

Table 1.1. List of Data Collected

1. Project Statement Repelita III Tanaman Pangan (1979-1983), 1978, Agricultural Extension Services Kabupaten Soppeng, Wajo and Bone.
2. Annual Reports in 1976 to 1977, Agricultural Extension Services Kabupaten Sidrap.
3. Annual Reports in 1969 to 1977, Agricultural Extension Services Kabupaten Soppeng.
4. Annual Reports in 1969 to 1977, Agricultural Extension Services Kabupaten Wajo.
5. Annual Reports in 1976 to 1977, Agricultural Extension Services Kabupaten Bone.
6. Annual Reports in 1974 to 1977, Agricultural Extension Services Inspection of South Sulawesi province.
7. Annual Report 1977/78, Sekretariat Badan Pembina Harian BIMAS Sulawesi Selatan.
8. Credit for BIMAS and INMAS for paddy and polowijo crops (1970/71 - 1978/79), 1978, Indonesia People's Bank.
9. Livestock production in South Sulawesi Province from 1969 to 1976, Livestock Services office file.
10. Lembaga Penelitian Pertanian Maros (1976 and 1979), South Sulawesi Branch Research Station of CRIA.
11. Pedoman Ringkas Melalui BUUD/KUD dan NON BUUD/KUD 1978/79, Depot Logistik Sulawesi Selatan.
12. Soil Map in South Sulawesi Province 1967 Soil Research Institute in Bogor.
13. South Sulawesi Regional Agricultural Development Planning/ATA-140 Project February-1979. The team of the Project on South Sulawesi RADP/ATA-140 in Ujung Pandang.
14. Reconnaissance Survey Report on Sanrego Irrigation Project in South Sulawesi, WECON Ltd., Feb. 1974 (IND/152)
15. Pembuatan Peta Petak Daerah Irigasi Bila di Propinsi Sulawesi Selatan, WECON Ltd.
16. Penyelidikan Geologi Teknik dan Mekanika Tanah Rencana Bendung Bila di Propinsi Sulawesi Selatan, Tricon P.T., Sep. 1976 (IND/355)
17. Penyelidikan Geologi Teknik dan Mekanika Tanah Rencana Bendung Sanrego di Propinsi Sulawesi Selatan, Tricon P.T., Sep. 1976 (IND/360)

to be continued.

18. Laporan Penyelidikan Hidrolis Dengan Model, Terhadap Rencana Bendung Bila, D.P.M.A., Jul., 1977 (IND/388)
19. Laporan Penyelidikan Hidrolis Dengan Model, Terhadap Rencana Bendung Type Cascade/Double Energy Dissipator untuk Bendung Sanrego di Sulawesi Selatan, D.P.M.A., Jul., 1977 (IND/413)
20. Proyek Irrigasi Bila, Bagian II, WECON Ltd.
21. Proyek Irrigasi Bila, Bagian IV, WECON Ltd.
22. Proyek Irrigasi Bila, Bagian V, WECON Ltd.
23. Proyek Irrigasi Sanrego, Bagian II, WECON Ltd.
24. Proyek Irrigasi Sanrego, Bagian III, WECON Ltd.
25. Pembuatan Peta Petak Daerah Irrigasi Sanrego, WECON Ltd.
26. Pengukuran Dan Penggambaran Situasi Daerah Irrigasi Langkemme di Propinsi Sulawesi Selatan, NV. Pancha Bawana.
27. Laporan Tahunan Tahun 1978/2 Mei 1978, P.U. Seksi Pengairan Sidrap-Enrekang.
28. Laporan Pekerjaan Selama Tahun Anggaran 1977-1978, P.U. Seksi Pengairan Soppeng-Wajo.
29. Laporan Pekerjaan Selama Tahun Anggaran 1977-1978, P.U. Seksi Pengairan Bone.
30. Cultivated Area in Propinsi Sul-Sel, Bid. Pengairan, DPUP Sul-Sel, Apr., 1978.
31. List of Inventory of Irrigated Area in 1978, DPUP Sul-Sel, Oct., 1978.
32. Exploitasi & Pemeliharaan Jaringan Irigasi, P.U. Seksi Pengairan Sidrap-Enrekang, Mar., 1978.
33. Luas sawah areal baku dan luas sawah areal tanam propinsi Sul-Sel. 1975/76, 1976/77 & 1977/78, DPUP Sul-Sel, Oct., 1978.
34. Hydrologic Considerations, Irrigation Rehabilitation Project, series B, Aug., 1971, NEDECO.
35. Eplanatory Note on Irrigation and Drainage, Proyek Irrigasi I.D.A. Sub-project Saddang, July 1973, NEDECO.
36. Second Technical Note, Design Criteria, Luwu Irrigation Project, North Luwu plan, Sulawesi Selatan, Dec., 1976, DHV, ILACO.

Table 1.2 Name of Kabupatens and Kecamatans
Selected for Agricultural Studies

Name of Kabupaten	Name of Kecamatan
(1) <u>Sidrap</u>	(1) Panca Lautang
	(2) Tellulimpoe
	(3) Maritengae
	(4) Dua Pitue
(2) <u>Bone</u>	(5) Cenrana
	(6) Ajangale
	(7) Dua Boccoe
	(8) Tellusiattinge
	(9) Ponre
	(10) Ulaweng
	(11) Lamuru
	(12) Lappariaja
	(13) Libureng
	(14) Kahu
	(15) Bonto Cani
(3) <u>Soppeng</u>	(16) Lalabata
	(17) Liliriaja
	(18) Marioriawa
	(19) Marioriwawo
	(20) Lilirilau
(4) <u>Wajo</u>	(21) Tempe
	(22) Tanastitolo
	(23) Maniang Pajo
	(24) Belawa
	(25) Sabbang Paru
	(26) Pammana
	(27) Takkalalla
	(28) Majauleng
	(29) Sajoanging

Table 2.1 Present Agro-economic Condition of the
Objective Area (1978)

	Gross Area (ha)		Population		Total Household		Average of family	No. of Farm Household
<u>Kab. Sidrap</u>	233,960	100	195,980	100	38,430	100	5.10	30,744
Pancalautang	13,800		18,940		3,627		5.22	2,902
TelluLimpoE	4,300		16,190		3,149		5.14	2,518
MariTengaE	12,100		36,230		7,514		4.82	6,011
Dua Pitue	182,500		50,540		9,679		5.22	7,743
Sub-total	212,700	90.9	121,900	62.2	23,969		5.09	19,174
<u>Kab. Bone</u>	455,600	100	622,320	100	101,100	100	6.16	80,880
Cenrana	14,800		24,320		3,931		6.19	3,145
Ajangale	17,700		47,850		7,957		5.92	6,366
DuaBoccoE	15,900		40,430		6,707		6.03	5,366
TellSiatenge	14,600		45,200		7,263		6.22	5,810
Ponre	28,800		12,690		2,465		5.15	1,972
Ulawang	21,700		44,620		8,055		5.54	6,444
Lamur	73,600		37,010		6,101		6.07	4,881
Lappariaja	30,200		46,480		7,233		6.43	5,786
Libureng	36,800		20,640		3,310		6.24	2,648
Kahu	25,600		27,080		4,214		6.43	3,371
Bonto Cani	36,200		12,570		2,013		6.24	1,610
Sub-total	315,300	69.2	358,890	57.7	59,249	58.6	6.06	47,399
<u>Kab. Soppeng</u>	140,000	100	241,010	100	44,740	100	5.39	33,457
Lalabata	40,000		64,080		11,626		5.51	8,694
Liliriaja	18,100		49,670		9,327		5.33	6,975
Marioriawa	30,000		45,140		6,215		7.26	4,648
Marioriawo	32,000		30,380		8,300		3.66	6,027
Lili-Rilau	19,900		51,740		9,272		5.58	7,247
Sub-total	140,000	100	241,010	100	44,740	100	5.39	33,771
<u>Kab. Wajo</u>	246,500	100	372,060	100	63,636	100	5.85	45,818
Tempe	3,800		45,550		6,985		6.52	5,029
Tanasitolo	15,400		35,210		5,786		6.09	4,166
Maniang Pajo	23,600		20,870		3,340		6.25	2,405
Belawa	17,300		36,840		6,204		5.94	4,467
Sabang Paru	13,100		41,260		6,547		6.30	4,714
Pamana	15,500		38,380		6,214		6.18	4,474
Takkalalla	35,300		44,630		8,039		5.55	5,788
Majauleng	23,100		33,510		6,103		5.49	5,077
Sajoanging	32,100		37,590		7,051		5.33	4,394
Sub-total	179,200	72.7	333,840	89.7	56,269	88.4	5.93	40,514
Grand Total	847,200		1,055,640		184,227		5.73	140,858

Source : Statistic Offices of Sidrap, Bone, Soppeng and Wajo Kabupatens.

Table 3.1 (1) Results of Soil Analysis

No. of Soil Pits *	No. of Soil Horizon	Thickness of Horizon (cm)	pH		Specific Gravity	Total Carbon (%)	Total Nitrogen (%)	Available P (ppm)	Cation Exchange Capacity (me)	Exchangeable Base				Base Saturation Degree (%)	Free Iron Oxide (%)	Soil Particle			Texture
			H ₂ O (1:1)	IN. KCl (1:1)						Ca (me)	Mg (me)	Na (me)	K (me)			Clay (%)	Silt (%)	Sand (%)	
1	2-1	0-30	4.5	5.0	1.92	0.34	0.120	1.5	28.3	5.4	8.8	0.26	0.46	56.25	0.54	54.29	14.71	31.0	Clay
	2-2	30-60	6.9	5.5	2.27	0.09	0.083	4.8	28.3	4.8	9.6	0.33	0.25	52.93	0.33	69.50	7.14	21.36	Clay
	2-3	60-100	7.7	5.6	2.27	0.05	0.048	5.9	26.9	12.4	2.64	0.46	0.31	58.77	-	58.77	22.20	19.13	Clay
10	10-1	0-15	7.1	6.1	1.92	2.84	0.441	2.0	47.60	27.3	2.63	0.70	0.15	64.66	0.08	69.61	27.90	2.49	Silty clay
11	11-1	0-25	6.9	5.5	2.08	1.03	0.166	5.0	22.4	7.2	1.16	0.37	0.85	44.11	0.45	58.21	21.47	17.32	Clay
	11-2	25-50	7.2	5.7	2.27	0.15	0.143	2.5	21.0	8.0	9.6	0.59	0.27	87.90	-	62.30	30.00	7.70	Silty clay
	11-3	50-100	7.7	6.7	2.27	0.10	0.055	4.6	28.6	19.6	1.52	0.61	0.25	76.85	-	36.07	60.80	3.13	S. cl. 1
7	7-1	0-10	7.2	6.0	2.08	0.89	0.214	1.5	24.8	8.4	8.88	0.33	0.13	71.53	0.22	44.17	52.86	2.97	Silty clay
	7-2	10-27	7.7	5.8	2.08	0.45	0.214	2.0	34.1	9.6	8.96	0.30	0.83	57.74	-	81.36	15.79	2.85	Clay
	7-3	27-50	7.2	6.8	2.27	1.25	0.095	5.2	28.4	21.6	1.44	0.37	0.54	84.33	-	55.05	42.74	2.21	Silty clay
	7-4	50+	7.7	7.0	2.08	0.01	0.095	5.2	24.2	11.0	11.0	0.35	0.35	93.80	-	32.36	62.34	5.30	Silty clay
23	23-1	0-15	4.9	4.2	2.0	0.21	0.143	2.5	3.97	0.4	0.65	0.09	0.39	36.02	0.37	9.78	30.70	59.52	Sandy loam
	23-2	15-30	5.1	5.0	2.50	0.18	0.119	1.5	8.87	2.4	1.50	0.11	0.25	48.03	-	19.20	20.43	60.37	Sandy loam
	23-3	30-100	5.2	5.1	2.0	0.28	0.071	1.5	9.10	1.72	1.52	0.26	0.38	42.64	-	26.86	12.84	60.30	S. cl. 1
27	27-1	0-40	-	4.5	2.0	0.42	0.167	2.4	26.1	8.80	2.72	0.48	0.61	48.31	1.04	57.32	40.06	2.62	Silty clay
	27-2	60-100	4.7	4.3	2.0	0.29	0.071	4.8	29.9	13.75	1.45	0.87	0.29	54.71	1.38	67.86	30.95	1.19	Silty clay
41	41-1	0-80	5.9	4.3	2.5	0.50	0.075	2.5	18.6	15.4	2.20	0.45	0.83	101.50	0.57	65.93	29.65	4.42	Clay
	41-2	80-100	7.4	5.9	2.27	0.88	0.036	3.2	20.4	12.8	5.12	0.73	0.87	95.69	0.49	59.56	22.08	20.36	Clay
54	54-1	0-15	6.0	5.0	2.17	1.08	0.238	2.0	36.6	16.8	1.76	0.60	1.33	55.98	0.67	68.51	29.60	1.89	Clay
	54-2	15-30	5.9	4.3	2.08	1.21	0.071	1.0	41.1	18.8	1.04	0.65	1.40	53.26	-	70.01	28.05	1.94	Clay
	54-3	30-50	6.5	5.1	2.17	0.74	0.120	1.8	42.5	18.0	1.84	0.69	1.06	50.80	-	74.74	19.00	6.26	Clay
	54-4	50-80	7.5	5.6	2.27	0.46	0.06	2.0	40.5	9.71	11.04	0.71	0.43	54.05	-	80.36	17.32	2.29	Clay
	54-5	80+	7.0	5.6	1.92	0.224	0.095	2.0	29.2	7.50	15.83	0.74	0.48	84.07	-	87.32	11.47	1.21	Clay
116	116-1	0-15	5.1	3.7	1.92	0.790	0.143		16.41	4.77	2.42	0.48	0.26	48.32	0.66	55.82	29.51	14.67	Silty clay
	116-2	15-40	6.2	3.7	1.92	0.670	0.167	2.0	11.54	2.13	2.81	0.42	0.52	50.95	-	44.92	37.49	17.59	Silty clay
	116-3	40-60	5.9	4.4	2.27	0.790	0.083	1.50	11.23	3.96	2.52	0.47	0.66	67.76	-	72.44	14.04	13.52	Clay
	116-4	60+	6.0	4.9	1.92	0.20	0.095	1.20	10.61	3.46	0.20	0.54	0.46	43.92	-	48.44	47.32	4.24	Silty clay
117	117-1	0-7	4.4	3.7	2.00	1.56	0.226	1.00	9.67	0.66	2.41	0.50	0.37	40.74	0.51	52.68	29.79	17.53	Silty clay
	117-2	7-17	4.5	3.7	2.08	1.17	0.143	2.50	9.33	0.36	3.53	0.61	0.09	49.20	-	58.24	14.39	27.37	Clay
	117-3	17-65	4.8	3.7	1.79	0.65	0.155	1.50	7.23	0.12	2.10	0.41	0.11	38.31	-	61.30	31.17	6.71	Silty clay
	117-4	65+	5.1	3.6	1.92	0.23	0.095	2.00	7.96	0.36	3.17	0.49	0.14	51.76	-	86.78	3.02	10.20	Clay

to be continued

Table 3.1 (2) Results of Soil Analysis

No. of Soil Pits *	No. of Soil Horizon	Thickness of Horizon (cm)	pH		Specific Gravity	Total Carbon (%)	Total Nitrogen (%)	Available P (ppm)	Cation Exchange Capacity (me)	Exchangeable Base				Base Saturation Degree (%)	Free Iron Oxide (%)	Soil Particle			Texture
			H ₂ O (1:1)	IN. KCl (1:1)						Ca (me)	Mg (me)	Na (me)	K (me)			Clay (%)	Silt (%)	Sand (%)	
119	119-1	0-18	5.3	3.6	2.27	0.90	0.143	1.50	36.22	4.95	1.95	0.52	0.49	48.77	0.33	25.30	15.41	39.23	Loam
	119-2	18-40	5.2	3.5	2.08	0.60	0.143	8.75	18.41	3.08	3.82	0.46	0.29	41.55	-	29.53	22.84	47.63	Sandy loam
	119-3	40-60	5.1	3.5	2.08	0.78	0.075	2.50	15.33	4.12	1.67	0.59	0.23	43.69	-	40.40	11.58	48.02	Sandy clay
	119-4	60-100	5.4	3.5	1.78	0.67	0.119	2.0	23.56	8.42	2.82	0.70	0.40	52.38	-	25.30	33.41	39.29	Loam
	119-5	100+	5.1	3.7	1.82	1.35	0.070	1.5	22.62	14.19	1.76	0.74	0.75	77.10	-	34.57	33.33	32.10	Clay loam
64	64-1	0-10	5.5	4.2	2.27	1.46	0.167	2.0	23.50	11.80	1.69	0.56	0.29	61.02	0.85	67.09	27.80	5.11	Clay
	64-2	10-45	6.6	5.2	2.27	0.21	0.214	1.5	24.18	9.94	3.06	0.79	0.11	57.61	-	56.13	26.57	17.30	Clay
	64-3	45+	6.7	5.1	1.92	0.19	0.083	1.5	23.24	10.11	3.23	0.91	0.11	61.79	-	16.30	15.21	68.49	Sandy loam
99	99-1	0-20	6.1			1.99	0.441	1.86	28.57	15.14	1.14	0.87	1.81	66.40	0.95	64.99	25.37	9.63	Clay
	99-2	20-40	6.5			0.86	0.404	1.80	22.50	8.20	4.14	0.70	1.85	66.20	-	80.41	11.82	7.75	Clay
	99-3	40+	5.8			0.12	0.294	1.86	24.28	7.48	5.14	0.52	1.88	61.90	0.58	66.15	21.84	12.01	Clay

* No. 2: Chromic Vertisols

10 : Rendzinas

11 : Eutric Fluvisols

7 : Orthic Luvisol

23 : Dystric Claysols

41 : Eutric Fluvisols

54 : Eutric Fluvisols

116 : Ferric Luvisols

117 : Dystric Nitroils

119 : Ferric Luvisols

64 : Eutric Fluvisols

99 : Chromic Luvisols

Table 3.2 Soil Classification

	Area (ha)	Proportional Extent (%)
Eutirc Fluvisols	109,000	29.3
Thionic Fluvisols	15,000	4.0
Dystric Gleysols	10,000	2.7
Chromic Vertisols	40,000	10.8
Orthic Luvisols	24,000	6.4
Chromic Luvisols	104,000	28.0
Ferric Luvisols	22,000	5.9
Dystric Nitosols	2,000	0.5
Ferric Acrisols	29,000	7.8
Rendzina	4,000	1.1
Lithosol	13,000	3.5
Total	372,000	100.0

Table 3.3 Land Capability Class

	Area (ha)	Proportional Extent (%)
Class I	118,000	31.7
Class II	44,000	11.8
Class III	127,000	34.2
Class IV	83,000	22.3
Total	372,000	100.0

Table 4.1 (1) Monthly Rainfall

(Rainy Days)

(mm/month)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Tanru Tedong													
1971	-	-	-	79	136	208	179	368	236	225	-	27	-
				(6)	(10)	(15)	(13)	(19)	(21)	(7)		(4)	(-)
1972	188	84	17	231	188	70	12	70	0	8	64	153	1,085
	(14)	(11)	(3)	(12)	(10)	(7)	(8)	(3)	(0)	(1)	(6)	(9)	(84)
1973	95	272	100	365	187	389	114	442	277	179	240	101	2,461
	(9)	(9)	(8)	(17)	(16)	(17)	(9)	(15)	(14)	(10)	(13)	(8)	(145)
1974	37	45	60	249	220	159	196	4	442	200	85	41	1,738
	(4)	(4)	(2)	(11)	(13)	(12)	(14)	(1)	(13)	(9)	(9)	(3)	(95)
1975	5	66	45	199	360	259	195	230	372	274	36	37	2,078
	(3)	(6)	(7)	(15)	(14)	(14)	(14)	(11)	(19)	(14)	(7)	(9)	(133)
1976	38	23	173	193	132	339	221	85	(106)	149	153	31	-
	(4)	(6)	(8)	(12)	(9)	(18)	(8)	(4)	(-)	(7)	(9)	(2)	(-)
1977	76	40	66	223	189	(340)	(114)	230	0	15	195	60	-
	(8)	(6)	(4)	(17)	(8)	(-)	(-)	(3)	(0)	(1)	(11)	(5)	(-)
1978	168	17	219	176	475	568	-	232	446	294	-	-	-
	(6)	(2)	(8)	(7)	(13)	(16)		(9)	(16)	(6)			(-)
Kanyuara													
1975	31	50	67	129	123	236	193	237	181	356	39	100	1,742
	(6)	(12)	(10)	(17)	(24)	(18)	(20)	(13)	(23)	(18)	(11)	(21)	(193)
1976	97	26	140	145	86	160	190	34	0	151	105	43	1,177
	(18)	(10)	(12)	(15)	(14)	(18)	(10)	(6)	(1)	(11)	(17)	(13)	(145)
1977	169	101	76	213	166	140	32	0	0	20	73	47	1,037
	(16)	(22)	(14)	(16)	(19)	(13)	(9)	(0)	(0)	(2)	(8)	(19)	(138)
1978	29	70	186	93	338	180	202	150	205	71	70	123	1,717
	(9)	(10)	(14)	(10)	(18)	(19)	(22)	(17)	(22)	(7)	(16)	(18)	(182)
Sengkang													
1975	-	-	-	-	-	-	-	-	289	112	56	30	-
									(19)	(15)	(9)	(10)	
1976	34	21	80	151	201	218	369	31	0	105	135	46	1,391
	(10)	(5)	(8)	(13)	(13)	(18)	(13)	(4)	(0)	(10)	(16)	(11)	(121)
1977	91	64	130	228	102	284	73	62	0	0	88	56	1,178
	(12)	(11)	(8)	(18)	(17)	(14)	(10)	(4)	(0)	(0)	(10)	(10)	(114)
1978	97	44	186	241	166	180	273	120	166	222	104	-	-
	(11)	(12)	(21)	(12)	(14)	(21)	(22)	(9)	(14)	(11)	(11)		

Table 4.1 (2) Monthly Rainfall

(Rainy Days)

(mm/month)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Watan Soppeng													
1970	13 (4)	8 (1)	51 (3)	220 (9)	113 (6)	197 (12)	125 (7)	-	-	-	112 (6)	-	-
1971	48 (3)	63 (6)	55 (15)	40 (5)	188 (12)	189 (13)	166 (10)	144 (5)	162 (9)	117 (5)	55 (6)	83 (4)	1,310 (92)
1972	291 (19)	132 (15)	64 (9)	112 (10)	207 (9)	9 (2)	7 (3)	21 (2)	0 (0)	0 (0)	21 (4)	205 (14)	1,069 (87)
1973	270 (14)	279 (11)	98 (12)	316 (13)	339 (13)	324 (17)	295 (16)	161 (12)	236 (17)	112 (9)	301 (11)	103 (10)	2,834 (155)
1974	287 (14)	149 (13)	199 (13)	148 (7)	165 (12)	90 (6)	163 (13)	23 (4)	80 (13)	262 (16)	85 (12)	66 (11)	1,717 (134)
1975	67 (7)	39 (8)	124 (10)	199 (12)	220 (19)	187 (14)	240 (17)	119 (9)	170 (16)	161 (12)	83 (8)	149 (14)	1,658 (146)
1976	71 (13)	56 (4)	109 (9)	160 (14)	217 (15)	160 (17)	168 (8)	16 (3)	0 (0)	110 (10)	228 (13)	101 (14)	1,396 (120)
1977	254 (16)	123 (19)	132 (13)	208 (18)	129 (15)	300 (12)	51 (6)	32 (3)	0 (0)	0 (0)	83 (6)	186 (12)	1,498 (120)
1978	101 (-)	56 (-)	200 (-)	333 (-)	-	-	-	-	-	-	-	-	-
Batu - Batu													
1973	68 (8)	174 (8)	55 (3)	67 (8)	89 (13)	250 (8)	188 (16)	130 (14)	455 (14)	54 (4)	131 (11)	208 (10)	1,869 (112)
1974	52 (6)	127 (10)	81 (9)	192 (15)	77 (11)	83 (6)	104 (14)	10 (3)	173 (9)	161 (16)	73 (6)	32 (4)	1,165 (109)
1975	-	10 (4)	127 (9)	108 (13)	246 (20)	168 (11)	144 (12)	127 (7)	110 (8)	366 (14)	52 (6)	-	-
1976	63 (8)	25 (1)	155 (6)	42 (4)	92 (4)	-	119 (6)	24 (3)	0 (0)	-	262 (9)	31 (3)	-
1977	167 (8)	142 (7)	117 (8)	318 (9)	152 (8)	243 (7)	-	53 (2)	0 (0)	0 (0)	26 (4)	52 (8)	-

Table 4.1 (3) Monthly Rainfall
(Rainy Days)

Year	(mm/month)												Annual
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
Takkalaya													
1970	184 (5)	19 (3)	154 (4)	80 (3)	220 (8)	206 (8)	276 (15)	23 (2)	74 (3)	342 (16)	309 (15)	223 (8)	2,110 (90)
1971	-	-	58 (4)	163 (8)	130 (5)	314 (15)	167 (10)	101 (4)	155 (10)	139 (7)	140 (6)	119 (7)	-
1972	244 (14)	199 (10)	71 (8)	160 (6)	105 (6)	14 (2)	0 (0)	7 (1)	15 (1)	0 (0)	17 (2)	104 (10)	936 (60)
1973	266 (16)	166 (12)	104 (10)	277 (12)	197 (7)	161 (12)	424 (19)	124 (5)	344 (15)	86 (7)	421 (6)	345 (16)	2,915 (137)
1974	157 (8)	156 (9)	335 (16)	121 (8)	180 (7)	233 (12)	225 (20)	126 (8)	23 (4)	-	60 (8)	76 (10)	-
1975	54 (9)	72 (7)	95 (7)	180 (14)	321 (24)	155 (12)	156 (11)	89 (7)	146 (13)	163 (13)	128 (10)	115 (11)	1,674 (138)
1976	85 (10)	25 (3)	76 (5)	186 (14)	174 (9)	247 (18)	137 (7)	15 (2)	1 (1)	188 (12)	199 (10)	158 (11)	1,491 (102)
1977	350 (18)	129 (9)	115 (8)	129 (11)	134 (10)	295 (11)	69 (5)	11 (3)	0 (0)	0 (0)	131 (7)	256 (14)	1,619 (96)
1978	98 (-)	58 (-)	416 (-)	111 (-)									

Table 4.1 (4) Monthly Rainfall

(Rainy Days)

(mm/month)

Year	Jan.	Feb.	Mar.	Apr.	May	June.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Maradda													
1971	-	1	5	61	178	342	143	138	103	131	193	154	-
	(1)	(5)	(4)	(14)	(12)	(9)	(7)	(5)	(4)	(7)	(8)		
1972	230	103	48	288	0	135	21	25	0	0	0	180	1,030
	(18)	(5)	(3)	(10)	(0)	(12)	(4)	(1)	(0)	(0)	(0)	(9)	(62)
1973	141	322	133	211	196	411	377	194	212	116	61	82	2,456
	(13)	(11)	(9)	(17)	(11)	(18)	(12)	(15)	(11)	(8)	(7)	(5)	(137)
1974	22	134	129	158	177	282	257	33	214	253	54	29	1,742
	(3)	(6)	(9)	(9)	(9)	(10)	(18)	(6)	(10)	(10)	(6)	(6)	(102)
1975	118	30	71	157	480	373	406	268	185	229	62	92	2,471
	(7)	(4)	(7)	(19)	(20)	(17)	(18)	(12)	(12)	(14)	(5)	(7)	(142)
1976	95	40	141	400	309	366	130	0	0	22	102	239	1,844
	(6)	(3)	(7)	(9)	(10)	(12)	(6)	(0)	(0)	(3)	(6)	(11)	(73)
1977	82	35	117	199	132	640	52	0	0	0	6	309	1,572
	(7)	(4)	(10)	(7)	(12)	(20)	(16)	(0)	(1)	(0)	(1)	(15)	(93)
1978	93	47	115	112	189	144	293	128	89	115	-	-	-
	(10)	(7)	(12)	(11)	(13)	(15)	(17)	(9)	(8)	(7)			
Sakkoli													
1970	3	12	191	122	506	385	433	157	190	69	146	34	2,248
	(2)	(2)	(8)	(12)	(25)	(19)	(20)	(10)	(13)	(9)	(10)	(5)	(135)
1971	36	36	17	86	130	161	281	361	329	168	0	0	1,605
	(5)	(1)	(1)	(4)	(4)	(6)	(6)	(6)	(7)	(6)	(0)	(0)	(46)
1972	130	0	0	246	218	142	0	-	0	37	123	280	-
	(7)	(0)	(0)	(6)	(8)	(8)	(0)		(0)	(2)	(7)	(16)	
1973	179	99	213	-	-	0	486	293	670	117	0	0	-
	(13)	(5)	(7)			(0)	(16)	(16)	(23)	(13)	(0)	(0)	
1974	0	0	46	183	452	60	445	3	70	337	95	0	1,691
	(0)	(0)	(4)	(14)	(19)	(12)	(18)	(1)	(7)	(17)	(11)	(0)	(103)
1975	45	63	46	265	437	372	253	173	521	309	126	29	2,639
	(4)	(5)	(4)	(12)	(18)	(12)	(20)	(14)	(24)	(17)	(11)	(7)	(148)
1976	4	2	149	396	371	584	360	45	0	186	172	178	2,447
	(2)	(1)	(7)	(17)	(17)	(18)	(14)	(8)	(0)	(8)	(13)	(12)	(117)
1977	105	81	111	29	231	405	253	44	-	40	215	311	-
	(9)	(4)	(9)	(4)	(7)	(14)	(8)	(2)		(2)	(5)	(8)	
1978	-	-	213	447	330								
			(6)	(13)	(13)								

