

Table 3.10.6 PRODUCTION, PLANTED AREA AND YIELD OF MAJOR CROPS IN LILONGWE ADD (1982/83 - 1988/89)

Crop	Planted Area (ha)						Yield (kg/ha)						Production (ton)					
	ADD		RDP		ADD		RDP		ADD		RDP		ADD		RDP			
	Total	Dedza H	Nicheu	LLW W.	LLW E.	T. Lifidzi	Total	Dedza H	Nicheu	LLW W.	LLW E.	T. Lifidzi	Total	Dedza H	Nicheu	LLW W.	LLW E.	T. Lifidzi
1. Maize																		
Local	318,143	42,121	55,304	143,107	45,822	38,810	1,218	852	972	1,347	1,378	1,547	389,268	35,874	53,872	193,811	63,340	48,350
Hybrid	29,862	1,415	1,257	14,543	2,798	10,295	2,592	2,237	3,241	2,833	2,289	2,692	70,488	3,152	4,200	41,238	6,290	16,833
Total	348,005	43,536	56,140	157,650	48,620	49,105	1,318	897	997	1,483	1,430	1,327	459,756	39,027	56,086	235,049	69,631	65,183
4. Groundnuts																		
	59,627	3,352	2,697	38,251	10,959	4,847	439	315	328	451	417	371	25,932	1,027	1,015	17,581	4,736	1,865
5. Pulses																		
	35,245	9,822	11,708	1,651	3,398	10,070	249	239	253	219	153	296	8,870	2,338	2,909	342	591	3,023
6. Irish Potatoes																		
	2,566	1,536	1,029	-	-	720	4,479	4,501	5,006	-	-	4,497	11,234	6,467	4,484	-	-	3,427
7. Wheat																		
	1,093	46	1,085	-	-	-	714	1,413	692	-	-	-	690	65	681	-	-	-
8. Tobacco																		
	14,792	-	28	13,465	1,399	716	466	-	285	469	406	446	6,940	-	8	6,367	577	322
Total	461,328	58,292	72,688	211,017	64,376	65,456	513,422	48,924	65,183	259,339	75,534	73,820						
LLW.W. - Lilongwe West																		
Dedza H - Dedza Hills																		
LLW.E. - Lilongwe East																		
T. Lifidzi - Thiwi Lifidzi																		

Table 3.10.7

## PLANTED AREA AND PRODUCTION OF MAJOR CROPS IN RDPs CONCERNED

Crop	Planted Area (ha)			Production (ton)		
	Bwanje V.	Dedza H	Ntcheu	Bwanje V.	Dedza H	Ntcheu
1. Maize						
Local	24,375	42,121	55,304	22,622	35,874	53,872
Composite	1,047	-	-	1,243	-	-
Hybrid	3,108	1,415	1,257	4,263	3,152	4,200
Total	28,530	43,536	56,140	28,128	39,027	56,086
2. Rice	1,030	0	0	1,261	0	0
3. Groundnuts	2,515	3,352	2,697	3,792	1,027	1,015
4. Pulses	1,051	9,822	11,708	670	2,338	2,909
5. Wheat	0	46	1,085	0	65	681
6. Sorghum	342	-	-	91	-	-
7. Millet	1,126	-	-	370	-	-
8. Cassava	7,114	-	-	2,302	-	-
9. Irish Potatoes	0	1,536	1,029	0	6,467	4,484
10. Sweet Potatoes	1,163	0	0	1,604	0	0
11. Cotton	4,006	-	-	2,956	-	-
12. Tobacco	60	-	28	6	-	8
13. Sunflower	18	-	-	1	-	-
14. Chillies	164	-	-	82	-	-
<b>Total</b>	<b>47,119</b>	<b>58,292</b>	<b>72,688</b>	<b>41,263</b>	<b>48,924</b>	<b>65,183</b>

Table 3.10.8 NUMBER OF FARM HOUSEHOLDS CULTIVATED PRODUCTION AND YIELDS BY CROPS

Crop	No. of Households Cultivated (A) (%)	Area Cultivated per Household (ha)	No. of Households Harvested (B)	(B)/(A) (%)	Production per Harvested Household (t)	Yield on Harvested Area (t/ha)	Average Yield in Salima ADD (t)
Local maize	108 (90) *	0.83	72	67	0.54	0.74	1.53
Composite maize	3 (3) *	1.00	3	100	1.13	1.72	2.03
Hybrid maize	58 (44) *	0.63	34	59	0.87	1.61	1.51
Maize total	120 (100)	1.08	94	78	0.98	0.83	1.54
Upland rice	(10) *	0.25	6	75	0.3	1.01	-
Lowland rice	(91) *	0.34	53	75	0.5	1.58	-
Rice total	(65)	0.33	59	76	0.48	1.53	1.25
Cotton	(31)	0.59	34	92	0.43	0.81	-
Beans/Pulses	(15)	0.25	10	56	0.27	0.82	-
Sweet potatoes	(13)	0.17	10	66	0.45	2.84	-
Groundnuts	(13)	0.31	10	67	0.17	0.57	-
Vegetables	(9)	0.21	7	64	0.45	1.11	-
Cassava	(8)	0.22	6	60	0.99	2.84	-
Finger millet	(8)	0.39	4	44	0.17	0.56	-
Sorghum	(3)	0.10	2	67	0.07	0.70	-
Tobacco	(2)	0.70	0	0	-	-	-

Number of samples: 120 farm households.

Average yield in Salima ADD area: Average on 1982/83-1984/85 (Annual survey of agriculture).

Percentage in parenthesis shows percentage to all farm households.

\*: Percentage to cultivated farm households.

Table 3.10.9

RICE CULTIVATION PRACTICES OF  
THE FARMERS SURVEYED

Items		Number of Cases	
		Number	%
Variety cultivated	Faya 14-M-69	46	61.30
	Kota-kota	8	10.70
	Mixed Faya	4	5.30
	Blue Bonnet	2	2.70
	Karonga	2	2.70
	Manda	2	2.70
	No information	11	14.60
	Total	<u>75</u>	<u>100.00</u>
Seed used	Own seed	37	49.30
	Purchased seed	33	44.00
	No information	5	6.70
	Total	<u>75</u>	<u>100.00</u>
Growing period	Sowing time (A)	Middle of November	
	Transplanting time (B)	Early January	
	Harvesting time (C)	Late of May	
	Growing period	190 days =	48 days (A-B) 142 days (B-C)
Fertilizer application	Applied farmers	1	1.30
	Non-applied farmers	74	98.70
	Total	<u>75</u>	<u>100.00</u>
Weeding	Weeded farmers	57	76.00
	Non-weeded farmers	18	24.00
	Total	<u>75</u>	<u>100.00</u>
	Number of times weeded	1.7 times (By hands)	
Cisease control	Controlled farmers	0	0.00
	Non-controlled farmers	75	100.00
Pest control	Controlled farmers	13	17.30
	Non-controlled farmers	62	82.70
	Total	<u>75</u>	<u>100.00</u>
	Kind of pests and way of control	Birds, Rodents, Hippos (By driving away)	

**Table 3.10.10 Farming Practices and Recommended Fertilizer Application Rates and Pesticides for Major Crops**

Crop	Farming Practices	Variety	Fertilizer Application		Insect Pests	Spraying	Diseases
			Standard Rate	Fertilizers recommend.			
Maize	<ol style="list-style-type: none"> <li>1. Early planting</li> <li>2. Plant density: 37,000 - 44,000</li> <li>3. Application manure: 12.5 tons/ha</li> <li>4. Weed control: during the first six weeks after germination</li> <li>5. Control of storage pests is important.</li> <li>6. Stooking is recommended.</li> </ol>	Local	N-40 kg/ha + P-10 kg/ha	DAP or 23:21:0+4S for basal dosage	Major insect pests: Armyworm, Red Locust, Large short-horned grasshopper, Crickets, Stalkborers, etc.	Major Disease: Northern Leaf Bright, Maize streak virus	
		Composite	N-76 kg/ha + P-20 kg/ha	Urea, CAN, S/A for top-dressing	Chemical: Carbaryl (Sevin)		
		Hybrid	N-96 kg/ha + P-40 kg/ha		Fenvalerate (Sumicidin) Trichlorfaon (Dipterex)		
Rice	<ol style="list-style-type: none"> <li>1. Nursery preparation</li> <li>2. Ploughing-breaking crods-levelling-bunding-paddling</li> <li>3. Water control and management</li> <li>4. Weed control and Bird scaring</li> <li>5. Harvesting/Drying/Threshing/Winning</li> </ol>	Faya 14-M-69	N-60 kg/ha + P-25 kg/ha	DAP, 23:21:0+4S or SA for basal dosage	Green grasshopper, Stem borer and Army worm	Leaf blast, Leaf spot	
		Blue Bonnet	N-80 kg/ha + P-25 kg/ha	Urea, CAN, S/A	Chemical: Carbaryl (Sevin)		
		IET 4094	N-80 kg/ha + P-25 kg/ha				
		IR 1561-250-2-2	N-80 kg/ha + P-25 kg/ha				
Beans	<ol style="list-style-type: none"> <li>1. Planting methods: pure stand/interplanting/dimba</li> <li>2. Avoid loss of beans by shattering</li> <li>3. Threshing</li> </ol>	Pure stand	N-40 kg/ha + P-40 kg/ha	DAP, 23:21:0+4S, 20:20:20, Urea	Bean beetle	Anthracnoc, Angle leaf spot, Halo blight	
					Chemical: Carbaryl (Sevin)		
Cotton	<ol style="list-style-type: none"> <li>1. Deep plough/Ridges 90 cm interval.</li> <li>2. Early planting at the first rain</li> <li>3. Weeding between planing and flowering periods</li> <li>4. Scouting and spraying</li> <li>5. Picking (Cotton Handbook of Malawi)</li> </ol>		N-34 kg/ha + P-45 kg/ha + S-22 kg/ha	DAP, SA	African ballworm, spiny, red and pink ballworms, red spider mites, cotton stainers, jassid, aphid, termites, elegant grasshopper		
					Chemical: Cypermethrin		
					Thiodicarb (Larvin)		
					Deltamethrin (Decis)		
					Lambdacyhalothrin (Karate)		

Source: Guide to Agricultural Production in Malawi 1991/92, MOA

Table 3.10.11 (1/3) Recommended Varieties and Varieties Applied in the Study Area

Crop	Crop Variety	Applied in the Study Area	Growing Period (days)	Potential Yield (kg/ha)	Seed Rate (kg/ha)	Suitable Zone (Altitude m)
Maize	Local (unimproved)	O	-	2,700	25	-
	Composite - CCA	O	130 - 140	4,500	25	El.500 - 900
	Composite - CCC		120 - 130	3,500 - 4,500	20 - 25	Above El.1000
	Composite - CCD		110 - 128	3,000 - 4,000	20 - 25	El.500 - 900
	Composite - UCA		140 - 150	5,000	25	Above El.1000
	Composite - Tuxpeno		110 - 120	4,000	25	Karonga lakeshore
	Hybrid - MH12		140 - 150	8,000	25	Above El.1000
	Hybrid - MH16	O	120 - 130	5,500	25	El.500 - 900
	Hybrid - MH17		140 - 150	8,000	25	Above El.1000
	Hybrid - MH18	O	120 - 130	5,500	25	El.500 - 900
	Hybrid - NSCM41	O	120 - 130	5,500	25 - 30	El.500 - 900
Rice	Faya 14-M-69	O	145 - 150 (R)	3,500 - 4,000	63	Lakeshore, Phalombe plain,
	Blue Bonnet	O	125 - 130 (R)	3,000 - 4,000	75	Shire Valley, Lake Chilwa
			150 - 155 (D)			
	IET 4094	O	115 - 120 (R)	6,000	75	*some local varieties similar to
			143 - 145 (D)			Faya are also planted by
	IR 1561-250-2-2	O	115 - 120 (R)	6,000	75	rainfed paddy field by smallholders.
		143 - 145 (D)				
Sorghum	Local	O	90	1,200	4	Shire Valley and food security crop in other marginal areas.
	PN3		90	3,000	4	
Pearl Millet	Nigerian compo. tall				8	Shire Valley, supplementary food crop
	Nigerian compo. dwarf				8	
Fingar Millet	516			2,000	5 - 7	Alternative food and cash crop in the plateau of Northern Region
	366			2,000	5 - 7	
	Dopalopa			2,000	5 - 7	
	Mavoli			2,000	5 - 7	
Wheat	Kenya Nyati			3,500	100	Plateau, e.g. Tasangano, Neno, Dedza, Phoka Hills
	Limpopo			3,500	100	
	Torim 73			3,500	100	
	Jupateco			3,500	100	
	Loerie			3,500	100	
	Gamtoos			3,500	100	

Source: Guide to Agricultural Production in Malawi 1991/92, MOA

Table 3.10.11 (2/3) Recommended Varieties and Varieties Applied in the Study Area

Crop	Crop Variety	Applied in the Study Area	Sowing time	Potential Yield (kg/ha)	Seed Rate (kg/ha)	Remarks
Beans	Nasaka (253/1)		January for Central R.	2,500	80 - 100	Good source of protein and cash income. Grown throughout the country mostly in cool plateau areas. Also grown in low altitude during winter months from April to July.
	Bwenzilaana (373)			2,500	80 - 100	
	Sapelekedwa (600/1)		Feb.-Mar. for relay cropping	2,500	80 - 100	
	Kamtsilo (499/1)			2,500	80 - 100	
	Kanazama (97/1)			2,500	75 - 90	
	Namajengo (336)			2,500	75 - 90	
Cowpeas	Nseula	Little	mid.Jan.-Feb.	2,000	16 - 20	Grown throuout the country. Suitable for warm areas with low rainfall, e.g. Shire Valley, Bwanje Valey, Lakeshore and Phalombe plians and dry plateu areas. High tolerant to heat and dry weather.
Pigeon Peas	ICP 9145	O	Onset of the rainy season. 270 days.	1,700	8	Grown in all the types of soils. Improve the soil fertility through nirogen fixation. valuable source of protein and cash.
Chick Peas	Local		February	1,500	8 - 10	Important cash crop in Shire Highland. Require less moisture and suited to relay cropping after maize. Improve soil fertility.
Filed Peas	Earlicrop (early)		mid.Mar. - mid.Apr.		65 - 95	High altitude. Grown as pulses and vegetables. Improve soil fertility.
	W.F. Massay (early)					
	Green Feast (mid.)					
	Orward (mid.)					
	Alderman (late)			2,000		
Soya Beans	Geduld	O	before end December	2,000	25	Useful for human protein sources and livestock artificial feed. substisitional crop of groundnuts.
	Davis			2,000	25	
	Hardee	O		2,000	25	
	Forrest			2,000	25	
	Bossier			2,000	25	
	Impala			2,000	25	
	Kudu			2,000	25	
Guar Beans	Khanpur Local		mid-end Jan.	2,000	6 - 8	Grown as cash crop. Processed for industrial use and animal feed.
Grams			December	1,500	6 - 10	Green and black grams are grown. Used in the same way in cowpcas.
Ground Beans			December	1,000	100 - 110	Used in the same way in cowpeas.
Ground-nuts	Chalimbana		first half of December	2,000	90	Grown as export crop for confectionay trade and provide raw materials to the domestic oil industry. Improve the soil fertility in cop roatation with maize and tobacco.
	Chitembana			2,400	100	
	ICGMS42	Promoted		1,500	90	
	Malimba	Promoted		1,500	35	
	RG1			1,500	70	
	Mani-Pintar	O		2,000	70	
	Mawanga	O		2,000	70	

Source: Guide to Agricultural Production in Malawi 1991/92, MOA

Table 3.10.11 (3/3) Recommended Varieties and Varieties Applied in the Study Area

Crop	Crop Variety	Applied in the Study Area	Sowing time	Potential Yield (kg/ha)	Seed Rate (kg/ha)	Remarks
Cotton	Makoka 78	O		2,500	25	Very valuable crop providing cash incomes. Seed is pressed into edible oils and cake for feeding livestock
	Ezam 6			2,800	25	
	IRM 81			3,000	25	
	Rasam 17			2,800	25	
Tobacco	NDDF	Estate	Nov.-Dec.			
	SDDF					
	Sun/Air Cured	O				
	Oriental (Sumsun)					
	Flue-Cured Virginia	Estate				
	Barley (Banket A1)	O				
Sun-flower	Local		mid.- end.	1,000	5 - 8	Top quality edible oil. Promoted throughout the country except for the cool plateau areas.
	Hybrid SO323	O	December			
	Hybrid	O				
Sesame	Local	O	mid.Dec. - mid.Jan.	1,000	16 - 20	Grown throughout the country as food and cash crop. Processed for cooking oil and soap making. Suitable for the lakeshore and warm plateau.
Caster seeds	Local					Grown in rich, well drained soils under hot climate.
Cassava	Chitembwere	O	9 - 18 months	6,000 - 7,000		Staple food in the Lakeshore. Advantageous with drought tolerance and low labour requirement.
	Manyokola	O				
	Gomani	O				
Sweet potatoes	Babache		before mid.Jan.	20 ton		Grown throughout the country as security and cash crop.
	Kenya			20 ton		
	TIS 3017			20 ton		
	LRS 407			20 ton		
	Yoyera			20 ton		
	Kamchiputu			20 ton		
European potatoes	Rosita			15 - 20 ton	2,000-	Grown as food and cash crops in the cool plateau areas.
	Cardinal			15 - 20 ton	3000	
	Roslin			15 - 20 ton		
	Tsangano			15 - 20 ton		
	Roslin Bvumbwe			15 - 20 ton		
	Crown			15 - 20 ton		
	Up to Date			15 - 20 ton		

Source: Guide to Agricultural Production in Malawi 1991/92, MOA



**Table 3.10.12 AGRICULTURAL IMPLEMENTS OWNED BY FARMERS**

	<i>% of Number of Households Owned</i>	<i>Number of Implements Owned per Household</i>
Rice	100.0	3.3
Mat	80.7	2.4
Axe/Hatchet	77.3	1.5
Sickle	66.4	1.4
Winnower	44.5	2.3
Seive	49.6	1.1
Thresher	17.6	1.5
Sprayer	10.1	1.0
Plough	3.4	1.3
Basket	2.5	1.0
Ridger	2.5	1.0
Draft animal	2.5	1.7
Cultivator	0.8	1.0
Harrow	0.0	0.0

*Number of effective households surveyed: 119 farm households*

Table 3.10.13

**MAIZE CULTIVATION PRACTICES OF  
THE FARMERS SURVEYED**

Items		Number of Cases		
		Number	%	
Variety cultivated	Local variety	85	63.4	
	Composite variety	2	1.5	
	Hybrid variety	47	35.1	
	Total	<u>134</u>	<u>100.0</u>	
Seed used	Own seed	87	60.8	
	Purchased seed	56	39.2	
	Total	<u>143</u>	<u>100.0</u>	
Growing period	Sowing time	Middle of November		
	Harvesting time	End of April to Early May		
	Growing period	165 days		
Fertilizer application	Applied farmers	51	45.1	
	Non-applied farmers	62	54.9	
	Total	113	100.0	
	<i>Details of application</i>			
	Basal N:	Applied farmers	47	41.6
		Non-applied farmers	4	3.5
		Total	<u>51</u>	<u>45.1</u>
		Amount applied (kg/ha)	26.1	-
	Basal P:	Applied farmers	30	26.5
		Non-applied farmers	21	18.6
		Total	<u>51</u>	<u>45.1</u>
		Amount applied (kg/ha)	23.7	-
	Basal K:	Applied farmers	0	-
	Top N:	Applied farmers	42	37.1
		Non-applied farmers	9	8.0
Total		<u>51</u>	<u>45.1</u>	
	Amount applied (kg/ha)	38.7	-	
Top P:	Applied farmers	0	-	
Top K:	Applied farmers	0	-	
Weeding	Weeded farmers	106	93.8	
	Non-weeded farmers	7	6.2	
	Total	<u>113</u>	<u>100.0</u>	
Disease control	Controlled farmers	2	1.8	
	Non-controlled farmers	111	98.2	
	Total	<u>113</u>	<u>100.0</u>	
Pest control	Controlled farmers	20	17.7	
	Non-controlled farmers	93	82.3	
	Total	<u>113</u>	<u>100.0</u>	

Table 3.10.14 LABOUR REQUIREMENT FOR MAIZE AND RICE CULTIVATION

(Unit: man.day/ha)

	Maize				Rice				(B)/(A) %
	Family Labour	Employed Labour	Total (A)	%	Family Labour	Employed Labour	Total (A)	%	
Land preparation	44.9	2.5	47.4	30.8	100.8	8.4	109.2	16.1	230
Sowing	13.2	0.3	13.5	8.8	41.9	5.5	47.4	7.0	351
Transplanting	-	-	-	-	94.6	14.5	109.1	16.1	-
Harvesting	25.2	2.6	27.8	18.1	92.1	10.8	102.9	15.1	370
Weeding	43.7	4.9	48.6	31.6	94.0	22.8	116.8	17.2	240
Disease, pest control	16.4	0.0	16.4	10.7	152.7	40.7	193.4	28.5	1,179
Total	143.4	10.3	153.7	100.0	576.1	102.7	678.8	100.0	442
%	93.3	6.7	100.0		84.9	15.1	100.0		-

Table 3.10.15 FARM BUDGET OF THE TYPICAL FARMERS IN THE STUDY AREA

Item	Male headed household				Female headed household			Average
	TA kachindamoto		TA other than Kachindamoto		upland	up/low land	Farmers living on agriculture and fisheries	
	upland	up/low land	upland	up/low land				
(A) Family size	5.7	5.5	8.4	6.1	5.6	5.0	7.0	5.8
(B) Cultivated land (ha)								
Upland	1.6	1.0	3.0	1.9	0.9	0.9	2.7	1.4
Lowland	0.0	0.4	0.0	0.3	0.0	0.3	0.1	0.4
Total	1.6	1.4	3.0	2.2	0.9	1.2	2.8	1.8
(C) Sale of products (MK)								
Crops	215.9	256.6	406.3	344.8	60.9	97.1	436.3	228.3
Livestock	5.2	50.4	248.0	1,331.0	40.0	8.8	29.2	150.0
Total	221.1	306.9	654.3	1,675.8	100.9	105.9	465.5	378.3
(D) Non-farm income (MK)	96.1	120.7	30.5	182.9	104.8	130.5	3,975.0	289.3
(E) Total income (MK)	317.2	427.6	684.8	1,859.2	205.7	236.4	4,440.5	667.6
(F) Production Cost (MK)	127.8	154.9	441.0	298.0	122.4	92.3	998.5	208.6
(G) Living expenditure (MK)	445.8	610.3	778.5	518.1	432.2	579.4	1,700.4	618.5
(H) Total outgo (MK)	573.6	765.2	1,295.5	816.1	554.6	671.7	2,698.9	827.1
(I) Balance (MK)	-256.4	-337.6	-534.7	1,043.1	-348.9	-435.3	1,741.6	-159.5
Number of samples	17	26	8	7	5	21	4	88

Data source: the farmer's economic survey conducted by the JICA study team on November, 1992

Table 3.10.16 ANNUAL LIVING EXPENDITURES PER CAPITA

Items	Male headed household				Average		
	TA Kachidamoto		TA other than Kachidamoto		Farmers living on agriculture and fisheries	Average	
	Upland	Upland/Lowland	Upland	Upland/Lowland			
Family size (Nos)	5.7	5.5	8.4	6.1	5	5.8	
Living expenditure	(1) Food (MK)	258	383	194	278	404	372
	(%)	58	63	25	54	70	60
	(2) Other expenses* (MK)	188	228	584	241	175	246
(%)	42	37	75	46	30	40	
(3) Total (MK)	446	610	779	518	579	618	
(%)	100	100	100	100	100	100	
Per capita expenses other than food (MK)	33	41	70	40	35	42	

