45
	Total 5 districts	11,052	2,061	1,097	212
Total whole Province	35,513	4,295	2,766	758	
3.	EAST JAVA				
	Lumajang	1,120	4	19	29
	Jombang	1,310	68	84	27
	Tulungagung	962	39	29	20
	Trenggalek	547	24	19	13
	Pasuruan	1,715	44	112	29
	Malang	1,418	0	0	34
	Total 6 districts	7,072	179	263	152
Total whole province	38,394	2,781	2,757	750	
4	SOUTH SULAWESI				
	Gowa	776	n.a	n.a	30
	Soppeng	317	n.a	n.a	29
	Sidendeng Rappang	471	n.a	n.a	25
	Majene	172	n.a	n.a	11
	Bone	1,280	n.a	n.a	39
	Maros	452	n.a	n.a	15
	Wajo	317	n.a	n.a	15
	Tana Toraja	442	n.a	n.a	18
	Polewali Mamasa	785	n.a	n.a	29
	Mamuju	651	n.a	n.a	60
	Enrekang	285	n.a	n.a	9
	Pinrang	593	n.a	n.a	33
	Barru	225	n.a	n.a	17
	Total 13 districts	6,766	n.a	n.a	330
Total whole province	10,983	n.a	n.a	531	

Sources: Dinas Pertanian Tanaman Pangan dan Hortikultura, North Sumatera, 1997; Dinas Pertanian Tanaman Pangan dan Hortikultura, West Java, 1997; Dinas Pertanian Tanaman Pangan dan Hortikultura, East Java, 1997; and Dinas Pertanian Tanaman Pangan dan Hortikultura, South Sulawesi, 1997

**Table G-4-2 Average Land Holding Size and Area Possible to be Converted for Fruit Growing**

No.	District/ Subdistrict	Proposed Fruit	Average of Total Land, include Irrigated Wet land Paddy (Ha)	Average Lands that Possible to convert into Fruit Area per Household			
				Upland (Ha)	Estate Land (Ha)	Rainfed land (Ha)	Total (Ha)
1.	NORTH SUMATERA Langkat: Setabat	Rambutan	1.13	0.18	0.06	0.72	0.95
		Binjai	Rambutan	2.91	0.64	0.80	1.30
	Karo: Simpang Empat Barus Jahe	Marquisa	2.02	1.90	0.07	0	1.97
		Marquisa	1.53	1.23	0.05	0	1.28
2.	WEST JAVA Purwakarta: Wanayasa Majalengka: Kertajati Ciamis: Sukadana	Mangosteen	0.98	0.04	0.60	0.13	0.77
		Mango	1.06	0.29	0.03	0.26	0.57
		Duku	1.08	0.08	0.78	0.06	0.91
3.	EAST JAVA Mojokerto: Gedang Malang: Batulawang & Tojiman Pasuruan: Grati & Nguling Trenggalek: Bendungan Lumajang: Ronoyoso	Banana	0.96	0.50	0	0	0.50
		Salak	2.70	0.68	0.78	0.04	1.46
		Mango	1.36	0.16	0	0.49	0.65
		Durian	1.07	0.70	0.09	0.16	0.79
		Avocado & Banana	0.72	0.72	0	0	0.72
4.	SOUTH SULAWESI Jeneponto: Bangkala Sinjai: West Sinjai Luwu: Masamba Tanah Toraja: Mangkudch	Mango	0.74	0.06	0.68	0	0.74
		Marquisa	1.64	0.64	0.70	0	1.34
		Rambutan	2.26	0.33	0.73	0.06	1.12
		Mangosteen	3.46	0.28	1.62	0.56	2.46