Table 4.1 (5) Monthly Rainfall
(Rainy Days)

Year	(mm/month)												Annual
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
Watam Pone													
1970	91 (6)	88 (6)	227 (10)	294 (15)	690 (20)	379 (13)	341 (14)	85 (5)	111 (5)	76 (4)	73 (4)	33 (3)	2,488 (105)
1971	85 (7)	100 (6)	51 (1)	155 (10)	208 (9)	453 (15)	164 (6)	205 (9)	281 (12)	149 (4)	190 (7)	6 (1)	2,047 (87)
1972	102 (8)	102 (7)	74 (6)	121 (8)	120 (13)	11 (2)	12 (3)	72 (3)	7 (1)	0 (0)	43 (1)	80 (8)	744 (60)
1973	215 (15)	146 (8)	65 (8)	153 (13)	206 (12)	104 (19)	278 (15)	231 (17)	333 (16)	115 (8)	119 (12)	76 (8)	2,041 (151)
1974	27 (6)	114 (12)	87 (10)	307 (11)	292 (16)	322 (11)	353 (14)	83 (6)	117 (9)	278 (7)	-	-	-
1975	-	-	-	-	-	-	218 (11)	187 (7)	110 (11)	130 (11)	85 (7)	105 (10)	-
1976	65 (4)	43 (6)	176 (9)	126 (10)	424 (11)	229 (9)	147 (3)	5 (1)	0 (0)	143 (7)	240 (11)	148 (5)	1,746 (76)
1977	45 (3)	17 (4)	246 (12)	136 (8)	241 (11)	391 (13)	41 (3)	24 (2)	0 (0)	0 (0)	11 (2)	91 (7)	1,243 (65)
1978	17 (2)	182 (6)	332 (14)	262 (12)	159 (9)	212 (9)	204 (12)	189 (5)	222 (8)	48 (2)	125 (6)	84 (8)	2,036 (93)

Table 4.1 (6) Monthly Rainfall
(Rainy Days)

Year	(mm/month)												Annual
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
<u>Arasoe</u>													
1970	268 (19)	163 (11)	322 (22)	282 (18)	751 (26)	430 (16)	368 (18)	66 (4)	164 (9)	34 (2)	0 (0)	129 (7)	2,977 (152)
1971	199 (8)	228 (8)	39 (6)	215 (8)	208 (10)	419 (22)	196 (15)	209 (14)	335 (17)	212 (11)	185 (17)	75 (11)	2,520 (147)
1972	171 (21)	91 (13)	132 (9)	188 (16)	355 (23)	145 (8)	40 (7)	54 (2)	11 (3)	0 (0)	31 (2)	173 (13)	1,391 (117)
1973	222 (19)	134 (19)	202 (15)	315 (21)	425 (25)	452 (23)	518 (19)	254 (19)	388 (19)	125 (12)	145 (16)	100 (16)	3,280 (223)
1974	138 (13)	52 (14)	127 (17)	297 (17)	271 (23)	299 (10)	355 (23)	121 (7)	311 (18)	126 (14)	180 (9)	147 (15)	2,424 (180)
1975	172 (16)	69 (11)	211 (11)	262 (20)	595 (28)	313 (25)	303 (24)	217 (18)	121 (16)	136 (17)	122 (10)	91 (14)	2,612 (210)
1976	63 (11)	47 (6)	177 (18)	345 (-)	401 (22)	521 (21)	72 (11)	32 (6)	0 (0)	118 (7)	97 (13)	124 (20)	1,997 (-)
1977	62 (14)	20 (8)	307 (23)	173 (19)	368 (24)	548 (23)	61 (13)	178 (10)	1 (1)	1 (1)	90 (6)	288 (22)	2,097 (164)
1978	59 (11)	238 (18)	238 (21)	213 (20)	321 (20)	229 (12)	434 (21)	405 (18)					
<u>Cellu</u>													
1970	201 (14)	110 (8)	277 (14)	254 (14)	697 (19)	455 (16)	431 (21)	76 (6)	128 (7)	116 (9)	172 (7)	51 (8)	2,968 (143)
1971	80 (8)	178 (10)	37 (3)	91 (9)	195 (9)	407 (18)	174 (8)	131 (12)	221 (3)	270 (10)	184 (10)	53 (3)	2,021 (103)
1972	129 (12)	134 (7)	106 (8)	169 (11)	200 (12)	43 (7)	19 (4)	5 (1)	0 (0)	0 (0)	92 (1)	79 (11)	976 (74)
1973	159 (15)	201 (15)	233 (11)	234 (17)	115 (20)	117 (19)	317 (14)	416 (18)	531 (19)	49 (11)	92 (13)	86 (14)	2,550 (186)
1974	12 (4)	266 (15)	93 (10)	614 (13)	282 (15)	333 (11)	324 (12)	49 (4)	204 (12)	40 (6)	45 (5)	66 (6)	2,328 (113)
1975	249 (13)	85 (5)	94 (8)	190 (14)	300 (19)	386 (20)	185 (14)	126 (12)	231 (18)	145 (12)	91 (8)	108 (7)	2,190 (150)
1976	69 (6)	103 (7)	199 (15)	244 (15)	511 (16)	313 (18)	26 (7)	0 (0)	0 (0)	31 (8)	462 (18)	312 (13)	2,270 (123)
1977	-	90 (7)	258 (12)	94 (9)	308 (13)	539 (13)	55 (4)	235 (5)	0 (0)	5 (1)	69 (5)	145 (12)	-
1978	66 (5)	162 (10)	365 (17)	230 (13)	200 (11)	166 (9)	279 (18)	215 (11)	324 (11)	65 (3)	141 (11)	249 (16)	2,462 (135)

Table 4.2 Mean Monthly Air Temperature (°C)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kanyuara													
1975	26.7	27.4	27.8	27.9	27.0	26.3	26.0	26.4	26.9	27.8	27.8	26.9	27.1
1976	26.7	27.0	27.4	27.3	27.0	26.0	25.8	26.4	26.7	27.0	27.5	26.9	26.8
1977	27.3	27.0	27.4	27.4	27.3	26.6	26.7	27.1	27.5	27.3	27.7	26.3	27.1
1978	27.0	27.1	27.0	27.1	26.9	25.8	26.9	25.9	27.1	28.1	27.8	27.5	27.0
Average	26.9	27.1	27.4	27.4	27.0	26.2	26.3	26.4	27.1	27.6	27.7	26.9	27.0
Sengkang													
1975	-	-	-	-	26.9	26.3	26.1	25.9	27.1	27.4	28.0	27.8	-
1976	27.9	28.4	28.3	27.8	27.6	25.1	24.8	25.3	26.0	29.2	28.4	28.5	27.3
1977	28.7	29.0	28.0	28.7	29.0	27.0	27.0	27.6	26.9	28.0	28.0	27.0	27.9
1978	27.5	28.0	27.5	27.3	27.6	27.8	26.1	26.3	26.6	-	-	-	-
Average	28.0	28.5	27.9	27.9	27.8	26.6	26.0	26.3	26.7	28.2	28.1	27.8	27.5
Camming													
1974	-	-	-	-	-	24.7	24.5	24.9	25.9	26.5	26.4	26.1	-
1975	25.9	25.9	26.0	25.9	25.2	24.9	24.7	24.9	-	-	26.2	26.1	-
1976	25.9	26.3	26.1	25.3	25.4	24.8	24.2	24.6	25.5	27.3	27.0	25.8	25.7
1977	26.0	26.4	26.1	26.5	25.8	24.8	24.5	24.5	25.5	26.9	27.9	26.7	25.9
1978	26.6	26.3	26.3	26.1	26.4	25.7	24.9	25.5	25.9	26.3	-	-	-
Average	26.1	26.2	26.1	26.0	25.7	25.0	24.6	24.9	25.7	26.8	26.9	26.2	25.9

Table 4.3 Mean Monthly Relative Humidity (%)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kanyuara													
1975	95.9	95.9	96.5	85.8	82.0	82.9	90.0	95.2	93.6	90.6	87.2	88.0	90.3
1976	90.0	89.0	90.0	91.0	91.0	93.0	95.0	94.0	96.0	97.0	96.0	96.0	93.2
1977	95.0	97.0	97.0	91.5	91.0	93.9	97.0	97.0	96.3	95.8	87.5	91.4	94.2
1978	91.5	98.3	98.8	99.0	98.9	91.9	87.3	84.2	84.3	81.2	84.0	87.5	90.6
Average	93.1	95.2	95.6	91.8	90.9	90.4	92.3	92.6	92.6	91.2	88.7	90.7	92.1
Sengkang													
1975	-	-	-	-	78.3	78.7	75.7	75.2	74.8	75.5	72.2	71.9	-
1976	70.7	66.1	68.0	69.8	73.2	75.5	75.0	68.4	60.7	63.4	68.7	65.2	68.7
1977	66.7	65.0	62.0	68.0	69.0	80.0	72.8	71.3	80.7	74.0	81.0	88.0	73.2
1978	83.7	80.4	86.6	84.9	87.2	87.4	86.8	84.2	85.4	-	-	-	-
Average	73.7	70.5	72.2	74.2	76.9	80.4	77.6	74.8	75.4	71.0	74.0	75.0	74.6
Camming													
1975	-	-	-	-	-	-	-	-	-	-	75.7	76.2	-
1976	72.3	70.3	75.4	79.8	76.5	79.0	78.2	72.1	59.9	67.8	74.6	78.4	73.7
1977	75.9	74.9	76.1	73.7	76.0	73.4	79.7	77.7	73.3	64.0	65.4	79.4	74.1
1978	76.3	77.1	79.8	78.8	79.3	78.5	78.9	75.6	72.1	79.6	-	-	-
Average	74.8	74.1	77.1	77.4	77.3	77.0	78.9	75.1	68.4	70.5	71.9	78.0	75.0

Table 4.4 Mean Monthly Sunshine Duration

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kanyuara (ml/day)													
1975	18.2	17.2	20.2	17.4	17.3	15.7	15.8	16.7	18.1	21.5	20.5	18.5	18.1
1976	17.1	18.4	18.5	19.9	19.1	18.4	21.5	19.3	18.9	18.9	20.1	17.3	18.9
1977	16.6	17.3	20.5	19.2	18.8	17.5	18.1	19.3	20.7	20.0	18.1	19.3	18.7
1978	18.3	17.9	17.8	18.4	19.9	19.3	19.0	17.8	18.9	20.8	18.9	18.5	18.8
Average	17.5	17.8	19.3	18.7	18.8	17.7	18.6	18.3	19.2	20.3	19.4	18.4	18.6
Sengkang (hr/month)													
1975	-	-	-	-	-	139	179	209	221	215	218	155	-
						(4.6)	(5.8)	(6.8)	(7.4)	(6.9)	(7.3)	(5.0)	
1976	194	204	188	210	188	162	200	262	260	213	210	169	2,460
	(6.3)	(7.3)	(6.1)	(7.0)	(6.1)	(5.4)	(6.5)	(8.4)	(8.7)	(6.9)	(7.0)	(5.5)	(6.7)
1977	147	117	192	185	201	145	206	229	279	307	231	174	2,413
	(4.7)	(4.2)	(6.2)	(6.2)	(6.5)	(4.8)	(6.6)	(7.4)	(9.3)	(9.9)	(7.7)	(5.6)	(6.6)
1978	155	145	162	169	211	178	198	194	183	-	-	-	-
	(5.0)	(5.2)	(5.2)	(5.6)	(6.8)	(5.9)	(6.4)	(6.3)	(6.1)	-	-	-	-
Average	165	155	181	188	200	156	196	224	236	245	220	166	2,332
	(5.3)	(5.5)	(5.8)	(6.3)	(6.5)	(5.2)	(6.3)	(7.2)	(7.9)	(7.9)	(7.3)	(5.4)	(6.4)
Camming (%)													
1975	-	-	-	-	-	-	-	-	-	-	44.6	41.6	-
1976	53.9	56.0	57.9	59.9	50.6	41.3	56.5	78.5	85.6	64.5	61.7	46.4	59.4
1977	46.8	52.8	56.5	57.1	53.9	39.1	53.3	57.8	78.5	76.9	73.2	36.5	56.9
1978	42.9	43.1	45.8	50.9	53.0	43.9	49.5	58.1	59.6	52.1	-	-	-
Average	47.9	50.6	53.4	56.0	52.5	41.4	53.1	64.8	74.6	64.7	59.8	41.6	55.0

Table 4.5 Mean Monthly Wind Velocity

													(m/sec)
Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kanyuara													
1975	2.5	2.2	2.9	2.5	3.7	2.4	2.3	2.0	2.4	1.9	2.6	2.9	2.5
1976	2.6	2.4	2.4	2.3	2.6	2.2	2.2	2.7	3.2	2.6	1.8	2.4	2.5
1977	2.1	3.3	2.3	2.2	1.8	2.0	2.5	2.9	3.2	2.9	1.4	1.6	2.4
1978	1.6	1.7	2.2	2.1	1.7	1.0	1.8	2.3	2.1	2.9	1.7	1.9	1.9
Average	2.2	2.4	2.5	2.3	2.5	1.9	2.2	2.5	2.7	2.6	1.9	2.2	2.3
Sengkang													
1975	-	-	-	-	-	-	-	1.0	0.8	0.6	0.7	1.4	-
1976	1.3	1.5	1.5	1.1	1.3	1.2	1.5	1.8	1.6	1.3	0.9	1.5	1.4
1977	1.5	2.0	1.3	1.1	1.0	1.4	1.8	2.0	2.0	2.0	1.4	1.2	1.5
1978	1.2	1.2	1.0	1.1	1.1	1.0	1.1	1.4	1.3	1.3	1.0	-	-
Average	1.3	1.6	1.3	1.1	1.1	1.2	1.5	1.5	1.4	1.3	1.0	1.4	1.3
Canning													
1975	-	-	-	-	-	-	-	-	-	-	1.4	1.9	-
1976	0.9	1.0	0.6	1.0	0.7	0.7	0.9	0.9	0.7	0.8	0.7	0.7	0.8
1977	0.8	0.9	0.8	0.7	0.6	0.6	0.8	0.8	1.0	0.8	0.9	0.9	0.8
1978	0.5	0.6	1.3	0.5	1.8	1.1	1.4	0.5	0.6	0.5	-	-	-
Average	0.7	0.8	0.9	0.7	1.0	0.8	1.0	0.7	0.8	0.7	1.0	1.2	0.9

Table 4.6 Monthly Evaporation

(mm/month)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
<u>Kanyuara</u>													
1975	174	181	189	166	230	202	192	187	140	180	204	165	2,210
1976	174	201	220	180	199	147	198	217	270	228	184	190	2,408
1977	172	132	154	144	160	140	146	143	177	205	208	151	1,932
1978	142	162	150	186	128	98	108	147	163	202	173	157	1,816
Average	166	169	178	169	179	147	161	174	188	204	192	166	2,903
<u>Sengkang</u>													
1975	-	-	-	-	-	116	128	159	174	135	187	159	-
1976	185	184	185	158	145	113	143	180	206	197	158	168	2,022
1977	168	177	188	131	159	110	134	175	240	303	227	181	2,193
1978	176	176	175	169	140	135	138	160	154	164	148	-	-
Average	176	179	183	153	148	119	136	169	194	200	180	169	2,006
<u>Camming</u>													
1975	-	-	-	-	-	-	-	-	-	-	159	149	-
1976	160	166	145	152	120	142	146	163	157	162	132	133	1,778
1977	117	121	144	127	117	-	118	128	106	176	139	123	-
1978	114	123	132	109	95	106	96	117	129	159	-	-	-
Average	130	137	140	129	111	124	120	136	131	166	143	135	1,602

Table 4.7 (1) Meteorological Data at Arasoe

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Monthly Mean Air Temperature (°C)													
1970	27.3	27.5	26.4	26.3	26.6	26.8	26.5	26.3	26.4	27.4	28.1	28.7	27.0
71	26.6	26.3	26.9	26.5	26.4	25.5	24.9	25.7	26.1	26.5	26.2	26.4	26.2
72	25.5	26.2	26.4	26.4	26.4	26.2	25.5	25.2	25.6	26.8	28.0	27.4	26.3
73	26.8	27.0	26.7	27.3	26.9	26.3	25.7	25.9	26.2	27.1	26.6	26.1	26.6
74	26.5	26.7	26.5	26.7	26.8	26.1	25.7	26.0	26.9	27.5	26.7	26.4	26.5
75	26.4	26.6	26.4	26.6	26.2	25.9	26.5	26.8	27.2	27.2	26.5	26.3	26.6
76	25.5	25.4	26.8	26.8	26.4	25.5	25.5	25.6	26.7	27.9	26.2	26.5	26.2
77	25.9	26.8	26.7	27.2	27.0	25.5	25.4	25.3	27.0	27.3	28.5	25.7	26.5
78	27.2	26.7	27.0	26.7	27.2	26.5	25.7	26.1	-	-	-	-	-
Average	26.4	26.6	26.6	26.7	26.7	26.0	25.7	25.9	26.5	27.2	27.1	26.7	26.5
Monthly Mean Relative Humidity (%)													
1970	76	74	82	80	83	81	80	77	78	75	76	73	78
71	87	88	86	82	82	82	82	79	81	80	83	80	83
72	82	80	78	81	80	79	77	76	73	72	72	77	77
73	81	81	82	82	83	86	83	82	82	79	81	81	82
74	78	77	77	83	82	81	82	80	79	79	80	79	80
75	80	79	80	84	84	83	78	76	77	82	81	80	80
76	82	80	82	81	80	82	77	73	72	72	83	91	80
77	93	90	80	81	81	84	79	79	75	69	70	82	80
78	75	79	82	78	82	82	81	82	-	-	-	-	-
Average	82	81	81	81	82	82	80	78	77	76	78	80	80

Table 4.7 (2) Meteorological Data at Arasoe

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Monthly Mean Sunshine Duration (%)													
1970	45.6	-	-	64.8	56.5	45.8	51.2	61.8	65.0	60.9	66.9	44.1	-
70	37.5	42.0	48.0	60.3	51.0	41.0	48.0	57.8	44.6	41.5	34.0	45.7	46.0
72	26.9	18.4	39.1	49.2	-	-	68.3	75.5	91.1	84.2	83.0	49.4	-
73	24.0	58.3	-	38.3	-	-	52.0	42.7	55.3	84.5	51.3	54.5	-
74	41.5	42.0	-	41.9	65.1	60.2	51.1	69.8	68.3	70.6	53.6	45.8	-
75	48.4	43.7	49.5	71.5	56.3	42.8	62.1	73.7	76.6	72.7	61.0	-	-
76	-	18.3	-	-	-	-	-	-	-	-	-	34.4	-
77	38.9	-	-	-	69.0	-	64.8	75.0	-	56.9	57.9	-	-
78	39.7	40.8	42.1	65.2	64.2	65.5	51.0	50.0	-	-	-	-	-
Average	37.8	37.6	44.7	55.9	60.4	51.1	56.1	63.3	66.8	67.3	58.2	45.7	53.7
Monthly Evaporation (mm/month)													
1971	-	85	126	78	59	71	82	106	95	90	82	114	-
72	94	138	138	96	92	111	135	161	180	186	162	139	1,632
73	112	136	97	87	85	79	80	80	99	117	131	109	1,212
74	146	132	147	90	92	85	83	103	98	122	112	114	1,324
75	112	110	83	42	63	59	81	81	111	94	108	115	1,059
76	94	109	97	96	93	71	136	186	180	166	82	130	1,440
77	133	119	142	131	129	129	177	208	233	289	271	164	2,125
78	148	158	149	160	163	116	123	161	-	-	-	-	-
Average	120	123	122	98	97	90	112	136	142	152	135	126	

Table 5.1 Present Land Use in the Objective Area

Land Use Categories	Area (ha)	Proportional Percentage (%)
<u>Farm land</u>	313,640	40.9
Paddy field	184,130	24.0
Upland	96,070	12.5
Estate crop land	33,440	4.4
<u>Non farm land</u>	453,470	59.1
Forest land	171,730	22.4
Grass land	231,630	30.2
Fish pond	790	0.1
Swamp land	34,290	4.5
Village land	15,030	1.9
Total	767,110	100.0

Table 5.2 Actual Multi-Cropping Index at
Kabupaten Level

	Name of Kabupaten			
	Sidrap	Bone	Soppeng	Wajo
1. Total paddy field	32,100	41,900	27,700	60,900
2. Irrigation paddy	20,500	3,400	10,000	2,500
3. Rainfed paddy	11,600	38,500	11,700	58,400
4. Rate of 2/1	0.64	0.08	0.46	0.04
5. Harvested Area				
5.1 Wet season paddy	23,100	27,500	17,400	36,800
5.2 Dry season paddy	12,900	2,000	13,600	900
6. Ratio of 5.1/1	0.72	0.66	0.80	0.60
7. Ratio of 5.2/1	0.40	0.05	0.63	0.01
8. Cropping ratio of paddy in dry season	0.40	0.05	0.63	0.01
9. Harvested area of polowijo in paddy field	710	23,230	1,210	6,760
10. Actual multi-cropping index in paddy field	1.15	1.26	1.48	0.73
11. Total upland area	4,920	20,490	30,830	32,480
12. Total harvested area of polowijo in upland area	620	43,660	21,240	9,640
13. Actual multi-cropping index in upland area	0.13	2.13	0.69	0.30

Table 5.3 Actual Multi-Cropping Index at Kecamatan Level

Kabupaten/ Kecamatan	Total Paddy Field	Irrigated Paddy Field	Rainfed Paddy Field	Rate of Irrigation Facilities	Harvested Area		Ratio	Cropping Ratio of Paddy in Dry Season	Harvested Area of Polowijo in Paddy Field	Actual Multi-Cropping Index in Paddy Field	Total Upland Area	Total Harvested Area of Polowijo in Upland Area	Actual Multi-Cropping Index in Upland Area
	(ha)	(ha)	(ha)	(4)=(2)/(1)	Wet Season Paddy	Dry Season Paddy					(7)=(6)/(5)	(8)=(6)/(1)	(9)
Sidrap													
Panca Lautang	5,080	2,320	2,760	0.45	3,150	1,070	0.34	0.22	230	0.89	1,240	110	0.09
Tellulimpoe	2,670	1,250	1,420	0.48	1,260	1,000	0.77	0.37	0	0.85	140	140	1.00
Maritengae	11,930	10,390	1,540	0.87	7,770	7,080	0.91	0.60	290	1.28	220	30	0.14
Dua Pitue	12,420	6,550	5,870	0.52	10,930	3,790	0.35	0.31	190	1.20	3,320	340	0.10
Bone													
Cenranae	5,080	0	5,080	0	3,640	0	0	0	120	0.73	940	20	0.02
Ajangale	4,750	0	4,750	0	3,860	0	0	0	1,920	1.21	1,060	430	0.41
Dua Boccoe	3,060	1,700	1,360	0.55	1,760	150	0.11	0.06	410	0.78	1,020	310	0.30
Tellusiatinge	4,990	640	4,350	0.12	3,200	350	0.09	0.06	510	0.80	590	120	0.20
Ponre	1,890	0	1,890	0	1,460	0	0	0	1,470	1.56	700	540	0.77
Ulaweng	920	0	920	0	660	70	0.14	0.11	830	1.81	4,010	11,310	2.82
Lamuru	1,530	0	1,530	0	1,270	430	0.31	0.27	1,380	2.05	4,740	14,890	3.14
Lappariaja	5,400	740	4,660	0.13	4,710	610	0.13	0.11	4,190	1.76	4,270	11,100	2.60
Libureng	5,300	0	5,300	0	2,910	0	0	0	4,770	1.45	1,600	1,840	1.15
Kahu	7,310	430	6,880	0.05	2,260	190	0.09	0.03	6,190	1.19	720	1,890	2.63
Bonto Cani	1,600	0	1,600	0	1,570	150	0.13	0.13	1,440	2.03	840	1,210	1.44
Soppeng													
Lalabata	6,780	2,800	3,980	0.41	5,910	5,270	0.90	0.78	180	1.67	5,050	580	0.11
Liliriaja	6,640	2,560	4,080	0.39	5,690	5,640	0.98	0.86	220	1.77	5,050	2,940	0.56
Marioriawa	4,150	3,400	750	0.82	2,050	1,350	0.65	0.34	120	0.90	2,880	430	0.13
Marioriwawo	1,740	220	1,530	0.12	1,560	1,130	0.69	0.65	290	1.76	6,100	11,390	1.87
Lilirilau	2,920	810	2,110	0.28	2,210	250	0.14	0.10	400	1.00	11,070	5,900	0.53
Wajo													
Tempe	280	0	280	0	150	0	0	0	60	0.53	2,070	250	0.12
Tanasitolo	4,020	0	4,020	0	1,540	0	0	0	1,070	0.64	2,360	290	0.12
Maniangpajo	7,000	520	6,480	0.07	2,760	0	0	0	1,020	0.55	2,900	1,560	0.54
Belawa	4,610	1,630	2,980	0.35	2,940	750	0.28	0.17	570	0.93	5,960	240	0.04
Sabbangparu	2,510	0	2,510	0	1,370	70	0.07	0.04	260	0.70	6,110	3,030	0.49
Pammana	5,800	240	5,560	0.04	2,130	0	0	0	990	0.88	3,090	2,730	0.50
Takalalla	12,920	0	12,920	0	9,850	0	0	0	790	0.82	2,470	170	0.07
Majauleng	10,350	220	10,130	0.19	5,430	0	0	0	810	0.60	2,570	910	0.35
Sajoanging	15,790	0	15,790	0	10,800	0	0	0	1,190	0.76	2,630	470	0.18
Total and Average	159,450	36,420	123,030	0.23	104,800	29,350	0.28	0.19	31,910	1.06	85,720	75,160	0.85

Table 6.1 (1) Irrigation Area of the Existing System in Kab. Sidrap

Basin/system	(unit: ha)						
	Acc'g to PU Data Measured on 1/25,000 Map				In Objective Area		
	Technic S-tech.	Exist.	Ext'ble	Total	Exist.	Irr'ble	
Bila R. Basin							
Bulucenrana	6,261	-	6,261	-	6,261	6,261	6,261
Lancirang	-	417	417	-	417	417	417
Sub-total	<u>6,261</u>	<u>417</u>	<u>6,678</u>	<u>0</u>	<u>6,678</u>	<u>6,678</u>	<u>6,678</u>
L. Sidenreng Basin							
Bilokka	-	931	931	-	931	931	931
Wattae	-	666	510	-	510	510	510
Bulutimorang	5,337	-	5,337	-	5,337	5,337	5,337
Sadang	13,560 ^{/1}	-	13,560	- ^{/2}	13,560 ^{/2}	8,050	8,050
Sub-total	<u>18,897</u>	<u>1,597</u>	<u>20,338</u>	<u>0</u>	<u>20,338</u>	<u>14,828</u>	<u>14,828</u>
Outside the Objective Area							
Tallangtallang	-	365	-	365	365	-	-
Allokarajae	-	1,150	-	1,150	1,150	-	-
Sub-total	<u>0</u>	<u>1,515</u>	<u>-</u>	<u>1,515</u>	<u>1,515</u>	<u>0</u>	<u>0</u>
<hr/>							
Total	25,158	3,529	27,016	1,515	28,531	21,506	21,506
(Technical Syst.			25,158	-	25,158	19,648	19,648)
(Semi-tech. Syst.			1,858	1,515	3,373	1,858	1,858)

^{/1} : Total area of Sadang System is 56,330 ha consisting of 50,330 ha of existing South System (36,770 ha in Kab. Pinrang and 13,560 ha in Kab. Sidrap) and 6,000 ha of North System (Right bank of the Sadang River under construction in Kab. Pinrang).

^{/2} : Not included irrigable area by the pump-up plan of the Sadang Project (PROSIDA).