Note: \* including housing, fuel, furniture/house utensil, clothing/footwear, medical care, transportation /communication cost, education, taxes and public imposts and obligation

Table 3.10.17. DETAILS OF LIVING EXPENDITURES

Particular	Amount (MK)	Percentage (%)	Percentage* (%)
(A) Foods	372	60	
(B) Expenses other than foods	246.4	40	
Housing	6.8		2.8
Fuel	11.5		4.7
Furniture/household utensils	27.8		11.3
Clothing and footwear	115.2		46.8
Medical care	23.5		9.6
Transportation and communication	20.6		8.4
Education	23.3		9.5
Other expenses	7.2		2.9
Taxes	3.5		1.4
Public imposts and obligation	7		2.8
(C) Total	618.4	100	100

Note: \*=Percentage for the total expenditures except food

Table 3.11.1 ANIMAL POPULATION IN SALIMA ADD (1985 - 1991)

RDP	Smallholder												Estate						Government						Total							
	Cattle			Goat			Sheep			Pig			Poultry			Cattle			Goat			Sheep			Pig			Poultry				
	1985	1986	1987	1988	1989	1990	1991	Average	1985	1986	1987	1988	1989	1990	1991	Average	1985	1986	1987	1988	1989	1990	1991	Average	1985	1986	1987	1988	1989	1990	1991	Average
1. Bwanje Valley	25,795	20,077	29,835	33,239	33,155	35,033	32,414	29,935	37,850	44,047	47,435	37,088	41,042	42,743	42,260	2,802	3,040	3,159	3,124	3,583	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693
	48,618	82,010	151,093	136,918	115,915	134,277	153,855	117,527	48,618	82,010	151,093	136,918	115,915	134,277	153,855	117,527	48,618	82,010	151,093	136,918	115,915	134,277	153,855	117,527	48,618	82,010	151,093	136,918	115,915	134,277	153,855	117,527
	85	120	128	92	74	85	105	106	85	120	128	92	74	85	105	106	85	120	128	92	74	85	105	106	85	120	128	92	74	85	105	106
	412	417	319	256	168	61	158	201	412	417	319	256	168	61	158	201	412	417	319	256	168	61	158	201	412	417	319	256	168	61	158	201
	40	80	95	105	42	61	83	83	40	80	95	105	42	61	83	83	40	80	95	105	42	61	83	83	40	80	95	105	42	61	83	83
	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	26,220	20,761	30,433	33,444	37,441	36,311	32,893	30,643	26,220	20,761	30,433	33,444	37,441	36,311	32,893	30,643	26,220	20,761	30,433	33,444	37,441	36,311	32,893	30,643	26,220	20,761	30,433	33,444	37,441	36,311	32,893	30,643
	37,935	44,167	45,743	47,527	47,162	41,127	42,898	42,366	37,935	44,167	45,743	47,527	47,162	41,127	42,898	42,366	37,935	44,167	45,743	47,527	47,162	41,127	42,898	42,366	37,935	44,167	45,743	47,527	47,162	41,127	42,898	42,366
	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798
	3,256	3,317	4,231	4,231	4,480	5,244	6,469	4,585	3,256	3,317	4,231	4,231	4,480	5,244	6,469	4,585	3,256	3,317	4,231	4,231	4,480	5,244	6,469	4,585	3,256	3,317	4,231	4,231	4,480	5,244	6,469	4,585
	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798	1,788	2,036	2,129	2,369	2,448	2,774	2,928	2,798
	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542
2. Salima	17,580	16,539	23,024	23,171	22,487	24,412	21,265	17,580	17,483	16,539	23,024	23,171	22,487	24,412	21,265	17,580	17,483	16,539	23,024	23,171	22,487	24,412	21,265	17,580	17,483	16,539	23,024	23,171	22,487	24,412	21,265	17,580
	66,468	43,090	47,423	42,100	47,125	63,002	52,973	66,468	66,468	43,090	47,423	42,100	47,125	63,002	52,973	66,468	66,468	43,090	47,423	42,100	47,125	63,002	52,973	66,468	66,468	43,090	47,423	42,100	47,125	63,002	52,973	66,468
	146	204	220	234	350	360	266	146	146	204	220	234	350	360	266	146	146	204	220	234	350	360	266	146	146	204	220	234	350	360	266	146
	38	0	0	0	0	0	5	38	38	0	0	0	0	0	5	38	38	0	0	0	0	0	5	38	38	0	0	0	0	0	5	38
	10	460	534	0	665	710	401	10	10	460	534	0	665	710	401	10	10	460	534	0	665	710	401	10	10	460	534	0	665	710	401	10
	1,716	1,396	1,719	1,349	1,201	1,216	1,415	1,716	1,716	1,396	1,719	1,349	1,201	1,216	1,415	1,716	1,716	1,396	1,719	1,349	1,201	1,216	1,415	1,716	1,716	1,396	1,719	1,349	1,201	1,216	1,415	1,716
	907	1,287	11,549	1,762	1,393	1,006	2,656	907	907	1,287	11,549	1,762	1,393	1,006	2,656	907	907	1,287	11,549	1,762	1,393	1,006	2,656	907	907	1,287	11,549	1,762	1,393	1,006	2,656	
	155	197	525	460	450	341	353	155	155	197	525	460	450	341	353	155	155	197	525	460	450	341	353	155	155	197	525	460	450	341	353	155
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	132	470	298	139	23	19	169	132	132	470	298	139	23	19	169	132	132	470	298	139	23	19	169	132	132	470	298	139	23	19	169	132
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	19,442	18,139	24,963	24,754	24,038	25,988	22,947	19,442	19,442	18,139	24,963	24,754	24,038	25,988	22,947	19,442	19,442	18,139	24,963	24,754	24,038	25,988	22,947	19,442	19,442	18,139	24,963	24,754	24,038	25,988	22,947	19,442
	18,487	25,671	38,621	29,741	24,235	49,591	35,690	18,487	18,487	25,671	38,621	29,741	24,235	49,591	35,690	18,487	18,487	25,671	38,621	29,741	24,235	49,591	35,690	18,487	18,487	25,671	38,621	29,741	24,235	49,591	35,690	18,487
	3,256	3,317	4,231	4,231	4,480	5,244	6,469	3,256	3,256	3,317	4,231	4,231	4,480	5,244	6,469	3,256	3,256	3,317	4,231	4,231	4,480	5,244	6,469	3,256	3,256	3,317	4,231	4,231	4,480	5,244	6,469	3,256
	1,788	2,036	2,129	2,369	2,448	2,774	2,928	1,788	1,788	2,036	2,129	2,369	2,448	2,774	2,928	1,788	1,788	2,036	2,129	2,369	2,448	2,774	2,928	1,788	1,788	2,036	2,129	2,369	2,448	2,774	2,928	1,788
	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542	66,610	44,020	48,235	42,239	47,813	63,731	62,129	53,542
3. Nkhorakota	3,359	3,230	3,738	3,396	2,907	2,907	3,823	3,359	3,359	3,230	3,738	3,396	2,907	2,907	3,823	3,359	3,359	3,230	3,738	3,396	2,907	2,907	3,823	3,359	3,359	3,230	3,738	3,396	2,907	2,907	3,823	3,359
	68,946	72,920	76,122	35,156	45,197	63,002	52,973	68,946	68,946	72,920	76,122	35,156	45,197	63,002	52,973	68,946	68,946	72,920	76,122	35,156	45,197	63,002	52,973	68,946	68,946	72,920	76,122	35,156	45,197	63,002	52,973	68,946
	11	99	92	108	238	360	266	11	11	99	92	108	238	360	266	11	11	99	92	108	238	360	266	11	11	99	92	108	238	360	266	11
	36	94	103	71	46	41	7	36	36	94	103	71	46	41	7	36	36	94	103	71	46	41	7	36	36	94	103	71	46	41	7	36
	5,880	12,240	14,321	11,953	716	780	656	5,880	5,880	12,240	14,321	11,953	716	780	656	5,880	5,880	12,240	14,321	11,953	716											

Table 3.11.2 Animal Population of Lilongwe ADD (1985/86 - 1989/90)

	Unit: head						
RDP	Cattle	Goat	Sheep	Poultry	Pig	Donkey	Total
1. Lilongwe West							
1985/86	64,049	77,073	3,818	181,092	21,208	-	347,240
1986/87	74,771	76,784	3,965	120,965	33,288	201	309,974
1987/88	-	-	-	-	-	-	-
1988/89	-	-	-	-	-	-	-
1989/90	68,408	91,109	3,966	601,825	33,914	328	799,550
Average	69,076	81,655	3,916	301,294	29,470	265	485,588
2. Lilongwe East							
1985/86	-	-	-	-	-	-	-
1986/87	40,517	45,063	4,360	90,572	8,023	110	188,645
1987/88	40,718	45,682	4,644	84,540	9,072	88	184,744
1988/89	-	-	-	-	-	-	-
1989/90	39,613	50,048	3,380	114,026	11,178	201	218,446
Average	40,283	46,931	4,128	96,379	9,424	133	197,278
3. Thiwi Lifidzi							
1985/86	29,769	33,332	635	-	10,648	-	74,384
1986/87	29,711	29,452	661	101,609	10,436	932	172,801
1987/88	30,439	29,835	655	74,195	11,031	922	147,077
1988/89	-	-	-	-	-	-	-
1989/90	32,678	27,611	681	70,296	10,319	1,098	142,683
Average	30,649	30,058	658	82,033	10,609	984	134,236
4. Dedza Hills							
1985/86	-	-	-	-	-	-	-
1986/87	18,278	38,447	1,937	79,471	5,365	12	143,510
1987/88	19,053	39,835	3,039	87,627	6,535	20	156,109
1988/89	-	-	-	-	-	-	-
1989/90	15,573	19,598	1,524	43,922	5,497	12	86,126
Average	17,635	32,627	2,167	70,340	5,799	15	128,582
5. Ntcheu							
1985/86	33,547	34,040	693	104,980	20,930	51	194,241
1986/87	34,954	35,246	646	115,987	19,323	29	206,185
1987/88	33,398	36,159	640	135,938	22,189	150	228,474
1988/89	-	-	-	-	-	-	-
1989/90	32,449	40,112	923	126,126	20,465	17	220,092
Average	33,587	36,389	726	120,758	20,727	62	212,248
Total Lilongwe ADD							
1985/86	127,365	144,445	5,146	286,072	52,786	51	615,865
1986/87	198,231	224,992	11,569	508,604	76,435	1,284	1,021,115
1987/88	123,608	151,511	8,978	382,300	48,827	1,180	716,404
1988/89	-	-	-	-	-	-	-
1989/90	188,721	228,478	10,474	956,195	81,373	1,656	1,466,897
Average	159,481	187,357	9,042	533,293	64,855	1,043	955,070



**Table 3.11.3 Estimated Animal Population of the Study Area**

RDP	Unit: head				
	Cattle	Goat	Sheep	Poultry	Pig
<b>I. Livestock population by RDP</b>					
1. Bwanje Valley	30,643	4,366	3,041	117,610	10,269
2. Dedza Hills	17,635	32,627	2,167	70,340	5,799
3. Ntcheu	33,587	36,389	726	120,758	20,727
Total	81,865	73,382	5,933	308,708	36,795
<b>II. Livestock population in the study area</b>					
1. Bwanje Valley	14,218	2,026	1,411	54,571	4,765
2. Dedza Hills	5,114	9,462	628	20,399	1,682
3. Ntcheu	10,882	11,790	235	39,126	6,715
Total	30,215	23,278	2,274	114,095	13,162

**Table 3.11.4 Estimated Animal Production in Salima ADD**

No.	Product	Parameter	Unit	Amount
1. Annual Meat Production				
1.1 Beef				
	(1) Cattle population		heads	54,500
	(2) Slaughter rate		%	16.1
	(3) Average liveweight of cattle when slaughtered		kg	250
	(4) Dressing-out percentage		%	50
	(5) Total carcas		ton	1,095
1.2 Smallstock (Goats/Sheep)				
	(1) Smallstock population		heads	94,200
	(2) Slaughter rate		%	9.9
	(3) Average liveweight of smallstock when slaughtered		kg	40
	(4) Dressing-out percentage		%	40
	(5) Total carcas		ton	149
1.3 Chicken				
	(1) Chicken population		heads	226,000
	(2) Average mature liveweight		kg	0.85
	(3) Dressing-out percentage		%	75
	(4) Total carcas		ton	144
-----				
	1.4 Total Meat		ton	1,388
2. Annual Milk Production				
	(1) Cattle population		heads	54,500
	(2) Cow percentage in herd		%	59.3
	(3) Cow population in herd		heads	32,319
	(4) Cow in lactation period /1		heads	13,353
	(5) Annual lactation yield		kg	300
	(6) Total milk /2		ton	4,006
3. Annual Egg Production				
	(1) Chicken population		heads	226,000
	(2) Chicken (female) population		heads	113,000
	(3) Annual egg production/female /3		nos.	40
	(4) Total eggs		nos.	4,520,000
4. Hides and Skins				
	(1) Annual hides production		nos.	2,100
	(2) Annual skins production		nos.	2,300
Remarks:	/1; estimated on the basis of calf population (male calves: 11.9% in herd, female calves 12.6%)			
	/2; including milk for calf			
	/3; Agricultural Compendium, Elsevier 1981			

**Table 3.11.5 Cattle Herd Composition in Salima ADD (1989 -1991)**

RDP	Bulls	Castrated Males	Cows	Male Calves	Female Calves	Unit: head
						Total Cattle
<b>1. Bwanje Valley</b>						
1989	1,717	2,826	21,612	3,955	4,331	34,441
1990	1,708	3,149	22,395	4,376	4,683	36,311
1991	1,835	2,909	19,889	4,131	4,129	32,893
Average	1,753	2,961	21,299	4,154	4,381	34,548
% in Herd	5.1	8.6	61.6	12.0	12.7	100.0
<b>2. Salima</b>						
1989	1,429	2,969	13,554	2,846	3,240	24,038
1990	1,376	3,329	14,573	3,155	3,555	25,988
1991	1,333	2,355	13,247	2,829	2,544	22,308
Average	1,379	2,884	13,791	2,943	3,113	24,111
% in Herd	5.7	12.0	57.2	12.2	12.9	100.0
<b>3. Nkhotakota</b>						
1989	317	467	1,808	297	262	3,151
1990	350	782	2,128	385	421	4,066
1991	307	1,270	1,786	348	415	4,126
Average	325	840	1,907	343	366	3,781
% in Herd	8.6	22.2	50.4	9.1	9.7	100.0
<b>Total Salima ADD</b>						
1989	3,463	6,262	36,974	7,098	7,833	61,630
1990	3,434	7,260	39,096	7,916	8,659	66,365
1991	3,475	6,534	34,922	7,308	7,088	59,327
Average	3,457	6,685	36,997	7,441	7,860	62,441
% in Herd	5.5	10.7	59.3	11.9	12.6	100.0

Source: Annual Livestock Census, SLADD, 1989 - 1991

Table 3.11.6 FISH YIELD IN SALJMA AND NKHOTAKOTA

Year	Minor Stratum	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1990	Mtakataka	45.1	32.1	48.7	34.8	73.9	57.5	56.3	61.2	75.2	59.8	29.7	38.8	613.0
	Chipoka	80.5	69.4	98.0	140.5	132.6	117.0	284.7	170.2	107.8	165.4	93.3	66.3	1,525.6
	Senga-Bay	57.8	21.1	24.0	41.2	33.6	91.3	227.9	58.9	114.0	104.0	59.9	98.1	931.7
	Domira-Bay	87.0	72.1	198.8	202.1	155.9	145.5	124.3	48.3	87.5	87.5	319.4	84.6	1,613.1
	Total	270.4	194.8	369.5	418.5	396.0	411.3	693.2	338.6	384.4	416.6	502.4	287.8	4,683.4
	Nkhotakota S.	74.6	60.0	51.9	77.8	54.8	415.4	193.9	104.2	146.8	67.3	30.3	76.3	1,353.3
1991	Chia Lagoon	76.6	31.0	57.5	40.6	26.1	24.0	29.2	19.5	18.7	43.4	37.6	46.3	450.5
	Nkhotakota C.S.	21.5	60.4	18.5	27.4	1.5	45.6	137.4	64.0	31.6	36.4	36.5	23.9	504.7
	Nkhotakota C.N.	53.0	25.5	55.9	68.8	88.1	98.4	167.4	19.1	122.8	223.0	44.5	107.2	1,073.7
	Nkhotakota N.	113.6	143.4	98.7	132.1	129.3	137.7	185.7	250.3	95.7	101.6	313.6	266.2	1,967.9
	Total	339.3	320.2	282.6	346.8	299.8	721.1	713.6	457.0	415.7	471.6	462.5	519.9	5,350.0
	Mtakataka	23.6	50.9	95.3	38.1	66.5	26.6	12.5	71.5	209.5	75.7	77.0	27.6	774.9
1991	Chipoka	108.5	374.0	291.6	528.0	158.5	248.9	188.4	506.2	534.5	509.2	447.0	586.9	4,481.7
	Senga-Bay	65.3	25.0	22.9	69.4	16.7	21.4	27.3	226.7	127.9	32.1	33.8	22.7	691.1
	Domira-Bay	198.8	74.2	107.0	23.9	18.4	13.6	29.9	66.0	292.8	38.4	49.4	157.6	1,069.9
	Total	396.1	524.0	516.8	659.4	260.2	310.6	258.1	870.5	1,164.6	655.4	607.3	794.9	7,017.7
	Nkhotakota S.	38.5	670.5	159.7	102.0	38.8	36.5	135.2	166.1	112.1	245.5	35.6	29.6	1,770.1
	Chia Lagoon	62.3	78.5	21.7	24.3	19.4	9.8	28.8	43.5	50.8	40.5	20.6	23.1	423.3
1991	Nkhotakota C.S.	45.0	33.5	12.2	39.6	28.8	50.2	56.2	88.6	33.1	19.1	8.8	15.8	430.7
	Nkhotakota C.N.	45.7	30.2	90.8	35.3	33.8	38.5	67.8	1,017.5	313.9	87.1	38.3	99.6	1,898.4
	Nkhotakota N.	221.6	84.1	60.4	49.8	114.1	11.2	52.4	40.5	22.9	71.9	27.2	98.5	854.6
	Total	413.1	896.8	344.7	250.9	234.9	146.1	340.4	1,356.1	532.7	464.2	130.5	266.7	5,377.2

Table 3.13.1 Type of Toilet Facility Available to Population in Households

Region/Rural and Urban	Total	Flush toilet		Pit Latrine		Bucket	None
		Exclusive	Shared	Exclusive	Shared		
(1) Whole Malawi							
- All area	100	2.8	0.8	51.4	12.4	0.1	32.6
- Rural	100	0.9	0.5	52.5	10.3	0.1	35.8
- Urban	100	19.2	3.8	41.3	30.7	0	5.1
(2) Central Region							
- All area	100	2.7	0.8	49	11.5	0.1	36
- Rural	100	0.8	0.6	50.1	9.3	0.1	39.1
- Urban	100	20.5	2.8	37.9	32.6	0	6.1
(i) Dedza district	100	0.9	0.2	62.5	10.7	0.1	25.6
(ii) Ntcheu district	100	0.8	0.1	59.2	15.9	0.1	23.8
(3) Southern Region							
- All area	100	3	0.9	52.1	13.4	0.1	30.4
- Rural	100	0.9	0.5	53.6	11.1	0.1	33.8
- Urban	100	19	4.7	40.6	31.5	0	4.2
(i) Mangochi district	100	1.1	0.4	64.2	6.4	0	27.8

Data source: Malawi population and housing census 1987

TABLE 3.13.2 SOURCE OF DRINKING WATER FOR PEOPLE

Region rural/urban and season	Total	(unit: %)							
		Piped inside DU	Piped outside DU	Communal stand pipe	Borehole	Well	Spring	Stream/ river	Lake and dam
<b>Malawi</b>									
(1) Whole									
wet season	100	2.2	3.1	18.3	13.4	43.5	0.8	17	1.8
dry season	100	2.2	3	17.4	13.2	43.8	0.8	17.7	1.9
(2) Rural									
wet season	100	0.5	1.1	15.5	14.4	47	0.8	18.7	1.9
dry season	100	0.5	1.1	14.5	14.1	47.4	0.9	19.5	2
(3) Urban									
wet season	100	16.6	19.4	42.6	5.2	13.2	0.2	2.1	0.6
dry season	100	16.6	19.3	42.6	5.3	13.1	0.3	2.1	0.6
<b>Central Region</b>									
(1) Whole									
wet season	100	2.4	2.6	9	16.9	53.3	0.6	14.7	0.6
dry season	100	2.3	2.6	8.8	16.4	53.4	0.6	15.3	0.6
(2) Rural									
wet season	100	0.5	0.9	6.3	17.9	57.1	0.6	16.1	0.6
dry season	100	0.5	0.9	6	17.4	57.2	0.6	16.6	0.6
(3) Urban									
wet season	100	19.6	18.2	35.5	7.3	17.1	0.3	1.9	0.2
dry season	100	19.6	18.1	35.5	7.3	17.2	0.3	1.9	0.2
<b>Southern Region</b>									
(1) Whole									
wet season	100	2.2	3.6	24.8	11.5	37.6	0.9	17.1	2.3
dry season	100	2.2	3.6	23.3	11.3	37.9	0.8	18.5	2.4
(2) Rural									
wet season	100	0.5	1.3	22	12.5	41.2	0.9	19	2.4
dry season	100	0.5	1.3	20.3	12.2	41.6	0.9	20.6	2.6
(3) Urban									
wet season	100	15.3	21.6	46.4	4	9.6	0.2	2.1	0.9
dry season	15.3	21.4	46.5	46.6	4	9.4	0.4	2.1	0.9

Data source: Malawi Population and housing census 1987

TABEL 3.13. 3. BASIC DATA FOR EDUCATION

Administration	Total population above 5	Percentage distribution of education attendance aged 5 years and over			Literacy rate (%) (1)
		Never attended	Primary std 1-3	Primary and Secondary and over	
(A) Whole Malawi					
total	6,594,557	54.8	17.5	24.2	0.1
Male	3,178,708	44.7	19.7	30.4	0.1
Female	3,415,849	64.3	15.5	18.4	0.1
(B) Central Region					
total	2,541,503	55.8	18.1	23	0.1
Male	1,240,231	46.3	20	29.1	0.1
Female	1,301,272	64.9	16.2	17.3	0.1
(C) Related districts to the Study Area					
- Dedza					
total	333,900	67.9	14.6	15.8	0.1
Male	151,628	59	17.7	20.6	0.1
Female	182,272	75.3	12.1	11.8	0.1
- Nicheu					
total	294,827	56.7	20.1	21.2	0.1
Male	133,457	47	22.7	26.9	0.1
Female	161,370	64.8	17.9	16.4	0.1
- Mangochi					
total	411,682	59.1	16.1	21.4	0.1
Male	192,865	47.9	19	27.9	0.1
Female	218,817	69.3	13.5	15.3	0.1
(D) Traditional administrations (TAs) related to the Study Area					
(1) Dedza district					
- T.A. Kaambu	33,412	75.7	23.2	1.1	
- T.A. Kachindamoto	41,757	65.3	32.5	2.2	
- S.T.A. Kamenya Gweza	17,945	54.4	43.2	2.4	
- Dedza city	13,640	49.9	43.1	7	
(2) Nicheu district					
- T.A. Kwantaine	25,569	49.8	47.7	2.5	
- S.T.A. Makwangwala	51,168	53.2	44.8	2	
- T.A. Njolomole	46,952	59.6	38.4	2	
- T.A. Chaakumbira	23,095	65.5	33.4	1.1	
- S.T.A. Goodson Ganya	56,276	55	43.2	1.8	
- T.A. Masasa	15,232	56.9	41.3	1.8	
(3) Mangochi district					
- T.A. Mpando	34,156	66.6	32.2	1.2	
Total of all the related TAs in 3 districts	359,202	59.1	38.7	2.2	
(E) Estimate for the Study Area	240,000	59	39	2	

Remarks: (1) % of population aged 5 years and over who are able to read and write either Chichewa, English or both.

