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CAPM INSTITUTIONAL BASELINE STUDY:

THE ORGANIZATIONAL, INSTITUTIONAL, AND POLICY FRAMEWORK

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Finally, to those who read the report, I hope it correctly reflects the organizations and institutions described and that it will provide some assistance to our mutual goal of developing smallholder commercial agriculture in Swaziland.

Conrad F. Fritsch
Mbabane, Swaziland
January 1990

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LIST OF ACRONYMS

ACP	-	Africa, Caribbean, and Pacific Trade Agreement
ADB	-	African Development Bank
AEO	-	Assistant Extension Officer
CAPM	-	Commercial Agricultural Production and Marketing Project
CCU	-	Central Cooperative Union
CDC	-	Commonwealth Development Corporation
CDD	-	Cooperative Development Department
CIDA	-	Canadian International Development Assistance
CMA	-	Common Monetary Area
CODEC	-	Cooperative Development Educational Centre
CSB	-	Civil Service Board
CSO	-	Central Statistics Organization
CSRET	-	Cropping Systems Research and Extension Training Project
DAE	-	Department of Agriculture and Extension
DRP	-	Department of Research and Planning
DVS	-	Department of Veterinary Services
EAPS	-	Economic Analysis and Planning Section
EDF	-	European Development Fund
EEC	-	European Economic Community
EO	-	Extension Officer
EW	-	Extension Worker
EWU	-	Early Warning Unit
FAO	-	Food and Agriculture Organization
FCL	-	Farm Chemicals Ltd.
FTC	-	Farmer Training Centre
GDP	-	Gross Domestic Product
GOS	-	Government of Swaziland
IFAD	-	International Fund for Agricultural Development
ITL	-	Individual Tenure Land
LUPS	-	Land Use Planning Section
MAMC	-	Mananga Agricultural Management Centre
MAU	-	Marketing Advisory Unit
MCIT	-	Ministry of Commerce, Industry, and Tourism
MEU	-	Monitoring and Evaluation Unit
MITC	-	Manzini Industrial Training Centre
MOAC	-	Ministry of Agriculture and Cooperatives
MOF	-	Ministry of Finance
MOI	-	Ministry of Interior
NAMBoard	-	National Agricultural Marketing Board
NIDCS	-	National Industrial Development Corporation of Swaziland
NMC	-	National Maize Corporation
NSMS	-	National Subject Matter Specialist
ODA	-	Overseas Development Agency
PEU	-	Public Enterprise Unit
PSAE	-	Public Sector Agribusiness Enterprise

LIST OF ACRONYMS
(continued)

PSE	-	Public Sector Enterprise
RD	-	Research Division
RDA	-	Rural Development Area
RDAP	-	Rural Development Area Project
RSA	-	Republic of South Africa
SACCE	-	South African Citrus Cooperative Exchange
SACU	-	Southern Africa Customs Union
SACUA	-	South African Customs Union Agreement
SADCC	-	Southern African Development Coordinating Conference
SAO	-	Senior Agricultural Officer
SARCCUS	-	Southern African Regional Commission for Conservation and Utilization of the Soil
SAS	-	Swaziland Agricultural Supplies
SCB	-	Swaziland Cotton Board
SDB	-	Swaziland Dairy Board
SIDA	-	Swedish International Development Agency
SIDC	-	Swaziland Industrial Development Corporation
SMC	-	Swaziland Milling Company
SMI	-	Swaziland Meat Industries
SNL	-	Swazi Nation Land
SOEC	-	Statistical Organization of the European Communities
T&V	-	Training and Visitation
UNDP	-	United Nations Development Program
UNISWA	-	University of Swaziland
WFP	-	World Food Program

SECTION I

INTRODUCTION

A. Study Objectives

This report compiles the results of one of two initial baseline studies undertaken at the start of the Commercial Agriculture Production and Marketing (CAPM) project. The report is designed to provide information and analysis on Swazi organizations and institutions, and government of Swaziland (GOS) policies and programs within which CAPM will operate. The goal is to improve project planning and implementation activities to better meet objectives and expectations of the USAID and the Ministry of Agriculture and Cooperatives (MOAC).