Table 6.1 (2) Irrigation Area of the Existing System in Kab. Soppeng

(unit: ha)

Basin/system	Acc'g to PU Data Measured on 1/25,000 Map In Objective Area						
	Technic.	S-tech.	Exist.	Ext'ble	Total	Exist.	Irr'ble
L. Tempe Basin							
Latenreng (Welonge)	-	800	-	800	800	-	800
Salobunne	3,500	-	2,100	-	2,100	2,100	2,100
Lajaroko	2,000	-	1,250	-	1,250	1,250	1,250
Toweleng	-	450	450	-	450	450	450
Leworang kr.	-	(1,192)	(1,192)		(1,192)		
Leworang kr.	-	(708)	(708)		(708)		
Leworang Total	-	1,900	1,900	-	1,900	1,900	1,900
Tinco	-	1,500	500	1,000	1,500	500	1,500
Sub-total	<u>5,500</u>	<u>6,550</u>	<u>6,200</u>	<u>1,800</u>	<u>8,000</u>	<u>6,200</u>	<u>8,000</u>
Walanae R. Basin							
Talumae	-	800	340	-	340	340	340
Akampen	-	1,100	1,100	-	1,100	1,100	1,100
Lalenge	-	1,250	1,000	-	1,000	1,000	1,000
Lagarigi	-	300	200	-	200	200	200
Paroto	-	270	270	-	270	270	270
Takku	-	460	460	-	460	460	460
Cenna	-	214	214	-	214	214	214
Sub-total	<u>0</u>	<u>4,394</u>	<u>3,584</u>	<u>0</u>	<u>3,584</u>	<u>3,584</u>	<u>3,584</u>
Total	5,500	10,234	9,784	1,800	11,584	9,784	11,584
(Technical Syst.			3,350	-	3,350	3,350	3,350
(Semi-tech. Syst.			6,434	1,800	8,234	6,434	8,234

Table 6.1 (3) Irrigation Area of the Existing System in Kab. Wajo

Basin/system	(unit: ha)						
	Acc'g to PU Data	Measured on 1/25,000 Map			In Objective Area		
	Technic.	S-tech.	Exist.	Ext'ble	Total	Exist.	Irr'ble
Bila R. Basin							
Salodua	-	524	524	-	524	524	524
Belawa	-	1,500	1,500	-	1,500	1,500	1,500
Sub-total	<u>0</u>	<u>2,024</u>	<u>2,024</u>	<u>0</u>	<u>2,024</u>	<u>2,024</u>	<u>2,024</u>
Cenranae R. Basin							
Bulupatila	0	240	240	0	240	240	240
Outside the Objective Area							
Bakka	0	288	220	0	220	0	0
Total	0	2,552	2,484	0	2,484	2,264	2,264

Table 6.1 (4) Irrigation Area of the Existing System in Kab. Bone

(Unit: ha)

Basin/system	Acc'g to PU Data Measured on 1/25,000 Map				In Objective Area		
	Technic.	S-tech.	Exist.	Ext'ble	Total	Exist.	Irr'ble
Walanae R. Basin							
Maradda	-	900	430	-	430	430	430
Bengo	-	2,500	500	-	500	500	500
Tadang Jompi	-	400	240	-	240	240	240
Sub-total	<u>0</u>	<u>3,800</u>	<u>1,170</u>	<u>0</u>	<u>1,170</u>	<u>1,170</u>	<u>1,170</u>
Cenranae R. Basin							
Unyi	0	2,500	1,700	800	2,500	1,700	2,500
Sub-total (Objective Area)	0	6,300	2,870	800	3,670	2,870	3,670
Outside the Objective Area							
Lanca	-	646	646	-	646	-	-
Mico	-	83	50	-	50	-	-
Jaling	-	2,000	1,300	700	2,000	-	-
Packing	-	286	286	-	286	-	-
Palakka	5,540	-	5,540	-	5,540	-	-
Panyili	-	298	298	-	298	-	-
Tanate Buang	-	365	365	-	365	-	-
Pallengoreng	-	704	704	-	704	-	-
Wollangi	-	385	385	-	385	-	-
Melle	-	399	399	-	399	-	-
Pattiro	5,400	-	5,400	-	5,400	-	-
Pangisoreng	-	300	180	-	180	-	-
Lerang	-	800	140	-	140	-	-
Sub-total	<u>10,940</u>	<u>6,266</u>	<u>15,693</u>	<u>700</u>	<u>16,393</u>	<u>0</u>	<u>0</u>
<hr/>							
Total	10,940	12,566	18,563	1,500	20,063	2,870	3,670
(Technical Syst.			10,940	-	10,940	-	-)
(Semi-tech. Syst.			7,623	1,500	9,123	2,870	3,670)

Table 6.2 (1) Irrigation Area in Each Kecamatan in Kab. Sidrap
(In Technical and Semi-technical System)

(Unit: ha)

Name of System	Name of Kecamatan							Total
	Mari-tengngae	Panca Rijang	Baranti	Dua Pitue	Watang Pulu	Tellu Limpoe	Panca Lautang	
Sadang								
in M.P.A.	5,925	0	0	-	0	1,248	877	8,050
outside	432	824	2,900	-	1,354	0	0	5,510
total	6,357	824	2,900	-	1,354	1,248	877	13,560
Bulutimorang	4,037	1,300	-	-	-	-	-	5,337
Bulucenrana	-	-	-	6,261	-	-	-	6,261
<u>Technical system total</u>								
in M.P.A.	9,962	1,300	0	6,261	0	1,248	877	19,648
outside	432	824	2,900	0	1,354	0	0	5,510
total	10,394	2,124	2,900	6,261	1,354	1,248	877	25,158
Lancirang	-	-	-	292 (417) ^{/1}	-	-	-	292 (417) ^{/1}
Bilokka	-	-	-	-	-	-	931	931
Wattae	-	-	-	-	-	-	510	510 ^{/2}
<u>Semi-tech. system total</u> (in M.P.A.)	-	-	-	292 (417) ^{/1}	-	-	1,441	1,733 ^{/3} (1,858) ^{/1}
<u>Total in M.P.A.</u>	9,962	1,300	0	6,553 (6,678) ^{/1}	0	1,248	2,318	21,381 (21,506) ^{/1}
<u>Total in Kab.</u>	10,394	2,124	2,900	6,553 (6,678) ^{/1}	1,354	1,248	2,318	26,891 (27,016) ^{/1}

Note: ^{/1} : Including 125 ha in Kec. Belawa in Kab. Wajo.

^{/2} : According to the PU Data, irrigation area of Wattae is 666 ha. 50 ha is an area measured on 1/25,000 maps.

^{/3} : Area of other semi-technical systems outside M.P.A. (Master Plan Area or Objective Area of Master Plan) is excluded.

Table 6.2 (2) Irrigation Area in Each Kecamatan in Kab. Soppeng and Wajo
(In Technical and Semi-technical Irrigation System)

(Unit: ha)

Name of System	Name of Kecamatan					Total
	Mario Riawa	Lalabata	Lili Riaja	Lili Rilau	Mario Riwawo	
Kab. Soppeng						
Lajaroko	1,250	0	-	-	-	1,250
Salobunne	2,100	-	-	-	-	2,100
<u>Sub-total</u> (Technical sys.)	<u>3,350</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,350</u>
Towelang	50	400	-	-	-	450
Leworang Kr	-	1,192	-	-	-	1,192
Leworang Kn	-	708	-	-	-	708
Tinco	-	500	-	-	-	500
Talumae	-	-	340	-	-	340
Akampen	-	-	1,100	-	-	1,100
Lalenge	-	-	800	200	-	1,000
Lagarigi	-	-	50	150	-	200
Paroto	-	-	270	-	-	270
Takku	-	-	-	460	-	460
Cennae	-	-	-	-	214	214
<u>Sub-total</u> (Semi-tech. sys.)	<u>50</u>	<u>2,800</u>	<u>2,560</u>	<u>810</u>	<u>214</u>	<u>6,434</u>
<u>Total</u>	<u>3,400</u>	<u>2,800</u>	<u>2,560</u>	<u>810</u>	<u>214</u>	<u>9,784</u>

Name of System	Name of Kecamatan					Total
	Mani-angpajo	Belawa	Pammana	Total in M.P.A.	Majauleng	
Kab. Wajo						
Salodua	524	-	-	524	-	524
Lancirang ^{/1}	-	125 ^{/1}	-	125 ^{/1}	-	125 ^{/1}
Belawa	-	1,500	-	1,500	-	1,500
Bulupatira	-	-	240	240	-	240
Bakka	-	-	-	0	220	220
<u>Total</u> (Semi-tech. sys.)	<u>524</u>	<u>1,625</u> (1,500) ^{/2}	<u>240</u>	<u>2,389</u> (2,264) ^{/2}	<u>220</u>	<u>2,609</u> (2,484) ^{/2}

Note: ^{/1}: System in Kab. Sidrap.

^{/2}: Excluding area covered by Lancirang System in Kab. Sidrap.

Table 6.2 (3) Irrigation Area in Each Kecamatan in Kab. Bone
(In Technical and Semi-technical Systems)

(Unit: ha)								
Name of System		Name of Kecamatan						
In MPA	Bonto- Cani	Kahu	Libureng Ponre Lamuru	Lappa- riaja	Ulaweng Ajangale Cenrana	Dua- Bocoe	Tellu- Siattinge	Total
<u>Technical Sys.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Semi-tech. Sys.</u>								
Maradda	-	430	-	-	-	-	-	430
Bengo	-	-	-	500	-	-	-	500
Tadang Jompi	-	-	-	240	-	-	-	240
Unyi	-	-	-	-	-	1,700	-	1,700
<u>Sub-total</u>	<u>0</u>	<u>430</u>	<u>0</u>	<u>740</u>	<u>0</u>	<u>1,700</u>	<u>0</u>	<u>2,870</u>
Lanca ^{/1}	-	-	-	-	-	-	646	646
<u>Total</u>	<u>0</u>	<u>430</u>	<u>0</u>	<u>740</u>	<u>0</u>	<u>1,700</u>	<u>646</u>	<u>3,516</u>

Name of System								
Name of Kecamatan								
Outside MPA	Awang- Pone	Pala- kka	Tanate- Riattang	Bare- bbo	Sibu- lue	Cine	Mare Tonre Salomekko Kajuara	Total
<u>Technical Sys.</u>								
Palakka	100*	1,940*	2,400*	1,100*	-	-	-	5,540
Pattiro	-	-	-	3,500*	1,650*	250*	-	5,400
<u>Total</u>	<u>100*</u>	<u>1,940*</u>	<u>2,400*</u>	<u>4,600*</u>	<u>1,650*</u>	<u>250*</u>	<u>0</u>	<u>10,940</u>
<u>Semi-tech. Sys.</u>								
Mico	-	50	-	-	-	-	-	50
Jaling	1,300	-	-	-	-	-	-	1,300
Paccing	286	-	-	-	-	-	-	286
Panyili	-	298	-	-	-	-	-	298
Tanate Buang	-	300*	-	65*	-	-	-	365
Pallengoreng	-	-	654*	50*	-	-	-	704
Wollang	-	270*	-	115*	-	-	-	385
Melle	-	269*	-	130*	-	-	-	399
Pangisoreng	-	-	-	-	-	180	-	180
Lerang	-	-	-	-	-	140	-	140
<u>Total</u>	<u>1,586</u>	<u>1,187*</u>	<u>654*</u>	<u>360*</u>	<u>0</u>	<u>320</u>	<u>0</u>	<u>4,107</u>
<u>Total including Lanca</u>								<u>4,753</u>
Total Semi-technical System:								7,623
Total Area in Kab. Bone :								18,563

Note: /1: Lanca system is located outside the Objective Area (Master Plan (Master Plan Area: MPA) in Kec. Tellu Siattinge of which western part is in MPA.

/2: Area with * shows approximately.

Table 6.3 (1) Irrigation Area Developed During Recent Five Years (PELITA II)

Name of System	Completed Year	Irrigation Area Before PELITA II ha	F/Y 1974/75			F/Y 1975/76			F/Y 1976/77			F/Y 1977/78			F/Y 1978/79					
			Expen- diture 10 ⁶ Rp	Irrig. Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area				
				Dev 'ed	Acc 'd		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}			
Kab. SIDRAP																				
1	Bulucenrana	-	3,600 (3,600)	29.6	900	4,500	30.8	797	5,297 (5,297)	39.9	-	5,297 (5,297)	20.1	-	5,297 (5,297)	113.2	964	6,261 (6,261)		
2	Bulutimorang ^{/3}	-	3,770	9.6	(390)	4,160	6.0	(256)	4,416 (4,416)	5.7	106	4,522 (4,522)	6.2	419	4,941 (1,491)	10.3	396	5,337 (5,337)		
<u>Sub-total</u>			<u>7,370</u>	<u>39.2</u>	<u>1,290</u>	<u>8,660</u>	<u>36.8</u>	<u>1,053</u>	<u>9,713</u>	<u>45.6</u>	<u>106</u>	<u>9,819</u>	<u>26.3</u>	<u>419</u>	<u>10,238</u>	<u>123.5</u>	<u>1,360</u>	<u>11,598 (11,598)</u>		
3	Sadang ^{/6}	-	13,560	-	-	13,560	-	-	13,560	-	-	13,560	-	-	13,560	-	-	13,560 (13,560)		
<u>Total of Technical Sys.</u>			<u>20,930</u>	<u>-</u>	<u>-</u>	<u>22,220</u>	<u>-</u>	<u>-</u>	<u>23,273</u>	<u>-</u>	<u>-</u>	<u>23,379</u>	<u>-</u>	<u>-</u>	<u>23,798</u>	<u>-</u>	<u>-</u>	<u>25,158 (25,158)</u>		
1	Lancirang	1976	0	0	0	5.0	417	417 (417)	0	0	417 (417)	0.7	0	417 (417)	0.8	0	417 (417)			
2	Wattae	1976	0	0	0	0	0	0 (666)	4.9	510	510 (666)	0	0	510 (666)	0	0	510 (666)			
3	Bilokka	1976	0	0	0	0	0	0 (847)	23.0	847	847 (847)	0	43	890 (890)	0	41	931 (931)			
4	Tallatallang	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (365)			
5	Allokarajae	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (1,150)			
<u>Total of Semi-tech. Sys.</u>			<u>0</u>	<u>0</u>	<u>0</u>	<u>5.0</u>	<u>417</u>	<u>417</u>	<u>27.9</u>	<u>1,357</u>	<u>1,774</u>	<u>0.7</u>	<u>43</u>	<u>1,817</u>	<u>0.8</u>	<u>41</u>	<u>1,858 (3,529)</u>			
<u>Total (Exc. Sadang)</u>			<u>7,370</u>	<u>39.2</u>	<u>1,290</u>	<u>8,660</u>	<u>41.8</u>	<u>1,470</u>	<u>10,130</u>	<u>73.5</u>	<u>1,463</u>	<u>11,593</u>	<u>27.0</u>	<u>462</u>	<u>12,055</u>	<u>124.3</u>	<u>1,401</u>	<u>13,456 (15,127)</u>		
Kab. SOPPENG																				
1	Salobunne ^{/4}	-	1,050 (750)	22.1	230	1,280	23.4	420	1,700 (1,600)	19.9	400	2,100 (1,200)	23.3	0	2,100 (1,400)	49.4	0	2,100 (3,500)		
2	Lajaroko	-	1,250 (1,250)	0	0	1,250	1.2	0	1,250 (1,250)	1.3	0	1,250 (1,250)	1.2	0	1,250 (1,175)	4.9	0	1,250 (2,000)		
<u>Total of Technical Sys.</u>			<u>2,300 (2,000)</u>	<u>22.1</u>	<u>230</u>	<u>2,530</u>	<u>24.6</u>	<u>420</u>	<u>2,950</u>	<u>21.2</u>	<u>400</u>	<u>3,350</u>	<u>24.5</u>	<u>0</u>	<u>3,350</u>	<u>54.3</u>	<u>0</u>	<u>3,350 (5,500)</u>		
1	Toweleng	-	250	0	0	250	0	0	250 (250)	0	50	300 (300)	0	0	300 (300)	0	150	450 (450)		
2	Leworang kr	-	1,192	0	0	1,192	0	0	1,192 (1,192)	1.1	0	1,192 (1,192)	1.0	0	1,192 (1,192)	2.0	0	1,192 (1,192)		
3	Leworang kn	1975	0	15.7	650	650	0	58	708 (708)	0	0	708 (708)	0	0	708 (708)	0	0	708 (708)		
4	Tinco	-	500	0	0	500	0	0	500 (500)	0	0	500 (500)	0	0	500 (500)	0	0	500 (1,500)		
5	Talumae	-	250	0	0	250	0	0	250 (250)	0	0	250 (250)	0	0	340 (375)	0	0	340 (800)		
6	Akampeng	-	1,100	0	0	1,100	0	0	1,100 (1,100)	0	0	1,100 (1,100)	0	0	1,100 (1,100)	0	0	1,100 (1,100)		
7	Lalenge	-	1,000	0	0	1,000	0	0	1,000 (1,250)	0.7	0	1,000 (1,250)	0.5	0	1,000 (1,250)	0.9	0	1,000 (1,250)		
8	Lagarigi	-	200	0	0	200	0	0	200 (275)	0	0	200 (275)	0	0	200 (275)	0	0	200 (300)		
9	Cennae	1978	0	0	0	0	50 ^{/5}	50	(50)	0	0	50 (50)	0	0	50 (50)	11.4	164	214 (214)		

Table 6.3 (2) Irrigation Area Developed During Recent Five Years (PELITA II)

Name of System	Completed Year	/1 Irrigation Area Before PELITA II ha	F/Y 1974/75			F/Y 1975/76				F/Y 1976/77				F/Y 1977/78				F/Y 1978/79				
			Expen- diture 10 ⁶ Rp	Irrig. Area		Expen- diture 10 ⁶ Rp	Irrigation Area			Expen- diture 10 ⁶ Rp	Irrigation Area			Expen- diture 10 ⁶ Rp	Irrigation Area			Expen- diture 10 ⁶ Rp	Irrigation Area			
				Dev 'ed	Acc 'd		Dev 'ed	Accumulated	Dev 'ed		Accumulated	Dev 'ed	Accumulated		Dev 'ed	Accumulated						
10 Paroto	1976	0	0	0	0	3.9	200	200	(270)	0	0	200	(200)	0.7	70	270	(270)	0.8	0	270	(270)	
11 Takku	1976	0	0	0	0	14.8	460	460	(460)	0	0	460	(460)	0.7	0	460	(460)	0.8	0	460	(460)	
12 Latenreng		0	0	0	0	0	0	0	(300)	0	0	0	(300)	0	0	0	(300)	0	0	0	(800)	
<u>Total of Semi-tech. Sys.</u>		<u>4,492</u>	<u>(3,600)</u>	<u>15.7</u>	<u>650</u>	<u>5,142</u>	<u>18.7</u>	<u>768</u>	<u>5,910</u>	<u>1.8</u>	<u>50</u>	<u>5,960</u>		<u>2.9</u>	<u>160</u>	<u>6,120</u>		<u>15.9</u>	<u>314</u>	<u>6,434</u>	<u>(9,044)</u>	
<u>Total</u>		<u>6,792</u>	<u>(5,600)</u>	<u>37.8</u>	<u>880</u>	<u>7,672</u>	<u>43.3</u>	<u>1,188</u>	<u>8,860</u>	<u>23.0</u>	<u>450</u>	<u>9,310</u>		<u>27.4</u>	<u>160</u>	<u>9,470</u>		<u>70.2</u>	<u>314</u>	<u>9,784</u>	<u>(14,544)</u>	
Kab. WAJO																						
1 Belawa	-	1,500	(500)	0	0	1,500	0	0	1,500	(1,500)	0	0	1,500	(1,500)	0	0	1,500	(1,500)	0	0	1,500	(1,500)
2 Salodua	1976	0	0	0	0	17.7	524	524	(524)	0	0	524	(524)	0	0	524	(524)	0	0	524	(524)	
3 Bulupatila	1976	0	0	0	0	10.2	240	240	(240)	0	0	240	(240)	0.7	0	240	(240)	0.8	0	240	(240)	
4 Bakke	1978	0	0	0	0	0	0	0	(67)	0	0	0	(100)	0	0	0	(100)	18.3	220	220	(288)	
<u>Total (Semi-tech. Sys.)</u>		<u>1,500</u>	<u>(500)</u>	<u>0</u>	<u>0</u>	<u>1,500</u>	<u>27.9</u>	<u>764</u>	<u>2,264</u>	<u>0</u>	<u>0</u>	<u>2,264</u>		<u>0.7</u>	<u>0</u>	<u>2,264</u>		<u>19.1</u>	<u>220</u>	<u>2,484</u>	<u>(2,552)</u>	
<u>Total (PU Seksi Peng.)</u>		<u>8,292</u>	<u>(6,100)</u>	<u>37.8</u>	<u>880</u>	<u>9,172</u>	<u>71.2</u>	<u>1,952</u>	<u>11,124</u>	<u>23.0</u>	<u>450</u>	<u>11,574</u>		<u>28.1</u>	<u>160</u>	<u>11,734</u>		<u>89.3</u>	<u>534</u>	<u>12,268</u>	<u>(17,096)</u>	
Kab. BONE																						
1 Palakka	1923	5,540		24.5	0	5,540	28.1	0	5,540	(5,540)	27.4	0	5,540	(5,540)	37.4	0	5,540	(5,540)	33.7	0	5,540	(5,540)
2 Pattiro	1925	5,400		28.8	0	5,400	30.1	0	5,400	(5,400)	44.8	0	5,400	(5,400)	38.8	0	5,400	(5,400)	35.6	0	5,400	(5,400)
<u>Total of Technical Sys.</u>		<u>10,940</u>	<u>(7,000)</u>	<u>53.3</u>	<u>0</u>	<u>10,940</u>	<u>58.2</u>	<u>0</u>	<u>10,940</u>		<u>72.2</u>	<u>0</u>	<u>10,940</u>		<u>76.2</u>	<u>0</u>	<u>10,940</u>		<u>69.3</u>	<u>0</u>	<u>10,940</u>	<u>(10,940)</u>
1 Maradda	1920	430		0	0	430	0	0	430	(720)	0	0	430	(900)	0	0	430	(855)	0	0	430	(900)
2 Bengo	1938	500		0	0	500	0	0	500	(2,000)	0	0	500	(2,500)	0.7	0	500	(2,500)	0.8	0	500	(2,500)
3 Tadang Jompi	1976	0		0	0	7.4	240	240	(400)	0	0	240	(400)	0	0	240	(400)	0	0	240	(400)	
4 Unji	1944	1,700		0	0	1,700	0	0	1,700	(2,250)	0.7	0	1,700	(2,500)	0.5	0	1,700	(2,250)	0.8	0	1,700	(2,500)
<u>Sub-total in Obj. Area</u>		<u>2,630</u>		<u>0</u>	<u>0</u>	<u>2,630</u>	<u>7.4</u>	<u>240</u>	<u>2,870</u>		<u>0.7</u>	<u>0</u>	<u>2,870</u>		<u>1.2</u>	<u>0</u>	<u>2,870</u>		<u>1.6</u>	<u>0</u>	<u>2,870</u>	<u>(6,300)</u>
5 Lanca	1976	0		0	0	6.5	200	200	(200)	0	446	646	(646)	0	0	646	(646)	0	0	646	(646)	
6 Mico	1978	0		0	0	0	0	0	(40)	0	0	0	(83)	17.2	50	50	(83)	0	0	50	(83)	
7 Jaling	1944	1,300		0	0	1,300	2.0	0	1,300	(1,800)	1.2	0	1,300	(1,800)	3.8	0	1,300	(1,700)	1.5	0	1,300	(2,000)

Table 6.3 (3) Irrigation Area Developed During Recent Five Years (PELITA II)

Name of System	Completed Year	/1 Irrigation Area Before PELITA II ha	F/Y 1974/75			F/Y 1975/76			F/Y 1976/77			F/Y 1977/78			F/Y 1978/79						
			Expen- diture 10 ⁶ Rp	Irrig. Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area		Expen- diture 10 ⁶ Rp	Irrigation Area					
				Dev 'ed	Acc 'd		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}		Dev 'ed	Accumulated ^{/2}				
8 Pacing	1978	0	0	0	0	0	0	0	(100)	0	0	0	(143)	13.8	229	229	(229)	0	57	286	(286)
9 Panyili	1976	0	0	0	0	0	0	0	(283)	10.5	283	283	(283)	0	15	298	(238)	0	0	298	(298)
10 Wollanga	1974	0	8.8	229	229	0	0	229	(229)	0	137	366	(366)	0.7	19	385	(385)	0.8	0	385	(385)
11 Melle	1976	0	0	0	0	0	0	0	(399)	13.3	399	399	(399)	0	0	399	(399)	0	0	399	(399)
12 Tanate Buang	1975	0	0	0	19.7	365	365	(365)	0	0	365	(365)	0	0	365	(365)	0	0	365	(365)	
13 Pallengoreng(1918)	1976	0	0	0	19.3	630	630	(630)	0	74	704	(704)	0	0	704	(704)	0	0	704	(704)	
14 Pangisoreng	1976	0	0	0	8.4	180	180	(180)	0	0	180	(210)	0.7	0	180	(180)	0.8	0	180	(300)	
15 Lerang	(1920)	140	0	0	140	0	0	140	(560)	0	0	140	(480)	0	0	140	(480)	0	0	140	(800)
<u>Total of Semi-tech. Sys.</u>		<u>4,070</u>	<u>(5,000)</u>	<u>8.8</u>	<u>229</u>	<u>4,299</u>	<u>63.3</u>	<u>1,615</u>	<u>5,914</u>	<u>25.7</u>	<u>1,339</u>	<u>7,253</u>		<u>37.4</u>	<u>313</u>	<u>7,566</u>		<u>4.8</u>	<u>57</u>	<u>7,623</u>	<u>(12,566)</u>
<u>Total</u>		<u>15,010</u>	<u>(12,000)</u>	<u>62.1</u>	<u>229</u>	<u>15,239</u>	<u>121.5</u>	<u>1,615</u>	<u>16,854</u>	<u>97.9</u>	<u>1,339</u>	<u>18,193</u>		<u>113.6</u>	<u>313</u>	<u>18,506</u>		<u>74.1</u>	<u>57</u>	<u>18,563</u>	<u>(23,506)</u>
Total (4 Kabupaten)		30,672		139.1	2,399	33,071	234.5	5,037	38,108	194.4	3,252	41,360		168.6	935	42,295		287.7	1,992	44,287	(55,729)
(Including Sadang)		44,232		-	-	46,631	-	-	51,668	-	-	54,920		-	-	55,855		-	-	57,847	(69,289)

/1: Figures in () in this Column is assumed based on the Preliminary Study Report (O.T.C.A. July 1974)

/2: Figures in () in those Column shows paddy field area planted in wet season according to Item No. 33 on Table 1.1.

/3: Figures in () of developed area in 1974/75 & 1975/76 is estimated proportionately to the expenditure (Budget)

/4: Estimated based on the progress of works and total irrigation area in respective years.

/5: As microhydro-power generation was commenced on January, 1975 using same intake facility, irrigation area is added from 1975, through other facilities are completed in 1978.

/6: In the Sadang System, the major works was completed by the end of World War II. Their rehabilitation and constructions works of small works are being implemented since 1971, however, under the PROSIDA Project. And it was scheduled to be completed than in South Area by the end of 1975. Although implementation of small works on the tertiary canal systems are still continued at present, irrigation area in Kab. Sidrap during past five years is taken as same as present area.