Data source: Malawi Population and housing census 1987

Table 3.14.1 PURCHASERS AND PROCESSORS OF SMALLHOLDER CROPS IN MALAWI

Crop	First Purchaser	Second Purchaser	Destination	Remarks
1. Maize	ADMARC Private Traders		Maize harvested in Salima ADD is collected and consumed mainly in and around Salima township. In good harvest seasons, maize is transported to Blantyre ADD for consumers in Lower Shire.	In Salima, maize varieties such as local flint, composite and hybrid are traded with the same manner.
2. Rice	ADMARC Private Traders	National Oil Industries Ltd. (NOIL) in Blantyre	Mainly local consumers, and limited export to Zambia.	Large amount of paddy is dealt with by ADMARC, but little by private traders.
3. Cotton	ADMARC Private Traders	ADMARC ginnery in Baraka Chigonamikango Ltd. in Salima	After sorting into three grades, lint of grades I & II is exported, and one of grade III is sold to Devid & Whitehead Ltd., textile company. Cotton seeds are sold to Lever Brothers Ltd. NOIL, and Kukoma Ltd. (local) for oil extraction	Private traders are officially permitted to participate in cotton market in crop season 1992/93.
4. Groundnuts	ADMARC Private Traders	Lever Brothers Ltd. in Blantyre Private buyers	Edible oil is both for local consumption and export.	Cropped area has declined since late 1980's
5. Tobacco	ADMARC (monopoly)	Auction Holding Ltd. in Limbe and Lilongwe		Malawi's biggest export earner. About 84% is grown by share farmers on commercial estates.
6. Soyabeans	ADMARC	K.K. Millers Ltd. in Kanengo Grain and Milling Ltd. in Lilongwe	Processed for animal feed and locally consumed	As promoted with new varieties by Salima ADD, soybeans become more popular.
7. Oilseeds Sunflower Sesame Castor seeds Sugar beans	ADMARC	Lever Brother Ltd.		
8. Chilies	ADMARC Private Traders	Private factory in Blantyre	Birdseye varieties (small) for export and Capsicum varieties (large) for domestic consumption	

Source: Salima ADD



Table 3.14.2 ADMARC PURCHASING AMOUNTS OF SMALLHOLDER CROPS

Crop	Unit: ton										Ave.
	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92*	
<b>Maize</b>											
North Region	46,306	46,284	46,553	68,049	48,830	na	na	na	56,537	32,000	49,223
Central Region	152,993	168,899	151,775	159,658	54,508	na	na	na	165,322	36,615	127,110
South Region	45,617	67,940	98,075	38,058	7,993	na	na	na	35,795	2,067	42,221
Malawi	244,916	283,123	296,403	265,765	111,331	59,466	233,026	231,680	257,654	70,682	205,405
<b>Paddy</b>											
North Region	na	na	4,647	4,647	5,806	na	na	na	1,821	910	3,566
Central Region	na	na	1,318	1,409	1,545	na	na	na	335	472	1,016
South Region	na	na	4,660	4,172	4,072	na	na	na	790	560	2,851
Malawi	na	na	10,625	10,228	11,423	6,887	11,336	7,920	2,946	1,942	7,913
<b>Groudnuts*</b>											
North Region	1,130	676	731	1,825	4,111	527	27	na	379	201	1,067
Central Region	13,860	19,911	na	na	na	na	na	na	4,916	1,598	10,071
South Region	150	300	na	na	na	na	na	na	12	21	121
Malawi	15,140	20,887	18,251	53,050	44,825	na	600	4,450	5,307	1,820	18,259
<b>Beans</b>											
North Region		421	820	1,738	1,875	1,582	234	179	1,012	663	947
Central Region		4,411	4,966	5,265	na	na	na	na	2,361	1,855	3,772
South Region		10,272	9,928	19,073	na	na	708	na	11	7	6,667
Malawi	2,186	15,104	15,714	26,076	10,054	na	na	na	3,384	2,525	10,720
<b>Sunflower</b>											
North Region	5	14	73	40	74	202	26	410	2,326	3,200	637
Central Region	na	na	na	na	na	na	na	na	50	15	33
South Region	na	na	na	na	na	na	na	na	289	814	552
Malawi	na	515	190	172	155	na	na	na	2,665	4,029	1,288
<b>Oriental Tobacco</b>											
Malawi		614.6	184.8	387.5	109.0	163.0	279.9	na	na	na	289.8

Source: ADMARC Regional Office Central

Guide to Agricultural Production

Monthly Bulletin of Statistics, National Statistical Office

Economic Report 1989, 1992

Remark: \*, estimated by MOA

Table 3.14.3 ADMARC - PURCHASED AMOUNTS OF SMALLHOLDER CROPS BY SALIMA DIVISIONAL OFFICE (1989/90 - 1991/92)

Area Office	Seed Cotton	Maize	Paddy	Ground-nuts	Soy beans	Sun-flower	Caster seed	Chillies Birdseye	Pigeon peas	Sesame	Beans	Cow peas	Cashew nuts	Chillies Capsicum	Sorghum Green-gram	Field peas	Total (kg)	Proportion (%)
<b>I. Mlakaaka</b>																		
1989/90	1,140,329	287,604	133,014	30	1,765	91	1,665	0	2,839	1,196	0	755	0	0	396	132	0	1,569,288
1990/91	1,623,796	180,518	1,388	0	5,317	3,956	1,048	1,419	601	236	0	0	0	0	129	0	0	1,818,279
1991/92	1,180,232	0	2,951	0	4,851	1,379	176	1,305	0	64	0	0	0	1	0	109	13	1,190,958
Average	1,314,786	156,041	45,784	10	3,978	1,809	963	908	1,147	499	0	252	0	0	175	80	4	1,526,175
<b>2. Salima</b>																		
1989/90	2,671,000	905,304	100,650	32	297	0	11,511	0	3,423	164	0	0	147	0	0	0	0	3,692,528
1990/91	1,803,830	40,235	88,599	68	638	107	9,332	200	50	600	0	0	166	0	0	116	0	1,943,825
1991/92	1,248,543	0	0	18	3,425	1,305	5,343	320	0	590	0	0	0	27	0	0	0	1,259,544
Average	1,907,791	315,180	63,083	39	1,453	471	8,729	173	1,158	451	0	0	104	9	0	39	0	2,298,632
<b>3. Benga</b>																		
1989/90	1,983,578	595,659	39,917	158,320	152	0	0	0	53	41	0	0	0	0	0	0	0	2,777,720
1990/91	2,479,065	157,140	77,798	206,852	2,538	1,496	0	84	0	32	0	0	0	0	0	0	0	2,925,005
1991/92	2,084,125	7,489	110	134,823	2,487	40	0	120	14	23	0	260	193	0	0	0	0	2,209,684
Average	2,182,256	253,429	39,275	159,998	1,726	512	0	68	22	32	0	87	64	0	0	0	0	2,637,470
<b>4. Nkhosakota</b>																		
1989/90	13,539	14,710	911,942	1,353	0	0	0	0	0	0	0	0	0	0	0	0	0	941,544
1990/91	42,404	2,166	158,322	0	189	0	0	0	0	0	752	0	0	0	0	0	0	203,833
1991/92	44,318	227	0	1,040	3,136	1,031	0	110	0	180	60	56	172	0	9	8	9	50,330
Average	33,420	5,701	356,755	798	1,108	344	0	37	0	60	271	19	57	0	3	3	3	398,569
<b>5. Khombedza</b>																		
1989/90	1,357,757	571,002	38,076	13,301	777	0	1,889	0	144	144	0	0	112	0	41	0	0	1,983,202
1990/91	1,942,419	350,364	5,078	1,456	2,462	498	893	69	0	283	0	0	0	0	0	0	0	2,303,522
1991/92	1,178,855	43,141	0	5,000	10,582	761	341	25	0	14	0	0	0	74	0	0	0	1,238,719
Average	1,493,010	321,502	14,385	6,586	4,607	420	1,091	31	48	147	0	0	37	25	14	0	0	1,841,814
<b>6. Mkhungu</b>																		
1989/90	69,121	372,646	320,957	828	1,095	0	0	0	1,216	0	542	28	0	0	0	0	0	766,433
1990/91	197,182	442,138	5,188	651	1,275	3,806	0	1,429	576	0	0	28	0	0	0	0	0	652,273
1991/92	154,389	39,865	204	10,397	2,814	18,365	0	6,047	11	0	717	361	76	737	0	0	0	233,246
Average	140,231	284,883	108,783	3,959	1,728	7,390	0	2,492	601	0	420	139	25	246	0	0	0	550,651
<b>7. Chinguluwe</b>																		
1989/90	1,254,897	1,172,888	0	2,169	3,051	133	0	0	0	0	0	0	0	0	0	0	0	2,433,138
1990/91	864,211	49,889	0	95	7,489	1,118	0	0	0	0	0	0	91	0	0	0	0	922,893
1991/92	1,059,554	611,389	0	1,132	5,270	626	0	0	0	0	0	0	46	0	0	0	0	1,678,016
Average	1,059,554	611,389	0	1,132	5,270	626	0	0	0	0	0	0	46	0	0	0	0	1,678,016
<b>Salima Divisional Office</b>																		
1989/90	7,235,524	2,746,925	1,544,556	173,864	4,086	91	15,065	0	7,675	1,545	542	783	259	0	437	132	0	11,750,715
1990/91	9,343,593	2,345,449	336,373	211,196	15,470	9,996	11,273	3,201	1,227	1,151	752	28	166	0	129	116	0	12,279,875
1991/92	6,754,673	140,611	3,265	131,373	34,784	23,999	5,860	7,927	25	871	777	677	532	839	9	117	22	7,105,374
Average	7,777,863	1,744,328	628,065	172,144	18,113	11,362	10,733	3,709	2,976	1,189	690	496	319	280	192	122	7	10,931,327
Proportion (%)	71.2	16.0	5.7	1.6	0.17	0.10	0.10	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	100.0

Table 3.14.4 ADMARC - PURCHASED AMOUNTS OF SMALLHOLDER CROPS BY BALAKA DIVISIONAL OFFICE (1990/91 - 1991/92)

Area Office	Cotton	Maize	Paddy	Ground-nuts	Soy beans	Sun-flower	Caster seed	Chillies	Pigeon peas	Sesame	Dolicos	Cow peas	Cashew nuts	Beans	Sorghum	Green-gram	Tobacco	Total (kg)	Proportion (%)
<b>1. Manjivira</b>																			
1990/91	761,796	53,801	0	288	1,000	0	380	15,459	6,009	68	0	266	0	0	75	78	0	839,067	
1991/92	1,411,634	881,051	0	0	5,855	9,060	0	6,384	4,911	258	0	241	0	0	680	154	9,327	2,319,394	
Average	1,086,715	467,426	0	144	3,428	4,530	190	10,922	5,460	163	0	254	0	0	378	116	4,664	1,579,231	5.1
<b>2. Balaka</b>																			
1990/91	1,156,355	256,745	26,030	502	0	2,640	1,455	10,672	15,937	4,661	0	4,366	0	0	7	8,010	0	1,479,363	
1991/92	1,651,233	528,505	3,760	371	1,737	42,968	0	19,346	4,143	6,425	0	41	0	0	812	3,281	0	2,258,529	
Average	1,403,794	392,625	14,895	437	869	22,804	728	15,009	10,040	5,543	0	2,183	21	0	410	5,646	0	1,868,946	6.0
<b>3. Miangochi</b>																			
1990/91	133,703	768,630	107,405	671	595	194	13	38,334	104,847	2,033	1,885	35,772	0	242	0	421	0	1,194,082	
1991/92	1,485,676	647,832	19,457	0	8,785	16,433	0	8,309	59,020	0	0	10,748	253	0	0	0	0	2,256,513	
Average	809,690	708,231	63,431	336	4,690	8,314	7	23,322	81,934	1,017	943	23,260	127	121	0	211	0	1,725,298	5.5
<b>4. Bitila</b>																			
1990/91	254,397	623,014	87,302	752	254	471	391	3,614	12,237	1,144	0	7,395	0	0	976	233	61	990,971	
1991/92	366,663	799,523	144,275	222	1,418	3,551	0	2,421	8,529	1,060	0	17	0	0	1,021	331	626	1,327,479	
Average	310,530	711,169	115,789	487	836	2,011	196	3,018	10,383	1,102	0	3,706	0	0	999	282	344	1,159,225	3.7
<b>5. Chiripa</b>																			
1990/91	669,525	1,258,223	0	9,742	3,769	239	0	10,363	15,190	1,530	0	5,794	0	0	712	6,671	201	1,974,375	
1991/92	798,857	20,519,874	358	1,729	22,380	3,838	0	2,449	3,555	51	0	25	0	0	0	711	699	21,353,116	
Average	734,191	10,889,049	179	5,736	13,075	2,039	0	6,406	9,373	791	0	2,910	0	0	356	3,691	450	11,663,746	37.3
<b>6. Nanyangu</b>																			
1990/91	1,465,998	382,278	0	0	1,567	181	1,184	54,232	21,531	1,438	783	2,164	0	0	56	795	729	1,931,356	
1991/92	1,513,413	602,520	0	0	94,590	7,729	0	2,454	924	2,834	0	0	0	0	922	39	2,630	2,224,464	
Average	1,489,706	492,399	0	0	48,079	3,955	592	28,343	11,228	2,136	392	1,082	0	0	489	417	1,680	2,077,910	6.6
<b>7. Nsipe</b>																			
1990/91	1,966	2,716,781	77	12,075	32,792	23	34	2,924	27	139	0	273	0	3,761	43	795	729	3,289,335	
1991/92	1,075	3,186,919	0	143	83,805	15,427	0	1,933	0	33	0	0	0	16,379	0	0	29,237	3,289,335	
Average	1,521	2,951,850	39	6,109	58,299	7,725	17	2,429	14	86	0	137	0	10,070	22	398	14,983	3,289,335	10.5
<b>8. Namwera</b>																			
1990/91	0	2,007,526	17,129	5,696	537	471	0	6,214	368	126	0	1,182	0	4,459	214	0	887	3,537,251	
1991/92	0	1,989,337	18,685	4,613	254	8,861	0	3,767	0	65	0	0	0	270	8,861	0	25,957	2,025,582	
Average	0	1,998,432	17,907	5,155	396	4,666	0	4,991	184	96	0	591	0	2,365	4,538	0	13,422	2,025,582	6.5
<b>9. Balaka Depo</b>																			
1990/91	0	3,384,630	0	0	180	2,610	0	56,431	106,560	0	1,890	4,950	0	0	0	6,930	0	3,537,251	
1991/92	0	8,054,370	0	0	109,990	0	0	2,340	0	0	0	0	0	148,060	0	0	0	8,166,700	
Average	0	5,719,500	0	0	55,085	1,305	0	28,216	54,450	0	945	2,475	0	74,030	0	3,465	0	5,861,976	18.8
<b>Balaka</b>																			
1990/91	4,443,740	11,451,628	237,943	29,726	40,694	6,829	3,457	198,243	282,706	11,139	4,558	62,162	0	8,462	2,083	23,933	2,607	11,966,465	
1991/92	7,228,551	37,209,731	186,535	7,078	328,814	107,867	0	47,063	83,422	10,726	0	11,031	294	164,709	12,296	4,516	68,476	45,221,112	
Average	5,836,146	24,330,680	212,239	18,402	184,754	57,348	1,729	122,653	183,064	10,933	2,279	36,597	147	86,586	7,190	14,225	35,542	31,251,247	100.0
Proportion (%)	18.7	77.9	0.68	0.06	0.59	0.18	0.01	0.39	0.59	0.03	0.01	0.12	0.00	0.28	0.02	0.05	0.11	100.0	

Table 3.14.5

LICENSED PRIVATE TRADERS AND SMALLHOLDER CROPS TO  
BE PURCHASED FOR 1990/91 - 1992/93

No.	Licence No.	Origin	Maize	Pegion peas	Cow peas	Paddy	Chilies	Caster seed	Beans	Soya beans	Sorg- hum	Ground nuts	Cotton
1990/91													
1.	SLADD/SAC/100228	Balaka											
2.	SLADD/SAC/100229	Blantyre											
3.	SLADD/SAC/100230	Balaka											
4.	SLADD/SAC/100231	Nicheu											
5.	SLADD/SAC/100232	Blantyre											
6.	SLADD/SAC/100234	Nicheu											
7.	SLADD/SAC/100235	Mangochi											
8.	SLADD/SAC/100236	Blantyre											
9.	SLADD/SAC/100237	Lilongwe											
10.	SLADD/SAC/100238	Salima											
11.	SLADD/SAC/100239	Limbe											
12.	SLADD/SAC/100240	Lilongwe											
13.	SLADD/SAC/100241	Bwanje											
14.	SLADD/SAC/100242	Lilongwe											
15.	SLADD/SAC/100243	Bwanje											
16.	SLADD/SAC/100244	Blantyre											
No. of traders			14	12	9	5	3	3	4	1	0	0	0
1991/92													
1.	SLADD/SAC/100247	Nicheu											
2.	SLADD/SAC/100248	Nkhotakota											
3.	SLADD/SAC/100251	Salima											
4.	SLADD/SAC/100252	Monkey Bay											
5.	SLADD/SAC/100253	Balaka											
6.	SLADD/SAC/100254	Balaka											
7.	SLADD/SAC/100255	Bilira											
8.	SLADD/SAC/100256	Salima											
9.	SLADD/SAC/100258	Blantyre											
10.	SLADD/SAC/100259	Mangochi											
11.	SLADD/SAC/100260	Monkey Bay											
No. of traders			9	3	5	5	0	0	3	1	1	0	0
1992/93													
1.	SLADD/SAC/100361	Lilongwe	90										
2.	SLADD/SAC/100362	Mangochi											
3.	SLADD/SAC/100363	Mangochi											
4.	SLADD/SAC/100364	Nkhotakota											
5.	SLADD/SAC/100365	Nicheu	60										
6.	SLADD/SAC/100366	Monkey Bay											10
7.	SLADD/SAC/100367	Bwanje	180	45		20							1,000
8.	SLADD/SAC/100368	Lilongwe	2,000			2,000			1,000			1,000	1,000
9.	SLADD/SAC/100369	Lilongwe											200
10.	SLADD/SAC/100370	Mangochi											100
11.	SLADD/SAC/100371	Blantyre	60	10									
12.	SLADD/SAC/100372	Lilongwe				100							
13.	SLADD/SAC/100373	Salima											10
14.	SLADD/SAC/100374	Blantyre				700							
No. of traders			7	3	0	5	0	0	2	0	0	2	7

Note 1. Shades indicate crops to be purchased by relevant private traders. Figures in shade are tonnage to be purchased by relevant traders.

2. Cotton was opened to private traders in 1992/93 crop season.

Table 3.14.6(1/2) FARM INPUT SUPPLIED BY SALIMA ADD (1991/92)

Item	Swazie Valley RDP				Salima RDP				Nkhokota RDP				Salima ADD Total				Area Applicable (ha)	Application Rate
	Supplied (bags)		Quantity (kg)	Total	Supplied (bags)		Quantity (kg)	Total	Supplied (bags)		Quantity (kg)	Total	Supplied (bags)		Quantity (kg)			
	Credit	Cash			Credit	Cash			Credit	Cash			Credit	Cash				
<b>FERTILIZERS (1)</b>																		
23-21-0 (50kg)	4,125	1,417	5,542	277,100	1,618	6,445	322,250	3,987	1,380	5,367	268,350	1,380	5,367	4,415	17,354	867,700	Basal dosage for maize, 200kg/ha followed by CAN and SA	
23-21-0 (25kg)	6,600	2,707	9,307	232,675	731	1,664	41,600	5,719	2,230	7,949	198,725	2,230	7,949	5,668	18,920	473,000		
Sub-total (23-21-0)	693	39	732	36,600	4,354	4,883	244,150	3,679	525	4,204	210,200	525	4,204	1,093	9,819	490,950	Basal dosage for maize, 80kg/ha followed by Urea	
DAP (50kg)	2,261	353	2,614	65,350	2,393	2,565	64,125	1,150	450	1,600	40,000	450	1,600	975	6,779	169,475		
Sub-total (DAP)	4,531	608	5,139	256,950	1,338	1,554	77,700	280	183	463	23,150	183	463	1,007	7,156	357,800	Top-dressing for maize, 175kg/ha four weeks after emergence	
Urea (50kg)	4,431	3,748	8,179	204,475	4,356	5,278	131,950	8,226	4,045	12,271	306,775	4,045	12,271	8,715	25,728	643,200		
Urea (15kg)	0	1	1	15	0	0	0	95	69	162	2,430	69	162	70	163	2,445		
Sub-total (Urea)	6,421	2,065	8,486	424,300	7,292	8,140	407,000	5,005	5,441	10,446	522,500	5,441	10,446	18,718	57,072	1,353,600	Top-dressing for maize, 200kg/ha four weeks after emergence	
CAN (50kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	4	15	950		
CAN (25kg)	16	896	912	22,800	0	0	0	3,557	1,639	5,196	129,900	1,639	5,196	3,573	6,108	152,700	Top-dressing for maize, 270kg/ha when crops are 45-60 cm	
Sub-total (CAN)	16	33	49	2,450	0	0	0	0	0	0	130,850	0	0	16	49	153,650		
D-Compound (50kg)																		
Total (1)	1,669	115	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	1,669	5 Tobacco, 200 kg/0.4ha	
<b>SEEDS (2)</b>																		
Maize - NSCM (10kg)	9,610	962	10,572	105,720	3,556	4,379	43,790	1,416	874	2,290	22,900	874	2,290	14,582	17,241	172,410	Hybrid local, 10kg/0.4ha	
Maize - R201 (10kg)	82	15	97	970	0	0	0	0	0	0	0	0	0	82	15	970	Hybrid Zimbabwe, 10kg/0.4ha	
Maize - MH 16 (10kg)	2,056	478	2,534	25,340	2,246	2,822	26,220	2,447	522	2,969	29,690	522	2,969	6,749	8,125	81,250	Hybrid local, 10kg/0.4ha	
Maize - MH 17 (10kg)	0	11	11	110	1	316	3,160	0	0	0	0	0	0	1	326	3,270	Hybrid local, 10kg/0.4ha	
Maize - MH 18 (10kg)	536	75	611	6,110	957	1,113	11,130	566	793	1,359	13,590	793	1,359	2,059	3,083	30,830	Hybrid local, 10kg/0.4ha	
Total (Maize)	2,628	3,109	5,737	105,266	290	290	5,220	538	80	618	11,124	80	618	3,456	6,645	66,450	For commercial produc., 18kg/0.2ha	
Soya (multiplication, 18kg)	600	42	642	11,556	0	0	0	0	0	0	0	0	0	600	42	6,420	For seed multiplication, 18kg/0.2ha	
Total (Soya)	23,375	1,146	24,521	1,716,470	0	0	0	9,725	15,931	25,656	1,795,920	15,931	25,656	33,100	50,177	3,512,390	For commercial produc., 70kg/0.4ha	
Rice - Faya (70kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	For commercial produc., 70kg/0.4ha	
Rice - IET (70kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	For commercial produc., 70kg/0.4ha	
Rice - Faya Basic (70kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	For seed multiplication, 70kg/0.4ha	
Total (Paddy)	2,850	0	2,850	71,250	6,300	6,300	157,500	1,895	160	2,055	51,375	160	2,055	11,045	160	280,125	25kg/0.4ha	
Groundnuts - MWG (25kg)	0	0	0	0	0	0	0	440	2,553	2,993	74,825	2,553	2,993	440	2,993	74,825	25kg/0.4ha	
Groundnuts - MFG (25kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40kg/0.4ha	
Groundnuts - GDA (40kg)	92	92	184	74,930	0	0	0	0	0	0	126,200	0	0	92	92	3,680		
Total (Groundnuts)	2,850	92	2,942	74,930	0	0	0	0	0	0	126,200	0	0	0	92	3,680		
Total (2)	2,045	472	2,045	2,045	472	472	2,045	472	472	472	2,759,834	472	472	4,993,030	4,993,030	4,993,030		
<b>PESTICIDES (3)</b>																		
Ripcord (250 ml)	1,455	24	1,479	1,479	416	6	422	218	0	218	0	0	218	2,089	30	2,119	Cotton, 0.2ha	
Ripcord (pack)	1,562	3	1,565	1,565	2,706	0	2,706	1,275	0	1,275	0	0	1,275	5,543	3	5,546	Cotton, 0.2ha (with Sevin+Dimethoate)	
Dime Saic	10,801	2,158	12,959	12,959	258	0	258	0	563	563	10,801	563	563	10,801	13,780	13,780	Cotton, 0.2ha	
Sevin (Salc)	28,972	575	29,547	29,547	25,139	293	25,432	0	2,930	2,930	8,978	2,930	2,930	54,111	63,089	63,089	Cotton, 0.2ha	
Acetic (Salc)	0	8,231	8,231	8,231	0	0	0	0	86	86	0	86	86	8,317	8,317	8,317	Cotton, 0.2ha	
Karate (250ml)	363	37	400	400	252	0	252	161	0	161	813	161	161	776	37	813	Cotton, 0.2ha	
Karate Pack	722	29	751	751	1,919	2	1,921	1,384	0	1,384	0	1,384	1,384	4,025	31	4,056	Cotton, 0.2ha (with Sevin+Dimethoate)	
Total (3)	60,112	60,112	60,112	60,112	30,991	0	30,991	21	0	21	6,617	21	6,617	97,720	97,720	97,720		
<b>INOCULATER (4)</b>																		
Rhizobium Packet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4 Soy beans, 0.2ha	