Source: Baseline Survey, JICA Study Team, 1997

**Table G-4-3 Ownership of Land in Four Provinces**

No.	District/ Subdistrict	Proposed Fruit	Total Land Documents (pieces)	Ownership Title Certificate (%)	Buy without Certificate (%)	Belong to Parent (%)
1	Langkat: Setabat Binjai	Rambutan	38	5.6	5.6	41.7
		Rambutan	47	23.4	51.3	8.5
2	Karo: Simpang Empat Bani Jahe	Marquisa	20	0	10.0	90.0
		Marquisa	38	1.0	1.0	21.0
3	Purwakarta: Wanayasa	Mangosteen	39	25.6	18.1	25.6
4.	Majalengka: Kertajati	Mango	43	69.9	0	13.9
5	Ciamis: Sukadana	Duku	38	11.2	26.0	7.8
6.	Mojokerto: Godang	Banana	50	36.0	80.0	0
7.	Malang: Batulawang & Tojiman	Salak	70	10.0	5.7	22.9
8.	Pasuruan: Grati & Nguling	Mango	38	36.0	48.0	40.0
9.	Trenggalek: Bendungan	Durian	50	10.0	2.0	36.0
10.	Lumajang: Ronoyoso	Avocado & Banana	38	0	0	100.0
11.	Jeneponto: Bangkala	Mango	29	0	6.9	93.1
12.	Sinjai: West Sinjai	Marquisa	20	0	0	5.0
13	Luwu: Masamba	Rambutan	52	25.0	1.9	65.0
14.	Tana Toraja: Mangkudeh	Mangosteen	67	14.9	0	38.8

Source: Baseline Survey, JICA Study Team, 1997

**Table G-4-4 Total Number of Food Crop Extension Workers  
(PPS & PPL) and NGO**

	Province / District	PPS	PPL	NGO-Rural oriented
1.	<b>NORTH SUMATERA</b>			60
	Dairi	5	44	
	Tapanuli Tengah	3	40	
	Tapanuli Utara	5	212	
	Tapanuli Selatan	11	163	
	Karo	4	31	
	Langkat	6	97	
	Total 6 districts	34	587	
Total whole Province	96	1127	60	
2.	<b>WEST JAVA</b>	5	156	17
	Bandung	5	178	
	Ciamis	3	122	
	Bogor			
	Sumedang	5	81	
	Tasikmalaya	5	116	
	Total 5 districts	23	653	
	Total whole Province	98	2,310	17
3.	<b>EAST JAVA</b>			17
	Lumajang	7	54	
	Jombang	10	57	
	Tulungagung	4	51	
	Trenggalek	4	30	
	Pasuruan	3	64	
	Malang	11	74	
	Total 6 districts	39	330	
Total whole province	150	1557	17	
4.	<b>SOUTH SULAWESI</b>			27
	Gowa	2	122	
	Soppeng	2	71	
	Sidengreng Rappang	3	92	
	Majene	3	44	
	Bone	4	211	
	Maros	2	102	
	Wajo	4	103	
	Tana Toraja	2	80	
	Polewali Mamasa	4	161	
	Mamuju	2	76	
	Enrekang	1	58	
	Pinrang	2	125	
	Barro	0	60	
	Total 13 districts	31	1305	
Total whole province	106	2008	27	

Source: Dinas Pertanian Tanaman Pangan dan Hortikultura, North Sumatera, West Java, East Java, South Sulawesi, 1997  
Direktorat Sosial Politik Pemda North Sumatera, West Java, East Java, and South Sulawesi, 1997

**Table G-5-1 Case of Rural Extension Program by Private Institution**

Name of NGO/ Agency	Nature of Service		Fee		Consultant Assessment	
	Location	Modes of operation	Fee paid by	Beneficiary's opinion	Stage of process	Sustainability
Yayasan Mitra Desa	North Sumatera	Provision service in getting good price of cabbage and extension.	Rp.20/kg, paid by farmers own the cabbage	Happy with this service	Beginning stage	Promising
LAPPSEM	South Sulawesi	water management and water fee collection	1.5% of Total Consultant fee, paid by Government Project	No different activities with PPL and Mantri Air activities	3 Years being process	Questionable when the project is terminated
Yayasan Mandiri	West Java	To link the Farmers and Bank	Consultant Fee paid by Government	No different activities with PPL and Mantri Air activities	has been practices at least 2 years	Questionable if the Project is terminated
PT Sarana Yogya Ventura (PT. SYV)	Yogyakarta	Finance and Management in Salak "Pondoh" Export Program through cooperative	Project Profit sharing 10% profit for PT SYV 90% profit for Cooperative	Salak growers and Village Trader are happy	has been 2 years, the loan installment Rp.30 million of total loan Rp.200 million paid.	promising

Source: Field Observation to respective NGO and their Clientele, 1997/98