Table 6.4 Inventory of Existing Irrigation Systems in the Objective Area

Name of System	Irrigable Area (ha)	Main Canal (km)	2ry Canal (km)	3ry Canal (km)	Total (km)	Canal Density (m/ha)	Drain Canal (km)	Insp. Path (km)	Div. Str. (no.)
1. Kab. SIDRAP									
Bulucenrana /1	6,261	9.4	36.3	64.4	110.1	17.6	3.0	2.2	9
Lancirang	417	1.0	1.2	-	2.2	5.3	-	-	2
Bulutimorang /1	5,337	2.1	14.8	36.6	53.5	10.0	-	2.1	1
Sadang /1	13,560	17.1	85.9	342.0	445.0	32.8	160.0	x	16
(w/Kab. PINRANG)	(50,330)	(44.9)	(287.3)	(1,269.4)	(1,601.6)	(31.8)	(432.8)	(89.1)	(141)
Bilokka	931	8.1	-	-	8.1	8.7	-	-	4
Wattae	510	1.8	-	-	1.8	3.5	-	-	-
Total	27,016	39.5	138.2	443.0	620.7	23.0	163.0		
2. Kab. SOPPENG									
Lajaroko /1	1,250	0.75	4.1	7.8	12.65	10.1	x	4.2	2
Salobunne /1	2,100	5.1	10.2	18.6	33.9	16.1	6.0	5.1	10
Towelang	450	1.1	-	(2.8)	1.1	2.4	x	x	1
Leworeng kiri	1,192	1.0	1.2	(9.8)	2.2	1.8	x	x	2
Leworeng kanan	708	5.2	3.8	(3.4)	9.0	12.7	x	x	3
Tinco	500	-	2.3	(4.8)	2.3	4.6	x	x	2
Talmae	340	1.5	1.8	(4.5)	3.3	9.7	x	x	2
Akampen	1,100	2.5	1.1	(7.3)	3.6	3.3	-	-	4
Lalenge	1,000	2.25	1.0	(6.4)	3.25	3.3	-	-	1
Lagarigi	200	-	3.85	(2.5)	3.85	19.3	-	-	1
Cennae	214	1.4	0.5	(4.8)	1.9	8.9	-	-	1
Paroto	270	0.25	-	(2.5)	0.25	0.9	x	x	1
Takku	460	0.2	2.0	(4.5)	2.2	4.8	x	x	3
Total	9,784	21.25	31.85	26.4 (79.7)	79.5 (132.8)	8.1 (13.6)	6.0		
3. Kab. WAJO									
Belawa	1,500	1.5	3.5	(4.8)	5.0	3.3	x	x	2
Bulupatila	240	1.0	-	(1.5)	1.0	4.2	x	x	2
Salodua	524	1.2	4.5	(1.5)	5.7	10.9	x	x	4
Bakke	220	0.5	-	-	0.5	2.3	-	-	-
Total	2,484	4.2	8.0	0 (7.8)	12.2 (20.0)	4.9 (8.1)	0		
4. Kab. BONE									
Maradda	430	2.9	-	-	2.9	6.7	-	-	2
Bengo	500	4.0	2.0	-	6.0	12.0	1.2	-	3
Tadang Jompi	240	0.6	-	-	0.6	2.5	-	-	1
Unyi	1,700	5.0	4.0	-	9.0	5.3	0.8	-	1
Sub-total	2,870	12.5	6.0	-	18.5	6.4	2.0		
Outside the Objective Area	15,693	52.8	44.1	104.0	200.9	5.4	16.2	6.0	
Total in Bone	18,563	65.3	50.1	104.0	219.4	11.8	18.2		
TOTAL	57,847	130.25	228.15	573.4	931.8	16.1	187.2		

Note : /1 The technical irrigation system

Source: The Reports from and interview survey at three PU Seksi Pengairan; Sidrap-Enrekang, Soppeng-Wajo and Bone.
(- means nil, x means not available)

Table 6.5 Present Conditions of Existing Irrigation Facilities in the Objective Area

No. ^{/1}	Name of System	Class	Type of Intake struc.	Condition of Intake	Canal & Structure	Type of ^{/2} project
<u>Northern Area (Bila River Basin)</u>						
1.	Bulu Cenrana	Tech.	Fix-Weir, gate	Very G.	Good	Reh.
2.	Lancirang	Semi.	Natural, gate	Bad	Bad	Sed.
3.	Belawa	Semi.	Natural, gate	Bad	Bad	Exp.
4.	Salodua	Semi.	Fix-Weir	Good	Bad	Sed.
<u>North & West to L. Sidenreng (L. Sidenreng Basin)</u>						
5.	Bulutimorang	Tech.	Fix-Weir, gate	Very G.	Good	Exp.
6.	Sadang South	Tech.	Movable dam	Very G.	Very g.	PROSIDA
7.	Bilokka	Semi.	Fix-Weir	Good	Bad	Sed.
8.	Wattae	Semi	Fix-Weir	Good	Bad	Sed.
<u>West & South to L. Tempe (L. Tempe & Walanae River Basin)</u>						
9.	Latenreng	(Semi) ^{/3}	Fix-Weir	Good	Not Comp.	Non PU
10.	Lajarako	Tech	Fix-Weir, gate	Very G.	Fairly G.	Exp.
11.	Salobunne	Tech.	Fix-Weir, gate	Very G.	Good	Reh.
12.	Towereng	Semi	Fix-Weir	Good	Bad	Non PU
-	Leworang Intake	-	Fix-Weir, gate	Very G.	-	-
13.	Leworang Kr.	Semi	-	-	Bad	Exp.
14.	Leworang Kn.	Semi	-	-	Fairly G.	Sed.
15.	Tinco	(Semi) ^{/3}	Natural ^{/4}	Bad	Bad	Non PU
16.	Talumae	Semi	Fix-Weir ^{/5}	Good	Bad	Non PU
17.	Akampung	Semi	Fix-Weir ^{/5}	Fairly G.	Bad	Exp.
18.	Lalenge	Semi	Fix-Weir	Good	Fairly G.	Exp.
19.	Lagarigi	Semi	Fix-Weir	Very G.	Fairly G.	Non PU
20.	Cennae	Semi	Gabion, gate	Fairly G.	Construc.	Sed.
21.	Paroto	Semi	Fix-Weir	Good	Bad	Sed.
22.	Takku	Semi	Fix-Weir	Good	Bad	Sed.
<u>Southern Inland (Walanae River Basin)</u>						
23.	Maradda	Semi	Fix-Weir	Very G.	Fairly G.	Exp.
24.	Bengo	Semi	Fix-Weir	Good	Fairly G.	Exp.
25.	Tadang Jompi	Semi	Spring water	Good	Bad	Sed.
<u>Eastern Area (Cenranae River Basin)</u>						
26.	Bulu Patila	Semi	Natural	Bad	Bad	Sed.
27.	Unyi	Semi	Fix-Weir ^{/5}	Fairly G.	Fairly G.	Exp.

Note: ^{/1} : Referred to Fig. 6.1

^{/2}) Type of Project is as followings

Reh. : Project under Rehabilitation Sub-Division, DPUP Sil-Sel.

Exp. : Project under Exploitation & Maintenance Sub-Division, DPUP Sul-Se

Sed. : Simple (Sederhana) Irrigation Project of DPUP Sul-Sel.

Non PU: Project under regional government (Bupati).

^{/3} : Same quality as village irrigation system.

^{/4} : Temporary weir of boulders without gate structure.

^{/5} : Fixed weir portion is repaired with gabion after damaged by flood.

Table 6.6 Catchment Area of Surface Runoff Water Source of the Existing Irrigation System

Name of System	Water Source	Catchment Area (CA) (km ²)	Irrigable Area (IA) (ha)	CA/IA
1. Kab. Sidrap				
Bilokka & Wattae	S. Bilokka	59	1,441	4.1
Bulucenrana	S. Boya	513	6,261	8.2
Lancirang	Dist. of Lancirang	9 (180/20)	417	2.2
Sub-total (Source in the objective area)		581	8,119	7.2
Bulutimorang	S. Reppang	74	5,337	1.4
Total in Kab. Sidrap		655	13,456	4.9
Sadang	S. Sadang		13,560	-
	"	(5,875)	(56,330) ^{/2}	10.4
2. Kab. Soppeng				
Salobunne	S. Salobunne	49	2,100 ^{/1}	2.3
Latenreng	S. Lajaroko	(48)	800 ^{/1}	(6.0)
Lajaroko	S. Lajaroko	-	1,250	-
	S. Lajaroko	54	2,050	2.6
	S. Batu-Batu	(103)	(4,150)	(2.5)
Towelang	S. Towelang	32	450	7.1
Leworang (Kr & Kn)	S. Leworang	118	1,900	6.2
Tinco & Talumae	S. Lewo	66	1,840 ^{/1}	3.6
Akampen	S. Belo	46	1,100	4.2
Lalenge & Lagarigi	S. Awo	96	1,200	8.0
Paroto	S. Paroto	7	270	2.6
Takku	S. Takku	1.6	460	0.3
Total exc. S. Langkemme		469.6	11,370	4.2
Cemmae	S. Langkemme	102	214	47.7
Total in Kab. Soppeng		571.6	11,584	4.9
3. Kab. Wajo				
Salodua	S. Manumanu	8	524	1.5
Bulupatila	(Drain in field)	5 (50/10)	240	2.1
Sub-total exc. S. Bila		13	264	1.7
Belawa	S. Bila	1,360	1,500	-
Total (Source in the objective area)		-	2,264	-
Bakke		0.2	220	0.1
Total in Kab. Wajo		-	2,484	-
4. Kab. Bone				
Maradda	S. Maradda	21	430	4.9
Bengo	S. Takka	21	500	4.2
Unyi	S. Unyi	136	2,500 ^{/1}	5.4
Sub-total (Source in the objective area)		178	3,430	5.2
2 technical systems	S. Palakka & Pattiro	308	10,940	2.8
5 semi-tech. systems	Small & medium rivers	159	4,124	3.9
Sub-total (Source outside the objective area)		467	15,064	3.1
Total (Surface runoff in Kab. Bone)		645	18,494	3.5
4 semi-tech. systems	Spring water	-	1,569	-
Total in Kab. Bone		-	20,063	-
Total (4 Kab.) Exc. Sadang & Bila		1,884.6	44,298	4.3

Note: ^{/1} Irrigable area in Kab. Soppeng and Bone including planned area. See Table 6.1.

^{/2} Including irrigation area in Kab. Pinrang 36,770 ha and 6,000 ha under-construction.

Table 6.7 (1) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Sidrap during Recent Five Years

Unit: ha

Description ^{/4}	1974/75				1975/76				1976/77				1977/78				1978/79			
	1974 (Wet)		1974/5 (Dry)		1975 (Wet)		1975/6 (Dry)		1976 (Wet)		1976/7 (Dry)		1977 (Wet)		1977/8 (Dry)		1978 (Wet)		1978/9 (Dry)	
	Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5		Irrigable Area/5	
	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd
in MPA																				
Biloka	0				0				847 (847)				890 (890)				931 (931)			
	0	0	0	0	0	0	0	0	847	808	0	0	890	874	240	240	-	-	-	-
	-	-	-	-	(847)	(799)	(0)	(0)	(847)	(808)	(0)	(0)	(890)	(874)	(240)	(240)	/1	-	-	-
Wattae	0				0				510				510				510 (666)			
	0	0	0	0	0	0	0	0	510	476	0	0	510	504	119	119	-	-	-	-
	-	-	-	-	(666)	(631)	(0)	(0)	(666)	(622)	(0)	(0)	(666)	(658)	(155)	(155)	/1	-	-	-
Lancirang	0				417				417				417				417 (417)			
	0	0	0	0	417	394	0	0	417	417	0	0	417	417	110	101	-	-	-	-
	-	-	-	-	(417)	(394)	(0)	(0)	(417)	(417)	(0)	(0)	(417)	(417)	(110)	(101)	/1	-	-	-
Bulucnrana	4,500				5,297				5,297				5,297 (5,297)				6,261 (6,261)			
	4,500	4,280	3,506	3,488	5,297	5,297	4,420	4,350	5,297	4,861	4,965	4,965	5,297	4,950	5,127	5,127	5,700	-	-	-
	-	-	-	-	(5,297)	(5,297)	(4,420)	(4,350)	(5,297)	(4,861)	(4,965)	(4,965)	(5,297)	(4,950)	(5,127)	(5,127)	-	-	-	-
PA/IA (HA/PA)%	100	(95.1)*	77.9*	(99.5)*	100	(100)	83.4	(98.4)	100	(91.8)	93.7	(100)	100	(93.4)	96.8	(100)	-	-	-	-
Sub-total in MPA	4,500				5,714				7,071				7,114				8,119 (8,275)			
Excl. Sadang	4,500	4,280	3,506	3,488	5,714	5,691	4,420	4,350	7,071	6,562	4,965	4,965	7,114	6,745	5,596	5,587	-	-	-	-
PA/IA (HA/PA)%	100	(95.1)	77.9	(99.5)	100	(99.6)	(77.4)	(98.4)	100	(92.8)	70.2	(100)	100	(94.8)	78.7	(99.8)	-	-	-	-
Sadang																				
Whole	50,330				50,330				50,330				50,330				50,330 (50,330)			
(PU Data)/1	-	-	-	-	(24,577)	(24,491)	(30,900)	(30,811)	(26,686)	(25,766)	(32,466)	(32,216)	(38,183)	(35,800)	(42,226)	(39,536)	/1	-	-	-
PA/IA (HA/PA)%	-	-	-	-	48.8	(99.65)	61.4	(99.71)	53.0	(96.55)	64.5	(99.23)	75.9	(93.76)	83.9	(93.63)	-	-	-	-
In Sidrap	13,560				13,560				13,560				13,560				13,560 (13,560)			
(PU Data)/2	(10,583)	-	(10,630)	-	(11,001)	-	(11,428)	-	(12,350)	-	(12,564)	-	(11,342)	-	(11,861)	-	-	-	-	-
PA/IA (HA/PA)%	10,583	10,228	10,630	10,366	11,001	10,962	11,428	11,395	12,350	11,924	12,564	12,467	11,342	10,634	11,861	11,105	-	-	-	-
	78.0	(96.65)*	78.4	(97.52)*	81.1	(99.65)	84.3	(99.71)	91.1	(96.55)	92.7	(99.23)	83.6	(93.76)	87.5	(93.63)	-	-	-	-
in MPA	8,050				8,050				8,050				8,050				8,050 (8,050)			
(59.37%)	6,283	6,072	6,311	6,154	6,531	6,508	6,784	6,765	7,332	7,079	7,399	7,401	6,733	6,313	7,041	6,593	-	-	-	-
Bulutimorang	4,160				4,416				4,522				4,941				5,337 (5,337)			
	4,160	3,732	3,149	3,146	4,416	4,381	3,642	3,642	4,522	3,851	3,769	3,763	4,941	4,189	4,600	4,600	-	-	-	-
	-	-	-	-	(4,416)	(4,381)	(3,642)	(3,642)	(4,522)	(3,851)	(3,769)	(3,763)	(4,941)	(4,189)	(4,600)	(4,600)	/1	-	-	-
PA/IA (HA/PA)%	100*	(89.7)*	75.7*	(99.9)*	100	(99.2)	82.5	(100)	100	(85.2)	83.3	(99.8)	100	(84.8)	93.1	(100)	-	-	-	-
Total in MPA	16,710				18,180				19,643				20,105				21,506 (26,662)			
	14,943	14,084	12,966	12,788	16,661	16,580	14,846	14,757	18,925	17,492	16,133	16,129	18,788	17,247	17,237	16,780	-	-	-	-
PA/IA (HA/PA)%	89.4	(94.3)	77.6	(98.6)	91.6	(99.5)	81.7	(99.4)	96.3	(92.4)	82.1	(100)	93.4	(91.8)	85.7	(97.3)	-	-	-	-
Total in Kab.	22,220				23,690				25,153				25,615				27,016 (27,172)			
Sidrap	19,243	18,240	17,285	17,000	21,131	21,034	19,490	19,387	23,943	22,337	21,198	21,195	23,397	21,568	22,057	21,292	-	-	-	-
PA/IA (HA/PA)%	86.6	(94.8)	77.8	(98.4)	89.2	(99.5)	82.3	(99.5)	95.2	(93.3)	84.3	(100)	91.3	(92.2)	86.1	(96.5)	-	-	-	-
BIMAS/INMAS	3,705	3,496	8,572	8,569	6,832	6,824	6,827	6,491	17,249	16,149	15,471	15,470	22,384	18,878	18,139	18,139	-	-	-	-
Pd/Pr (HA/PA)%	-	(94.4)	231	(100)	-	(99.9)	99.9	(95.1)	-	(93.6)	89.7	(100)	-	(84.3)	81.0	(100)	-	-	-	-
Whole Paddy /3	25,760	24,421	18,748	17,469	35,454	34,366	23,241	23,136	36,982	32,511	21,403	21,369	39,949	32,864	-	-	-	-	-	-
Pd/Pr (HA/PA)%	-	(94.8)	72.8	(93.2)	-	(96.9)	65.6	(99.5)	-	(87.9)	57.9	(99.8)	-	(82.3)	-	-	-	-	-	-
Rainfed	6,517	6,181	1,463	469	14,323	13,332	3,751	3,749	13,039	10,174	205	174	16,552	11,296	-	-	-	-	-	-
Pd/Pr (HA/PA)%	-	(94.8)	22.4	(32.1)	-	(93.1)	26.2	(99.9)	-	(78.0)	1.6	(84.8)	-	(68.2)	-	-	-	-	-	-

Table 6.7 (2) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Sidrap during Recent Five Years

- Note : /1 Figures in () are planted area and harvested area in each, system according to "Luas Sawah Areal Baku dan Luas Sawah Areal Tanam Propinsi Sul-Sel", Bid. Pengairan DPUP Sul-Sel, Oct. 1978.
- /2 Figures in () are planted area in Kab. Sidrap in Sadang System according to "Laporan Tahunan Tahun 1978, Sidrap-Enrekang", PU Seksi Pengairan Sidrap-Enrekang, May 1978.
- /3 Planted area and harvested area of whole paddy (in Kab. Sidrap) is according to Table 3.4.2 in Progress Report on the Master Plan Study CESSWRDP, Feb. 1979
- /4 Name of system with underline shown technical irrigation system, system without underline is semi technical system, and rainfed includes village irrigation system.
- /5 Irrigable area in each year is based on Table 6.3 and it shown in () is according to "List of Inventory of Irrigation Area in 1978" DPUP Sul-Sel. October, 1979.
- /6 (*) Planted area and harvested area in 1974/75 and harvested area in Sadang System in Sidrap are estimated as follows:
- (1) HA/PA of whole Sadang is applied for HA/PA in Sidrap during 3 years from 1975 to 1977.
 - (2) HA/PA of Bulucenrana, Bulutimorang and Sadang is an average of respective season's paddy during 3 years from 1975 to 1977.
 - (3) PA/IA of Bulucenrana and Bulutimorang of 1974 wet season paddy is assumed as 100%.
(an average of 3 years)
 - (4) PA/IA of Bulucenrana and Bulutimorang of 1974/75 dry season paddy is assumed as 77.9% and 75.7% respectively based on the increase rate during 3 years from 1975 to 1977 estimated by least squares method.
- /7 PA: Planted Area
 HA: Harvested Area
 IA: Irrigable Area
 Pd: Planted Area of Dry Season Paddy
 Pr: Planted Area of Wet Season Paddy

Table 6.8 (1) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Soppeng during Recent Five Years

Unit: ha

Description ^{/3}	1974/75		1975/76		1976/77		1977/78		1978/79	
	1974 (Wet)		1975 (Wet)		1976 (Wet)		1977 (Wet)		1978 (Wet)	
	Irrigable Area/4	Harv'd	Irrigable Area/4	Harv'd	Irrigable Area/4	Harv'd	Irrigable Area/4	Harv'd	Irrigable Area/4	Harv'd
Salobunne	1,280	-	1,700	-	2,100	-	2,100	-	2,100	(3,500)
	-	-	1,700	1,323	1,924	1,332	2,100	1,002	2,100	-
	-	-	(2,680)	(2,180)	(1,924)	(1,332)	(2,279)	(1,087)	-	-
Lajaroko	1,250	-	1,250	-	1,250	-	1,250	(1,250)	1,250	(2,000)
	-	-	1,250	1,025	1,250	1,050	1,175	680	1,250	-
	-	-	(1,250)	(1,025)	(1,250)	(1,050)	(1,175)	(680)	-	-
Latenreng	0	-	0	-	0	-	0	(300)	0	(800)
	-	-	0	0	0	0	0	0	-	-
	-	-	(300)	(450)	(300)	(250)	(300)	(275)	-	-
Toweleng	250	-	250	(250)	300	-	300	(300)	450	(450)
	-	-	250	126	300	232	300	275	-	-
	-	-	(250)	(126)	(300)	(232)	(300)	(275)	-	-
Leworang Kr.	1,192	-	1,192	-	1,192	-	1,192	-	1,192	-
	-	-	1,192	1,192	1,192	1,192	1,192	1,192	-	-
	-	-	(1,192)	(1,192)	(1,192)	(1,192)	(1,192)	(1,192)	-	-
Leworang Kn.	650	-	708	-	708	-	708	-	708	-
	-	-	708	708	708	708	688	688	-	-
	-	-	(708)	(708)	(708)	(708)	(688)	(688)	-	-
Tinco	500	-	500	-	500	-	500	(500)	500	(500)
	-	-	500	452	500	400	500	473	-	-
	-	-	(500)	(452)	(500)	(400)	(500)	(473)	-	-
Talumae	250	-	250	-	250	(250)	340	(375)	340	(800)
	-	-	250	123	250	175	340	272	-	-
	-	-	(250)	(123)	(250)	(175)	(375)	(300)	-	-
Akampeng	1,100	-	1,100	-	1,100	-	1,100	-	1,100	-
	-	-	1,100	1,100	1,100	1,100	1,100	1,085	-	-
	-	-	(1,100)	(1,100)	(1,100)	(1,100)	(1,100)	(1,085)	-	-
Lalenge	1,000	-	1,000	-	1,000	-	1,000	-	1,000	(1,250)
	-	-	1,000	1,000	1,000	980	1,000	960	-	-
	-	-	(1,250)	(1,250)	(1,250)	(1,225)	(1,250)	(1,200)	-	-
Lagaligi	200	-	200	-	200	-	200	(275)	200	(300)
	-	-	200	145	200	156	200	145	-	-
	-	-	(275)	(200)	(275)	(314)	(275)	(200)	-	-
Cennae	0	-	50	-	50	-	50	(50)	214	(214)
	-	-	50	50	50	50	50	50	-	-
	-	-	(50)	(50)	(50)	(50)	(50)	(50)	-	-
Paroto	-	-	200	-	200	-	270	-	270	(270)
	-	-	200	163	200	200	270	202	-	-
	-	-	(270)	(220)	(200)	(200)	(270)	(202)	-	-
Takku	0	-	460	-	460	-	460	-	460	(460)
	-	-	460	435	460	460	460	435	-	-
	-	-	(460)	(435)	(460)	(460)	(460)	(435)	-	-

Table 6.8 (2) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Soppeng during Recent Five Years

Unit: ha

Description ^{/3}	1974/75		1975/76				1976/77				1977/78				1978/79					
	1974 (Wet)		1974/5 (Dry)		1975 (Wet)		1975/6 (Dry)		1976 (Wet)		1976/7 (Dry)		1977 (Wet)		1977/8 (Dry)		1978 (Wet)		1978/9 (Dry)	
	Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4	
	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd
Total	7,672				8,860				9,310				9,470				9,784	(14,544)		
PA or HA/IA (%)					100	89.2	58.1	58.1	98.1	86.3	56.5	56.5	99.0	78.8	24.0	24.0	-	-	-	-
HA/PA (Pd/Pr) (%)					-	89.2	58.1	100	-	88.0	(57.6)	100	-	79.6	(24.2)	100	-	-	-	-
(PU Data) ^{/1}					(10,535)	(9,211)	(5,395)	(5,395)	(9,759)	(8,588)	(5,502)	(5,502)	(10,214)	(8,142)	(2,270)	(2,270) ^{/1}	-	-	-	-
BIMAS/INMAS	12,147	8,729 ^{/6}	5,808	5,808	7,612	7,594	5,724	4,525	9,586	9,057	7,156	7,156	9,858	8,907	6,728	6,634	-	-	-	-
HA/PA (Pd/Pr) (%)	-	71.9	(47.8)	100	-	99.8	(75.2)	79.1	-	94.5	(74.7)	100	-	90.4	(68.2)	98.6	-	-	-	-
Assumed ^{/5}																				
PA/IA (HA/PA) (%)	100	(71.9)	47.8	(100)	100	(99.8)	75.2	(79.1)	98.1	(94.5)	74.7	(100)	99.0	(90.4)	68.2	(98.6)				
Estimated Area ^{/5}	7,672	5,516	3,667	3,667	8,860	8,842	6,663	5,270	9,134	8,632	6,955	6,955	9,375	8,475	6,459	6,369	-	-	-	-
Whole Paddy ^{/2}	19,330	14,467	14,860*	14,434	21,649	19,765	(15,195)*	15,149	20,861	18,724	(10,461)*	11,799	21,038	16,526	-	-	-	-	-	-
HA/PA (Pd/Pr) (%)	-	74.8	(76.9)*	97.1*	-	91.3	(70.2)*	99.7*	-	89.8	(50.1)*	11.3*	-	78.6	-	-	-	-	-	-
Rainfed	11,658	8,951	11,198*	10,767	12,789	10,923	(8,532)*	9,879	11,727	10,092	(3,506)*	4,844	11,663	8,051	-	-	-	-	-	-
HA/PA (Pd/Pr) (%)	-	96.8	(96.0)*	96.2*	-	85.4	(66.7)*	11.6*	-	86.1	(29.9)*	13.8*	-	69.2	-	-	-	-	-	-

Note: ^{/1} Figures in () are planted area and harvested area in each system according to "Luas Sawah Areal Baku dan Luas Sawah Area Tanam Propinsi Sul-Sel". Bid. Pengairan DPUP Sul-Sel, Oct. 1978. (Referred as "PU Data")

^{/2} Planted area and harvested area of whole paddy (in Kab. Soppeng) is according to Table 3.4.2 in Progress Report on the Master Plan Study CESSWRDP, Feb. 1979. Planted area of dry season paddy shown with * is not reliable due to incorrect statistical procedure.

^{/3} Name of system with underline shows technical irrigation system, system without underline is semi-technical system, and rainfed includes village irrigation system.

^{/4} Irrigable area in each year is based on Table 6.3 and it shown in () is according to "List of Inventory of Irrigation Area in 1978" DPUP Sul-Sel, Oct. 1978.

^{/5} Total planted area and harvested area in irrigated land in Kab. Soppeng based on the PU Data especially in dry season, are not reliable as compared with them of whole paddy as well as of BIMAS/INMAS. Accordingly, total area in irrigated land is estimated as follows:

(1) Planted area of wet season paddy on the PU Data is applied during 3 years from 1975 to 1977.

(2) PA/IA of wet season paddy in 1974 is assumed as 100%.

(3) Planted area of dry season paddy is estimated assuming that PA/IA is same as Pd/Pr of BIMAS/INMAS.

(4) HA/PA of BIMAS/INMAS is applied as HA/PA of irrigated land.

(5) Revised area is not allocated for each system and shown with.*

^{/6} Due to insect damage, harvest area in BIMAS/INMAS, namely irrigated land is less than it of rainfed.

^{/7} PA: Planted Area
IA: Irrigable Area
Pr: Planted Area of Wet Season Paddy
HA: Harvest Area
Pd: Planted Area of Dry Season Paddy

Table 6.9 Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Wajo during Recent Five Years

Unit: ha

Description ^{/3}	1974/75		1975/76		1976/77		1977/78		1978/79	
	1974 (Wet)		1975 (Wet)		1976 (Wet)		1977 (Wet)		1978 (Wet)	
	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd
Belawa	1,500	-	1,500	-	1,500	-	1,500	-	1,500	-
	-	-	1,500	1,075	1,500	1,348	1,500	1,330	1,500	1,330
	-	-	(1,500)	(1,075)	(1,500)	(634)	(1,500)	(1,330)	(1,500)	(1,330)
Salodua	0	-	524	-	524	-	524	-	524	-
	-	-	524	495	524	324	524	405	524	405
	-	-	(524)	(495)	(524)	(324)	(524)	(405)	(524)	(405)
Bulupatila	0	-	240	-	240	-	240	-	240	-
	-	-	240	240	240	200	240	200	240	200
	-	-	(240)	(240)	(240)	(200)	(240)	(200)	(240)	(200)
Sub-total in MPA	1,500	-	2,264	-	2,264	-	2,264	-	2,264	-
	1,500*	560*	2,264	1,810	2,264	1,872	2,264	1,935	2,264	1,935
	-	-	(2,264)	(1,810)	(2,264)	(1,458)	(2,264)	(1,935)	(2,264)	(1,935)
Bakke	0	-	0	-	0	-	0	-	0	-
	0	0	0	0	0	0	0	0	0	0
	-	-	(67)	(67)	(75)	(75)	(100)	(100)	(0)	(0)
Total ^{/5}	1,500	-	2,264	-	2,264	-	2,264	-	2,264	-
	1,500*	560*	2,264	1,810	2,264	1,872	2,264	1,935	2,264	1,935
	100*	(37.3)*	(2,331)	(1,877)	(2,339)	(1,233)	(2,364)	(2,035)	(2,364)	(2,035)
PA/IA (HA/PA) (%) (PU Data) ^{/1}	-	-	-	-	-	-	-	-	-	-
BIMAS/INMAS HA/PA (Pd/Pr) (%)	9,803	3,190	8,147	5,669	12,392	2,382	11,601	-	-	-
	-	325	-	69.6	--	192	-	-	-	-
Whole Paddy ^{/2} HA/PA (Pd/Pr) (%)	63,538	40,447	63,941	59,068	66,647	36,989	64,574	31,592	-	-
	-	63.7	-	92.4	-	(55.5)	-	48.7	-	-
Rainfed HA/PA (Pd/Pr) (%)	62,038	39,887	61,677	57,258	64,383	35,117	62,310	29,657	-	-
	-	64.3	-	92.8	-	54.5	-	47.6	-	-

Note: ^{/1} Figures in () are planted area and harvested area in each system according to "Luas Sawah Areal Baku dan Luas Sawah Areal Tanam Propinsi Sul-Sel". Bid. Pengairan DPUP Sul-Sel, Oct. 1978 (Referred as "PU Data")

^{/2} Planted area and harvested area of whole paddy (in Kab. Wajo) is according to Table 3.4.2 in Progress Report on the Master Plan Study CESSWRDP, Feb. 1979.

^{/3} All irrigation systems in Kab. Wajo are semi-technical system, and village irrigation systems are included in rainfed.

^{/4} Irrigable area in each year is based on Table 6.3 and it shown in () is according to "List of Inventory of Irrigation Area in 1978" DPUP Sul-Sel. Oct. 1978.

^{/5} Planted area and harvested area in 1974 wet season and 1974/75 dry season shown with * are estimated as follows:

- (1) PA/IA of 1974 wet season paddy is assumed as 100% (an average of 3 years).
- (2) According to agricultural statistics, wet season paddy in 1974 is damaged due to insect and flood and wet season paddy in 1975 is mainly flood. It is considered that HA/PA of wet season paddy in 1974 is similar to it in 1975. HA/PA of 1975 wet season paddy in irrigated land is 79.9% while it of BIMAS/INMAS is 69.6%, as HA/PA of 1974 wet season paddy of BIMAS/INMAS is 32.5%, HA/PA of 1974 wet season paddy in irrigated field = $32.5 \times 79.9 / 69.6 = 37.3\%$.
- (3) PA/IA 1975/6 dry season paddy in irrigated field is 66.8% while Pd/Pr of whole paddy is 3.82%, as Pd/Pr of 1974/5 dry season paddy of whole paddy is 2.23%, PA/IA of 1974/5 dry season paddy in irrigated field = $2.23 \times 66.8 / 3.82 = 39.0\%$.
- (4) HA/PA of dry season paddy in irrigated field is almost constant. An average HA/PA of dry season paddy in irrigated field 94.5% is applied for it in 1974/75 dry season paddy.