Table 3.14.6(2/2) FARM INPUT SUPPLIED BY SALIMA ADD (1992/93)

Item	Bwanje Valley RDP			Salima RDP			Nkhosakona RDP			Salima ADD Total			Area Applicable (ha)	Application Rate	
	Supplied (bags)		Quantity (kg)	Supplied (bags)		Quantity (kg)	Supplied (bags)		Quantity (kg)	Supplied (bags)		Quantity (kg)			
	Credit	Cash		Credit	Cash		Credit	Cash		Credit	Cash				
<b>FERTILIZERS (1)</b>															
23-23-0 (50kg)	4,239	2,914	7,153	3,576,500	4,389	6,922	346,100	8,982	5,390	14,372	718,600	17,610	10,837	28,447	1,422,550
23-23-0 (25kg)	1,054	338	1,392	34,800	0	0	0	0	0	0	0	1,054	338	1,392	34,800
Sub-total (23-23-0)	5,293	3,252	8,545	3,611,300	4,389	6,922	346,100	8,982	5,390	14,372	718,600	17,610	10,837	28,447	1,457,350
DAP (50kg)	811	86	897	283,450	4,351	762	5,113	7,305	1,507	8,812	440,600	17,241	2,353	19,594	979,700
Sub-total (DAP)	811	86	897	283,450	4,351	762	5,113	7,305	1,507	8,812	440,600	17,241	2,353	19,594	979,700
Urea (50kg)	6,809	746	7,555	377,750	4,678	595	5,273	8,165	516	8,681	434,050	19,652	1,837	21,509	1,075,450
Urea (25kg)	1	53	54	1,350	2,080	488	2,568	2,929	0	2,929	73,225	5,010	541	5,551	138,775
Urea (15kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total (Urea)	6,810	746	7,555	379,100	6,758	1,083	7,841	11,094	516	12,610	507,275	14,662	1,837	17,060	1,214,225
CAN (50kg)	5,714	2,461	8,175	408,750	7,534	1,900	9,434	13,389	3,673	17,062	853,100	26,637	8,034	34,671	1,733,550
CAN (25kg)	25	68	93	2,325	191	20	211	94	0	94	2,350	310	88	398	9,950
Sub-total (CAN)	5,739	2,529	8,268	411,075	7,725	1,920	9,645	13,483	3,673	17,156	855,450	26,947	8,122	35,069	1,743,500
SA (50kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SA (25kg)	10	401	411	10,275	0	0	0	3,888	1,049	4,937	123,425	3,898	1,450	5,348	133,700
Sub-total (SA)	10	401	411	10,275	0	0	0	3,888	1,049	4,937	123,425	3,898	1,450	5,348	133,700
D-Compound (50kg)	63	294	357	17,850	306	0	306	15,300	0	0	2,645,350	63	294	357	17,850
Total (1)	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625	1,516,625
<b>SEEDS (2)</b>															
Maize - NSCM (10kg)	5,469	1,181	6,650	66,500	2,674	434	3,108	31,080	1,569	449	2,018	20,180	2,064	11,776	117,760
Maize - R201 (10kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maize - MH 16 (10kg)	553	184	737	7,370	378	46	424	4,240	1,662	431	2,093	20,930	661	3,254	32,540
Maize - MH 17 (10kg)	0	0	0	0	0	0	0	0	51	0	510	510	51	510	510
Maize - MH 18 (10kg)	1,974	404	2,378	23,780	2,806	525	3,331	33,310	2,931	678	3,609	36,090	7,711	1,607	93,180
Total (Maize)	8,916	1,969	10,885	108,850	7,258	1,006	8,264	82,640	6,163	1,763	77,710	77,710	10,496	243,990	243,990
Soya (commercial, 18kg)	312	5,239	5,551	99,918	900	0	900	16,200	468	27	495	8,910	1,680	5,266	69,460
Soya (multiplication, 18kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (Soya)	312	5,239	5,551	99,918	900	0	900	16,200	468	27	495	8,910	1,680	5,266	69,460
Rice - Faya (70kg)	36,300	833	37,133	2,599,310	3,450	10,050	13,500	945,000	10,350	992	11,342	793,940	50,100	11,875	4,338,250
Rice - EI (70kg)	0	0	0	0	0	0	0	0	8,277	133	8,410	588,700	8,277	133	588,700
Rice - Faya Basic (70kg)	0	0	0	0	0	0	0	0	1,500	0	1,500	105,000	1,500	0	105,000
Total (Paddy)	36,300	833	37,133	2,599,310	3,450	10,050	13,500	945,000	11,877	1,125	12,002	1,403,940	11,877	1,125	1,403,940
Groundnis - MWG (25kg)	0	0	0	0	4,900	400	5,300	132,500	38,275	4,755	63,030	1,575,750	63,175	5,155	68,330
Groundnis - MPG (25kg)	0	0	0	0	0	0	0	0	775	0	775	19,375	775	0	19,375
Groundnis - GDA (40kg)	0	0	0	0	0	0	0	0	40	40	1,600	40	40	1,600	1,600
Total (Groundnis)	0	0	0	0	4,900	400	5,300	132,500	43,090	4,795	68,405	1,596,725	70,990	5,195	1,729,225
Total (2)	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878	2,796,878
<b>PESTICIDES (3)</b>															
Ripcord (250 mis)	1,361	0	1,361	746	746	0	746	453	0	453	2,560	2,560	0	2,560	2,560
Ripcord (pack)	1,531	0	1,531	1,573	1,573	0	1,573	1,109	0	1,109	4,213	4,213	0	4,213	4,213
Dime Sac	7,500	3,021	10,521	5,377	5,377	0	5,377	480	0	480	16,378	16,378	0	16,378	16,378
Sevin (Sacc)	19,135	5,271	24,406	12,254	12,254	22	12,276	5,293	0	5,293	36,682	36,682	0	36,682	36,682
Acetic (Sacc)	0	372	372	0	0	0	0	0	0	0	372	372	0	372	372
Karate (250mis)	0	0	0	33	33	0	33	0	0	0	33	33	0	33	33
Karate Pack	1,623	0	1,623	2,983	2,983	0	2,983	936	0	936	5,542	5,542	0	5,542	5,542
Total (3)	39,814	39,814	39,814	22,988	22,988	22,988	22,988	2,978	2,978	2,978	65,780	65,780	65,780	65,780	65,780
<b>INOCULATER (4)</b>															
Rhizobium Packet	0	0	0	0	0	0	0	20	0	20	20	20	0	20	20

Table 3.14.7

**EXISTING STORAGE CAPACITY OF ADMARC  
SALIMA DIVISIONAL OFFICE**

Category	Location	Storage Capacity (ton)			
		Warehouse	Mini-silo	Shed (m3)	Total
Salima Divisional Office	Salima town	29,645	0	10,435	40,080
Salima Depot		7,722	0	10,435	
		5,400			
		2,088			
		14,435			
<b>1. Mtakataka Area Office</b>		0	2,500	7,623	10,123
1.1 Parent Market	Mtakataka	0	1,500	1,296	3,282
				486	
1.2 Unit Markets	(1) Golomoti	0	500	3,780	5,171
				891	
	(2) Naminkokwe	0	0	468	468
	(3) Kapiri	0	0	216	216
	(4) Dzongwe	0	500	486	986
	(5) Ngodzi	0	0	0	0
<b>2. Salima Area Office</b>		0	0	4,248	4,248
2.1 Parent Market	Salima	0	0	3,930	3,930
2.2 Unit Markets	(1) Mtonga	0	0	112	112
	(2) Lifuwu	0	0	0	0
	(3) Pemba	0	0	206	206
<b>3. Chinguluwe Area Office</b>		0	1,000	2,267	3,267
3.1 Parent Market	Chinguluwe	0	500	728	1,567
				192	
				147	
	(Kalambe)			240	
3.2 Unit Markets	(1) Thonje	0	0	0	0
	(2) Mnjere	0	0	0	0
	(3) Mvera	0	500	432	1,460
				528	
<b>4. Khombedza Area Office</b>		0	500	2,844	3,344
4.1 Parent Market	Khombedza	0	500	990	2,165
				486	
				189	
4.2 Unit Markets	(1) Kamuona	0	0	189	189
	(2) Chikombe	0	0	612	612
	(3) Makiori	0	0	378	378
	(4) Limpimbi	0	0	0	0
	(5) Katete	0	0	0	0
<b>5. Benga Area Office</b>		0	500	3,465	3,965
5.1 Parent Market	Benga	0	500	1,386	1,886
5.2 Unit Markets	(1) Mtosa	0	0	0	0
	(2) Kapiri	0	0	378	378
	(3) Gomadzi	0	0	0	0
	(4) Ngala	0	0	648	837
				189	
	(5) Katonya	0	0	486	486
	(6) Kanungunugu	0	0	378	378
	(7) Mitawa	0	0	0	0
<b>6. Nkhotakota Area Office</b>		0	0	15,580	15,580
6.1 Parent Market	Nkhotakota	0	0	6,438	12,876
				6,438	
6.2 Unit Markets	(1) Bua	0	0	544	544
	(2) Mwalawatongolo	0	0	0	0
	(3) Nkhotakota	0	0	2,160	4,365
				693	
				456	
				1,056	
<b>7. Mkhunga Area Office</b>		0	0	2,517	2,517
5.1 Parent Market	Mkhunga	0	0	823	1,309
				486	
5.2 Unit Markets	(1) Msenjere	0	0	544	544
	(2) Chidebwe	0	0	544	544
	(3) Liwalazi	0	0	120	120
<b>Total</b>		29,645	4,500	48,979	83,124

Table 3.14.8

**EXISTING STORAGE CAPACITY OF ADMARC  
BALAKA DIVISIONAL OFFICE**

Category	Location	Storage Capacity (ton)			
		Warehouse	Mini-silo	Shed (m3)	Total
Blaka Divisional Office	Balaka town	16,000	6,000		22,000
Balaka Depot		5,000	6,000		
		5,000			
		3,500			
		1,000			
		1,000			
		500			
<b>Liviridzi Depot</b>					
<b>1. Namlangu Area Office</b>		<b>0</b>	<b>500</b>	<b>2,350</b>	<b>2,850</b>
1.1 Parent Market	Shapevale	0	500	900	1,400
1.2 Unit Markets	√(1) Kasinje	0	0	600	600
	√(2) Sosola	0	0	850	850
	√(3) Malembo	0	0	0	0
<b>2. Bilila Area Office</b>		<b>0</b>	<b>500</b>	<b>1,400</b>	<b>1,900</b>
2.1 Parent Market	Bilila	0	500	800	1,300
2.2 Unit Markets	√(1) Chawanje	0	0	600	600
<b>3. Balaka Area Office</b>					
3.1 Parent Market	Balaka			Not available	
3.2 Unit Markets	√(1) Mpilisi				
	√(2) Utale				
<b>4. Manjawira Area Office</b>					
4.1 Parent Market	Manjawira				
4.2 Unit Markets	√(1) Chanthunya			Not available	
	√(2) Senzani				
<b>5. Mangochi Area Office</b>					
5.1 Parent Market	Mangochi				
5.2 Unit Markets	√(1) Monkey Bay				
	√(2) Cape Mc Lear				
	√(3) Makanjira				
	√(4) Fort Magwoya				
	√(5) Nkhuzi				
	√(6) Masi			Not available	
	√(7) Nankhwali				
	√(8) Masanje				
	√(9) Namalaka				
	√(10) Lulanga				
	√(11) Malindi				
	√(12) Nkope				
<b>6. Chiripa Area Office</b>					
6.1 Parent Market	Chiripa			Not available	
<b>7. Nsipe Area Office</b>					
5.1 Parent Market	Nsipe				
5.2 Unit Markets	√(1) Lizulu			Not available	
	√(2) Gowa				
	√(3) Chauya				
	√(4) Mlangeni				
<b>8. Namwera Area Office</b>					
5.1 Parent Market	Namwera			Not available	
5.2 Unit Markets	√(1) Katuli				
<b>Total</b>		<b>16,000</b>	<b>7,000</b>	<b>3,750</b>	<b>26,750</b>



Table 3.14.9 DEMAND AND SUPPLY BALANCE OF CEREALS IN STUDY AREA

Item	Unit	Bwanje	Dedza Hills	Ntcheu	Total
Total Population in RDP	persons	198,245	200,831	264,470	663,546
Proportional Extent of Study Area	%	46.4%	29.0%	32.4%	35.6%
Estimated Population	persons	91,986	58,241	85,688	235,915
<b>Maize</b>					
Annual Per Capita Requirement	kg/person	200	200	200	200
Requirement	ton	18,397	11,648	17,138	47,183
Production	ton	13,047	11,333	18,812	43,192
Balance	ton	-5,350	-315	1,674	-3,991
Self-Sufficiency Ratio	%	70.9%	97.3%	109.8%	91.5%
<b>Rice</b>					
Annual Per Capita Requirement	kg/person	3.7	3.7	3.7	3.7
Requirement	ton	340	215	317	873
Production (paddy x 0.65)	ton	380	0	0	380
Balance	ton	40	-215	-317	-493
Self-Sufficiency Ratio	%	111.7%	0.0%	0.0%	43.6%
<b>Wheat</b>					
Annual Per Capita Requirement	kg/person	5.4	5.4	5.4	5.4
Requirement	ton	497	315	463	1,274
Production	ton	0	19	221	240
Balance	ton	-497	-296	-242	-1,034
Self-Sufficiency Ratio	%	0.0%	6.0%	47.8%	18.8%
<b>Sorghum/Millet</b>					
Annual Per Capita Requirement	kg/person	3.6	3.6	3.6	3.6
Requirement	ton	331	210	308	849
Production	ton	214	0	0	214
Balance	ton	-117	-210	-308	-635
Self-Sufficiency Ratio	%	64.6%	0.0%	0.0%	25.2%
<b>Total Cereals</b>					
Annual Per Capita Requirement	kg/person	213	213	213	213
Requirement	ton	19,565	12,388	18,226	50,179
Production	ton	13,641	11,352	19,033	44,026
Balance	ton	-5,924	-1,036	807	-6,153
Self-Sufficiency Ratio	%	69.7%	91.6%	104.4%	87.7%

Note: Production is of average in the period from 1984/85 to 1991/92

TABLE 3.15.1 INTERNAL ALLOCATION OF FUNDS IN SALIMA ADD IN 1991/92

(Unit: MK)

SECTION	REVENUE	DEVELOPMENT	TOTAL
Man and administration	1,987,530	199,919	2,187,449
Planning and evaluation	0	11,241	11,241
Irrigation	0	246,230	246,230
Irrigation Nkhotakota RDP	0	185,288	185,288
Land husbandry	26,240	1,550	27,790
Construction	285,250	615,669	900,919
Computer	23,760	0	23,760
Accounts and stores	4,800	17,365	22,165
Credit and marketing	5,080	508,000	513,080
Extension and visual aids	19,834	0	19,834
Nkhotakota	74,360	574,343	648,703
Salima project	134,740	82,318	217,058
Bwanje valley project	146,660	86,951	233,611
Adaptive research	0	21,470	21,470
Crops, horticulture and seed multiplication	53,230	173,784	227,014
Training	7,165	0	7,165
Chitala farm institute	86,900	0	86,900
Women's programme	6,975	4,000	10,975
Farm mechanization	18,140	9,523	27,663
Rural industries	7,960	0	7,960
Veterinary	40,862	53,435	94,297
Health/Bilharzia	0	115,333	115,333
Health/Bilharzia Nkhotakota RDP	0	93,211	93,211
Vehicle workshop	169,794	178,780	348,574
Vehicle workshop Nkhotakota	0	88,174	88,174
<b>Total</b>	<b>3,099,280</b>	<b>3,266,584</b>	<b>6,365,864</b>

Data source : Salima ADD

**TABLE 3.15.2 SEED MULTIPLICATION OF RICE IN SALIMA ADD**

Location	Basic seed			Certified seed		
	Acreage (ha)	Name of variety	Amount (ton)	Acreage (ha)	Name of variety	Amount (ton)
Lifuwu *	10	Faya	40	30	Faya	105
	3	IET				
	2	IR1561/250/2/2				
Bua *	0			20	IET4094	110
Kastu **	0			20	Faya	70
<b>Total</b>	<b>15</b>		<b>40</b>	<b>70</b>		<b>285</b>

Data source: Salima ADD

\*: Government run irrigation scheme

\*\* : Self-help irrigation scheme

**TABLE 3.15.3 NUMBER OF FIELD ASSISTANTS IN SALIMA ADD**

RDP	NO. OF EPSs	No. of Sections	No. of field assistants	No. of Blocks	Total No. of farmers club	No. of farmers	(b)/(a)
			(a)			(b)	
Bwanje Valley	6	46	43	355	339	43,589	1,014
Salima	4	47	48	281	320	41,634	867
Nkhotakota	4	44	42	276	309	33,458	797
<b>Total</b>	<b>14</b>	<b>137</b>	<b>133</b>	<b>912</b>	<b>968</b>	<b>118,631</b>	<b>892</b>

Data source: Salima ADD

**TABLE 3.15.4 ACTIVITIES OF EXTENSION WORK IN SALIMA ADD IN 1991/92**

Activities	Salima RDP	Bwanje Valley RDP	Nkhotatota RDP	Total
1. On farm demo./mini plots	219	408	33	660
2. Block demonstrations	788	809	633	2,230
3. Field days	34	33	23	90
4. Public meetings	74	354	185	613
5. Club meetings	1,706	1,109	1,166	3,981
6. Form block committees	225	307	113	645
7. Block gardens/demonstrations	351	273	129	753
8. EPA demonstrations	44	15	16	75
9. Visits to on farm demonstrations	546	1,009	2,885	4,440

Data source: Salima ADD

**TABLE 3.15.5 TRAINING STAFF IN SALIMA ADD**

Location	Post	Number
Salima ADD headquarters	Training officer	1
	Assistant training officer	1
	total	2
Chitala Farm Institute	Principal officer	1
	Deputy pricipal officer	1
	Field assistant	4
	Farm home assistant	1
	total	7
Nkhotakota Residential Training Center	Principal officer	1
	Deputy pricipal officer	1
	Field assistant	1
	Farm home assistant	2
	total	5

Data source: Salima ADD

**TABLE 3.15.6 TRAINING COURSES IN SALIMA ADD**

Course	Term	Season	Place	Subject	Trainer	Trainee
<b>(A) Farmer's Course</b>						
1. Day training	2 hours	Dry season	EPA	farming practice	SMSs(EPA)	25-30 farmers per day
2. Residential training	1-2 weeks	Dry season	Nkhotakota RTC Chitala FI	farming practice, motorcycles riding, maintenance of irrigation scheme, etc.	TC's officers and SMSs(ADD)	farmers selected by EPA
<b>(B) Staff Course</b>						
1. Day training	4 hours	Dry season	EPA	technical information	PO(EPA) SMSs(RDP) SMSs(ADD)	FAs and FHAs
2. Residential training	1-2 week	Dry season	Nkhotakota RTC Chitala F.I Salima conference room	Subjects in the year	SMSs(ADD) TC's officer	FAs and FHAs

Data source: Salima ADD

Note: RTC=Residential Training Center, Chitala FI=Chitala Farm Institute  
SMS=Subject Matter Specialist, PO=Project Officer  
FA=Field Assisnt, FHA=Farm Home Assistant

**TABLE 3.15.7 TRAINING ACTIVITIES IN SALIMA ADD IN 1991/92**

Activity	RDP			Total
	Salima	Bwanje Valley	Nkhhotakota	
<b>1. Farmers RT course</b>				
Number of courses	10	4	9	23
Number of attendant	102	88	248	438
<b>2. Farmers DT course</b>				
Number of courses	96	81	56	233
Number of attendant	1,985	4,437	1,543	7,965
<b>3. Farmers mobile course</b>				
Number of courses	112	216	122	450
Number of attendant	3,424	6,180	4,754	14,358
<b>4. Staff RT course</b>				
Number of courses	25	9	1	35
Number of attendant	201	78	23	302
<b>5. Staff DT course</b>				
Number of courses	101	120	74	295
Number of attendant	412	1,833	940	3,185