The CAPM project is designed to support development of agribusiness through promotion of private sector initiatives complementary with GOS policy and program actions. The project strives, in part, to shift the public sector role from direct management of employment creating production, processing, and marketing activities to one of promoting, monitoring, and using indirect management approaches to foster a balanced private sector expansion of these activities.

CAPM staff interface with GOS counterparts from the MOAC, the Ministry of Commerce, Industry, and Tourism (MCIT), and the Ministry of Education. The project provides a long-term agribusiness specialist to the MCIT, and one to the MOAC. A long-term agribusiness marketing specialist is located in the MOAC and short-term policy analysis assistance is also provided. A visiting professor of agribusiness management is assigned to the Luyengo campus of the University of Swaziland. In addition, long-term participant training is provided for two GOS employees and 357 person-months of short-term, in-country training is programmed.

Project objectives relevant to this baseline study include the following:

- o assist the GOS in formulating policies, programs, regulations, and information systems which enable it to effectively monitor and guide private and public sector agricultural processing and marketing enterprises;
- o promote salary and wage employment opportunities for Swazi citizens through expansion of agricultural processing and marketing opportunities; and
- o strengthen the agribusiness curriculum and training capabilities at the University of Swaziland (UNISWA) and

other institutions, thus increasing the number of Swazi citizens trained in agribusiness management skills.

Within these objectives, the GOS supports small farmers on Swazi Nation Land (SNL) and individual tenure land (ITL) in increasing their incomes through expanded local and export marketing of agricultural products. The GOS believes this can be enhanced by increasing private sector agribusiness activities, organized or expanded through CAPM efforts, which provide value added to agricultural products produced on Swaziland farms.

To support the CAPM project and the MOAC in achieving these goals this baseline study seeks to:

- o identify and describe functions and interrelationships between existing private and public sector organizations and institutions which impact on agricultural production, processing, and marketing activities; and

- o identify and assess existing and proposed policies and programs of the MOAC, the MCIT, and the Ministry of Finance with respect to achieving efficient introduction and strengthening of commercial agricultural production, processing, and marketing technologies in the private sector.

This report does not contain recommendations in the normal sense of the word. However, a final section summarizes the various institutions, organizations, policies, and programs and identifies issues needing further analysis and/or decisions. This summary aims to clarify policy, program, and operational inconsistencies, especially as they relate to the promotion of agribusiness activities.

The summary may provide GOS and USAID officials with the basis to identify and set priorities for conducting appropriate follow-up analyses. Ultimately, policy or program decisions will be made to maximize the CAPM project contribution toward achieving desired commercialization of Swazi smallholder agricultural production activities through expansion of agribusiness activities.

B. Study Scope

The structure and functioning of the MOAC has not been studied to the same degree as has the private sector. Thus, it is useful for existing policies and programs of the MOAC and other GOS organizations to be given further review, identification, and evaluation as to their actual and potential impact on promoting commercial agricultural development. Accordingly, this report is oriented toward identification and review of MOAC institutions, policies, and programs with a view

toward providing the most efficient utilization of available CAPM and MOAC personnel to achieve mutually agreed upon agribusiness and commercial production and marketing objectives.

The recently completed subsector strategies and workplans for the MOAC and available MOAC annual reports were used as guides for this report. Interviews with MOAC officials and other individuals representing marketing boards, credit institutions, and public and private sector agribusiness organizations provided additional input to this study. References to workplans, reports, and other relevant information are detailed in annex B.

Policies and programs of the Ministry of Finance (MOF), specifically the newly created Public Enterprise Unit (PEU), also impact on MOAC programs. This unit monitors public sector enterprises, including those in the MOAC, to promote more efficient management and operation. The agribusiness orientation of the CAPM project intersects with the market development and management functions of these public enterprises which include the National Agricultural Marketing Board (NAMBoard), Central Cooperative Union (CCU), the Swaziland Dairy Board (SDB), the National Maize Corporation (NMC), and the Swaziland Cotton Board (SCB).