^{/6} PA: Planted Area
IA: Irrigable Area
Pr: Planted Area in Wet Season
HA: Harvested Area
Pd: Planted Area in Dry Season

Table 6.10 (1) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Bone during Recent Five Years

Unit: ha

Description ^{/3}	1974/75		1974/5 (Dry)		1975/76		1975/6 (Dry)		1976/77		1976/7 (Dry)		1977/78		1977/8 (Dry)		1978 (Wet)		1978/9 (Dry)	
	Irrigable Area/4		Planted	Harv'd	Irrigable Area/4		Planted	Harv'd	Irrigable Area/4		Planted	Harv'd	Irrigable Area/4		Planted	Harv'd	Irrigable Area/4		Planted	Harv'd
	Planted	Harv'd			Planted	Harv'd			Planted	Harv'd			Planted	Harv'd			Planted	Harv'd		
In MPA	430	-	-	-	430	-	-	-	430	-	-	-	430	-	-	-	-	430 (900)	-	-
Maradda	-	-	-	-	344	320	108	79	430	388	72	68	409	370	129	128	-	-	-	-
					(720)	(670)	(225)	(165)	(900)	(812)	(150)	(142)	(855)	(775)	(270)	(269)				
Bengo	500	-	-	-	500	-	-	-	500	-	-	-	500	-	-	-	-	500 (2,500)	-	-
					400	295	100	93	500	490	200	199	500	490	100	100	-	-	-	-
					(2,000)	(1,473)	(500)	(463)	(2,500)	(2,448)	(1,000)	(995)	(2,500)	(2,448)	(500)	(500)				
Tadang jompi	0	-	-	-	240	-	-	-	240	-	-	-	240	-	-	-	-	240 (400)	-	-
					240	219	195	193	240	240	195	195	240	240	229	229	-	-	-	-
					(400)	(365)	(325)	(322)	(400)	(400)	(325)	(325)	(400)	(400)	(381)	(381)				
Sub-total in hilly area	930	-	-	-	1,170	-	-	-	1,170	-	-	-	1,170	-	-	-	-	1,170 (3,800)	-	-
PA/IA (HA/PA) (%)	875/6	805/7	-	-	984	834	403	365	1,170	1,118	467	462	1,149	1,100	458	457	-	-	-	-
(PU Data)/1	94.1	(92.0)	-	-	84.1	(84.8)	34.4	(90.6)	100	(95.6)	39.9	(98.9)	9822	(95.7)	39.1	(100)	-	-	-	-
					(3,120)	(2,508)	(1,050)	(950)	(3,800)	(3,660)	(1,475)	(1,462)	(3,755)	(3,623)	(1,150)	(1,150)				
Unji	1,700	-	-	-	1,700	-	-	-	1,700	-	-	-	1,700	-	-	-	-	1,700 (2,500)	-	-
	1,587	1,440	-	-	1,530	1,221	850	847	1,700	1,683	1,190	1,190	1,530	1,428	510	510	-	-	-	-
					(2,250)	(1,796)	(1,250)	(1,245)	(2,500)	(2,475)	(1,750)	(1,750)	(2,250)	(2,100)	(750)	(750)				
Total in MPA	2,630	-	-	-	2,870	-	-	-	2,870	-	-	-	2,870	-	-	-	-	2,870 (6,300)	-	-
PA/IA (HA/PA) (%)	2,462/6	2,245/7	-	-	2,514	2,055	1,253	1,212	2,870	2,801	1,657	1,652	2,679	2,528	968	967	-	-	-	-
(PU Data)/1	93.6	(91.2)	-	-	87.6	(81.7)	43.7	(96.7)	100	(97.6)	57.7	(99.7)	93.3	(94.4)	33.7	(100)	-	-	-	-
					(5,370)	(4,304)	(2,300)	(2,195)	(6,300)	(6,135)	(3,225)	(3,212)	(6,005)	(5,723)	(1,901)	(1,900)				
Outside MPA																				
Palakka	5,540	-	-	-	5,540	-	-	-	5,540	-	-	-	5,540	-	-	-	-	5,540 (5,540)	-	-
					5,540	5,040	2,400	2,394	5,540	5,375	2,400	2,358	5,540	5,371	2,400	2,400	-	-	-	-
					(5,540)	(5,040)	(2,400)	(2,394)	(5,540)	(5,375)	(2,400)	(2,358)	(5,540)	(5,371)	(2,400)	(2,400)				
Pattiro	5,400	-	-	-	5,400	-	-	-	5,400	-	-	-	5,400	-	-	-	-	5,400 (5,400)	-	-
					5,400	4,550	2,160	2,160	5,400	5,214	1,620	1,604	5,400	5,190	2,160	2,158	-	-	-	-
					(5,400)	(4,550)	(2,160)	(2,160)	(5,400)	(5,214)	(1,620)	(1,604)	(5,400)	(5,190)	(2,160)	(2,158)				
Lanco	0	-	-	-	200	-	-	-	646	-	-	-	646	-	-	-	-	646 (646)	-	-
					200	183	0	0	646	611	188	188	646	610	188	188	-	-	-	-
					(200)	(183)	(0)	(0)	(646)	(611)	(188)	(188)	(646)	(610)	(188)	(188)				
Mico	0	-	-	-	0	-	-	-	0	-	-	-	50	-	-	-	-	50 (83)	-	-
					0	0	0	0	0	0	0	0	50	50	20	20	-	-	-	-
					(40)	(36)	(0)	(0)	(50)	(50)	(0)	(0)	(83)	(83)	(33)	(33)				
Jaling	1,300	-	-	-	1,300	-	-	-	1,300	-	-	-	1,300	-	-	-	-	1,300 (2,000)	-	-
					1,170	1,156	390	388	1,170	1,147	325	325	1,105	1,086	325	325	-	-	-	-
					(1,800)	(1,779)	(600)	(597)	(1,800)	(1,764)	(500)	(500)	(1,700)	(1,670)	(500)	(500)				
Paccing	0	-	-	-	0	-	-	-	0	-	-	-	229 (229)	-	-	-	-	286 (286)	-	-
					0	0	0	0	0	0	0	0	229	229	29	29	-	-	-	-
					(100)	(93)	0	0	(143)	(139)	0	0	(229)	(229)	(29)	(29)				
Panyili	0	-	-	-	0	-	-	-	283 (283)	-	-	-	298	-	-	-	-	298 (298)	-	-
					0	0	0	0	283	283	89	89	238	238	89	89	-	-	-	-
					(283)	(253)	(89)	(89)	(283)	(283)	(89)	(89)	(238)	(238)	(89)	(89)				

Table 6.10 (2) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Bone during Recent Five Years

Unit: ha

Description/3	1974/75		1974/5 (Dry)		1975/76		1975/6 (Dry)		1976/77		1976/7 (Dry)		1977/78		1977/8 (Dry)		1978/79		1978/9 (Dry)	
	Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4		Irrigable Area/4	
	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd	Planted	Harv'd
Tanatebuang	0	-	-	-	365	355	164	164	365	365	183	183	365	365	183	183	365	(365)	-	-
	-	-	-	-	365	355	164	164	365	365	183	183	365	365	183	183	365	(365)	-	-
	-	-	-	-	(365)	(355)	(164)	(164)	(365)	(365)	(183)	(183)	(365)	(365)	(183)	(183)	(365)	(365)	-	-
Wollangi	229	-	-	-	229	203	154	138	366	353	308	300	385	385	270	270	385	(385)	-	-
	-	-	-	-	229	203	154	138	366	353	308	300	385	385	270	270	385	(385)	-	-
	-	-	-	-	(229)	(203)	(154)	(138)	(366)	(353)	(308)	(300)	(385)	(385)	(270)	(270)	(385)	(385)	-	-
Melle	0	-	-	-	0	0	0	0	399	399	239	239	399	399	239	239	399	(399)	-	-
	-	-	-	-	0	0	0	0	399	399	239	239	399	399	239	239	399	(399)	-	-
	-	-	-	-	(399)	(372)	(239)	(239)	(399)	(399)	(239)	(239)	(399)	(399)	(239)	(239)	(399)	(399)	-	-
Pallengoreng	0	-	-	-	630	599	0	0	704	697	0	0	704	697	0	0	704	(704)	-	-
	-	-	-	-	630	599	0	0	704	697	0	0	704	697	0	0	704	(704)	-	-
	-	-	-	-	(630)	(599)	(0)	(0)	(704)	(697)	(0)	(0)	(704)	(697)	(0)	(0)	(704)	(704)	-	-
Pengisoreng	0	-	-	-	180	136	39	37	180	163	51	51	180	129	51	51	180	(210)	-	-
	-	-	-	-	154	136	39	37	180	163	51	51	154	129	51	51	180	(210)	-	-
	-	-	-	-	(180)	(159)	(45)	(43)	(210)	(190)	(60)	(60)	(180)	(150)	(60)	(60)	(180)	(150)	-	-
Lerang	140	-	-	-	140	130	30	27	140	108	30	30	140	108	20	20	140	(560)	-	-
	-	-	-	-	140	130	30	27	140	108	30	30	140	108	20	20	140	(560)	-	-
	-	-	-	-	(560)	(521)	(120)	(108)	(480)	(430)	(120)	(120)	(480)	(430)	(80)	(80)	(480)	(430)	-	-
Total	12,609	-	-	-	13,984	12,352	5,337	5,308	15,323	14,715	5,433	5,367	15,636	14,857	5,974	5,972	15,693	(17,206)	-	-
Outside MPA	12,445	11,748	-	-	13,828	12,352	5,337	5,308	15,173	14,715	5,433	5,367	15,335	14,857	5,974	5,972	-	-	-	-
PA/IA (HA/PA) (%)	98.7	(94.4)	-	-	98.9	(89.3)	38.2	(99.5)	99.0	(97.0)	35.5	(98.8)	98.1	(96.9)	38.2	(100)	-	-	-	-
(PU Data)/1	-	-	-	-	(15,726)	(14,143)	(5,971)	(5,932)	(16,386)	(15,870)	(5,707)	(5,641)	(16,349)	(15,817)	(6,231)	(6,229)	-	-	-	-
Total	15,239	-	-	-	16,854	14,407	6,590	6,520	18,193	17,516	7,090	7,019	18,506	17,385	6,942	6,939	18,563	(23,506)	-	-
	14,907	13,993	-	-	16,342	14,407	6,590	6,520	18,043	17,516	7,090	7,019	18,014	17,385	6,942	6,939	-	-	-	-
PA/IA (HA/PA) (%)	97.8	(93.9)	-	-	97.0	(88.2)	39.1	(98.9)	99.2	(97.1)	39.0	(99.0)	97.3	(96.5)	37.5	(100)	-	-	-	-
(PU Data)/1	-	-	-	-	(21,096)	(18,447)	(8,271)	(8,127)	(22,686)	(22,005)	(8,932)	(8,853)	(22,354)	(21,540)	(8,132)	(8,129)	-	-	-	-
Estimated Area																				
Total	14,907	13,993	5,714 ^{L5}	5,466 ^{L5}	16,342	14,407	4,775 ^{L5}	4,481 ^{L5}	18,043	17,516	3,586 ^{L5}	3,507 ^{L5}	18,014	17,385	3,650	3,650	-	-	-	-
PA/IA (HA/PA) (%)	97.8	(93.9)	37.5	(95.7)	97.0	(88.2)	28.3	(93.5)	99.2	(97.1)	19.7	(97.8)	97.3	(96.5)	19.7	(100)	-	-	-	-
in MPA																				
Hilly Area (6.1%)	875 ^{L6}	805 ^{L7}	349 ^{L5}	334 ^{L5}	984	834	291 ^{L5}	273 ^{L5}	1,170	1,118	219 ^{L5}	214 ^{L5}	1,149	1,100	215 ^{L8}	215 ^{L8}	-	-	-	-
Coastal Area (11.2%)	1,587	1,440	640 ^{L5}	612 ^{L5}	1,530	1,221	535 ^{L5}	502 ^{L5}	1,700	1,683	401 ^{L5}	393 ^{L5}	1,530	1,428	172 ^{L8}	172 ^{L8}	-	-	-	-
Sub-total (17.3%)	2,462 ^{L6}	2,245 ^{L7}	989 ^{L5}	946 ^{L5}	2,514	2,055	826 ^{L5}	775 ^{L5}	2,870	2,801	620 ^{L5}	607 ^{L5}	2,679	2,528	387	387	-	-	-	-
Outside MPA (82.7%)	12,445 ^{L6}	11,748 ^{L7}	4,725 ^{L5}	4,520 ^{L5}	13,828	12,352	3,949 ^{L5}	3,706 ^{L5}	15,173	14,715	2,966 ^{L5}	2,900 ^{L5}	15,335	14,857	3,263 ^{L8}	3,263 ^{L8}	-	-	-	-
BIMAS/INMAS	4,565	774	3,173	3,060	11,821	11,660	4,808	2,244	12,240	9,388	4,575	1,242	12,255	1,538	3,737	-	-	-	-	-
HA/PA (Pd/Pr) (%)	-	17.0	(69.5)	96.4	-	98.6	(40.7)	46.7	-	76.7	(37.4)	27.1	-	12.5	(30.5)	-	-	-	-	-
Whole Paddy/2	65,845	45,101	5,714	5,466	71,413	69,160	4,775	4,481	71,806	56,035	3,586	3,507	73,280	61,242	-	-	-	-	-	-
HA/PA (Pd/Pr) (%)	-	68.5	(8.7)	95.7	-	96.8	(6.7)	93.8	-	78.0	(5.0)	97.8	-	83.6	-	-	-	-	-	-
Rainfed/3	50,938	31,108	0	0	55,071	54,753	0	0	53,763	38,519	0	0	55,266	43,857	-	-	-	-	-	-
HA/PA (Pd/Pr) (%)	-	61.1	(0)	-	-	99.4	(0)	-	-	71.6	(0)	-	-	79.4	-	-	-	-	-	-

Table 6.10 (3) Planted Area and Harvested Area on Irrigated Paddy Field in Kab. Bone during Recent Five Years

- Note: /1 Figures in () are planted area and harvested area in each system according to "Luas Sawah Areal Baku dan Luas Sawah Areal Tanam Propinsi Sul-Sel", Bid. Pengairan DPUP Sul-Sel, Oct. 1978. (Referred as "PU Data")
- /2 Planted area and harvested area of whole paddy (in Kab. Bone) is according to Table 3.4.2 in Progress Report on the Master Plan Study CESSWRDP, Feb., 1979.
- /3 Name of system with underline shows technical irrigation system, system without underline is semi-technical system, and rainfed includes village irrigation system.
- /4 Irrigable area in each year is based on Table 6.3 and it shown in () is according to "List of Inventory of Irrigation Area in 1978" DPUP Sul-Sel, Oct., 1978.
- /5 Total area of planted area and harvested area of dry season paddy in each system in 1975/76 and 1976/77 which is estimated based on the PU Data is over whole paddy in Kab. Bone. Assuming that all planted area and harvested area of dry season paddy in Kab. Bone is in irrigated field only, planted area and harvested area in irrigated field during three years are assumed and then in MPA and outside MPA are estimated proportionally to the Irrigable Area.
- /6 Applying an average PA/IA of wet season paddy in each region during three years from 1975 to 1977, planted area of 1974 wet season paddy is estimated for respective regions.
- /7 Applying an average HA/PA of wet season paddy in each region during three years from 1975 to 1977, harvested area of 1974 wet season paddy is estimated for respective regions.
- /8 According to revised figures of PU Data, planted area of 1977/78 dry season paddy in hilly area is 98% of it of 1976/77, planted area of 1977/78 in Unji system is only 43% and it of outside MPA is 110%. Applying same rate for estimated area of 1976/77 dry season paddy, planted area 1977/78 dry season in respective region is estimated. HA/PA of 1977/78 dry season paddy is almost 100% according to PU Data. Harvested area of 1977/78 dry season paddy estimated accordingly.

Table 6.11 Water Consumption for Paddy Cultivation in Kab. Sidrap

Description/ Water Source	Wet Season Paddy									Dry Season Paddy							
	Total Paddy Field (ha)	Planted Area (ha)	Harvest Area (ha)	Farm Requirement (mm)	Effective Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Requirement (mm)	Supplied by Irrigation (10 ⁶ m ³)	Planted Area (ha)	Harvest Area (ha)	Farm Requirement (mm)	Effective Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Requirement (mm)	Supplied by Irrigation (10 ⁶ m ³)
1974/75																	
Irrigation																	
Sadang System	13,560	10,583	10,228	800	417	42.5	383	547	55.8	10,630	10,366	824	122	12.7	702	1,001	104.1
Other outside MPA	4,160	4,160	3,732	800	417	15.4	383	547	20.2	3,149	3,146	824	122	3.8	702	1,001	31.0
(Sub-total)	17,720	14,743	13,960			57.9			76.0	13,779	13,512			16.5			135.1
Inside MPA	4,500	4,500	4,280	800	417	17.9	383	547	23.5	3,506	3,488	824	122	4.3	702	1,001	35.0
Total Irrigation	22,220	19,243	18,240			75.8			99.5	17,285	17,000			20.8			170.1
Rainfed	22,880	6,517	6,181	(417)	417	25.9	-	-	-	1,463	469	(122)	122	0.6	-	-	-
Total	45,100	25,760	24,421			101.7			99.5	18,748	17,469			21.4			170.1
1975/76																	
Irrigation																	
Sadang System	13,560	11,001	10,962	814	427	47.0	387	552	60.7	11,428	11,395	822	116	13.2	706	1,008	114.9
Other outside MPA	4,416	4,416	4,381	814	427	18.8	387	552	24.3	3,642	3,642	822	116	4.2	706	1,008	36.3
(Sub-total)	17,976	15,417	15,343			65.8			85.0	15,070	15,037			17.4			151.2
Inside MPA	5,714	5,714	5,691	814	427	24.3	387	552	31.5	4,420	4,350	822	116	5.1	706	1,008	44.4
Total Irrigation	23,690	21,131	21,034			90.1			116.5	19,490	19,387			22.5			195.6
Rainfed	21,410	14,323	13,332	(427)	427	56.8	-	-	-	3,751	3,749	(116)	116	4.3	-	-	-
Total	45,100	35,454	34,366			146.9			116.5	23,241	23,136			26.8			195.6
1976/77																	
Irrigation																	
Sadang System	13,560	12,350	11,924	814	198	23.6	616	880	104.7	12,564	12,467	823	230	28.8	593	847	105.9
Other outside MPA	4,522	4,522	3,851	814	198	7.5	616	880	33.4	3,669	3,763	823	230	8.5	593	847	31.3
(Sub-total)	18,082	16,872	15,775			31.1			138.1	16,233	16,230			37.3			137.2
Inside MPA	7,071	7,071	6,562	814	198	13.1	616	880	58.1	4,965	4,965	823	230	11.5	593	847	42.4
Total Irrigation	25,153	23,943	22,337			44.2			196.2	21,198	21,195			48.8			179.6
Rainfed	19,947	13,039	10,174	(198)	198	20.2	-	-	-	205	174	(230)	230	0.5	-	-	-
Total	45,100	36,982	32,511			64.4			196.2	21,403	21,369			49.3			179.6
1977/78																	
Irrigation																	
Sadang System	13,560	11,342	10,634	803	186	19.9	617	882	94.4	11,861	11,105						
Other outside MPA	4,941	4,941	4,189	803	186	7.8	617	882	37.0	4,600	4,600						
(Sub-total)	18,501	16,283	14,823			27.7			131.4	16,461	15,705						
Inside MPA	7,114	7,114	6,745	803	186	12.5	617	882	59.1	5,596	5,587						
Total Irrigation	25,615	23,397	21,568			40.2			190.5	22,057	21,292						
Rainfed	19,485	16,552	11,296	(186)	186	21.0	-	-	-	-	-						
Total	45,100	39,949	32,864			61.2			190.5	-	-						
Average & Total Paddy Field in 1978																	
Irrigation																	
Sadang System	13,560	11,319	10,937			33.2			78.9	11,621	11,333			18.2*			108.3*
Other outside MPA	5,337	4,510	4,038			12.4			28.7	3,765	3,788			5.5*			32.9*
(Sub-total)	18,897	15,829	14,975			45.6			107.6	15,386	15,121			23.7*			141.2*
Inside MPA	8,119	6,100	5,820			17.0			43.1	4,622	4,598			7.0*			40.6*
Total Irrigation	27,016	21,929	20,795			62.6			150.7	20,008	19,719			30.7*			181.8*
Rainfed	18,084	12,608	10,246			31.0			-	1,806*	1,464*			1.8*			-
Total	45,100	34,537	31,041			93.6			150.7	21,131*	20,658*			32.5*			181.8*

* Average of 3 years

Table 6.12 Water Consumption for Paddy Cultivation in Kab. Soppeng & Wajo

Description/ Water Source	Wet Season Paddy									Dry Season Paddy							
	Total Paddy Field (ha)	Planted Area (ha)	Harvest Area (ha)	Farm Require- ment (mm)	Effec- tive Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Require- ment (mm)	Supplied by Irri- gation (10 ⁶ m ³)	Planted Area (ha)	Harvest Area (ha)	Farm Require- ment (mm)	Effec- tive Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Require- ment (mm)	Supplied by Irri- gation (10 ⁶ m ³)
Kab. Soppeng																	
1974/75																	
Irrigation	7,672	7,672	5,516	708	325	17.9	383	547	30.1	3,667	3,667	838	171	6.3	667	953	35.3
Rainfed	14,028	11,658	8,951	(325)	325	29.3	-	-	-	-	10,767	(171)	171	18.3	-	-	-
Total	21,700	19,330	14,467			47.2			30.1	-	14,434			24.6			35.3
1975/76																	
Irrigation	8,860	8,860	8,842	720	488	43.4	232	331	29.5	6,663	5,270	835	234	12.4	601	859	45.5
Rainfed	12,840	12,789	10,923	(488)	488	53.2	-	-	-	-	9,879	(234)	234	22.9	-	-	-
Total	21,700	21,649	19,765			96.6			29.5	-	15,149			35.3			45.5
1976/77																	
Irrigation	9,310	9,134	8,632	727	361	31.0	366	523	45.0	6,955	6,955	839	417	29.2	422	603	42.2
Rainfed	12,390	11,727	10,092	(361)	361	36.5	-	-	-	-	4,844	(417)	417	20.0	-	-	-
Total	21,700	20,861	18,724			67.5			45.0	-	11,799			49.2			42.2
1977/78																	
Irrigation	9,470	9,375	8,475	718	362	30.8	356	509	43.3	6,459	6,369						
Rainfed	12,230	11,663	8,051	(362)	362	28.9	-	-	-	-	-						
Total	21,700	21,038	16,526			59.7			43.3	-	-						
Average & Total Paddy Field in 1978																	
Irrigation	9,784	8,760	7,866			30.8			37.0	5,936	5,565			16.0*			41.0*
Rainfed	11,916	11,960	9,505			37.0			-	-	8,497*			20.4*			-
Total	21,700	20,720	17,371			67.8			37.0	-	13,794*			36.4*			41.0*
Kab. Wajo																	
1974/75																	
Irrigation	1,500	1,500	560	788	429	2.6	359	513	3.1	584	553	841	114	0.7	727	1,039	6.2
Rainfed	67,500	62,038	39,887	(429)	429	170.7	-	-	-	833	676	(114)	114	0.7	-	-	-
Total	69,000	63,538	40,447			173.3			3.1	1,418	1,229			1.4			6.2
1975/76																	
Irrigation	2,264	2,264	1,810	755	555	10.0	200	286	5.1	1,512	1,312	835	120	1.6	715	1,021	13.3
Rainfed	66,736	61,677	57,258	(555)	555	318.0	-	-	-	930	124	(120)	120	0.1	-	-	-
Total	69,000	63,941	59,068			328.0			5.1	2,442	1,436			1.7			13.3
1976/77																	
Irrigation	2,264	2,264	1,872	774	451	8.6	323	461	8.8	122	118	836	171	0.2	665	950	1.0
Rainfed	66,736	64,383	35,117	(451)	451	158.3	-	-	-	100	70	(171)	171	0.2	-	-	-
Total	69,000	66,647	36,989			166.9			8.8	222	188			0.4			1.0
1977/78																	
Irrigation	2,264	2,264	1,935	769	319	6.1	450	643	12.2	521	521						
Rainfed	66,736	62,310	29,657	(319)	319	94.7	-	-	-	-	-						
Total	69,000	64,574	31,592			100.8			12.2	-	-						
Average & Total Paddy Field in 1978																	
Irrigation	2,264	2,073	1,544			6.8			7.3	685	626			0.9*			6.8*
Rainfed	66,736	62,602	40,480			185.4			-	621*	290*			0.3*			-
Total	69,000	64,675	42,024			192.2			7.3	1,361*	951*			1.2*			6.8*

* Average of 3 years

Table 6.13 Water Consumption for Paddy Cultivation in Kab. Bone

Description/ Water Source	Total Paddy Field (ha)	Wet Season Paddy								Dry Season Paddy							
		Planted Area (ha)	Harvest Area (ha)	Farm Require- ment (mm)	Effec- tive Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Require- ment (mm)	Supplied by Irri- gation (10 ⁶ m ³)	Planted Area (ha)	Harvest Area (ha)	Farm Require- ment (mm)	Effec- tive Rainfall (mm)	Rainfall Consumed (10 ⁶ m ³)	Deficit on Farm (Net Req't) (mm)	Gross Require- ment (mm)	Supplied by Irri- gation (10 ⁶ m ³)
1974/75																	
Irrigation																	
Inside MPA(Hilly)	930	875	805	658	495	4.0	163	233	1.9	349	334	702	180	0.7	522	746	3.0
Inside MPA(Coastal)	1,700	1,587	1,440	606	528	7.9	78	111	1.7	640	612	661	310	1.9	351	501	3.0
(Sub-total)	2,630	2,462	2,245			11.9			3.6	989	946			2.6			6.0
Outside MPA	12,609	12,445	11,748	606	528	61.8	78	111	13.0	4,725	4,520	661	310	14.0	351	501	22.5
Total Irrigation	15,239	14,907	13,993			73.7			16.6	5,714	5,466			16.6			28.5
Rainfed	65,461	50,938	31,108	(512)	512	159.2			-	0	0			-			-
Total	80,700	65,845	45,101			232.9			16.6	5,714	5,466			16.6			28.5
1975/76																	
Irrigation																	
Inside MPA(Hilly)	1,170	984	834	663	619	5.0	44	63	0.5	291	273	702	227	0.7	475	679	2.0
Inside MPA(Coastal)	1,700	1,530	1,221	609	528	6.3	81	116	1.4	535	502	659	216	1.1	443	633	3.2
(Sub-total)	2,870	2,514	2,055			11.3			1.9	826	775			1.8			5.2
Outside MPA	13,984	13,828	12,352	609	528	65.5	81	116	14.4	3,949	3,706	659	216	8.0	443	633	23.4
Total Irrigation	16,854	16,342	14,407			76.8			16.3	4,775	4,481			9.8			28.6
Rainfed	63,846	55,071	54,753	(574)	574	314.6			-	0	0			-			-
Total	80,700	71,413	69,160			391.4			16.3	4,775	4,481			9.8			28.6
1976/77																	
Irrigation																	
Inside MPA(Hilly)	1,170	1,170	1,118	659	477	5.2	182	260	2.9	219	214	698	276	0.6	422	603	1.2
Inside MPA(Coastal)	1,700	1,700	1,683	606	412	7.0	194	277	4.7	401	393	650	260	1.0	390	557	2.2
(Sub-total)	2,870	2,870	2,801			12.2			7.6	620	607			1.6			3.4
Outside MPA	15,323	15,173	14,715	606	412	60.6	194	277	40.7	2,966	2,900	650	260	7.5	390	557	16.2
Total Irrigation	18,193	18,043	17,516			72.8			48.3	3,586	3,507			9.1			19.6
Rainfed	62,507	53,763	38,519	(445)	445	171.3			-	0	0			-			-
Total	80,700	71,806	56,035			244.1			48.3	3,586	3,507			9.1			19.6
1977/78																	
Irrigation																	
Inside MPA(Hilly)	1,170	1,149	1,100	658	329	3.6	329	470	5.2	215	215						
Inside MPA(Coastal)	1,700	1,530	1,428	604	349	4.9	255	364	5.1	172	172						
(Sub-total)	2,870	2,679	2,528			8.5			10.3	387	387						
Outside MPA	15,636	15,335	14,857	604	349	52.0	255	364	54.2	3,263	3,263						
Total Irrigation	18,506	18,014	17,385			60.5			64.5	3,650	3,650						
Rainfed	62,194	55,266	43,857	(339)	339	148.5			-	0	0			-			-
Total	80,700	73,280	61,242			209.0			64.5	3,650	3,650						
Average & Total Paddy Field in 1978																	
Irrigation																	
Inside MPA(Hilly)	1,170	1,044	964			4.5			2.6	269	259			0.7*			2.1*
Inside MPA(Coastal)	1,700	1,587	1,443			6.5			3.2	437	420			1.3*			2.8*
(Sub-total)	2,870	2,631	2,407			11.0			5.8	706	679			2.0*			4.9*
Outside MPA	15,693	14,195	13,418			60.0			30.6	3,726	3,597			9.8*			20.7*
Total Irrigation	18,563	16,826	15,825			71.0			36.4	4,431	4,276			11.8*			25.6*
Rainfed	62,137	53,760	42,060			198.4			-	0	0			-			-
Total	80,700	70,586	57,885			269.4			36.4	4,431	4,276			11.8*			25.6*