Data source: Salima ADD

Note: RT= Residential training , DT=Day training

TABLE 3.15.8 CREDIT PACKAGE PRICE LIST PER 0.4 HA

	Fertilizer		Seed		interest (MK)	Total amount (MK)	
	name	dosage (kg)	price (MK)	dosage (kg)			price (MK)
<b>(A) Maize variety: NSCM41 and MH16/18</b>							
(1) CAN		100	96	10	25	14.52	135.52
(2) 23:21:21		100	100	10	25	26.52	247.52
CAN		100	96				
(3) Urea		50	45	10	25	8.4	78.4
(4) DAP		25	24.5	10	25	23.22	216.72
CAN		150	144				
(5) DPA		35	34.3	10	25	15.22	142.02
Urea		75	67.5				
<b>(B) RICE</b>							
<b>(1) VARIETY FAYA(BASIC)</b>							
(1) S/Ammonium		100	84	25	17.5	12.18	113.68
<b>(2) VARIETY BLUE BONNET</b>							
(1) S/Ammonium		100	84	30	21	12.6	117.6
<b>(3) VARIETY ITE4094</b>							
(1) 23:21:0		50	50	30	21	18.6	173.6
S/Ammonium		100	84				
<b>(C) COTTON</b>							
<b>(1) PACKAGE-1</b>							
Ripcord		500 ml	58.5			10.35	96.6
Sevin		1875	23.75				
Dimethoate		0.34	4				
<b>(2) PACKAGE-2</b>							
Ripcord		400 ml	27.39			6.62	61.76
Sevin		1875	23.75				
Dimethoate		0.34	4				
<b>(3) PACKAGE-3</b>							
Ripcord cotton pack			57.95			6.95	64.9
<b>(4) PACKAGE-4</b>							
Karate cotton pack			44.25			5.31	49.56

Data source: Salima ADD

TABLE 3.15.9 CREDIT AMOUNT AND REPAYMENT CONDITION IN SALIMA ADD

Season	RDP	Total number of farmer's club	No. of participants		Amount loaned	Amount recovered to date	Balance	% of recovered
			men	women				
			Nos	Nos				
1986/87	Bwanje	188	2,612	466	203,201	200,240	3,924	98.5
	Salima	257	3,298	734	489,128	431,110	57,017	88.3
	Nkhotakota	210	3,178	447	329,928	326,109	3,812	98.8
	Total	655	9,088	1,647	1,022,257	958,459	64,753	93.8
1987/88	Bwanje	219	3,062	806	325,059	312,633	12,632	96.2
	Salima	218	3,083	911	718,749	597,524	121,225	83.13
	Nkhotakota	203	3,640	699	449,360	438,663	10,698	97.62
	Total	640	9,785	2,416	1,493,168	1,348,819	144,554	90.3
1988/89	Bwanje	304	4,614	1,134	649,797	63,202	19,708	97.1
	Salima	290	5,015	1,289	1,194,723	972,613	222,190	81.4
	Nkhotakota	342	6,622	1,879	1,204,661	1,092,333	112,328	90.7
	Total	936	16,251	4,302	3,049,181	2,696,148	354,146	88.4
1989/90	Bwanje	358	6,688	1,456	1,095,602	978,202	124,008	89.3
	Salima	320	4,301	1,836	1,318,184	1,083,633	234,551	82.2
	Nkhotakota	341	5,569	1,496	1,232,941	1,097,687	135,254	89
	Total	1,019	16,558	4,788	3,646,727	3,159,522	493,812	86.6
1990/91 (As of Oct. '92)	Bwanje	404	6,442	2,069	1,661,641	1,411,204	250,433	84.9
	Salima	370	4,380	1,861	1,900,934	1,516,714	384,221	79.8
	Nkhotakota	345	5,922	1,516	2,168,739	1,584,662	584,077	73.1
	Total	1,119	16,744	5,446	5,731,315	4,512,579	1,218,731	78.7
1991/92	Bwanje	339	5,444	2,546	1,704,946	270,590	1,232,266	15.9
	Salima	320	4,373	4,032	1,841,842	258,954	1,582,889	14.1
	Nkhotakota	309	6,314	1,670	1,882,748	545,310	1,337,438	30
	Total	968	16,131	8,248	5,429,537	1,074,853	4,152,594	19.9

Data source: Salima ADD

**TABLE 3.15.10 AMOUNT LOANS AND REPAYMENT  
FOR MEDIUM TERM CREDIT IN 1991/92  
(AS OF OCTOBER, 1991/92)**

RDP	Total amount (MK)	% of recovery	Number of borrowers
Bwanje Valley	78,008	66	477
Salima	46,589	62	225
Nkhotalota	19,404	58	103
<b>Total</b>	<b>144,001</b>	<b>64</b>	<b>805</b>

**TABLE 3.16.1 FARMER'S CLUB IN SALIMA ADD**

year	RDP	Farmer's Club			Membership			
		Mixed club	Women's club	Total	Men	FHH	Married female	Total
1986/87	Bwanje Valley	177	11	188	2,612	0	466	3,078
	Salima	257	0	257	3,298	0	734	4,032
	Nkhotakota	210	0	210	3,181	0	448	3,629
	<b>Total</b>	<b>644</b>	<b>11</b>	<b>655</b>	<b>9,091</b>	<b>0</b>	<b>1,648</b>	<b>10,739</b>
1986/87	Bwanje Valley	189	30	219	3,062	0	808	3,870
	Salima	218	0	218	3,083	0	911	3,994
	Nkhotakota	203	0	203	3,608	0	691	4,299
	<b>Total</b>	<b>610</b>	<b>30</b>	<b>640</b>	<b>9,753</b>	<b>0</b>	<b>2,410</b>	<b>12,163</b>
1986/87	Bwanje Valley	277	27	304	4,314	406	728	5,448
	Salima	259	31	290	5,015	331	958	6,304
	Nkhotakota	314	28	342	5,496	786	1,093	7,375
	<b>Total</b>	<b>850</b>	<b>86</b>	<b>936</b>	<b>14,825</b>	<b>1,523</b>	<b>2,779</b>	<b>19,127</b>
1986/87	Bwanje Valley	318	40	358	6,688	347	1,109	8,144
	Salima	257	63	320	4,307	514	1,322	6,143
	Nkhotakota	310	31	341	5,721	427	918	7,066
	<b>Total</b>	<b>885</b>	<b>134</b>	<b>1,019</b>	<b>16,716</b>	<b>1,288</b>	<b>3,349</b>	<b>21,353</b>
1986/87	Bwanje Valley	316	88	404	6,442	753	2,096	9,291
	Salima	287	83	370	4,380	328	1,533	6,241
	Nkhotakota	316	29	345	5,950	464	952	7,366
	<b>Total</b>	<b>919</b>	<b>200</b>	<b>1,119</b>	<b>16,772</b>	<b>1,545</b>	<b>4,581</b>	<b>22,898</b>
1986/87	Bwanje Valley	265	74	339	5,444	552	1,994	7,990
	Salima	212	108	320	4,350	1,544	2,488	8,382
	Nkhotakota	253	56	309	6,314	605	1,065	7,984
	<b>Total</b>	<b>730</b>	<b>238</b>	<b>968</b>	<b>16,108</b>	<b>2,701</b>	<b>5,547</b>	<b>24,356</b>

Data source: Salima ADD

FHH: female headed household



TABLE 3.16.2 (1/3) BASIC INFORMATION OF THE EXISTING SCHEMES AND SCHEME COMMITTEES

Items	Mwalawoyera scheme	Mzandamula scheme
1 Type of scheme	farmer's self-help scheme	farmer's self-help scheme
2 Year of construction	1990/91, August to November 1992	1985/86 to 1987
3 Contribution from farmers for construction	labor contribution to digging out irr/drain, canals	labor contribution to digging out irr/drain, canal and carrying stone
4 Government contribution	planning/design/supply of all materials	planning/design/supply of all materials
5 Administrative location	STA: Ganya/Dedza district	T.A: Kachindamoto/ Dedza district
6 Project area (net ha)	110	229
7 Number of related village	9	8
8 Name of villages	(1) Akubilila 1 (2) Akubilila 2 (3) Mose (4) Mwadzangati (5) Nsanjani 3 (6) Kanyoza (7) Kamaima (8) Tamsala (9) Majinga	(1) Dziko (2) Garuanenengi (3) Bwanamakowa (4) Mbangaji (5) Mthembanji (6) Chatewa (7) Mkondolire (8) Mwasinja
9 Number of households	198 ( among this 76 FHHs, 38 % for total)	472 ( among this 180 FHHs, 38 % for total)
10 Farm size/household	0.2 to 0.8 ha	0.2 to 1.2 ha
11 Land allocation to farmers	No new land allocation was applied to the project. Farm of each farmer after completion of the project is as same as that before construction	The land use in the project area before construction comprises paddy field and grazing lands. No new land allocation was not applied to the case of Mwalawoyera scheme. With respect to the grazing lands, an average figure of lands (total grazing divided by the total number of applicant farmers) was allocated to the farmers.
12 Land acquisition for irrigation facilities	No land acquisition cost: Group village headman authorized land for irrigation facilities.	No land acquisition cost: Group village headman authorized land for irrigation facilities.
13 Scheme committee	no	no
13-a Legal basis	1990 August	1985/86 fiscal year
13-b Establishment year		

TABLE 3.16.2 (2/3) BASIC INFORMATION OF THE EXSISTING SCHEMES AND SCHEME COMMITTEES

Items	Mwalawoyera scheme	Mtandamula scheme
13-c Structure	(1) The scheme committee is composed of 4 committees, namely (i) Land allocation, (ii) Scheme management, (iii) Block and (iv) Farmer's credit club. 1-chairman/1-secretary/8-committee member	(1) The scheme committee is composed of 4 committees, namely (i) Land allocation, (ii) Scheme management, (iii) Block and (iv) Farmer's credit club. 1-chairman/1-secretary/8-committee member
13-d Member of land allocation committee	1-chairman/1-vice chairman/1-secretary/ 1-vice secretary/1-treasury/4-committee member	1-chairman/1-vice chairman/1-secretary/ 1-vice secretary/1-treasury/4-committee member
13-e Member of scheme/block/ farmer's credit club committees	The group village headman is nominated to the chairman of the land allocation committee. Other chairman and main posts of the committees are elected by all the participant farmers. The maximum service period of the chairman and main posts is 3 years. All chairmen/main posts are voluntarily work without salaries.	The group village headman is nominated to the chairman of the land allocation committee. Other chairman and main posts of the committees are elected by all the participant farmers. The maximum service period of the chairman and main posts is 3 years. All chairmen/main posts voluntarily work without salaries.
13-f Appointment/service period/salary	there is	there is
13-g Land ledger and farmer's list	there is	there is
13-h Constitution of scheme committee	General assembly meeting: once a year	General assembly meeting: once a year
13-i Meeting system	Periodical meeting: twice a month	Periodical meeting: twice a month
13-j Incomes of scheme committee	(i) crop income from communal garden (ii) annual due (or membership fee): MK 5/year/participant farmer	(i) crop income from communal garden (MK 400/year) (ii) annual due:none (iii) payment deposit from the farmers without contributing their labor for construction period(MK12/each)
13-k Outgo of the scheme committee	Stationery, sundry costs	Stationery, sundry costs
13-l Availability of cash flow note	there is a cash flow note managed by treasury in farmer's credit club committee.	there is a cash flow note managed by treasury in farmer's credit club committee.
13-m Properties of scheme committee	nothing at all	nothing at all
14 Farmer's credit club	5	21
15 Water management		

TABLE 3.16.2 (3/3) BASIC INFORMATION OF THE EXISTING SCHEMES AND SCHEME COMMITTEES

Items	Mwalawoyera scheme	Mwandamula scheme
15-a Layout/drawing of system	not yet	none
15-b List of inventories of systems	not yet	none
15-c Decision of time to start irrigation	not yet operated	scheme committee assisted by scheme manager of Salima ADD
15-d Operation of gate	not yet operated	scheme committee assisted by scheme manager of Salima ADD
15-e Rotational irrigation	not yet operated	not practiced
15-f Main items of maintenance	not yet operated	(i) desilting of canal, (ii) weeding and shaping of canal, (iii) stone pitching
15-g Maintenance times	not yet operated	once a month by farmer themselves
16 General farming practice	rice only	rice only
16-a Kind of crop cultivated	(i) transplanting (100 %)	(i) direct sowing (25 %), transplanting (75 %)
16-b Sowing method	Early Nov.-seeding	Early Dec-seeding
16-c Cropping calendar	Jan/Feb.- transplanting May/Jun.- harvesting Faya	Jan.- transplanting May/Jun.- harvesting Faya
16-d Rice variety	all man power	Normal year: Direct sowing (25 %), animal power (75 %) Year of 1992: Direct sowing (75 %), animal power (25 %)
16-e Method of land preparation	none	animal power with 2-cattle
16-f Application of fertilizer/chemical	pounding by man power	pounding by man power
16-g Method of milling	(i) 75 % to ADMARC, (ii) 25 % home consumption	(i) 25 % to ADMARC, (ii) 50 %, exchange rice to maize from hills people and (iii) 25 % home consumption
17 Marketing of rice		(i) damage of paddy caused by pippo (ii) rough land levelling (iii) damage of paddy caused by cattle (iv) water shortage (v) lack of hospital (vi) lack of facilities of school and dormitory for teacher (vii) rough road conditions (viii) no ADMARC marketing facilities (ix) defaults of irrigation facilities which might be accrued from an improper design and/or construction (x) lack of field drains (xi) improvement of a lead canal from the Naminkokuwe river and an intake at the Naminkokuwe river (xii) illegal irrigation water intake by some farmers
18 Problems the farmers encountered at present		

**TABLE 3.17.1 FARMERS EXPECTATION FOR THE FUTURE AGRICULTURAL DEVELOPMENT**

Items	% of the number of farmers						
	1 st	2 nd	3 rd	4 th	5 th	6 th	below 7 th
Cosntruction of irrigation facilities	73	18	2	1	0	0	6
Construction of drainage facilities	41	40	7	1	0	0	11
Expansion of cultural lands	33	10	3	3	0	0	51
Supply of farm inputs	16	16	11	6	1	1	49
Reinforcement of extension services	12	29	28	13	3	0	15
Reinforcement of credit services	11	15	18	22	4	0	30
Development of road system	9	17	34	6	0	0	34
Improvement of marketing system	8	19	24	12	6	3	28
Introduction of mechanization	7	11	13	10	3	0	56
Introduction of draft animal	6	21	18	14	3	2	36

Data source: Farmer's economic survey of JICA study team 1992, November

**TABLE 3.17.2 FARMER'S EXPECTATION FOR THE FUTURE RURAL DEVELOPMENT**

Expectation Order	Male headed household				Female headed household			Fisheries and agriculture household
	TA Kachindamoto		TA other than Kachindamoto		Up	(%)	UP/Low	
	Up.	UP/Low	Up.	UP/Low				
1	Well	Hospital	Mill	Well	Well	Well	Well	
2	Hospital	Well	G.S	Hospital	Mill	Hospital	Market	
3	Mill	Mill	Hospital	Market	Hospital	Mill	Hospital	
4	Market	Market	Market	Mill	Road	Market	G.S	
5	G.S	G.S	Road	G.S	School	School	School	
6	School	Road	Well	School	Market	Road	Mill	
7	Road	School	School	Road	G.S	G.S	Road	

Data source: Farmer'e economic survey conducted by JICA study team in November 1992.

UP: farmers who own upland

UP/Low: farmers who own both upland and lowland

G.S: grain store house

**ANNEX I**  
**ASSEEMENT OF DEVELOPMENT POTENTIAL**

***Figures***



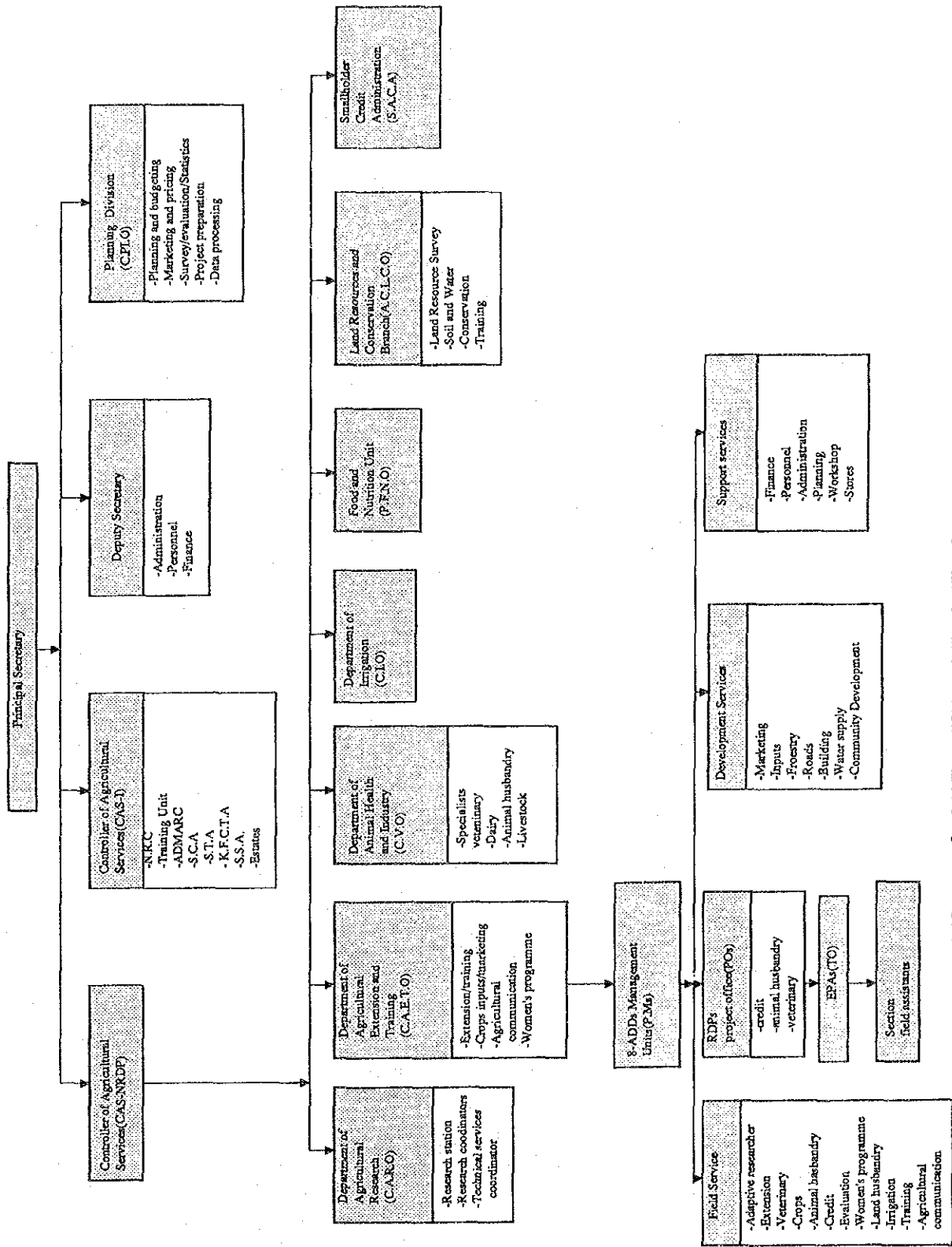


FIG.2.4.1 ORGANIZATIONAL STRUCTURE OF MINISTRY OF AGRICULTURE

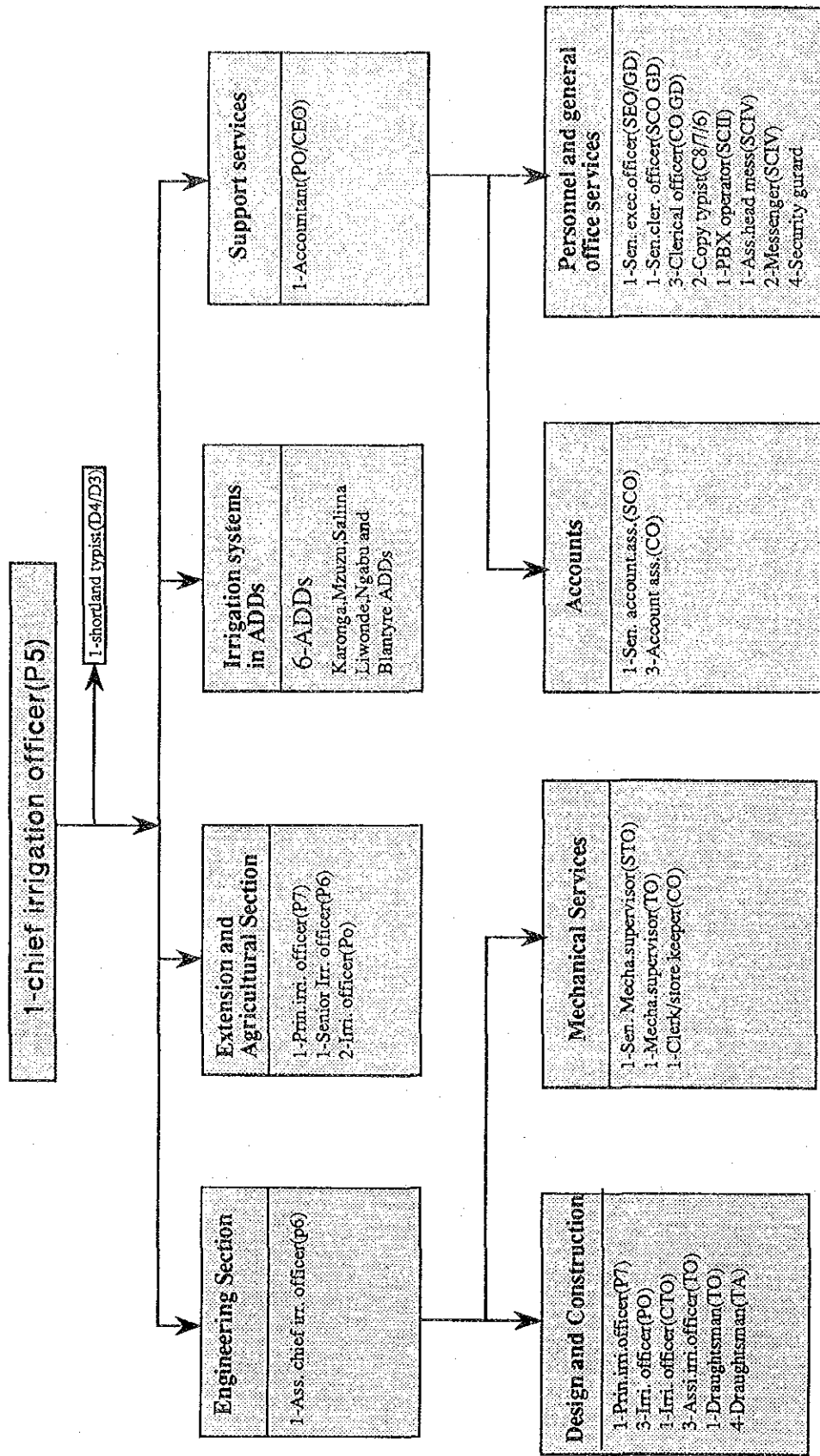


FIG.2.4.2 DEPARTMENT OF IRRIGATION



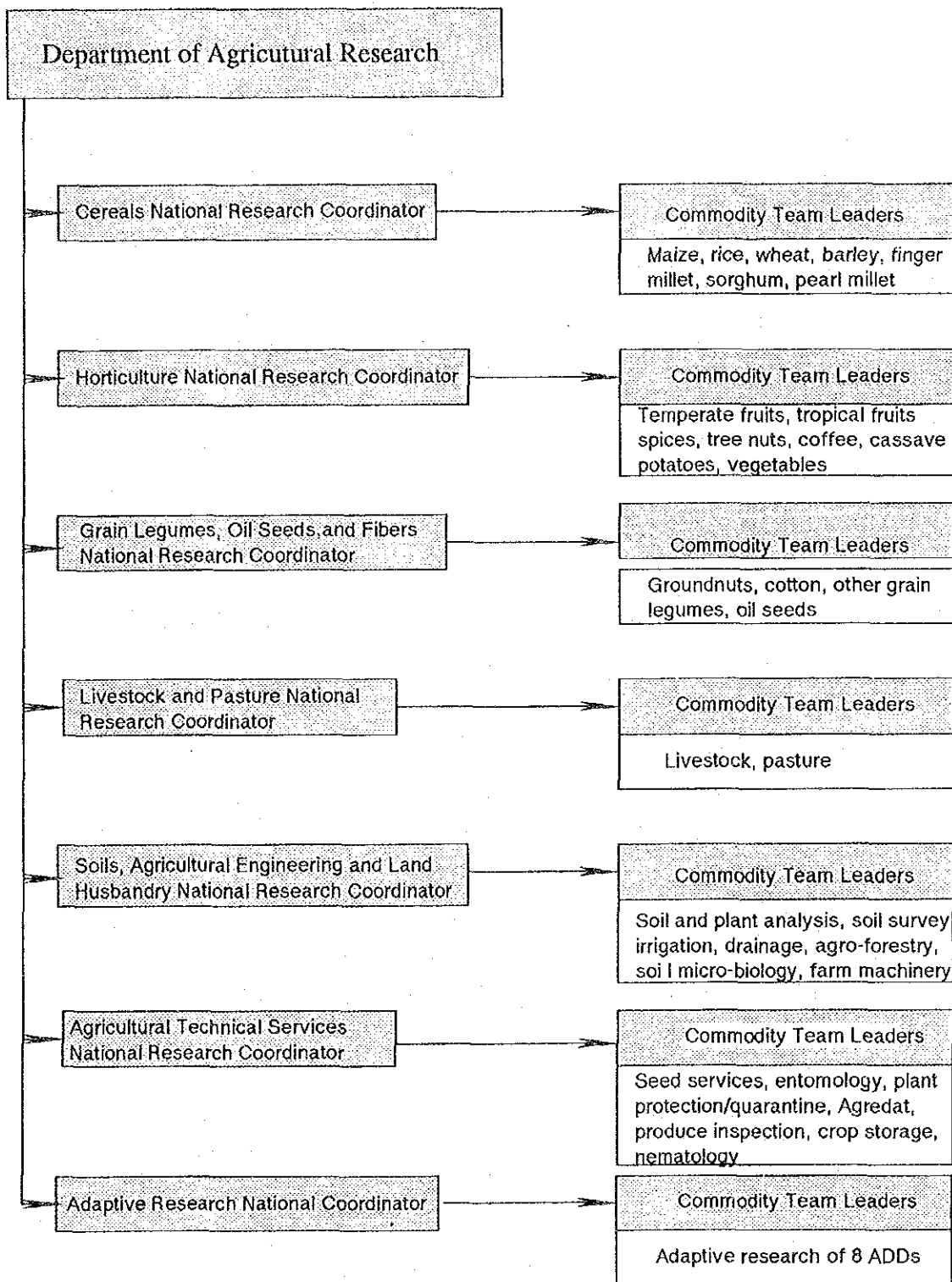


FIG. 2.4.3 FLOW OF RESEARCH COORDINATION AT NATIONAL LEVEL

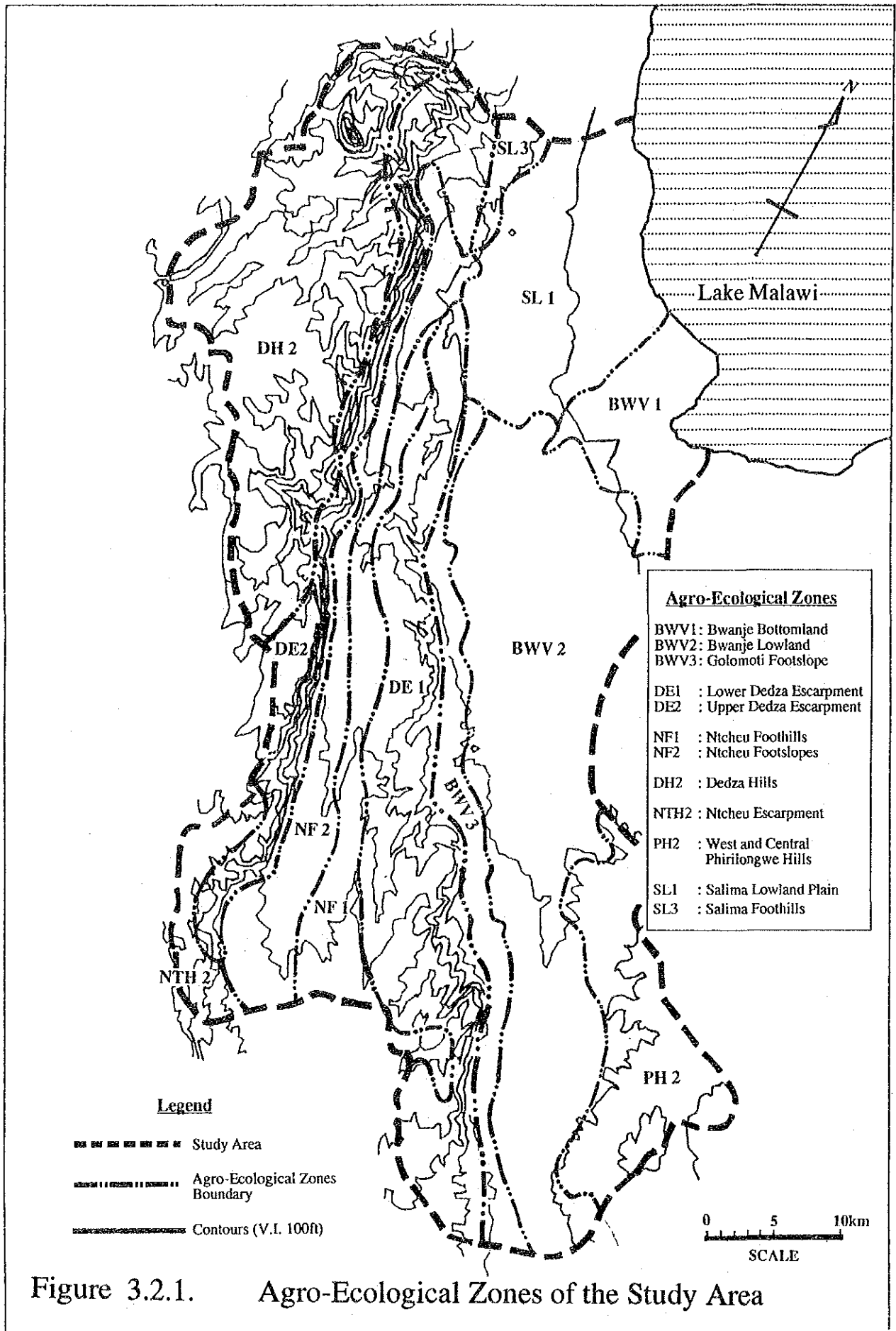
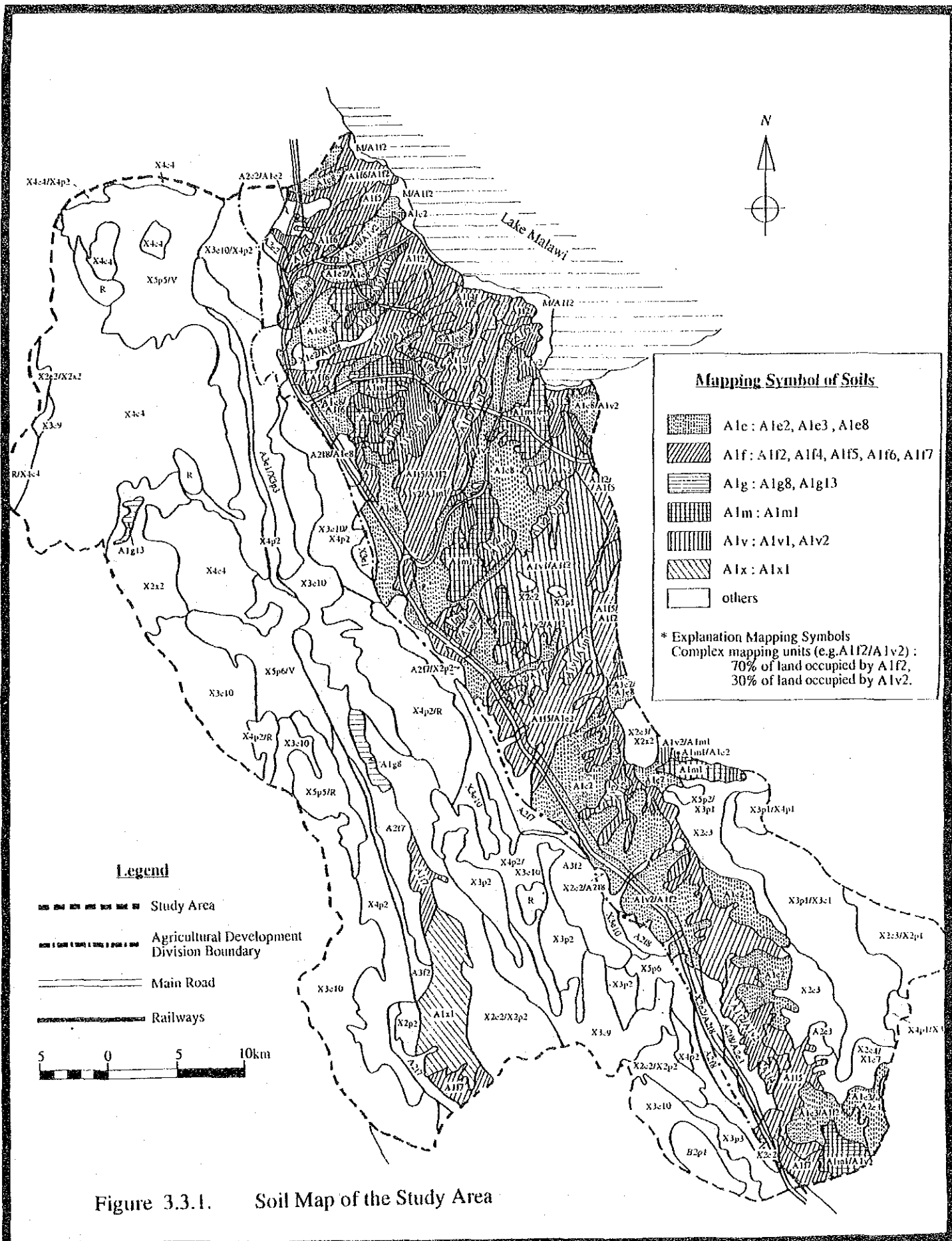


Figure 3.2.1. Agro-Ecological Zones of the Study Area



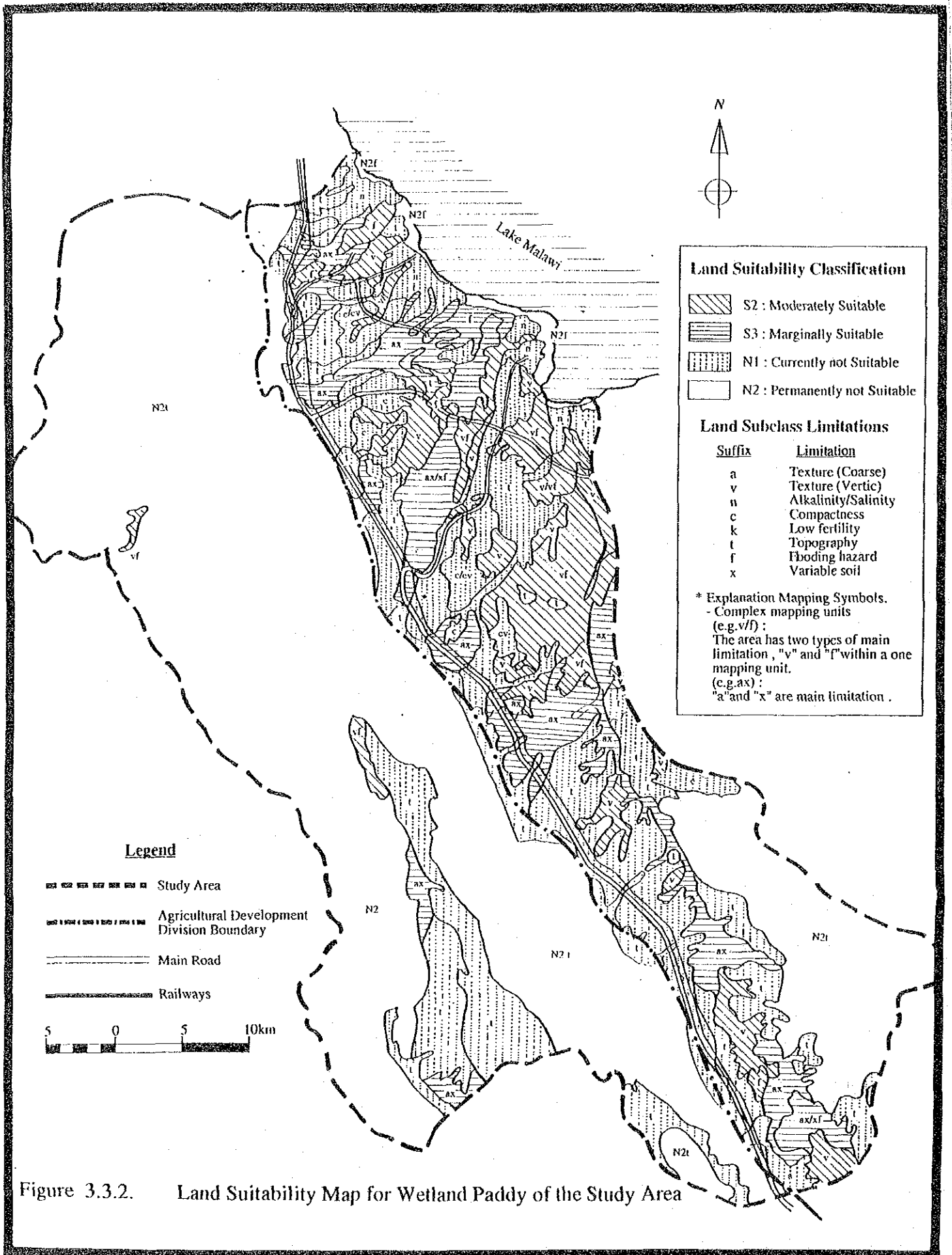


Figure 3.3.2. Land Suitability Map for Wetland Paddy of the Study Area

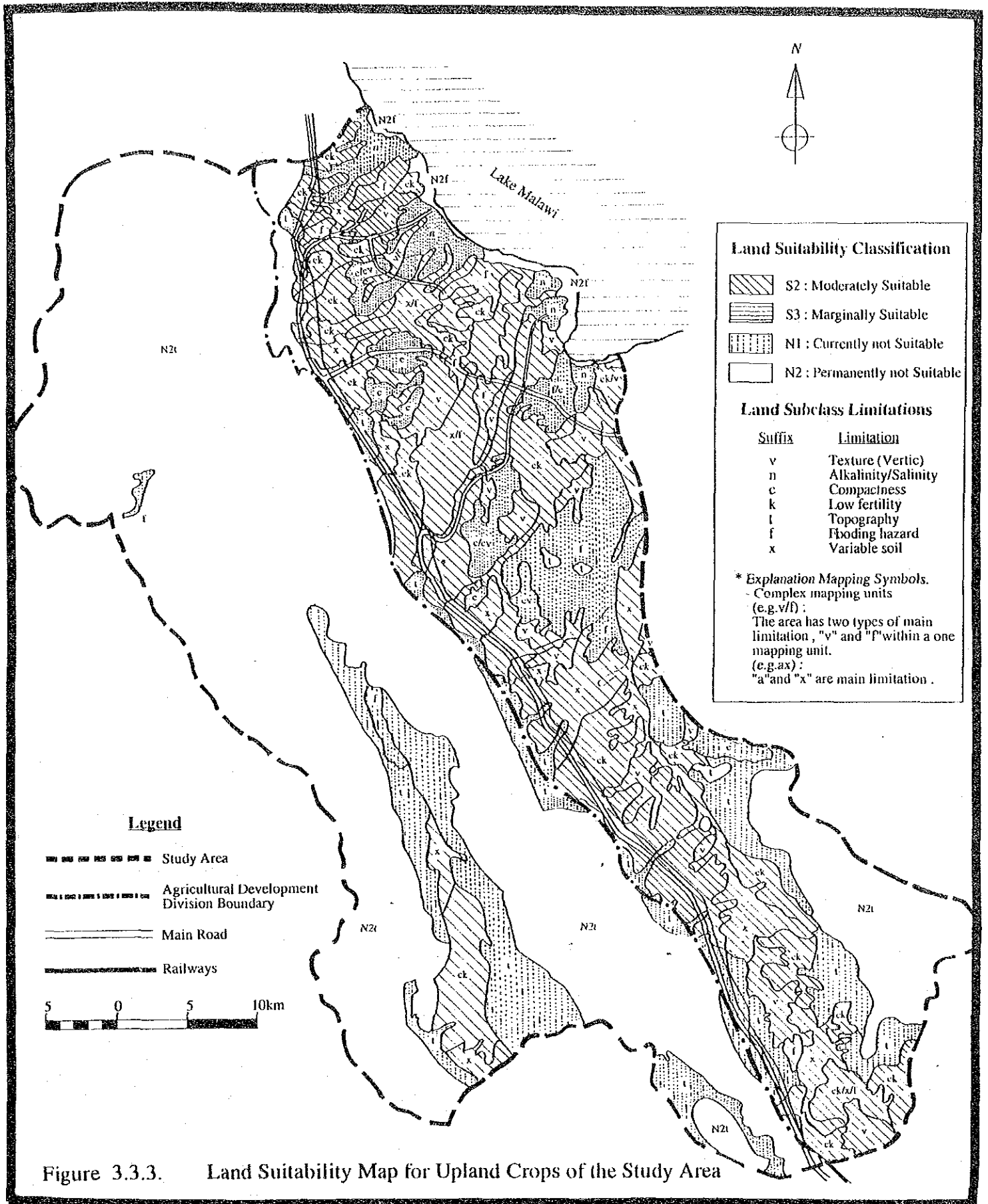


Figure 3.3.3. Land Suitability Map for Upland Crops of the Study Area

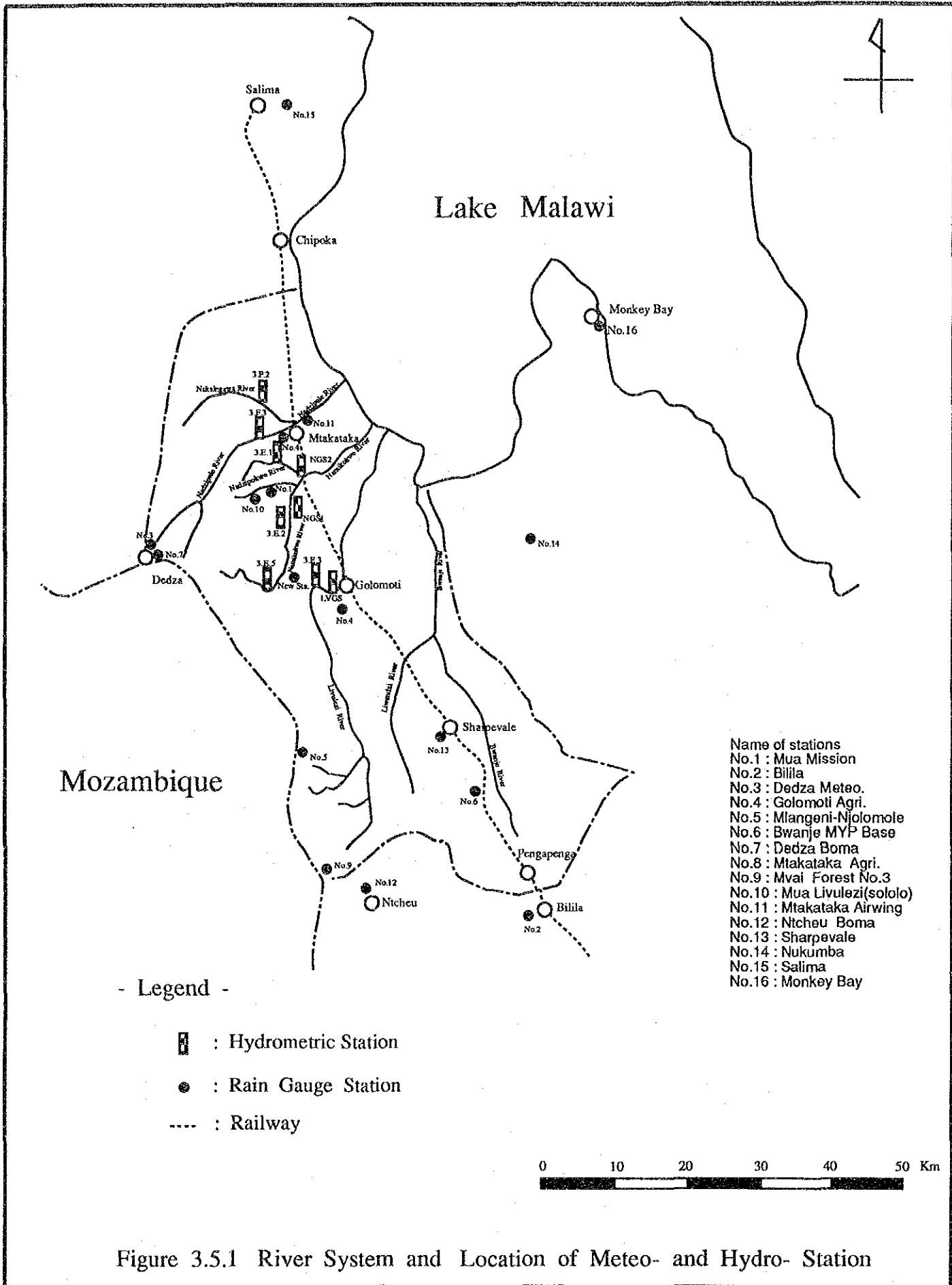
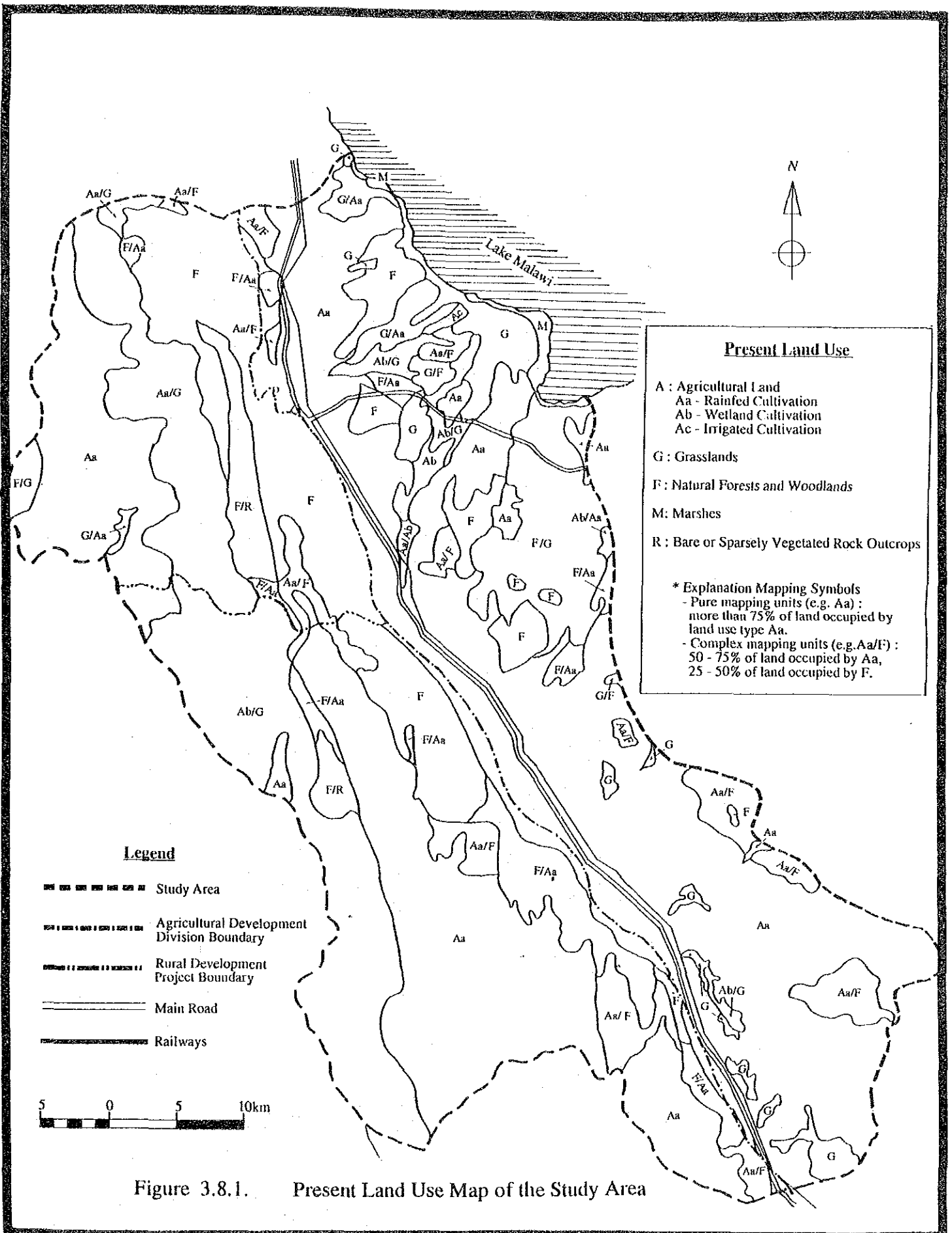