* Average of 3 years

Table 6.14 Water Consumption for Paddy Cultivation in Kab. Sidrap, Soppeng, Wajo and Bone /1

Kabupaten	Paddy Field	Harvested Area			Consumption of			Supplied by Irrigation			Total Consumption			
		Water Source	Wet	Dry	Total	Effective Rainfall			Wet	Dry	Total	Wet	Dry	Total
			Season	Season		Wet	Dry	Total						
	10 ⁶ m ³	10 ³ ha	10 ³ ha	10 ³ ha	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³	10 ⁶ m ³
SIDRAP														
	Sadang System	13.6	11.0	11.4	22.4	33.2	18.2*	51.4	78.9	108.3*	187.2	112.1	126.5	238.6
	Other outside	5.3	4.0	3.7	7.7	12.4	5.5*	17.9	28.7	32.9*	61.6	41.1	38.4	78.5
	Sub-total	18.9	15.0	15.1	30.1	45.6	23.7*	69.3	107.6	141.2*	248.8	153.2	164.9	318.1
	Inside MPA	8.1	5.8	4.6	10.4	17.0	7.0*	24.0	43.1	40.6*	83.7	60.1	47.6	107.7
	Total Irrigation	27.0	20.8	19.7	40.5	62.6	30.7*	93.3	150.7	181.8*	332.5	213.3	212.5	425.8
	Rainfed	18.1	10.3	1.5*	11.8	31.0	1.8*	32.8	-	-	-	31.0	1.8	32.8
	Total	45.1	31.1	20.7*	51.8	93.6	32.5*	126.1	150.7	181.8*	332.5	244.3	214.3	458.6
SOPPENG														
	Irrigation	9.8	7.9	5.6	13.5	30.8	16.0*	46.8	37.0	41.0*	78.0	67.8	57.0	124.8
	Rainfed	11.9	9.5	8.4*	17.9	37.0	20.4*	57.4	-	-	-	37.0	20.4	57.4
	Total	21.7	17.4	13.8*	31.2	67.8	36.4*	104.2	37.0	41.0*	78.0	104.8	77.4	182.2
WAJO														
	Outside MPA	0.2	0	0	0	0	0	0	0	0	0	0	0	0
	Inside MPA	2.3	1.5	0.6	2.1	6.8	0.9*	7.7	7.3	6.8*	14.1	14.1	7.7	21.8
	Total Irrigation	2.5	1.5	0.6	2.1	6.8	0.9*	7.7	7.3	6.8*	14.1	14.1	7.7	21.8
	Rainfed	66.5	40.5	0.3*	40.8	185.4	0.3*	185.7	-	-	-	185.4	0.3	185.7
	Total	69.0	42.0	0.9*	42.9	192.2	1.2*	193.4	7.3	6.8*	14.1	199.5	8.0	207.5
BONE														
	Outside MPA	15.7	13.4	3.6	17.0	60.0	9.8*	69.8	30.6	20.7*	51.9	90.6	30.5	121.1
	Inside MPA	2.9	2.4	0.7	3.1	11.0	2.0*	13.0	5.8	4.9*	10.7	16.8	6.9	24.7
	Total Irrigation	18.6	15.8	4.3	20.1	71.0	11.8*	82.8	36.4	25.6*	62.0	107.4	37.4	144.8
	Rainfed	62.1	42.1	0	42.1	198.4	0	198.4	-	-	-	198.4	0	198.4
	Total	80.7	57.9	4.3	62.2	269.4	11.8	281.2	36.4	25.6*	62.0	305.8	37.4	343.2
TOTAL														
	Outside MPA	34.8	28.4	18.6	47.0	105.6	33.5	139.1	138.2	161.9	300.1	243.8	195.4	439.2
	Inside MPA	23.1	17.6	11.6	29.2	65.6	25.9	91.5	93.2	93.3	186.5	158.8	119.2	278.0
	Total Irrigation	57.9	46.0	30.2	76.2	171.2	59.4	230.6	231.4	255.2	486.6	402.6	314.6	717.2
	Rainfed	158.6	102.4	10.2	112.6	451.8	22.5	474.3	-	-	-	451.8	22.5	474.3
	Total	216.5	148.4	40.4	188.8	623.0	81.9	704.9	231.4	255.2	486.6	887.4	337.1	1,191.5

/1 All figures are average during 4 years from 1974 to 1977 except following two:

- 1) Area of irrigable paddy field is in 1978.
- 2) Figures with * are average 3 dry seasons, 1974/5, 1975/6 & 1976/7.

Table 6.15 (1) Estimated Mean Monthly Discharges (1/2)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Boya (CA = 514 km ²)													
<u>1975</u>													
Qm	-	-	-	-	-	-	-	-	-	17.8	9.4	16.8	-
Qi					0.0	0.8	2.5	1.9	0.0	0	1.9	3.2	-
Q	-	-	-	-	-	-	-	-	-	17.8	11.3	20.0	-
<u>1976</u>													
Qm	13.3	12.6	31.7	27.3	30.9	27.8	30.3	9.0	3.9	4.6	11.5	10.5	17.8
Qi	4.8	4.6	1.7	0.3	1.4	0.0	1.9	4.4	2.9	0.2	2.0	5.4	2.5
Q	18.1	17.2	33.4	27.6	32.2	27.8	32.3	13.4	6.8	4.8	13.5	15.9	20.3
<u>1977</u>													
Qm	10.7	12.2	24.8	39.1	14.3	21.4	4.0	16.9	1.1	0.5	6.2	19.4	14.2
Qi	4.7	4.5	1.2	0.2	1.9	0.0	3.9	3.6	1.5	0	1.4	4.1	2.3
Q	15.4	16.7	26.0	39.3	16.2	21.4	7.9	20.5	2.6	0.5	7.6	23.5	16.5
<u>1978</u>													
Qm	25.2	11.8	28.5	-	-	-	-	24.8	-	-	-	-	-
Qi	3.1	5.2	0.8	0.2	-	-	-	-	-	-	-	-	-
Q	28.3	17.0	29.3	-	-	-	-	-	-	-	-	-	-
<u>Average</u>													
Qm	16.4	12.2	28.3	33.2	22.6	24.6	17.2	16.9	2.5	7.6	9.0	15.6	17.2
Q	20.6	17.1	29.6	33.5	24.3	24.6	20.1	17.0	4.7	7.7	10.8	19.8	19.2
Q/CA	4.0	3.3	5.8	6.5	4.7	4.8	3.9	3.3	0.9	1.5	2.1	3.9	3.7
Batu-Batu (CA - 113 km ²)													
<u>1975</u>													
Qm	-	-	-	-	-	7.4	6.5	2.3	4.6	4.6	2.8	8.0	-
Qi	-	-	-	0.8	0.8	1.4	1.7	1.0	0.2	0	1.1	1.0	-
Q	-	-	-	-	-	8.8	8.2	3.3	4.8	4.6	3.9	9.1	-
<u>1976</u>													
Qm	5.1	1.1	2.9	0.3	1.3	0.4	2.6	0.2	0.0	0.1	0.7	0.8	1.3
Qi	1.3	1.0	0.0	1.1	2.1	2.4	2.0	1.9	0.6	0	0.2	1.4	1.2
Q	6.4	2.1	2.9	1.4	3.4	2.8	4.6	2.1	0.6	0.1	0.9	2.2	2.5
<u>1977</u>													
Qm	12.4	11.9	3.9	7.1	1.8	9.3	0.9	1.6	0.1	0.0	0.3	2.4	4.3
Qi	0.9	0.9	0.5	0.1	1.7	0.8	2.7	1.2	0.6	0	1.0	1.2	1.0
Q	13.3	12.8	4.4	7.2	3.5	10.1	3.6	2.8	0.7	0.0	1.3	3.6	5.3
<u>1978</u>													
Qm	1.9	2.8	2.1	2.1	5.5	2.5	1.6	2.7	1.2	2.9	-	-	-
Qi	1.4	0.9	0.1	1.6	0.9	1.9	1.1	0.8	0.1	0	-	-	-
Q	3.3	3.7	2.2	3.7	6.4	4.4	2.7	3.5	1.3	2.9	-	-	-
<u>Average</u>													
Qm	6.5	5.3	3.0	3.2	2.9	4.9	2.9	1.7	1.5	1.9	1.3	3.7	3.2
Q	7.7	6.2	2.2	4.1	4.4	6.5	4.8	2.9	1.9	1.9	2.0	5.0	4.2
Q/CA	6.8	5.5	2.8	3.6	3.9	5.7	4.3	2.6	1.7	1.7	1.8	4.4	3.7

Table 6.15 (2) Estimated Mean Monthly Discharge (2/2)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Langkemme (CA = 104 km ²)													
<u>1974</u>													
Qm	-	-	-	-	3.0	4.3	4.0	2.6	2.3	4.4	2.8	5.1	-
Qi				0.1	0.1	0	0	0	0	0	0.1	0.1	-
Q	-	-	-	-	3.1	4.3	4.0	2.6	2.3	4.4	2.9	5.2	-
<u>1975</u>													
Qm	4.8	4.9	4.6	5.5	3.7*	1.5	2.4	2.5	2.3	1.5	1.8	5.6	3.4
Qi	0.1	0.1	0	0	0	0.1	0.1	0.1	0	0	0.1	0.1	0.06
Q	4.9	5.0	4.6	5.5	3.7	1.6	2.5	2.6	2.3	1.5	1.9	5.7	3.5
<u>1976</u>													
Qm	4.9	1.9	2.1	2.9	2.3	3.4	3.9	2.4	1.4	3.1	2.7	5.0	3.0
Qi	0.1	0.1	0	0	0.1	0	0.1	0.1	0	0	0	0.1	0.05
Q	5.0	2.0	2.1	2.9	2.4	3.4	4.0	2.5	1.4	3.1	2.7	5.1	3.1
<u>1977</u>													
Qm	12.7	14.6	7.5	7.9	5.9	7.1	4.5	3.0	2.1	2.7	2.3	6.0	6.4
Qi	0	0.1	0	0.1	0.1	0	0.1	0.1	0	0	0.1	0	0.05
Q	12.7	14.7	7.5	8.0	6.0	7.1	4.6	3.1	2.1	2.7	2.4	6.0	6.4
<u>1978</u>													
Qm	5.1	4.1	5.1	4.1									
Qi	0.1	0.1	0	0.1									
Q	5.2	4.2	5.1	4.2									
<u>Average</u>													
Qm	6.9	6.4	4.8	5.1	3.7	4.1	3.7	2.6	2.0	2.9	2.4	5.4	4.2
Q	7.0	6.5	4.8	5.2	3.8	4.1	3.8	2.7	2.0	2.9	2.5	5.5	4.2
Q/CA	6.7	6.2	4.6	5.0	3.7	3.9	3.7	2.6	1.9	2.8	2.4	5.3	4.0
(m ³ /sec/100 km ²)													

Note: Qm : Discharge observed at respective gauging stations (m³/sec)

Qi : Estimated withdrawal for irrigation (m³/sec)

Q/CA : Specific discharge (m³/sec/100 km²)

Table 6.16 (1) Estimation of Mean Monthly Discharge of the Lawo and Padangeng Rivers (1/2)

(Unit: Mean Monthly Discharge Q: m³/sec
(Specific Discharge q: m³/sec/100 km²)

River: CA :	Langkemme		Lawo		Batu-Batu ₂		Padangeng		
	104	Km ²	64	Km ²	113	Km ²	107	Km	
	Qa	qa	Qb	qb	Qc	qc	q	Q	
1974	Apr.								
	May	3.1	3.0	1.9*	2.9*	2.8*	2.5*	2.7	2.9
	Jun.	4.3	4.1	2.6*	4.0*	4.0*	3.5*	3.8	4.1
	Jul.	4.0	3.8	2.4*	3.7*	3.6*	3.2*	3.5	3.7
	Aug.	2.6	2.5	1.5*	2.4*	2.1*	2.1*	2.3	2.5
	Sep.	2.3	2.2	1.3*	2.0*	2.1*	1.9*	2.0	2.1
	Oct.	4.4	4.2	2.6*	4.1*	4.0*	3.5*	3.8	4.1
	Nov.	2.9	2.8	1.7*	2.7*	2.6*	2.3*	2.5	2.7
	Dec.	5.2	5.0	3.1*	4.9*	4.6*	4.1*	4.5	4.8
1975	Jan.	4.9	4.7	2.9*	4.6*	4.4*	3.9*	4.3	4.6
	Feb.	5.0	4.8	3.0*	4.7*	4.4*	3.9*	4.3	4.6
	Mar.	4.6	4.4	2.8*	4.3*	4.2*	3.7*	4.0	4.3
	Apr.	5.5	5.3	3.4*	5.3*	5.0*	4.4*	4.9	5.2
	May	3.7	3.6	2.2*	3.5*	3.4*	3.0*	3.3	3.5
	Jun.	1.6	1.5	0.9*	1.4*	8.8	7.8	4.6	4.9
	Jul.	2.5	2.4	2.2	3.4	8.2	7.3	5.4	5.8
	Aug.	2.6	2.5	1.3	2.0	3.3	2.9	2.5	2.7
	Sep.	2.3	2.2	2.0	3.1	4.8	4.2	3.7	4.0
	Oct.	1.5	1.4	1.2	1.8	4.6	4.1	3.0	3.2
	Nov.	1.9	1.8	0.9	1.4	3.9	3.5	2.5	2.7
	Dec.	5.7	5.5	4.5	7.0	9.1	8.1	7.6	8.1
1976	Jan.	5.0	4.8	3.5	5.5	6.4	5.7	5.6	6.0
	Feb.	2.0	1.9	2.5	3.9	2.1	1.9	2.9	3.1
	Mar.	2.1	2.0	2.0	3.1	2.9	2.6	2.9	3.1
	Apr.	2.9	2.8	1.7*	2.7*	1.4	1.2	2.0	2.1
	May	2.4	2.3	1.7	2.7	3.4	3.0	2.9	3.1
	Jun.	3.4	3.3	2.2	3.4	2.8	2.5	3.0	3.2
	Jul.	4.0	3.8	1.1	1.7	4.6	4.1	2.9	3.1
	Aug.	2.5	2.4	0.2	0.3	2.1	1.9	1.1	1.2
	Sep.	1.4	1.3	2.2	3.4	0.6	0.5	2.0	2.1
	Oct.	3.1	3.0	0.7	1.1	0.1	0.1	0.6	0.6
	Nov.	2.7	2.6	1.3	2.0	0.9	0.8	1.4	1.5
	Dec.	5.1	4.9	4.0	6.3	2.2	1.9	4.1	4.4
1977	Jan.	12.7	12.2	7.9*	12.4*	13.3	11.8	12.1	12.9
	Feb.	14.7	14.1	9.2*	14.4*	12.8	11.3	12.9	13.8
	Mar.	7.5	7.2	4.6*	7.2*	4.4	3.9	5.6	6.0

Table 6.16 (2) Estimation Mean Monthly Discharge of the Lawo and Padangeng Rivers (2/2)

(Unit: Mean Monthly Discharge Q : m^3/sec)
(Specific Discharge q : $m^3/sec/100km^2$)

River:	Langkemme ₂		Lawo ₂		Batu-Batu ₂		Padangeng		
CA :	104	Km ²	64	Km ²	113	Km ²	107	Km	
	Qa	qa	Qb	qb	Qc	qc	q	Q	
1977	Apr.	8.0	7.7	5.4	8.4	7.2	6.4	7.4	7.9
	May	6.0	5.8	3.6	5.6	3.5	3.1	4.4	4.7
	Jun.	7.1	6.8	10.3	16.1	10.1	8.9	12.5	13.4
	Jul.	4.6	4.4	2.3	3.6	3.6	3.2	3.4	3.6
	Aug.	3.1	3.0	1.1	1.7	2.8	2.5	2.1	2.2
	Sep.	2.1	2.0	0.6	0.9	0.7	0.6	0.8	0.9
	Oct.	2.7	2.6	0.3	0.5	0.0	0.0	0.3	0.3
	Nov.	2.4	2.3	0.5	0.8	1.3	1.2	1.0	1.1
	Dec.	6.0	5.8	3.2	5.0	3.6	3.2	4.1	4.4
1978	Jan.	5.2	5.0	6.0	9.4	3.3	2.9	6.2	6.6
	Feb.	4.2	4.0	3.8	5.9	3.7	3.3	4.6	4.9
	Mar.	5.1	4.9	5.4	8.4	2.2	1.9	5.2	5.6
	Apr.	4.2	4.0	-	-	3.7	3.3		
	May					6.4	5.7		
	Jun.					4.4	3.9		
	Jul.					2.7	2.4		
	Aug.					3.5	3.1		
	Sep.					1.3	1.2		

Note: Discharge with * and discharge of the Padangeng River are estimated based on the correlation between Langkemme and Lawo ro Batu-Batu as shown on Fig. 6.4.

$$qb = 1.036 qa - 0.24$$

$$qc = 0.827 qa + 0.01$$

$$q = (qb + qc)/2$$

Table 6.17 (1) Available Water for Irrigation (1/3)
(Estimated Mean Monthly Discharge)

River Catchment Area	Year	(Unit: m ³ /sec)													
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	
(1) Bila at G.S.	1973	-	-	-	34.0	45.2	26.6	50.7	28.2	36.1	19.5	14.6	28.1	-	
	1974	7.7	8.8	3.7	15.1	18.5	16.8	31.9	12.2	54.2	28.2	18.3	13.1	19.0	
	1975	9.8	28.7	23.3	10.1	33.7	25.4	36.1	33.3	47.2	28.9	14.8	11.0	25.2	
	1976	5.6	3.5	10.0	7.8	21.6	14.6	10.9	11.8	2.9	4.9	11.5	9.5	9.6	
	1977	9.2	13.2*	7.7	29.5	17.2	25.8	10.6	17.2	2.5	2.4	2.5	31.0	14.1	
	1978	18.3	11.7	27.2	-	-	-	-	-	-	-	-	-	-	-
	Average	10.1	13.2	14.4	19.3	27.2	21.8	28.0	20.5	28.6	16.8	12.3	18.5	19.2	
(2) Boya at Existing Intake	1973	-	-	-	46.1*	61.3*	36.1*	68.8*	38.2*	49.0*	26.4*	19.8*	38.1*	-	
	1974	10.4*	11.9*	5.0*	20.5*	25.1*	22.8*	43.3*	16.5*	73.5*	38.2*	24.8*	17.8*	25.8	
	1975	13.3*	38.9*	31.6*	13.7*	45.7*	34.4*	49.0*	45.2*	64.0*	17.8	11.3	20.0	32.1	
	1976	18.1	17.2	33.4	27.6	32.3	27.8	32.2	13.4	6.8	4.8	13.5	15.9	20.3	
	1977	15.4	16.7	26.0	39.3	16.2	21.4	7.9	20.5	2.6	0.5	7.6	23.5	16.5	
	1978	28.3	17.0	29.3	-	-	-	-	-	-	-	-	-	-	
	Average	17.1	20.3	25.1	29.4	36.1	28.5	40.2	26.8	39.2	17.5	15.4	23.1	26.6	
(3) Batu-Batu at G.S.	1974	-	-	-	-	2.8*	4.0*	3.6*	2.1*	2.1*	4.0*	2.6*	4.6*	-	
	1975	4.4*	4.4*	4.2*	5.0*	3.4*	8.8	8.2	3.3	4.8	4.6	3.9	9.1	5.3	
	1976	6.4	2.1	2.9	1.4	3.4	2.8	4.6	2.1	0.6	0.1	0.9	2.2	2.5	
	1977	13.3	12.8	4.4	7.2	3.5	10.1	3.6	2.8	0.7	0.0	1.3	3.6	5.3	
	1978	3.3	3.7	2.2	3.7	-	-	-	-	-	-	-	-	-	
	Average	6.9	5.8	3.4	4.3	3.3	6.4	5.0	2.6	2.1	2.2	2.2	4.9	4.1	

Note : Figures with * are estimated.

Table 6.17 (2) Available Water for Irrigation (2/3)

River Catchment Area	Year	(Unit: m ³ /sec)												
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
(4) Padangeng at Proposed Damsite (All discharges are estimated, see Table 6.8)	1974	-	-	-	-	2.9	4.1	3.7	2.5	2.1	4.1	2.7	4.8	-
	1975	4.6	4.6	4.3	5.2	3.5	4.9	5.8	2.7	4.0	3.2	2.7	8.1	4.5
	1976	6.0	3.1	3.1	2.1	3.1	3.2	3.1	1.2	2.1	0.6	1.5	4.4	2.8
	1977	12.9	13.8	6.0	7.9	4.7	13.4	3.6	2.2	0.9	0.3	1.1	4.4	5.9
	1978	6.6	4.9	5.6	-	-	-	-	-	-	-	-	-	-
Average	7.5	6.6	4.8	5.1	3.6	6.4	4.1	2.2	2.3	2.1	2.0	5.4	4.3	
(5) Lawo at G.S.	1974	-	-	-	-	1.9*	2.6*	2.4*	1.5*	1.3*	2.6*	1.7*	3.1*	-
	1975	2.9*	3.0*	2.8*	3.4*	2.2*	0.9*	2.2	1.3	2.0	1.2	0.9	4.5	2.3
	1976	3.5	2.5	2.0	1.7*	1.7	2.2	1.1	0.2	2.2	0.7	1.3	4.0	1.9
	1977	7.9*	9.2*	4.6*	5.4	3.6	10.3	2.3	1.1	0.6	0.3	0.5	3.2	4.1
	1978	6.0	3.8	5.4	-	-	-	-	-	-	-	-	-	-
Average	5.1	4.6	3.7	3.5	2.4	4.0	2.0	1.0	1.5	1.2	1.1	3.7	2.8	
(6) Langkemne at G.S.	1974	-	-	-	-	3.1	4.3	4.0	2.6	2.3	4.4	2.9	5.2	-
	1975	4.9	5.0	4.6	5.5	3.7	1.6	2.5	2.6	2.3	1.5	1.9	5.7	3.5
	1976	5.0	2.0	2.1	2.9	2.4	3.4	4.0	2.5	1.4	3.1	2.7	5.1	3.1
	1977	12.7	14.7	7.5	8.0	6.0	7.1	4.6	3.1	2.1	2.7	2.4	6.0	6.4
	1978	5.2	4.2	5.1	4.2	-	-	-	-	-	-	-	-	-
Average	7.0	6.5	4.8	5.2	3.8	4.1	3.8	2.7	2.0	2.9	2.5	5.5	4.2	

Note: Figures with * are estimated.

Table 6.17 (3) Available Water for Irrigation (3/3)

River Catchment Area	Year	(Unit: m ³ /sec)												
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
(7) Sanrego at G.S.	1973	-	-	-	9.9	8.9	-	-	9.6*	8.8	7.2	10.2	10.7	-
	1974	11.4	10.3	8.8*	11.3	7.9	8.8	10.7	8.3	9.1	7.4	7.1	6.8	9.0
	1975	7.9	8.8*	8.0	9.2	14.6	12.4	9.5	14.6	15.5	9.2	10.5	10.7	10.9
	1976	8.7	8.8*	8.8*	8.5	9.1	9.3	7.6	5.9	5.4	5.6	5.4	7.2	7.5
	1977	10.3	8.9	10.4	8.7	7.0	20.8	6.3	9.6*	7.8	7.4*	8.3	8.9	9.5
	1978	8.7	7.1	8.1	-	-	-	-	-	-	-	-	-	-
Average	9.4	8.8	8.8	9.5	9.5	12.8	8.5	9.6	9.3	9.3	7.4	8.3	8.9	9.2
(8) Walanae at Proposed Mong Damsite	1974	-	-	-	38.3	84.8	94.5	102.6	50.9	88.1	68.3	37.6	63.9	-
	1975	114.2	131.6	78.7	144.6	317.3	205.1	198.9	123.0	79.5	89.5	111.4	72.5*	138.9
	1976	174.0*	85.8	82.5	57.8	114.9	113.4	72.4	25.2	12.4	13.2	20.2	60.2	69.3
	1977	289.6	361.9	151.9	108.2	34.3	366.4	48.3	32.2	18.4	14.2	18.2	36.8	123.4
	1978	118.3	69.1	71.9	63.0	124.1	104.2	107.7	83.5	24.4	28.0	35.2	129.2	79.9
	Average	174.0	162.1	96.3	82.4	135.1	176.7	106.0	63.0	44.5	42.6	44.5	72.5	100.0
(9) Gilirang at Tarumpakkae G.S.	1974	-	-	-	-	-	-	-	-	-	-	-	-	-
	1975	-	-	-	-	-	-	-	-	59.7	22.2	3.8	2.0	-
	1976	1.1	0.4	1.5	3.3	27.0	38.8	62.3	11.1	0.8	16.1	2.3	1.0	13.8
	1977	24.5	33.0	37.5	35.2	30.3	56.1	60.0	23.1	15.0	11.9	2.0	3.8	27.7
	1978	14.9	2.3	9.4	19.6	68.3	7.5	23.3	-	-	-	-	-	-
	Average	13.5	11.5	16.1	19.4	41.9	34.1	48.5	17.1	25.2	16.7	2.7	2.3	20.8

Note : Figures with * are estimated

Table 7.1 Farm Input per Ha Used for Wet Season
Paddy under Existing Irrigated Land

Name of Kecamatan	Seed (kg)	Urea (kg)	TSP (kg)	Agri. Chemicals (l)	Rodenticide (kg)
P.Lautang	30	80	25	0.86	0.03
T.Limpoe	30	122	34	0.55	0.014
M.Tengae	30	103	50	0.36	0.04
Dua Pitue	30	63	14	0.74	0.06
Cenrana	-	-	-	-	-
Ajangale	-	-	-	-	-
Dua Boccoe	30	58	25	1.02	0.1
T.Siattinge	30	58	37	2.6	0
Ponre	-	-	-	-	-
Ulaweng	30	25	30	0	0
Lamuru	30	85	54	1.65	0.05
Lapparija	30	41	59	0.08	0.03
Libureng	-	-	-	-	-
Kahu	30	65	83	0	0
Bonto Cani	30	132	75	1.19	0.4
Lalabata	30	85	1.28	0.09	0.03
Liliriaja	30	127	3	0.06	0.14
Marioriawa	30	39	0.4	0.148	0.022
Marioriwawo	30	125	4	0.147	0.042
Lilirilau	30	76	0	0.06	0.023
Tempe	-	-	-	-	-
Tanasitolo	30	137	45	1.3	0.09
M. Pajo	30	137	33	1.3	0.45
Belawa	30	92	18	1.09	0.08
S.Paru	30	125	35	2.1	0.1
Pamana	30	85	25	1.5	0.07
Takkalalla	30	68	17	0.83	0.059
Majauleng	30	70	37	1.41	0.08
Sajoanging	30	112	35	2.05	0.1

Note: - : No cultivation

Table 7.2 Farm Input per Ha Used for Dry Season
Paddy Under Existing Irrigated Land

Name of Kecamatan	Seed (kg)	Urea (kg)	TSP (kg)	Agri. Chemicals (l)	Rodenticide (kg)
P.Lautang	30	96	27	0.91	0.07
T.Limpoe	30	76	25	0.78	0.05
M.Tengae	30	74	42	1.1	0.08
Dua Pitue	30	77	24	1.23	0.04
Cenrana	-	-	-	-	-
Ajangale	-	-	-	-	-
Dua Boccoe	30	39	16	1.2	-
T.Siattinge	30	28	1.3	0.01	-
Ponre	-	-	-	-	-
Ulaweng	-	-	-	-	-
Lamuru	30	95	23	1.85	0.13
Lapparija	30	54	25	0.33	0.04
Libureng	-	-	-	-	-
Kahu	-	-	-	-	-
Bonto Cani	30	90	86	1.5	0.1
Lalabata	30	83	2	0.09	0
Liliriaja	30	134	6	0.142	0.025
Marioriawa	30	36	5	0.08	0.06
Marioriwawo	30	89	5	0.06	0.36
Lilirilau	30	138	39	0.9	0.23
Tempe	-	-	-	-	-
Tanasitolo	-	-	-	-	-
M.Pajo	-	-	-	-	-
Belawa	-	-	-	-	-
S.Paru	-	-	-	-	-
Pamana	-	-	-	-	-
Takkalalla	-	-	-	-	-
Majauleng	-	-	-	-	-
Sajoanging	-	-	-	-	-

Note: - : No cultivation

Table 7.3 Farm Labour Requirement
Per Ha for Paddy Cultivation

(Unit: man. day)

Farming Operation	Upland Rice Area	Rainfed Area	Irrigated Area
Nursery preparation ^{/1}	9	5	5
Ploughing & Puddling ^{/2}	10	25	25
Transplanting/planting	10	24	24
Weeding	10	12	12
Fertilization	0	0	2
Application of chemicals	0	0	7
Harvesting ^{/3}	-	-	-

/1: In addition to labour, 6 cow. days are required.

/2: In addition to labour, 32 cow. days are required.