Figure 3.5.1 River System and Location of Meteo- and Hydro- Station



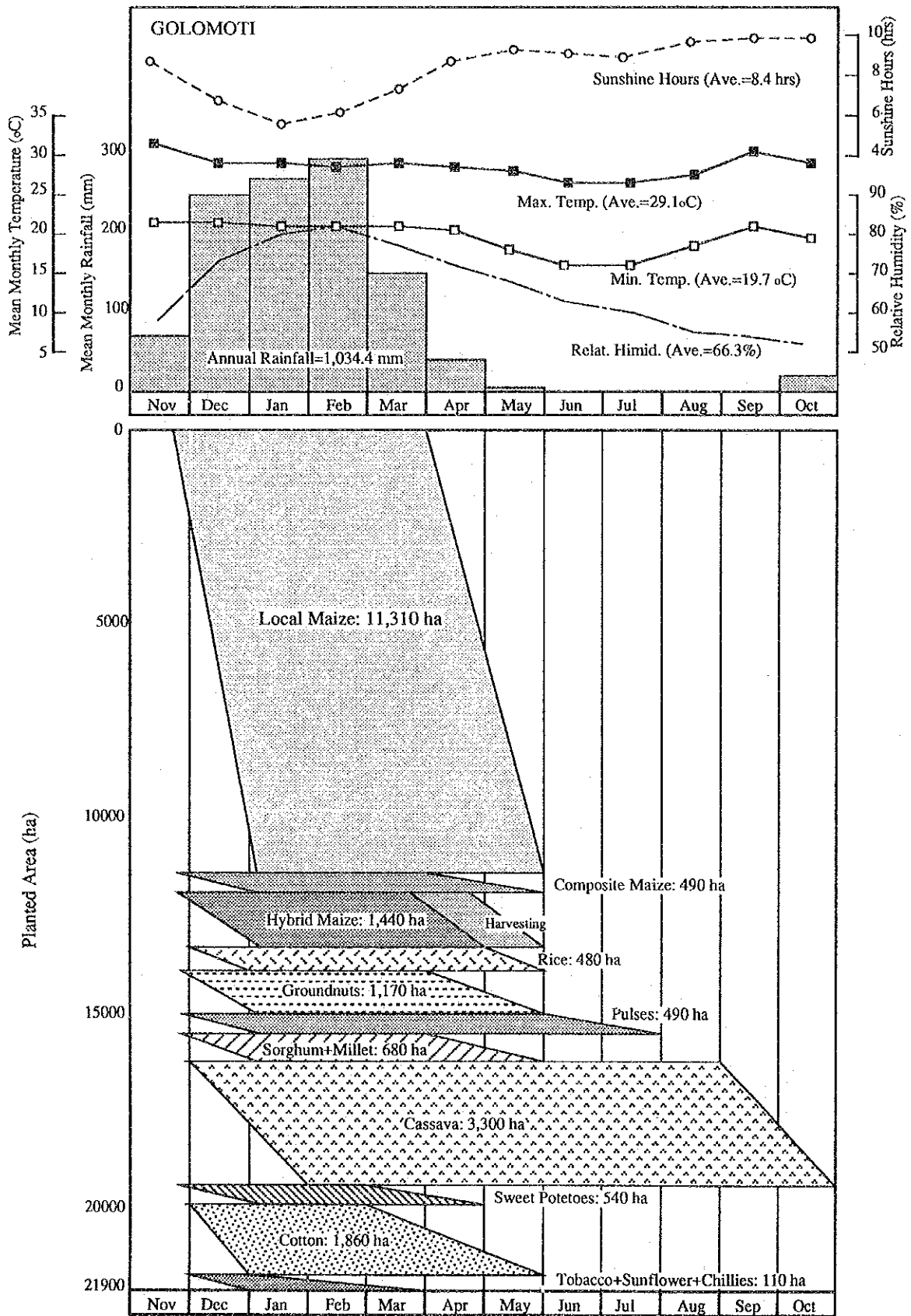


Figure 3.10.1 PRESENT CROPPING PATTERNS OF THE STUDY AREA (BWAJE VALLEY RDP)



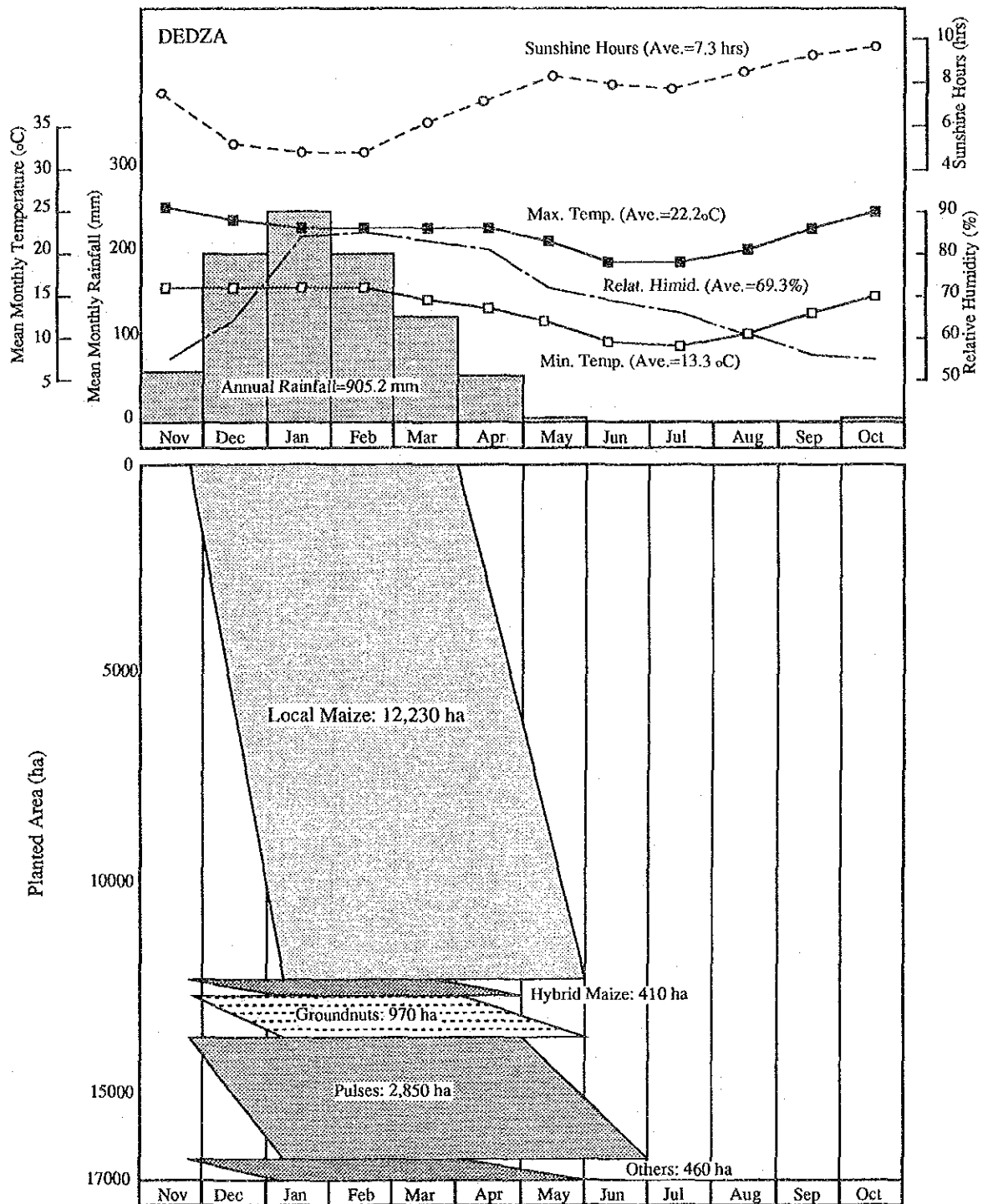


Figure 3.10.2 PRESENT CROPPING PATTERNS OF THE STUDY AREA (DEDZA RDP)

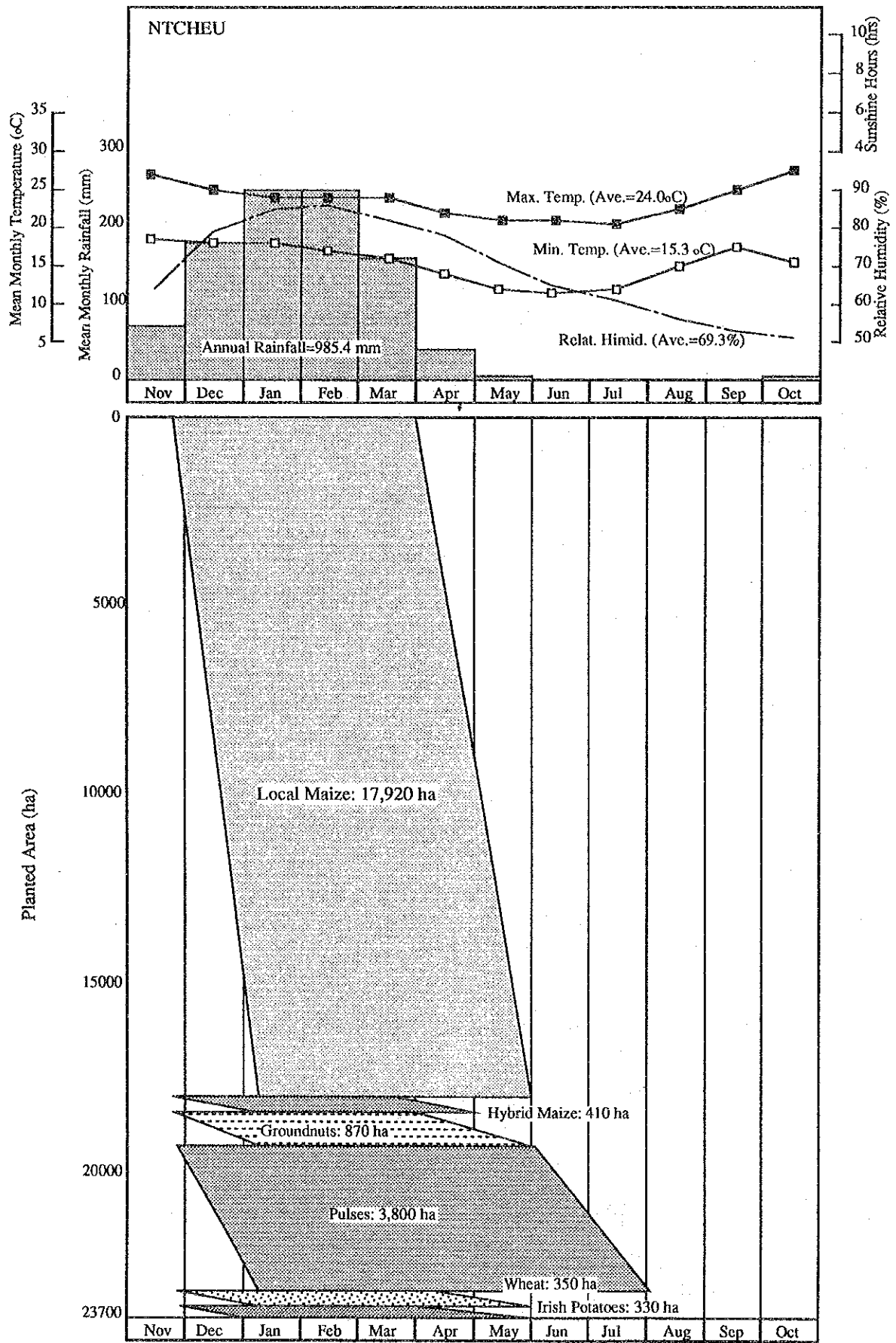
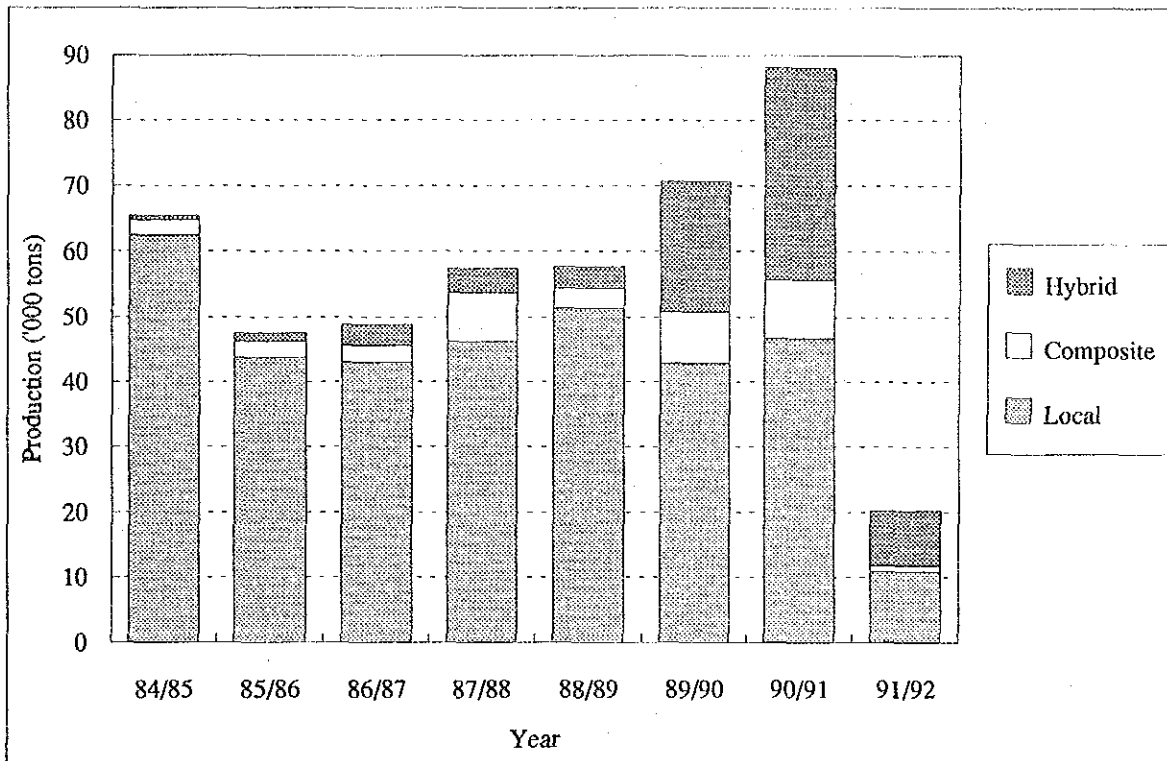


Figure 3.10.3 PRESENT CROPPING PATTERNS OF THE STUDY AREA (NTCHEU RDP)

### MAIZE PRODUCTION



### MAIZE YIELD

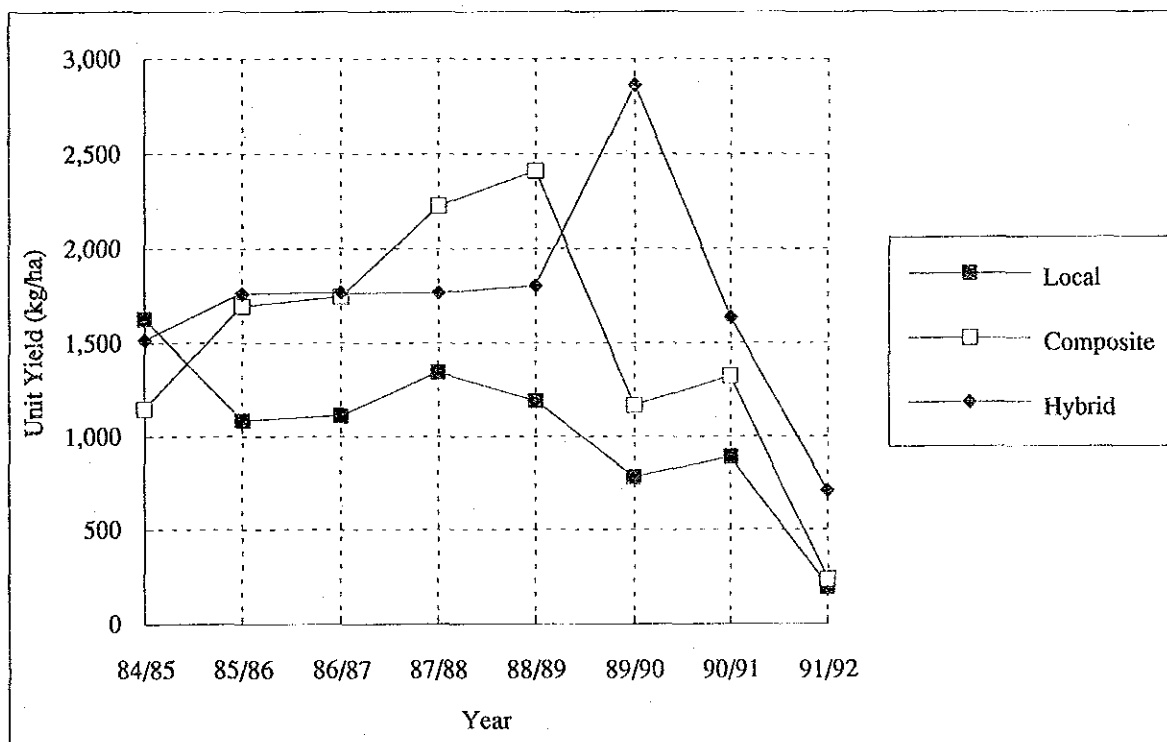
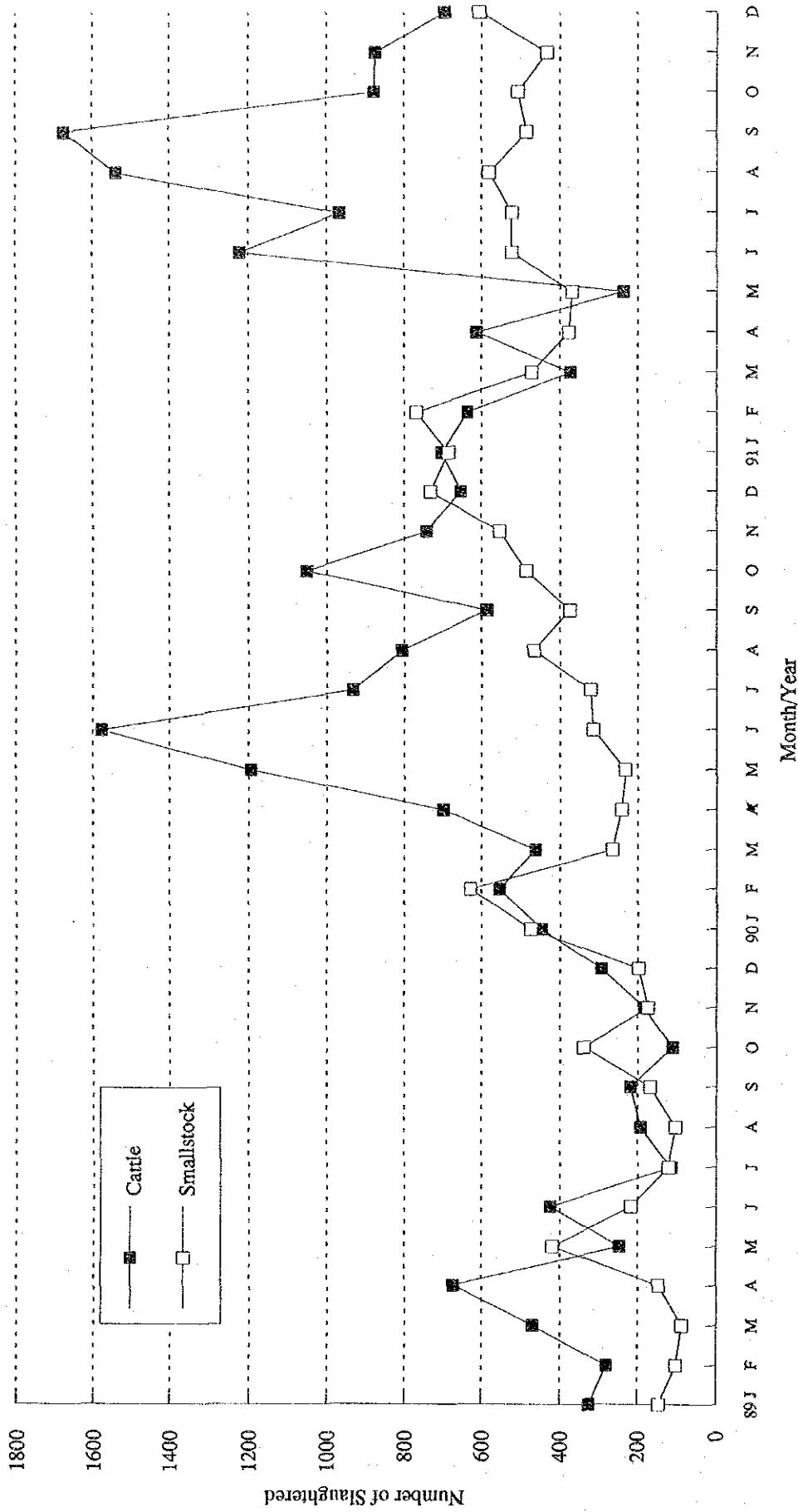
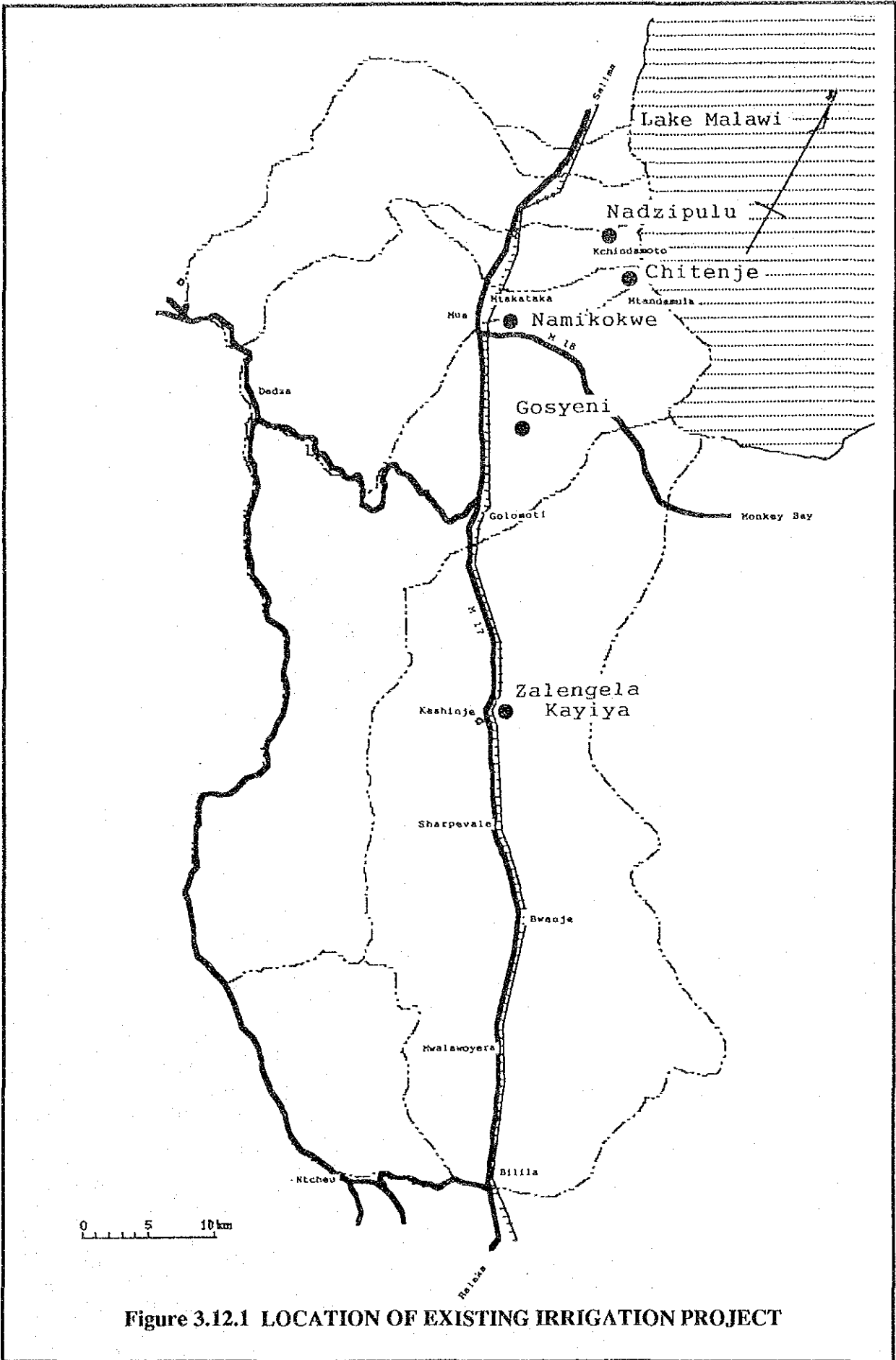