/3: Labour requirement for harvest depends on yield of paddy.
Labour requirement per one ton of dry stalk paddy is estimated at about 16 man. day

Table 7.4 Farm Labour Requirement
Per Ha for Major Upland Crops

Farming Operation	(Unit: man. day)				
	Maize	Peanuts	Soybeans	Green Beans	Cassava
Land preparation	10 <u>/1</u>	23 <u>/2</u>	23 <u>/2</u>	23 <u>/2</u>	18 <u>/2</u>
Seeding/planting	10	15	5	5	14
Weeding	10	10	15	14	10
Fertilization	0	0	0	0	0
Application of chemicals	0	3	0	0	0
Harvesting/Drying	15	27	23	22	20
Total	45	78	66	64	62

/1: In addition to labours, 14 cow. days are required.

/2: In addition to labours, 16 cow. days are required.

Table 8.1 Results of Paddy Yield Survey

Sampling Number	Rice Variety	Sampling Place		Number of Hills per ha	Number of Grains per Hill	Number of Panicles per Hill	Number of Grain per Panicle	^{/1} Weight of Sunk Grains per Hill (g)	Weight of 1,000 Grains (g)	Number of Sunk Grains per Hill	Percentage of Ripened Grain	^{/2} Unit Yield (Paddy per ha)	^{/3} Unit Yield (Dry Stalk Paddy per ha)
		Village	Kecamatan										
1	C4 - 63	Baru	Lalabata	152,700	614	10	61.4	9.12	21.5	425	69.2	1.39	1.82
2	IR - 30	Labessi	Marioriwawo	200,000	1,270	22	57.7	16.90	24.7	685	53.9	3.38	4.42
3	IR - 30	Galung	Liliriaja	173,300	3,013	26	115.9	46.83	21.1	2,219	73.6	8.12	10.61
4	IR - 32	Otting	Dua Pitue	187,800	1,516	20	75.8	27.84	23.7	1,177	77.6	5.23	6.84
5	local 46	Otting	Dua Pitue	152,700	1,685	14	120.4	28.81	22.5	1,278	75.0	4.40	5.75
6	IR - 32	Lanairang	Dua Pitue	152,700	2,083	23	90.6	40.73	24.3	1,673	80.3	6.22	8.13
7	IR - 26	Baru	Lalabata	160,000	2,292	20	114.6	31.46	21.3	1,479	64.5	5.03	6.57
8	IR - 26	Baru	Lalabata	160,000	1,697	17	99.8	26.04	20.8	1,250	73.7	4.17	5.45
9	IR - 5	Patangkai	Lappariaja	134,400	1,414	21	67.3	23.83	21.9	1,089	77.0	3.21	4.20
10	IR - 5	Samaenre	Lappariaja	210,000	984	15	65.6	17.10	22.7	753	76.5	3.59	4.69
11	C4 - 63	Maddumpa	Lalabata	160,000	946	15	63.1	14.70	22.1	666	70.4	2.35	3.07
12	IR - 26	Attangsolo	Marioriawa	217,700	2,725	26	104.8	38.06	21.0	1,810	66.4	8.29	10.84
13	IR - 5	Sengreng Palie	Lappariaja	160,000	1,682	16	105.1	34.30	26.8	1,281	76.2	5.49	7.18

^{/1} : Grain selected by the solution of salt with 1.06 specific gravity

^{/2} : Paddy = gabah kering

^{/3} : Dry stalk paddy = padi kering.
Conversion ratio of gabah kering/padi kering = 76.5/100

Table 8.2 (1) Unit Yield and Production for Paddy in Agricultural Study

Name of Kabupaten	Name of Kecamatan	Paddy Field						Upland Area			Total Production of Paddy
		Wet Season Paddy			Dry Season Paddy			H. Area	U. Yield	T. Production	
		H. Area	U. Yield	T. Production	H. Area	U. Yield	T. Production				
SIDRAP	Panca Lautang	3,150	3.83	12,100	1,070	3.75	4,000	-	-	-	16,100
	Tellulimpoe	1,260	3.83	4,800	1,000	3.77	3,800	-	-	-	8,600
	Maritengae	7,770	4.13	32,100	7,080	4.54	32,100	-	-	-	64,200
	Dua Pitue	10,930	3.74	40,900	3,790	4.47	19,700	110	0.7	100	60,700
BONE	Cenrana	3,640	1.75	6,400	-	-	-	-	-	-	6,400
	Ajangale	3,860	1.60	6,200	-	-	-	-	-	-	6,200
	Dua Boccoe	1,760	1.97	3,500	150	2.34	400	-	-	-	3,900
	Tellusiatinge	3,200	1.84	5,900	350	2.14	700	-	-	-	6,600
	Ponre	1,460	2.19	3,200	-	-	-	280	1.32	400	3,600
	Ulaweng	660	1.72	1,100	70	2.11	200	60	1.23	100	1,400
	Lamuru	1,270	2.90	3,700	430	2.61	1,100	1,270	1.43	1,800	6,600
	Lappariaja	4,710	2.68	12,600	610	4.13	2,500	1,140	1.30	1,500	16,600
	Libureng	2,910	2.03	5,900	-	-	-	910	1.23	1,100	7,000
	Kahu	2,260	1.71	3,900	190	2.35	500	660	1.38	900	5,300
	Bonto Cani	1,570	1.93	3,000	150	2.30	300	320	1.25	400	3,700
SOPPENG	Lalabata	5,910	3.67	21,700	5,270	4.00	21,100	190	1.45	300	43,100
	Liliriaja	5,690	3.83	21,800	5,640	4.71	26,600	120	1.55	200	48,600
	Marioriawa	2,050	3.26	6,700	1,350	3.76	5,100	-	-	-	11,800
	Marioriwawo	1,560	3.21	5,000	1,130	4.46	5,000	350	1.33	500	10,500
	Lilirilau	2,210	2.43	5,400	250	4.69	1,200	-	-	-	6,600
KAJO	Tempe	150	2.72	400	-	-	-	-	-	-	400
	Tanasitolo	1,540	2.51	3,900	-	-	-	-	-	-	3,900
	Maniang Pajo	2,760	2.92	8,000	-	-	-	210	2.21	500	8,500
	Belawa	2,940	3.54	10,400	750	1.58	1,200	-	-	-	11,600
	Sabbang Paru	1,370	2.39	3,300	70	1.75	100	330	2.07	700	4,100
	Pammana	2,130	2.87	6,100	-	-	-	320	1.99	600	6,700
	Takkalalla	9,850	2.92	28,800	-	-	-	-	-	-	28,800
	Majauleng	5,430	3.15	17,100	-	-	-	270	2.51	700	17,800
Sajoanging	10,800	2.40	25,900	-	-	-	100	1.11	100	26,000	
Grand Total		104,800	2.96	309,800	29,350	4.28	125,600	6,640	1.49	9,900	445,300

Remarks: 1) H. Area : Harvested Area
2) U. Yield : Unit Yield

3) T. Production : Total Production
4) - : less than 50 ha or jero

Table 8.2(2) Unit Yield of Paddy for Irrigated Land,
Rainfed Paddy Field and Upland Area

(unit : dry stalk paddy/ha)

Name of Kecamatan	Irrigated Land		Rainfed Area		Upland
	W.S.P/1	D.S.P /2	W.S.P/1	D.S.P/2	
P. Lautang	5.75	4.99	3.10	2.31	-
T. Limpos	5.21	4.86	2.61	3.07	-
M. Tengae	4.95	5.88	2.88	2.66	-
Dua Pitue	6.02	6.79	3.10	3.89	0.7
Cenrana	-	-	1.75	1.69	-
Ajangale	-	-	1.60	1.87	-
Dua Boccoe	3.41	2.97	1.90	2.05	-
T. Siatinge	3.82	4.04	1.82	2.09	-
Ponre	-	-	2.19	1.89	1.32
Ulaweng	-	-	1.72	2.11	1.23
Lamuru	-	-	2.90	2.61	1.43
Lappariaja	3.36	4.23	2.58	3.99	1.30
Libureng	-	-	2.03	1.84	1.23
Kahu	5.06	2.35	1.58	2.35	1.38
Bonto Cani	-	-	1.93	2.30	1.25
Lalabata	4.31	5.35	2.98	2.98	1.45
Liliriaja	5.04	5.77	2.70	3.84	1.55
Marioriawa	3.61	5.33	3.00	3.28	1.42
Marioriwawo	4.23	4.90	2.37	3.90	1.33
Lilirilau	4.27	5.51	2.22	3.75	1.40
Tempe	-	-	2.72	-	2.12
Tanasitolo	-	-	2.51	1.82	1.69
M. Pajo	3.74	-	2.84	2.48	2.21
Belawa	3.96	-	3.39	1.58	-
S. Paru	-	-	2.39	1.75	2.07
Pammana	3.71	-	2.78	-	1.99
Takkalalla	-	-	2.92	2.78	-
Majauleng	3.76	-	3.07	2.50	2.51
Sajoanging	-	-	2.40	-	1.11

Remarks: /1: Wet Season Paddy

/2: Dry Season Paddy

Table 8.3 Unit Yield and Production for Maize

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	86	0.74	60
Tellulimpoe	75	0.80	60
Maritengae	59	0.68	40
Dua Pitue	312	0.80	250
Cenrana	115	0.61	70
Ajangale	1,384	0.70	970
Dua Boccoe	403	0.65	260
Tellusiatinge	319	0.61	190
Ponre	997	0.71	710
Ulaweng	10,507	0.54	5,670
Lamuru	12,139	0.69	8,380
Lappariaja	8,319	0.73	6,070
Libureng	2,753	0.72	1,980
Kahu	2,731	0.70	1,910
Bonto Cani	2,100	0.70	1,470
Lalabata	291	0.79	230
Liliriaja	2,713	0.94	2,250
Marioriawa	274	0.80	220
Marioriwawo	4,603	0.62	3,680
Lilirilau	6,009	0.79	4,750
Tempe	152	0.87	130
Tanasitolo	243	0.64	160
Maniang Pajo	828	0.70	580
Belawa	324	0.86	280
Sabbang Paru	1,447	0.82	1,190
Pamma	2,337	0.94	2,200
Takkalalla	359	0.84	300
Majauleng	381	0.95	360
Sajoanging	267	0.85	230
Total	62,527	0.71	44,650

Table 8.4 Unit Yield and Production for Peanuts

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	17	0.64	10
Tellulimpoe	5	0.81	-
Maritengae	25	0.81	20
Dua Pitue	55	0.89	50
Cenrana	16	0.48	10
Ajangale	806	0.50	400
Dua Boccoe	104	0.49	50
Tellusiatinge	230	0.49	110
Ponre	384	0.51	200
Ulaweng	1,139	0.49	560
Lamuru	852	0.53	450
Lappariaja	2,625	0.55	1,440
Libureng	1,963	0.54	1,060
Kahu	3,761	0.55	2,070
Bonto Cani	139	0.48	70
Lalabata	41	0.71	30
Liliriaja	118	0.74	90
Marioriawa	40	0.70	30
Marioriwawo	2,164	0.71	1,540
Lilirilau	0	0.40	-
Tempe	2	0.70	-
Tanasitolo	190	0.69	130
Maniang Pajo	694	0.64	440
Belawa	284	0.95	270
Sabbang Paru	21	0.74	60
Pammana	215	0.88	190
Takkalalla	215	0.80	170
Majauleng	273	0.78	210
Sajoanging	329	0.74	240
Total	16,767	0.59	9,900

Table 8.5 Unit Yield and Production for Soybeans

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	193	0.37	70
Tellulimpoe	7	0.40	-
Maritengae	0	-	-
DuaPitue	2	0.43	-
Cenrana	0	-	-
Ajangale	0	-	-
Dua Boccoe	5	0.36	-
Tellusiatinge	0	-	-
Ponre	5	0.36	-
Ulaweng	27	0.35	10
Lamuru	145	0.37	50
Lappariaja	355	0.37	130
Libureng	31	0.36	10
Kahu	0	0	-
Bonto Cani	0	0	-
Lalabata	168	0.75	130
Liliriaja	13	0.73	10
Marioriawa	146	0.75	110
Marioriwawo	211	0.75	160
Lilirilau	163	0.71	120
Tempe	31	0.75	20
Tanasitolo	0	-	-
Maniang Pajo	43	0.59	30
Belawa	37	0.71	30
Sabbang Paru	1,133	0.78	880
Pammana	158	0.78	120
Takkalalla	8	0.80	10
Majauleng	17	0.70	10
Sajoanging	0	0	-
Total	2,898	0.66	1,900

Table 8.6 Unit Yield and Production for Green beans

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	30	0.51	20
Tellulimpoe	10	0.49	-
Maritengae	24	0.47	10
Dua Pitue	3	0.59	-
Cenrana	1	0.22	-
Ajangale	20		-
Dua Boccoe	15	0.24	-
Tellusiatinge	12	0.23	-
Ponre	190	0.25	50
Ulaweng	121	0.23	30
Lamuru	1,544	0.26	400
Lappariaja	2,464	0.26	640
Libureng	560	0.25	140
Kahu	72	0.25	20
Bonto Cani	77	0.26	20
Lalabata	21	0.61	10
Liliriaja	165	0.60	100
Marioriawa	40	0.65	30
Marioriawo	4,309	0.68	2,930
Lilirilau	73	0.64	50
Tempe	74	0.73	50
Tanasitolo	685	0.59	400
Maniang Pajo	466	0.52	240
Belawa	107	0.70	70
Sabbang Paru	196	0.70	140
Panmana	526	0.68	360
Takkalalla	288	0.58	170
Majauleng	676	0.53	360
Sajoanging	746	0.57	430
Total	13,515	0.49	6,670

Table 8.7 Unit Yield and Production for Cassava

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	17	4.43	80
Tellulimpoe	46	5.63	260
Maritengae	212	6.27	1,330
Dua Pitue	51	6.05	310
Cenrana	11	2.73	30
Ajangale	135	4.54	610
Dua Boccoe	191	4.10	780
Tellusiatinge	65	4.14	270
Ponre	153	4.64	710
Ulaweng	286	4.37	1,250
Lamuru	324	4.37	1,420
Lappariaja	383	4.73	1,810
Libureng	395	4.79	1,890
Kahu	849	4.64	3,940
BontoCani	15	4.72	70
Lalabata	46	6.53	300
Liliriaja	27	6.88	190
Marioriawa	34	7.54	260
Marioriwawo	41	6.14	250
Lilirilau	20	6.60	130
Tempe	37	8.00	300
Tanasitolo	195	8.57	1,670
Maniang Pajo	332	10.89	3,620
Belawa	61	8.89	540
Sabbang Paru	94	9.78	920
Pammana	163	10.71	1,750
Takkalalla	91	9.68	880
Majauleng	100	27.2	2,720
Sajoanging	222	10.21	2,270
Total	4,596	6.65	30,560

Table 8.8 Unit Yield and Production for Coconuts

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	131	0.87	110
Tellulimpoe	27	0.63	20
Maritengae	250	0.63	160
Dua Pitue	2,104	0.66	1,390
Cenrana	146	1.19	170
Ajangale	222	0.76	170
Dua Boccoe	237	0.87	210
Tellusiatinge	308	0.76	230
Ponre	15	1.30	20
Ulaweng	58	0.76	40
Lamuru	59	0.60	40
Lappariaja	419	0.65	270
Libureng	79	0.57	50
Kahu	421	0.66	280
Bonto Cani	60	2.01	120
Lalabata	46	2.26	110
Liliriaja	171	2.35	400
Marioriawa	195	2.37	460
Marioriwawo	330	2.26	750
Lilirilau	280	2.27	640
Tempe	148	2.77	410
Tanasitolo	308	2.08	640
Maniang Pajo	181	2.78	500
Belawa	805	2.80	2,280
Sabbang Paru	454	6.91	3,140
Pammana	688	1.72	1,180
Takkalalla	105	1.78	190
Majauleng	205	3.13	800
Sajoanging	248	5.16	1,280
Total	8,750	1.82	15,900

Table 8.9 Unit Yield and Production for Kapok

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	24	0.23	6
Tellulimpoe	4	0.11	-
Maritengae	2	0.20	-
Dua Pitue	70	0.28	20
Cenrana	3	0.20	1
Ajangale	71	0.17	12
Dua Boccoe	3	0.22	1
Tellusiatinge	23	0.17	4
Ponre	6	0.21	1
Ulaweng	77	0.35	27
Lamuru	15	0.39	6
Lappariaja	289	0.30	87
Libureng	9	0.30	3
Kahu	59	0.23	14
Bonto Cani	10	0.20	2
Lalabata	29	0.34	10
Liliriaja	138	0.91	126
Marioriawa	40	0.72	29
Marioriwawo	238	0.67	159
Lilirilau	133	0.84	112
Tempe	25	0.87	22
Tanasitolo	138	0.23	32
Maniang Pajo	141	0.17	24
Belawa	88	0.17	15
Sabbang Paru	294	0.46	135
Pammana	312	0.60	187
Takkalalla	58	0.47	27
Majauleng	100	0.40	40
Sajoanging	214	0.47	101
Total	2,610	0.46	1,200

Table 8.10 Unit Yield and Production for Coffee

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	2	0.28	1
Tellulimpoe	-	-	-
Maritengae	-	-	-
Dua Pitue	5	0.30	2
Cenrana	-	-	-
Ajangale	4	0.33	1
Dua Boccoe	1	0.50	1
Tellusiatinge	-	-	-
Ponre	1	0.35	-
Ulaweng	2	0.26	1
Lamuru	20	0.14	3
Lappariaja	6	0.18	1
Libureng	4	0.30	1
Kahu	20	1.14	23
Bonto Cani	33	0.35	12
Lalabata	3	0.94	3
Liliriaja	-	0.69	-
Marioriawa	12	0.49	6
Marioriwawo	40	0.26	10
Lilirilau	-	1.0	-
Tempe	-	-	-
Tanasitolo	-	-	-
Maniang Pajo	3	0.08	-
Belawa	-	-	-
Sabbang Paru	1	0.5	1
Pammana	-	-	-
Takkalalla	-	-	-
Majauleng	2	0.25	1
Sajoanging	1	0.5	1
Total	160	0.43	70

Table 8.11 Unit Yield and Production for Kemiri

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	141	0.57	80
Tellulimpoe	32	0.40	13
Maritengae	6	0.33	2
Dua Pitue	242	0.46	112
Cenrana	35	0.37	13
Ajangale	13	2.08	27
Dua Boccoe	28	0.94	26
Tellusiatinge	96	0.33	32
Ponre	95	0.92	87
Ulaweng	35	0.79	28
Lamuru	267	0.95	254
Lappariaja	685	0.46	312
Libureng	78	0.47	37
Kahu	276	0.49	134
Bonto Cani	173	0.39	67
Lalabata	34	2.50	85
Liliriaja	310	1.75	544
Marioriawa	135	1.11	150
Marioriwawo	54	2.01	109
Lilirilau	113	1.17	132
Tempe	-	-	-
Tanasitolo	170	0.04	7
Maniang Pajo	117	0.34	40
Belawa	1	0.50	1
Sabbang Paru	144	0.73	105
Pammana	81	0.92	74
Takkalalla	25	0.42	11
Majauleng	88	0.57	50
Sajoanging	189	1.04	196
Total	3,660	0.74	2,730

Table 8.12 Unit Yield and Production for Pepper

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	-	-	-
Tellulimpoe	-	-	-
Maritengae	-	-	-
Dua Pitue	1.1	0.35	0.33
Cenrana	-	-	-
Ajangale	-	-	-
Dua Boccoe	-	-	-
Tellusiatinge	-	-	-
Ponre	-	-	-
Ulaweng	2	0.05	0.10
Lamuru	1.25	0.07	0.09
Lappariaja	1.00	0.10	0.10
Libureng	1.00	0.17	0.17
Kahu	2.42	0.34	0.82
Bonto Cani	1.00	0.47	0.47
Lalabata	0.49	0.20	0.10
Liliriaja	-	-	-
Marioriawa	-	-	-
Marioriwawo	0.65	2.23	1.45
Lilirilau	-	-	-
Tempe	-	-	-
Tanasitolo	-	-	-
Maniang Pajo	-	-	-
Belawa	-	-	-
Sabbang Paru	-	-	-
Pammana	-	-	-
Takkalalla	-	-	-
Majauleng	-	-	-
Sajoanging	-	-	-
Total	10.8	0.34	3.63

Table 8.13 Unit Yield and Production for Tobacco

Name of	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	-	-	-
Tellulimpoe	-	-	-
Maritengae	-	-	-
Dua Pitue	-	-	-
Cenrana	-	-	-
Ajangale	312	0.26	80
Dua Boccoe	216	0.39	85
Tellusiatinge	164	0.38	62
Ponre	-	-	-
Ulaweng	457	0.24	111
Lamuru	291	0.38	112
Lappariaja	255	0.29	75
Libureng	4	0.50	2
Kahu	5	0.20	1
Bonto Cani	1	-	-
Lalabata	38	0.03	1
Liliriaja	1,071	0.13	143
Marioriawa	10	-	-
Marioriawo	1,876	0.11	207
Lilirilau	4,049	0.11	445
Tempe	26	0.27	7
Tanasitolo	1	-	-
Maniang Pajo	24	0.25	6
Belawa	-	-	-
Sabbang Paru	500	0.35	175
Pammana	1,377	0.55	755
Takkalalla	-	-	-
Majauleng	89	0.36	32
Sajoanging	75	0.51	38
Total	10,841	0.22	2,337

Table 8.14 Unit Yield and Production for Sugar Cane

Name of Kecamatan	Harvested Area (ha)	Unit Yield (t/ha)	Total Production (ton)
Panca Lautang	-	-	-
Tellulimpoe	-	-	-
Maritengae	-	-	-
DuaPitue	5.0	3.96	19.8
Cenrana	-	-	-
Ajangale	5.0	3.84	19.2
Dua Boccoe	19.4	2.90	56.2
Tellusiatinge	-	-	-
Ponre	4.4	3.43	15.1
Ulaweng	-	-	-
Lamuru	1.0	0.5	0.5
Lappariaja	8.3	2.31	19.2
Libureng	5.9	2.29	13.5
Kahu	5.4	1.54	8.3
Bonto Cani	1.3	0.62	0.8
Lalabata	-	-	-
Liliriaja	-	-	-
Marioriawa	-	-	-
Marioriwawo	2.0	8.0	16.0
Lilirilau	-	-	-
Tempe	33	3.23	73.5
Tanasitolo	-	-	-
Maniang Pajo	3	17.4	52.2
Belawa	-	-	-
Sabbang Paru	625	0.28	174.5
Pammana	75.5	8.75	661.0
Takkalalla	-	-	-
Majauleng	5.0	6.14	30.7
Sajoanging	20.0	10.3	205
Total	819.2	1.67	1366

Table 8.15 Past Trend of Unit Yield for Paddy^{/6}

Name of Kecamatan		Entire area ^{/1}		Irrigated land		Rainfed area	
		W ^{/2}	IR ^{/3}	W	IR	W	IR
P. Lautang	W ^{/4}	0.64	0.41	0.78	1.00	0.59	0.18
	D ^{/5}	0.73	0.73	0.60	0.51	0.04	0.02
T. Limpoe	W	0.55	0.26	0.22	0.16	- 0.89	- 0.17
	D	0.73	0.42	0.03	0.25	0.72	0.39
M. Tengae	W	0.92	0.46	0.89	0.37	- 0.73	- 0.12
	D	0.75	0.41	0.83	0.88	0.62	0.26
Dua Pitue	W	0.39	0.19	0.87	0.38	- 0.80	- 0.23
	D	0.69	0.23	0.87	0.89	0.15	0.11
Lalabata	W	0.34	0.20	0.84	0.67	0.89	0.65
	D	0.60	0.34	0.45	0.22	- 0.03	- 0.01
Liliriaja	W	0.30	0.14	0.86	0.67	0.75	0.35
	D	0.65	0.30	0.81	0.36	0.07	0.04
Marioriawa	W	- 0.32	- 0.21	0.54	0.70	0.70	0.74
	D	0.65	0.29	0.99	0.95	0.96	0.51
Marioriwawo	W	0.32	0.01	0.80	0.61	0.52	0.20
	D	0.64	0.30	- 0.73	- 0.23	- 0.13	- 0.11
Lilirilau	W	- 0.22	- 0.08	0.83	0.45	0.66	0.48
	D	0.80	0.38	0.62	0.33	- 0.16	- 0.08
Tempe	W	- 0.60	- 0.13				
	D						
Tanasitolo	W	- 0.66	- 0.19				
	D	- 0.28	- 0.03				
M. Pajo	W	- 0.33	- 0.12	- 0.41	- 0.59	- 0.23	- 0.17
	D						
Belawa	W	0.15	0.04	0.13	0.07	- 0.11	- 0.07
	D	0.18	0.02			0.63	0.29
S. Paru	W	- 0.35	- 0.06			0.74	
	D	0.37	0.06			0.31	
Pammana	W	- 0.52	- 0.81	- 0.52	- 0.79	0.27	0.22
	D						
Takkalalla	W	- 0.72	- 0.02	- 0.34	- 0.57	0.36	0.20
	D	0.93	0.29				

- to be continued -

Name of Kecamatan		Entire area		Irrigated land		Rainfed area	
		γ	IR	γ	IR	γ	IR
Majauleng	W	- 0.16	- 0.04	- 0.93	- 0.42	0.29	0.10
	D						
Sajoanging	W	- 0.46	- 0.08	- 0.95	- 0.58	0.67	0.41
	D						

Remarks:

- /1 : Total area is composed of irrigated land and rainfed (paddy) area.
- /2 : Coefficient of corelation
- /3 : annual increasing ratio of unit yield of paddy which described as ton/ha/year
- /4 : wet season paddy
- /5 : dry season paddy
- /6 : Past trend of unit yield (IR) is computed by least square line method on the basis of the data from 1966 to 1977 for the entire area and from 1974 to 1977 for irrigated and rainfed area. Computation for Kabupaten Bone is not made due to shortage of data available at kecamatan level.

Table 8.16(1) Past trend of Unit Yield for Upland Crops (1)^{/1}

Name of Kecamatan	Maize		Cassava		Sweet Potato	
	γ ^{/2}	IR ^{/3}	γ	IR	γ	IR
P. Lautang	0.68	0.05	0.44	0.42	*	*
T. Limpoe	- 0.78	- 0.03	- 0.02	- 0.01	0.12	0.09
M. Tengae	- 0.67	- 0.04	- 0.53	0.04	- 0.30	- 0.26
Dua Pitue	- 0.56	- 0.04	0.64	0.06	*	*
Lalabata	- 0.36	- 0.02	- 0.94	- 0.40	- 0.62	- 0.18
Liliriaja	- 0.18	- 0.01	- 0.46	- 0.19	- 0.20	0.02
Marioriawa	- 0.54	- 0.01	- 0.87	- 0.61	- 0.64	- 0.02
Marioriwawo	- 0.82	- 0.07	- 0.89	- 0.41	*	*
Lilirilau	- 0.86	- 0.03	- 0.88	- 0.52	- 0.17	- 0.03
Tempe	- 0.11	- 0.01	- 0.67	- 0.68	- 0.47	- 0.20
Tanasitolo	- 0.45	- 0.05	- 0.25	- 0.23	- 0.29	- 0.18
M. Pajo	- 0.53	- 0.10	0.36	0.56	0.13	0.09
Belawa	- 0.67	- 0.05	- 0.38	- 0.36	- 0.41	- 0.17
S. Paru	- 0.65	- 0.04	- 0.17	- 0.14	0.30	0.18
Panmana	- 0.36	- 0.04	- 0.14	- 0.13	0.11	0.07
Takkalalla	- 0.27	0.03	- 0.20	- 0.20	- 0.39	- 0.21
Majauleng	- 0.46	- 0.03	- 0.57	- 0.77	- 0.46	- 0.38
Sajoanging	0.62	- 0.05	0.27	0.12	0.45	0.24

^{/1} : Past trend of unit yield is estimated on the basis of least squares line method for the data from 1970 to 1977.

^{/2} : Coefficient of correlation

^{/3} : annual increasing ratio (ton/ha/year)

Table 8.16(2) Past Trend of Unit Yield for Upland Crops (2)^{/1}

Name of Kecamatan	Peanuts		Soybeans		Green beans	
	γ ^{/2}	IR ^{/3}	γ	IR	γ	IR
P. Lautang	*	*	- 0.79	- 0.08	*	*
T. Limpoe	- 0.99	- 0.1	*	*	0.94	0.08
M. Tengae	- 0.82	- 0.17	*	*	*	*
Dua Pitue	- 0.65	- 0.19	*	*	*	*
Lalabata	- 0.55	- 0.01	0.18	0.01	- 0.69	- 0.02
Liliriaja	- 0.35	- 0.03	- 0.4	- 0.01	- 0.22	- 0.05
Marioriawa	- 0.64	- 0.02	0.16	0.004	0.61	0.01
Marioriwawo	0.43	- 0.07	- 0.44	- 0.03	- 0.62	- 0.13
Lilirilau	- 0.71	- 0.13	- 0.09	- 0.01	0.44	0.03
Tempe	- 0.37	- 0.03	0.45	0.01	0.83	0.03
Tanasitolo	- 0.57	- 0.03	*	*	- 0.43	- 0.03
M. Pajo	- 0.47	- 0.03	*	*	0.46	- 0.05
Belawa	- 0.26	0.02	- 0.03	- 0.002	*	*
S. Paru	0.31	0.01	0.58	0.01	0.29	0.01
Pammana	0.92	0.02	0.84	0.04	0.14	0.01
Takkalalla	0.45	0.001	*	*	- 0.34	- 0.01
Majauleng	0.31	0.01	*	*	- 0.48	- 0.02
Sajoanging	0.12	0.001	*	*	- 0.42	- 0.02

^{/1} : Past trend of unit yield is estimated on the basis
of least square line method for the data from 1970 to 1977.