Figure 3.10.4 PRODUCTION AND YIELD OF MAIZE IN SALIMA ADD 1984/85 - 1991/92



Note: records in 1989 are not reliable due to less organized survey and reporting.

Figure 3.11.1 MONTHLY RECORD OF ANIMAL SLAUGHTER IN SALIMA ADD



**Figure 3.12.1 LOCATION OF EXISTING IRRIGATION PROJECT**

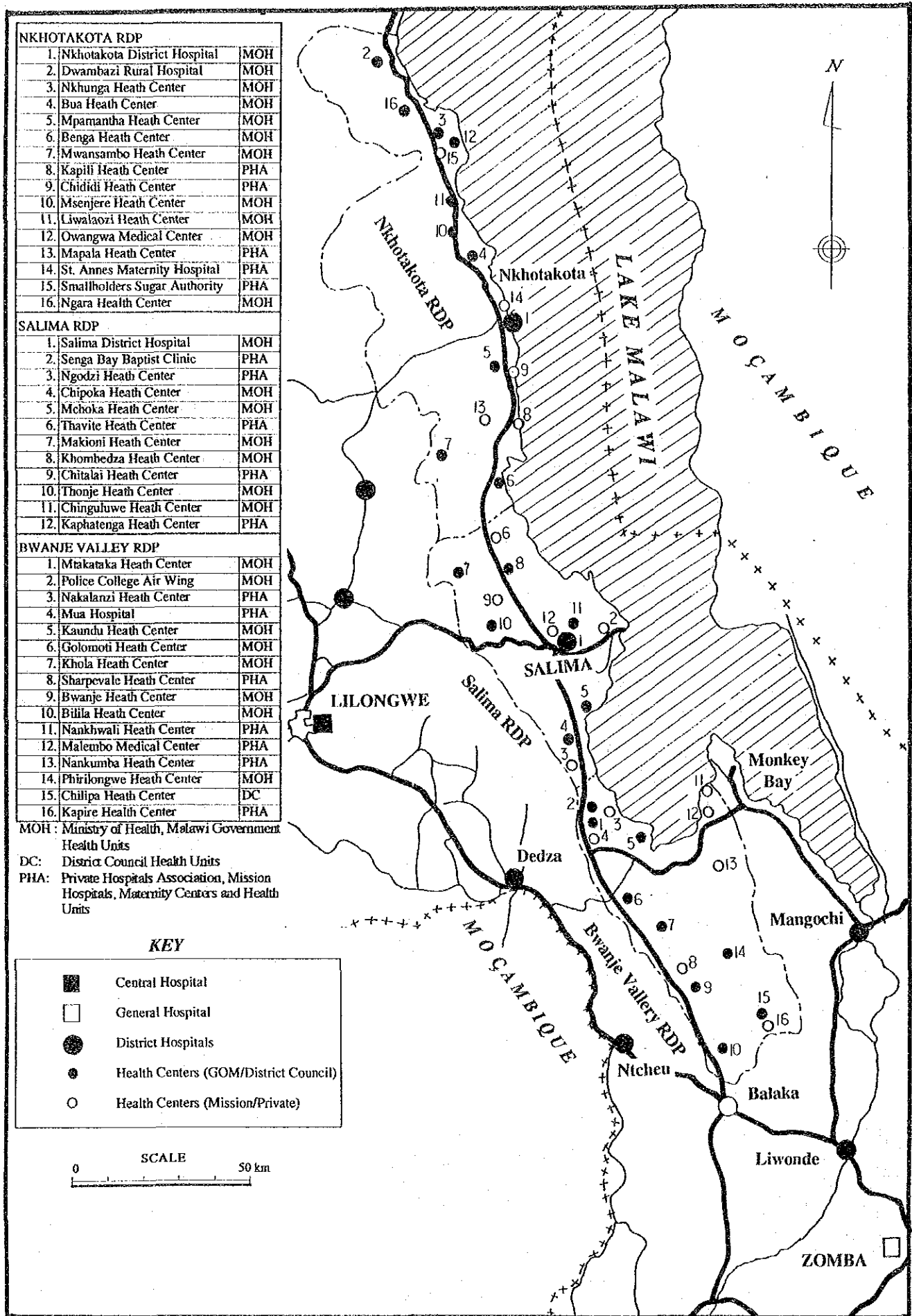


Figure 3.13.1 Hospitals and Health Centers in Salima ADD

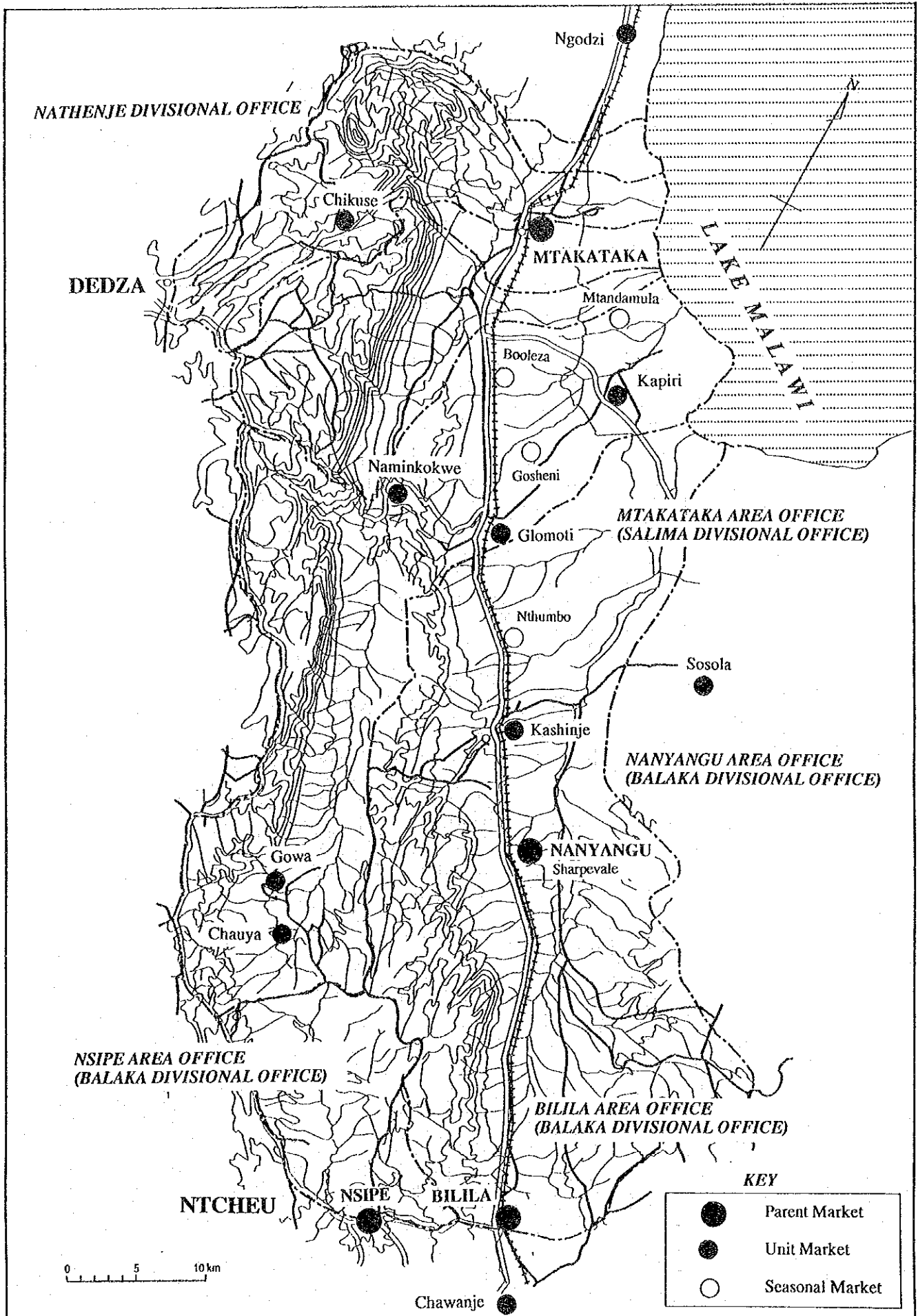
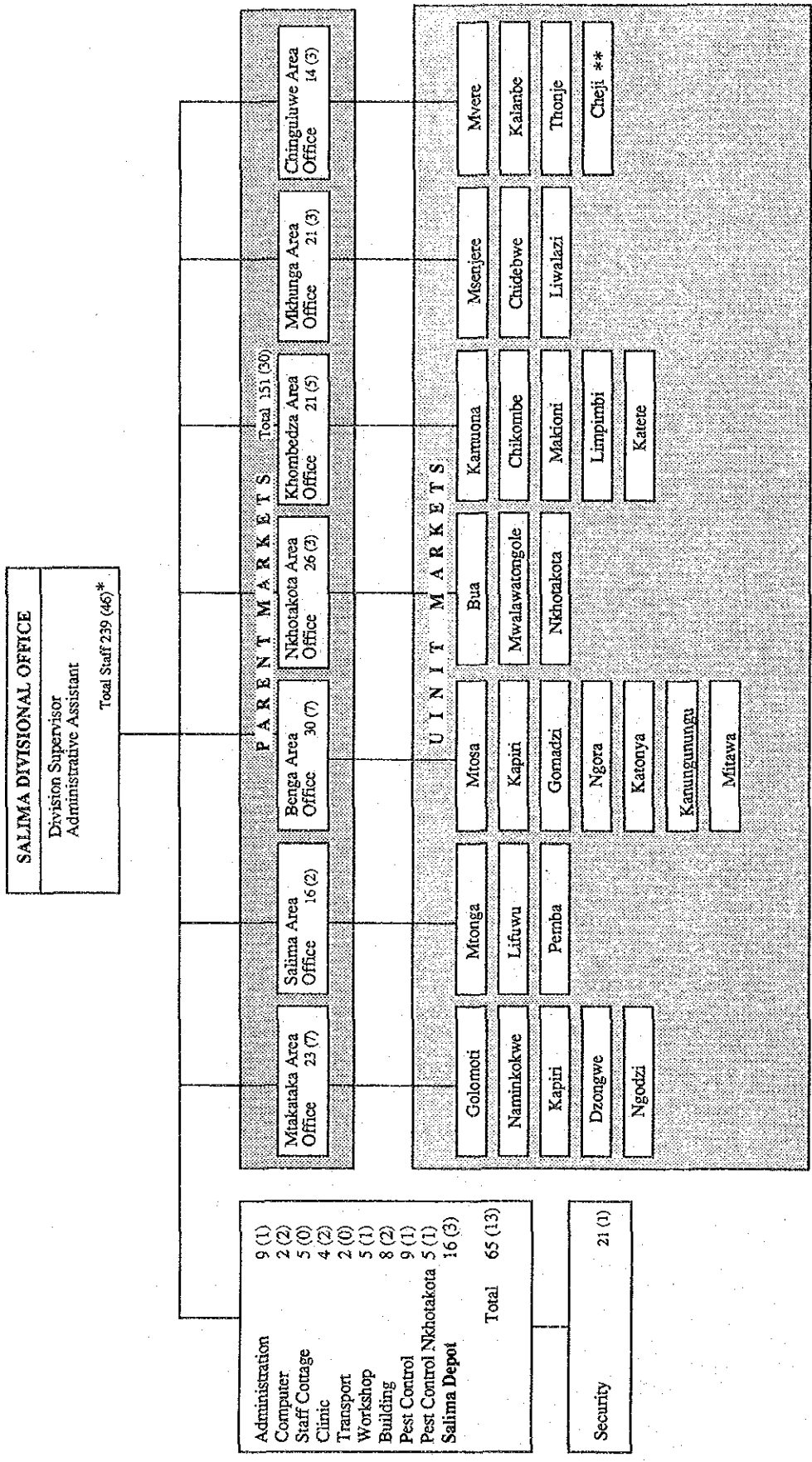


Figure 3.14.1 Location of ADMARC Markets in the Study Area

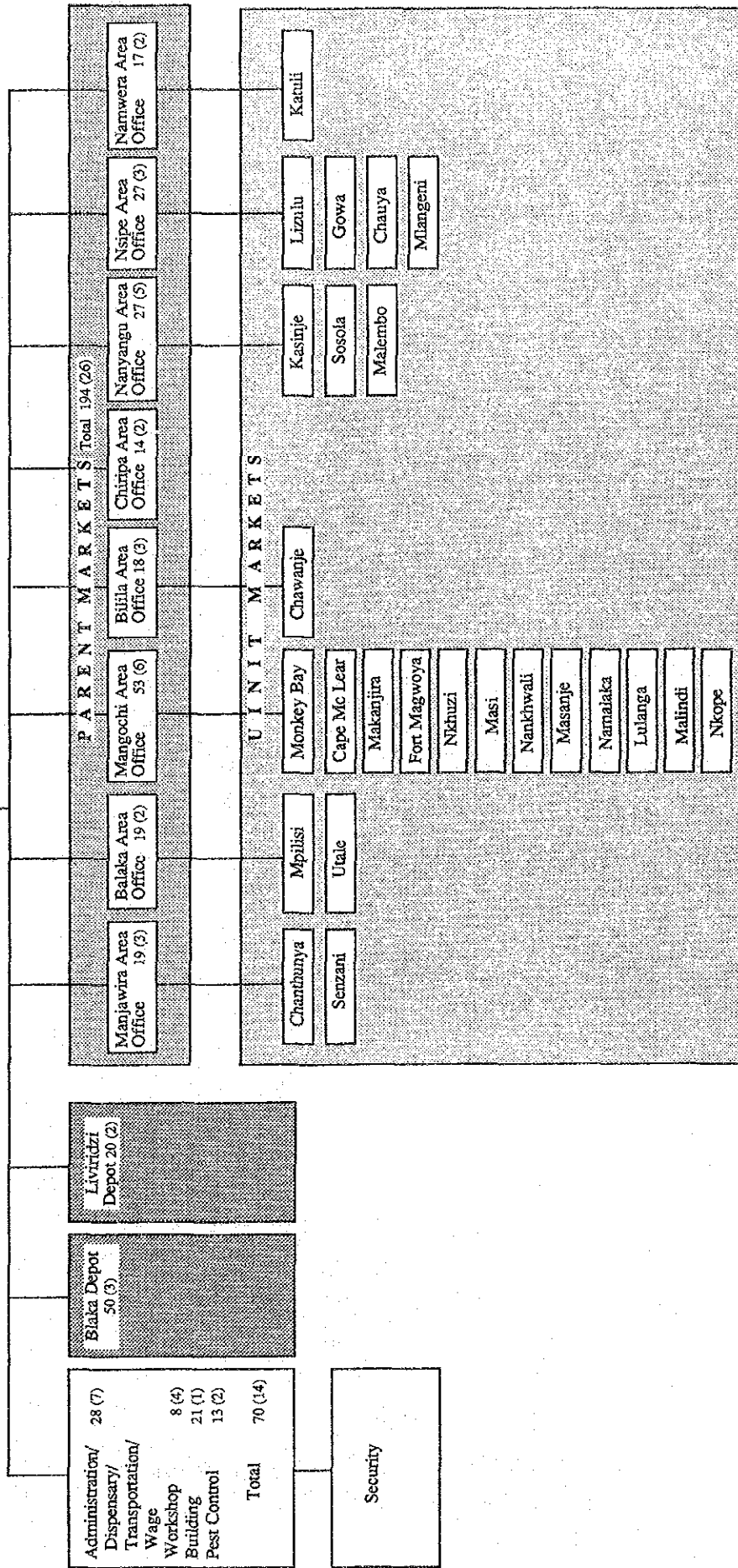


Remark: \* Total staff number is 239 including 46 senior staff members.  
\*\* to be open soon.

Fig. 3.14.2 ORGANIZATION CHART OF ADMARC - SALIMA DIVISIONAL OFFICE



**BALAKA DIVISIONAL OFFICE**  
 Division Supervisor  
 Administrative Assistant  
 Total Staff 334 (45) \*



Remark: \* Total staff number is 334 including 45 senior staff members.

Fig. 3.14.3 ORGANIZATION OF ADMARC - BALAKA DIVISIONAL OFFICE

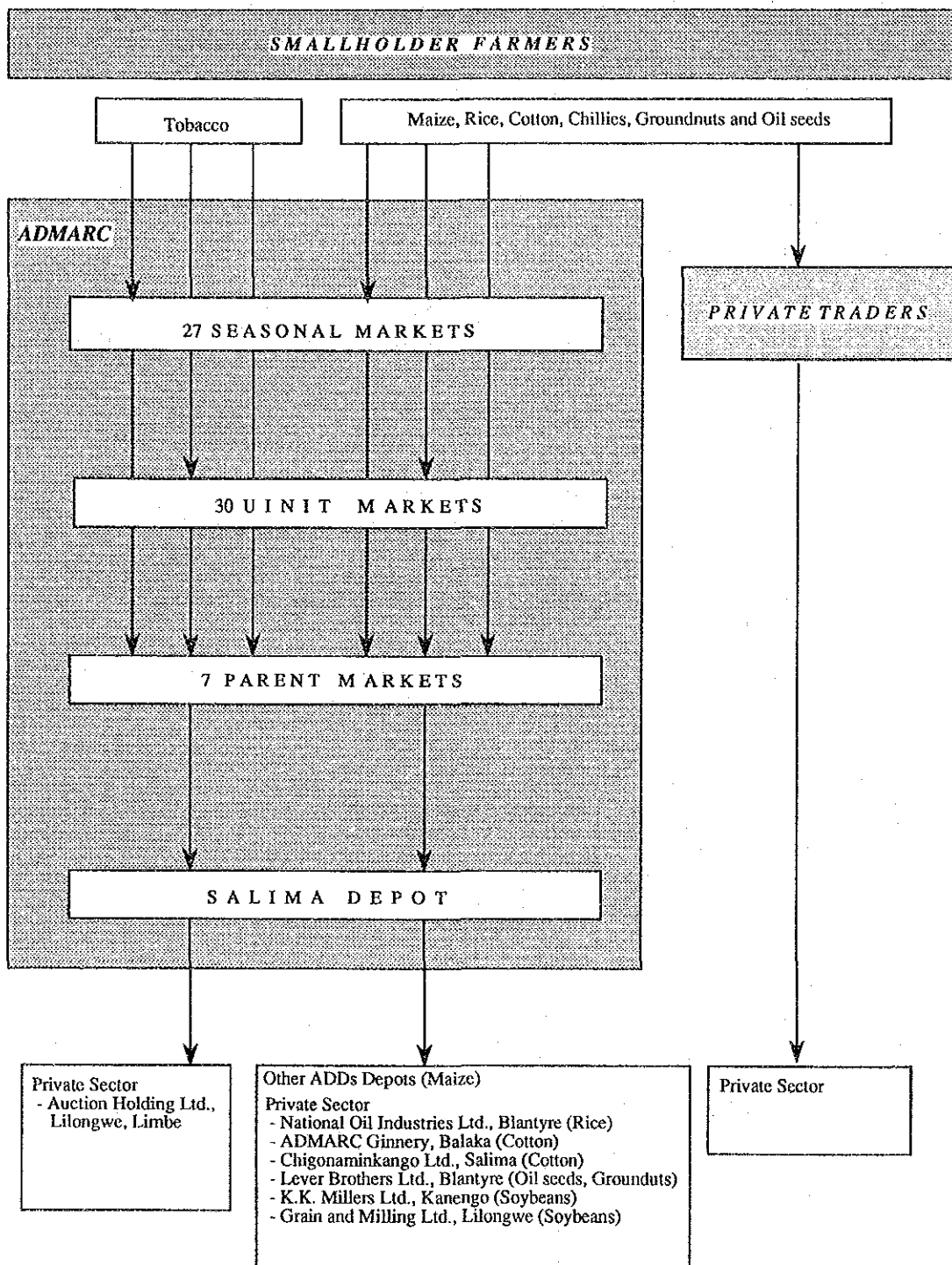


Fig. 3.14.4 MARKETING CHANNELS OF SMALLHOLDER CROPS IN SALIMA ADD