^{/2} : Coefficient of correlation

^{/3} : annual increasing ratio (ton/ha/year)

Table 8.16(3) Past Trend of Unit Yield for Upland Crops (3)^{/1}

Name of Kecamatan	Tard long bean	
	γ / ²	IR / ³
P. Lautang	*	*
T. Limpoe	*	*
M. Tengae	*	*
Dua Pitue	*	*
Lalabata	- 0.50	- 0.03
Liliriaja	- 0.81	- 0.02
Marioriawa	*	*
Marioriwawo	0.55	0.03
Lilirilau	- 0.37	- 0.01
Tempe	0.69	0.02
Tanasitolo	- 0.29	- 0.03
M. Pajo	- 0.98	- 0.05
Belawa	*	*
S. Paru	*	*
Pammana	- 0.10	- 0.01
Takkalalla	*	*
Majauleng	- 0.51	- 0.02
Sajoanging	0.97	0.04

/1 : Past trend of unit yield is estimated on the basis of least square line method for the data from 1970 to 1977.

/2 : Coefficient of correlation

/3 : annual increasing ratio (ton/ha/year)

Table 9.1 Number of Livestock in 4 Kabupatens 1974 - 1976

Kecamatan year	Kind of cattle						
	Horse	Cattle	Buffallow	Goat	Sheep	Chicken	Ducks
Sidrap 1974	6,684	23,384	13,847	8,363	-	280,548	-
75	7,413	27,905	14,929	8,750	-	322,068	40,174
76	8,710	31,321	16,398	10,811	-	483,102	149,454
Bone 1974	22,774	97,947	38,036	10,666	160	1,001,440	33,207
75	24,595	108,808	38,369	13,555	198	11,602,820	66,414
76	26,415	121,847	18,458	15,719	244	2,404,230	31,455
Soppeng 1974	7,927	37,525	1,747	6,600	34	196,729	69,818
75	8,515	41,721	1,839	8,382	42	393,458	99,636
76	9,121	44,355	2,311	10,259	51	590,187	298,864
Wajo 1974	22,781	33,251	45,720	78,709	1,085	654,032	148,627
1975	23,603	37,803	49,839	22,039	1,320	954,632	199,244
1976	24,317	41,187	53,004	27,187	2,497	1,431,948	99,621

Table 9.2 Production of Forest Material
(1977/78)

Kind		Sidrap	Bone	Soppeng	Wajo	Total
Timber	(m ³)	703,993	540,749	123	17,417	1,262,282
Rottan	(kg)	801,420	2,517	2,230	142	806,309
Charcoal	(kg)	-	-	6,223	-	6,223
Kemiri	(kg)	1,610	16,730	18,538	-	36,878
Arenga palm	(l)	-	-	203,165	-	203,165
Bamboo	(piece)	-	20,770	1,375	-	22,145
Nipa	(sheet)	-	-	2,800	-	2,800
Fan-palm	(sheet)	-	-	6,140	-	6,140
Pengiun	(piece)	-	-	12,000	-	12,000
Baruk	(kg)	24		10	-	34
Fire-wood	(band)	166	1,723	-	-	1,889
Palm-Sugar	(kg)	100	3,050	-	-	3,150

Table 10.1 Farm Land Area by Size of Holding in South Sulawesi

Size of Holding	Total Area		Whole area owned by holder		Partially owned by holder	
	Area	%	Area	%	Area	%
	ha		ha		ha	
0.5	46,109	6.25	29,573	7.0	12,203	4.2
0.5 - 1.0	122,424	16.60	70,213	16.6	44,852	15.5
1.0 - 2.0	245,818	33.33	139,223	33.0	98,573	34.0
2.0 - 3.0	139,921	18.97	79,130	18.7	57,897	20.0
3.0 - 4.0	65,653	8.90	37,785	8.9	27,030	9.3
4.0 - 5.0	40,428	5.48	23,007	5.4	17,421	6.0
5.0	77,102	10.46	43,488	10.3	32,120	11.1
Total	737,455	100.00	422,419	100.0	290,096	100.00

Source : Agricultural Census, 1973

Table 10.2 Proportion of Number of Farmers by Tenure and Size of Holding in South Sulawesi

Size of Holding	Owner	Owner Cultivator		Total Farmers
	Cultivator	cum Tenant	Tenant	
0.5	18.51	6.63	2.96	27.83
0.5 - 1.0	16.25	9.85	1.78	27.77
1.0 - 2.0	16.63	11.23	1.00	28.85
2.0 - 3.0	5.38	3.86	0.20	9.44
3.0	3.52	2.42	0.07	6.00
Total	60.27	33.99	5.73	100.00

Table 10.3 Average Land Holding per Farm Household
By kecamatan in the Objective Area

	Paddy (ha)	Upland (ha)	Total (ha)	Farm Household	Average land holding per farm household		
					Paddy (ha)	Upland (ha)	Total (ha)
Kab. Sidrap							
PancaLautang	5,080	1,240	6,320	2,902	1.75	0.43	2.18
TelluLimpoE	2,670	140	2,810	2,518	1.06	0.06	1.12
MariTengaE	11,930	220	12,150	6,011	1.98	0.04	2.02
DuaPituE	12,420	3,320	15,740	7,743	1.60	0.43	2.03
Sub-total	32,100	4,920	37,020	19,174	1.67	0.26	1.93
Kab. Bone							
Cenrana	5,080	940	6,020	3,145	1.62	0.30	1.92
Ajangale	4,750	1,060	5,810	6,366	0.75	0.17	0.92
Dua BoccoE	3,060	1,020	4,080	5,366	0.57	0.19	0.76
TellSiatenge	4,990	590	5,580	5,810	0.86	0.10	0.96
Ponre	1,890	700	2,590	1,972	0.96	0.35	1.31
Ulaweng	920	4,010	4,930	6,444	0.14	0.62	0.76
Lamur	1,530	4,740	6,270	4,881	0.31	0.97	1.28
Lappariaja	5,400	4,270	9,670	5,786	0.93	0.74	1.67
Libureng	5,300	1,600	6,900	2,648	2.00	0.60	2.60
Kahu	7,310	720	8,030	3,371	2.17	0.21	2.38
BontoCani	1,600	840	2,440	1,610	0.99	0.52	1.51
Sub-total	41,830	20,490	62,320	47,399	0.88	0.43	1.31
Kab. Soppeng							
Lalabata	6,780	5,050	11,830	8,694	0.78	0.58	1.36
Liliriaja	6,640	5,050	11,690	6,975	0.95	0.73	1.68
Marioriawa	4,150	2,880	7,030	4,648	0.89	0.62	1.51
Marioriawo	1,750	6,100	7,850	6,207	0.28	0.98	1.26
Lili-Rilau	2,920	11,070	13,990	7,247	0.40	1.53	1.93
Sub-total	22,230	30,150	52,390	33,771	0.66	0.89	1.55
Kab. Wajo							
Tempe	280	2,070	2,350	5,029	0.06	0.41	0.47
TanaSitolo	4,020	2,360	6,380	4,166	0.96	0.57	1.53
Maniang Pajo	7,000	2,900	9,900	2,405	2.91	1.21	4.12
Belawa	4,610	5,960	10,570	4,467	1.03	1.33	2.36
SabangParu	2,510	6,110	8,620	4,714	0.53	1.30	1.83
Pamana	5,800	3,090	8,890	4,474	1.30	0.69	1.99
Takkalalla	12,920	2,470	15,390	5,788	2.23	0.43	2.66
Majauleng	10,350	2,570	12,920	5,077	2.04	0.50	2.54
Sajoangng	15,790	2,630	18,420	4,394	3.59	0.60	4.19
Sub-total	63,280	30,160	93,420	40,514	1.56	0.74	2.30
Grand Total	159,450	85,720	245,170	140,858	1.13	0.61	1.74

Source : Agricultural Extension Service Offices of Sidrap, Bone, Soppeng and Wajo Kabupatens.

Table 11.1 Development of Agricultural Support System
in South Sulawesi

	1974	1975	1976	1977	1978	1979
South Sulawesi Province						
Village Unit (Wilud)	262	286	332	332	620	620
Village Unit Cooperative (BUUD/KUD)	295	315	325	336	345	345
Village Unit BRI	115	123	175	210	210	210
Kiosk	306	376	435	583	508	508
Rural Extension Center (BPP)	-	-	-	-	-	-
Field Extension Worker (PPL)	200	260	280	368	574	574
Extension Supervisor (PPM)	-	-	-	144	144	144
Subject-matter Specialist (PPS)	19	21	15	17	26	29
The Objective Area						
Village Unit	64	65	108	137	189	190
BUUD/KUD	80	85	87	89	90	90
Village Unit BRI	35	35	51	59	59	59
Kiosk	62	69	69	72	76	86
Rural Extension Center (BPP)	-	-	-	14	15	15
PPL	65	77	100	138	181	181
PPM	-	-	-	26	29	29
PPS	4	4	5	5	4	4

Source: Agricultural Extension Service, South Sulawesi
Co-operative Offices of 4 Kabupatens.
BRI Kabupaten Offices.

Table 11.2 Average Size and Function of the Village Unit
in the Objective Area

	Objective Area	Kab.Sidrap	Kab.Wajo	Kab.Soppeng	Kab.Bone
Farm Household (No)	140,858	19,174	40,514	33,771	47,399
Paddy field (ha)	156,580	32,100	60,940	21,700	41,840
Irrigated (ha)	36,570	20,510	2,610	9,930	3,520
Rainfed (ha)	120,010	11,590	58,330	11,770	38,320
Upland (ha)	103,020	4,820	32,480	30,830	34,890
No. of Kec.	29	4	9	5	11
No. of Village	203	19	45	26	113
No. of Village Unit	190	52	58	30	50
BUUD/KUD (No)	90	24	26	13	27
KIOSK (No)	86	25	11	33	17
PPL (No)	181	56	42	28	55
BRI (No)	59	23	10	13	13
Per Wilud					
Paddy field (ha)	741	617	1,051	723	837
Irrigated P.F. (ha)	192	394	45	331	70
Upland (ha)	542	88	560	1,027	698
Farm Household (No)	741	369	699	1,126	948
BUUD/KUD (No)	0.47	0.46	0.45	0.43	0.54
KIOSK (No)	0.45	0.48	0.19	1.1	0.34
PPL (No)	0.95	1.08	0.72	0.93	1.1
BRI (No)	0.31	0.44	0.17	0.43	0.26

Note: Kec. - Kecamatan (Sub-District)

BUUD/KUD = Village Unit Co-operative

PPL = Field Extension Worker

BRI = Indonesia People's Bank

Table 11.3 BIMAS and INMAS Area by Kecamatan
(Average of 1974-'78)

	Wet Season Paddy (ha)					Dry Season Paddy (ha)				
	Total	BIMAS	INMAS	B + I	%	Total	BIMAS	INMAS	B + I	%
<u>Kab. Sidrap</u>										
PancaLautang	3,153	655	1,333	1,988	32.3	1,067	441	150	591	55.4
TelluLimpoE	1,264	484	692	1,176	93.0	1,000	329	382	711	71.1
MariTengaE	7,774	3,252	3,368	6,620	85.2	7,078	4,047	2,270	6,317	89.3
Dua PituE	10,972	1,378	2,509	3,887	35.4	3,788	640	2,770	3,410	90.0
Sub-total	23,163	5,769	7,902	13,671	59.0	12,933	5,457	5,572	11,029	85.3
<u>Kab. Bone</u>										
Cenrana	3,639	0	0	0	0	75	0	0	0	0
Ajangale	3,856	0	12	12	0.3	10	0	0	0	0
DuaBoccoe	1,759	159	57	216	12.3	151	47	16	63	41.7
TellSiattenge	3,210	13	10	23	0.7	348	12	88	100	28.7
Ponre	1,457	0	0	0	0	46	0	0	0	0
Ulawang	660	0	3	3	0.5	71	0	0	0	0
Lamuru	1,270	92	25	117	9.2	425	130	10	140	32.9
Lappariaja	4,708	225	590	815	17.3	614	107	244	351	57.2
Libureng	2,906	0	0	0	0	44	0	0	0	0
Kahu	2,261	0	40	40	1.8	194	43	19	62	32.0
BontoCani	1,573	50	0	50	3.2	150	96	37	133	88.7
Sub-total	27,299	539	737	1,276	4.7	2,128	435	414	849	39.9
<u>Kab. Soppeng</u>										
Lalabata	5,906	2,831	1,057	3,888	65.8	5,271	1,735	716	2,451	46.5
Liliriaja	5,692	3,074	1,273	4,347	76.4	5,642	1,823	601	2,424	41.6
Marioriawa	2,047	836	270	1,106	54.0	1,345	443	208	651	48.4
Marioriawo	1,564	725	319	1,044	66.8	1,126	380	88	468	41.6
Lili-Rilau	2,213	195	98	293	13.2	253	129	9	138	54.6
Sub-total	17,422	7,661	3,017	10,678	33.4	13,637	4,510	1,622	6,132	45.0
<u>Kab. Wajo</u>										
Tempe	149	0	0	0	0	0	0	0	0	0
TanaSitolo	1,538	200	0	200	13.0	38	0	0	0	0
ManiangPajo	2,757	1,017	142	1,159	42.0	11	0	0	0	0
Belawa	2,941	1,442	212	1,654	56.2	750	0	0	0	0
SabangParu	1,365	40	0	40	2.9	65	0	0	0	0
Pamana	2,131	496	26	522	24.5	0	0	0	0	0
Takkalalla	9,848	1,544	0	1,544	15.7	18	0	0	0	0
Majauleng	5,428	1,410	0	1,410	25.8	4	0	0	0	0
Sajoanging	10,800	2,763	66	2,829	26.2	0	0	0	0	0
Sub-total	36,957	8,912	446	9,358	25.3	886	0	0	0	0
Grand Total	104,841	22,881	12,102	34,983	33.4	29,584	10,402	7,608	18,010	60.9

Note : Area is harvested area.

% is BIMAS + INMAS by total area.

Table 11.4 Development of Agricultural Extension Service

	1974	1975	1976	1977	1978	1979
<u>The Objective area</u>						
Rural Extension Center	-	-	-	14	14	14
Subject-matter Specialist	4	4	5	5	4	4
Extension Supervisor	-	-	-	36	39	39
Field Extension Worker	65	77	100	138	181	181
<u>Kab. Sidrap</u>						
Rural Extension Center	-	-	-	3	3	3
Subject-matter Specialist	1	1	1	1	1	1
Extension Supervisor	-	-	-	10	10	10
Field Extension Worker	20	20	37	47	56	56
<u>Kab. Bone</u>						
Rural Extension Center	-	-	-	4	4	4
Subject-matter Specialist	1	1	1	1	1	1
Extension Supervisor	-	-	-	11	11	11
Field Extension Worker	21	27	32	46	55	55
<u>Kab. Soppeng</u>						
Rural Extension Center	-	-	-	3	3	3
Subject-matter Specialist	1	1	2	2	1	1
Extension Supervisor	-	-	-	5	8	8
Field Extension Worker	14	14	16	29	28	28
<u>Kab. Wajo</u>						
Rural Extension Center	-	-	-	4	4	4
Subject-matter Specialist	1	1	1	1	1	1
Extension Supervisor	-	-	-	10	10	10
Field Extension Worker	10	16	15	16	42	42

Source : Agricultural Extension Service of each 4 Kabupatens.

Table 11.5 Production of Paddy Seed in South Sulawesi

	1977		1978	
	Planted Area (ha)	Production (ton)	Planted Area (ha)	Production (ton)
<u>South Sulawesi</u>				
Seed Center	20	54	19	71
Seed Station	164	378	180	480
Seed Grower	203	374	294	523
Total	387	806	493	1,074
<u>The Objective Area</u>				
Seed Station	62	106	61	110
Seed Grower	54	98	62	124
Total	116	204	123	234

Source : Agricultural Extension Service of South Sulawesi

Provincial Seed Center, Maros.

Table 11.6 Paddy BIMAS Package Credit per Ha (1978/'79)

	Urea (kg)	TSP (kg)	DAP (kg)	Kcl/ K ₂ O (kg)	Insec- ticide (l)	Roden cide (g)	Seed	Spray er	Other expense	Total
Paddy in wet field (using TSP)										
Package A Amount	200	50	-	30	2	100	-	-	-	-
Value Rp	14,000	3,500	-	2,100	2,460	230	3,750	2,000	10,000	38,040
Package B Amount	100	35	-	30	2	100	-	-	-	-
Value Rp	7,000	2,450	-	2,100	2,460	230	-	2,000	10,000	26,240
Package C Amount	250	75	-	30	2	100	-	-	-	-
Value Rp	17,500	5,250	-	2,100	2,460	230	3,750	2,000	10,000	43,290
Paddy in wet field (using DAP)										
Package A Amount	180.5	-	50	30	-	100	-	-	-	-
Value Rp	12,635	-	4,500	2,100	6,000	230	3,750	1,000	10,000	40,215
Package B Amount	86.3	-	35	30	-	100	-	-	-	-
Value Rp	6,041	-	3,150	2,100	6,000	230	-	1,000	10,000	28,521
Package C Amount	220	-	75	30	-	100	-	-	-	-
Value Rp	15,400	-	6,750	2,100	6,000	230	3,750	1,000	10,000	45,230
Paddy in wet field (Using insecticide Sebagian Granula)										
Package A Amount	200	50	-	30	-	100	-	-	-	-
Value Rp	14,000	3,500	-	2,100	6,000	230	-	1,000	10,000	40,580
Package B Amount	100	35	-	30	-	100	-	-	-	-
Value Rp	7,000	2,450	-	2,100	6,000	230	-	1,000	10,000	28,780
Package C Amount	250	75	-	30	-	100	-	-	-	-
Value Rp	17,500	5,250	-	2,100	6,000	230	3,750	1,000	10,000	43,830

Table 11.7 INMAS Package Credit per Ha (1978/'79)

	Urea (kg)	TSP (kg)	Insecticide (l)	Pesticide (g)	Total
Minimum Amount	50	12.5	1	50	-
Value Rp	3,500	875	1,230	115	5,720
Maximum Amount	100	25	2	100	-
Value Rp	7,000	1,750	2,460	230	11,440

Table 11.8 Upland Crops Package Credit per Ha 1978/'79

	Urea (kg)	TSP (kg)	Pesti cide (kg)	Seed (kg)	Sprayer	Other Expense	Total
Maize Amount	250	100	0.5	25	-	-	-
Value Rp	17,500	7,000	615	2,385	-	4,000	31,500
Soy bean Amount	75	100	4	50	-	-	-
Value Rp	5,250	7,000	4,980	12,330	2,000	4,000	35,500
Peanut Amount	100	100	2	100	-	-	-
Value Rp	7,000	7,000	2,460	29,040	1,000	4,000	50,500
Green kidney bean Amount	50	50	2	25	-	-	-
Value	3,500	3,500	2,460	7,040	1,000	4,000	21,500
Sorghum Amount	150	100	1	15	-	-	-
Value Rp	10,500	7,000	1,230	1,270	500	4,000	24,500
Cassava Amount	200	75	0.5	-	-	-	-
Value Rp	14,000	5,250	1,150	5,100	-	4,000	29,500
Sweet potato Amount	150	50	-	-	-	-	-
Value	10,500	3,500	-	4,500	-	4,000	22,500

Source : PROGRAM PENINGKATAN PRODUKSI PADI & POLOWIJO
(BIMAS - INMAS) 1978/'79
PROPINSI DAERAH TINGKAT I SULAWESI SELATAN

Table 11.9 Paddy BIMAS Credit in South Sulawesi

		Loan Amount (1,000 Rp.)	Repayment (1,000 Rp)	Outstanding (1,000 Rp.)	Proportion of outstanding(%)
1970	1971	180,538	124,877	55,661	30.83
	1971	54,955	40,961	13,994	25.46
1971	1972	94,319	67,698	26,621	28.22
	1972	89,228	68,652	20,576	23.06
1972	1973	709,476	542,190	167,286	60.14
	1973	187,258	136,152	51,106	27.29
1973	1974	789,119	495,018	294,100	37.27
	1974	446,463	250,477	195,986	43.90
1974	1975	753,149	483,424	269,725	35.81
	1975	496,470	297,434	199,036	40.09
1975	1976	911,670	546,200	365,470	40.08
	1976	964,348	470,259	494,089	51.23
1976	1977	1,110,932	585,664	525,268	47.28
	1977	1,051,448	440,549	610,899	58.10
1977	1978	1,184,240	448,517	735,723	62.12
	1978	1,020,783	245,983	774,800	75.90
1978	1979	1,310,241	362	1,309,879	99.97

Source : BANK RAKYAT INDONESIA, UJUNG PANDANG REGIONAL
OFFICE JAN. 1979.

Table 11.10 Paddy BIMAS Credit in Kabupaten Sidrap

	No. of Renter	Loan Amount (1,000Rp.)	Repayment (1,000Rp.)	Outstanding Amount (1,000Rp.)	Proportion of Outst. (%)
1970 1971	NA ^{/1}	23,262	16,616	6,646	28.57
1971	NA	7,018	5,810	1,208	17.21
1971 1972	NA	5,353	3,542	1,811	83.83
1972	1,524	19,484	15,189	4,295	22.06
1972 1973	7,101	93,561	70,797	22,764	24.33
1973	3,652	41,026	27,606	13,420	32.71
1973 1974	1,980	51,615	28,756	22,859	44.28
1974	2,471	47,583	30,677	16,906	35.52
1974 1975	2,851	53,383	53,152	231	0.43
1975	5,245	96,738	78,353	18,385	19.00
1975 1976	4,483	118,082	105,108	12,973	10.98
1976	6,955	188,178	156,774	31,404	16.61
1976 1977	5,980	168,972	146,192	22,780	13.48
1977	7,708	230,727	174,493	56,234	24.37
1977 1978	5,196	155,551	112,937	42,614	27.39
1978	8,558	279,702	140,485	139,217	49.77
1978 1979	7,211	274,138	27,998	246,139	89.79

Source : BANK RAKYAT INDONESIA, SIDRAP BRANCH OFFICE, May, 1979.

^{/1} : NA = not available.

Table 11.11

Paddy BIMAS Credit in Kabupaten Bone

		No. of Renter	Loan Amount (1,000Rp.)	Repayment (1,000Rp.)	Outstanding Amount (1,000Rp.)	Proportion (%)
1970	1971	NA ^{/1}	10,669	10,669	0	0
	1971	NA	1,056	1,056	0	0
1971	1972	NA	2,154	2,154	0	0
	1972	92	14,762	14,419	343	2.32
1972	1973	112	34,689	34,233	456	1.31
	1973	593	27,497	22,887	4,610	16.76
1973	1974	466	36,478	34,014	2,464	6.75
	1974	88	2,684	2,251	433	16.09
1974	1975	697	28,341	18,518	9,823	34.64
	1975	951	32,994	20,309	12,685	38.45
1975	1976	806	31,384	12,155	19,229	61.27
	1976	989	25,377	9,098	16,279	64.14
1976	1977	1,386	40,701	21,735	18,966	46.59
	1977	1,002	16,970	7,137	9,653	57.49
1977	1978	981	17,520	5,828	11,692	66.73
	1978	1,476	22,895	2,434	20,461	89.36
1978	1979	537	6,907	54	6,853	99.22

Source : BANK RAKYAT INDONESIA, WATANPONE BRANCH OFFICE,
MAY, 1979

^{/1} : NA = not available

Table 11.12 Paddy BIMAS Credit in Kabupaten Soppeng

	No. of Renter	Loan Amount (1,000Rp.)	Repayment (1,000Rp.)	Outstanding (1,000Rp.)	Proportion (%)
1970 1971	NA ^{/1}	15,293	15,293	0	0
1971 1971	NA	NA	NA	NA	-
1971 1972	NA	5,300	5,300	0	0
1972 1972	1,598	16,371	16,308	63	0.38
1972 1973	5,802	62,880	62,354	526	0.83
1973 1973	1,085	7,625	7,305	320	4.19
1973 1974	3,359	46,560	44,340	2,220	4.77
1974 1974	5,005	96,222	83,462	12,760	13.26
1974 1975	2,386	52,113	46,449	5,664	10.86
1975 1975	3,911	82,710	69,163	13,547	16.37
1975 1976	2,471	61,210	56,851	4,359	7.12
1976 1976	3,106	81,462	65,843	15,619	19.17
1976 1977	2,063	51,358	48,921	2,437	4.74
1977 1977	3,366	78,874	63,741	15,133	19.18
1977 1978	1,884	39,089	38,225	864	2.21
1978 1978	4,230	109,407	70,578	38,829	35.49
1978 1979	4,380	133,591	173	133,418	99.89

Source : BRI Branch office in Soppeng Kabupaten

^{/1} : NA = not available

Table 11.13 Paddy BIMAS Credit in Kabupaten Wajo

	No. of Renter	Loan Amount (1,000Rp.)	Repayment (1,000Rp.)	Outstanding (1,000Rp.)	Proportion (%)
1970 1971	NA ^{/1}	5,199	3,847	1,352	26.01
1971	-	-	-	-	-
1971 1972	-	-	-	-	-
1972	NA	7,833	7,833	0	0
1972 1973	NA	31,632	29,568	2,064	6.52
1973	NA	30,488	30,488	0	0
1973 1974	200	15,578	1,408	14,170	90.97
1974	8,998	156,498	66,418	90,079	57.55
1974 1975	0	0	0	0	
1975	2,293	104,969	57,093	47,876	45.61
1975 1976	0	0	0	0	
1976	2,599	297,798	130,690	167,108	56.11
1976 1977	0	0	0	0	
1977	2,470	370,541	92,588	277,953	75.01
1977 1978	0	0	0	0	
1978	1,159	87,568	8,628	78,940	90.14
1978 1979	0	0	0	0	

Source : BRI Branch Office in Kabupaten Wajo

^{/1} : NA = not available

Table 11.14 Development of BUUD/KUD in 4 Kabupatens of the Objective Area

Kabupaten		1973	1974	1975	1976	1977	1978	1979
<u>Sidrap</u>								
	BUUD	15	9	3	3	0	0	0
	KUD	4	10	21	21	24	24	24
<u>Bone</u>								
	BUUD	0	0	0	0	0	0	0
	KUD	25	25	25	26	27	27	27
<u>Soppeng</u>								
	BUUD	11	11	0	0	1	1	1
	KUD	0	0	11	12	12	12	12
<u>Wajo</u>								
	BUUD	22	21	9	1	0	1	1
	KUD	0	4	16	24	25	25	25
<u>Total</u>								
	BUUD	48	41	12	4	1	2	2
	KUD	29	39	73	83	88	88	88

Source : Each Co-operative Office in 4 Kabupatens.

Table 11.15 Number of BUUD/KUD and members
in 4 Kabupatens in 1978

	Sidrap	Bone	Soppeng	Wajo	Total
No. of BUUD	-	-	1	1	2
members	-	-	1,066	48	1,114
candidates	-	-	-	-	-
No. of KUD	24	27	12	25	88
members	4,221	1,598	1,872	3,906	11,597
candidates	8,882	6,062	3,137	1,200	19,281
BUUD/KUD	24	27	13	26	90
members	4,221	1,598	2,938	3,954	12,711
candidates	8,882	6,062	3,137	1,200	19,281
Total (A)	13,103	7,660	6,075	5,154	31,992
No. of Total Farm Household (B)	30,740	80,880	33,590	44,990	190,200
% of (A)/(B)	42.6	9.5	18.1	11.5	16.8

Source: Each Co-operative Office in 4 Kabupatens

Table 11.16 Number of Equipment owned by BUUD/KUD
in 4 Kabupatens of the Objective Area (1978)

	Sidrap	Bone	Soppeng	Wajo	Total	South Sulawesi
Rice Mill						
Large Rice Mill	12	1	4	3	20	36
Rice Mill Unit	199	30	22	159	410	745
Small Rice Mill	234	19	5	4	262	388
Engerberg type	142	810	829	764	2,545	4,874
Total	587	860	860	930	3,237	6,012
Total Capacity (t/hu)	201	125	147	137	610	1,105
Warehouse	23	13	9	22	67	185
Trayser	-	3	-	10	13	25
Moisture tester	22	10	12	27	71	214
Mist blower	-	-	-	1	1	5
Dryer	-	-	-	1	1	2

Source : Each Co-operative Office in 4 Kabupatens
Provincial Agricultural Extension Service,
South Sulawesi.

Table 11.17 Development of Water User's Association (P3A)
in South Sulawesi

	1976/1977	1977/1978	1978/1979	Total
Number of P3A	10	7	15	32
Command irrigated area	3,843	2,500	6,019	12,362

Table 11.18 Number and member of Water User's Association (P3A)
in 4 Kabupatens of the Objective Area (1979)

	Sidrap	Bone	Soppeng	Wajo	Total
No. of P3A	2	4	1	0	7
Irrigated Area (ha)	1,435	1,571	530	0	3,536
No. of Members	530	1,624	285	0	2,439

Source : Agricultural Extension Service Offices in 4 Kabupatens.