Discussion of all organizations and institutions which impact on the MOAC and with which the CAPM project can potentially interact is beyond the scope of this study. Moreover, recent USAID studies, specifically the multivolume Manual for Action in the Private Sector (1989) and the Investment Climate and Private Sector Assessment of the Kingdom of Swaziland (1987), provide exhaustive identification and analysis of public and private sector organizations and institutions operating in the Swaziland economy. This work will not be repeated here.

However, those organizations and institutions most likely to have direct impact on CAPM (including those discussed in the above reports) are reviewed.

C. Macroeconomic Overview of the Swaziland Economy

The Swazi economy is closely tied to that of the Republic of South Africa (RSA). Swaziland is a member of the Southern Africa Customs Union (SACU) and the Common Monetary Area (CMA). Its currency (lilangeni; singular: emalangeni; plural) remains at par with the South African Rand. (In December 1989 the exchange rate was about US$1 =E2.62.)

The association of the emalangeni with the Rand severely restricts the use of monetary policy by Swaziland Central Bank authorities. Inflation and general price trends are dictated by

the RSA. However, the onset of economic sanctions and strictures on debt rescheduling against the RSA in 1986 by many of the western democracies resulted in a sharp depreciation of the Rand against most western currencies. While normally creating a climate for expanding foreign trade, the sanctions and associated pressures on debt rescheduling has the effect of countering this trend in the RSA.

The emalangeni was similarly depreciated. However, since Swaziland was not subject to sanctions or debt rescheduling strictures, export expansion has prevailed since 1986. As a member of the Africa, Caribbean, and Pacific Trade Agreement (ACP), Swaziland also enjoys favorable terms of trade with members of the European Economic Community (EEC).

Membership in SACU has direct monetary implications on the Swaziland government. Sales tax and import duties collected by the RSA government on products exported (or purchased in the RSA) for use in Swaziland are remitted to the Swazi Treasury. However, the agreement contains clauses which discriminate against the free development of new industry in the three smaller member countries. To provide partial relief, the agreement includes an additional compensation factor so that the actual funds transferred by the RSA are greater than the amount of taxes and duties levied. However, this compensating factor does not compare favorably with potential growth which would be available under a freer industrial development environment.

A 1989 forecast prepared by a consultant to the GOS (Bourne, 1989) suggests that about 40 percent (E162.4 million) of government revenue will be from SACU receipts. This is down from about 70 percent in 1983/84. The reduction is a result of major expansion in company tax receipts (E17.2 million to E73 million), personal income tax receipts (E24.9 million to E57.1 million), and sales tax receipts (E0 to E48.7 million) over the period.

Swaziland recorded surpluses in the combined current and capital account in 1987/88 and a surplus is projected for 1988/89. It has maintained a policy of fiscal constraint in the past which gives it a favorable international credit standing. On the downside, however, the GOS has not invested sufficiently in public urban infrastructure, thus potentially jeopardizing future non-agricultural economic growth and urban expansion.

The positive effects created by an undervalued currency have resulted in a major expansion of non-agricultural products since 1986. Although official figures are not yet available, unofficial estimates suggest that Swaziland has enjoyed a favorable balance of trade since 1989 (comments by the governor of the Central Bank, November 16, 1989). These informal

projections indicate that manufactured exports may be close to 50 percent of total exports for 1989 although sugar and wood pulp remain the largest individual export commodities.

Swaziland imports primarily manufactured items, mostly from the RSA. In 1987, 90 percent of Swaziland's imports were from the RSA, while only 36 percent of its exports were to that country. Imports from the RSA in 1980 represented 77 percent of the total, while exports were 29 percent. As a result, Swaziland's trade balance with the RSA remains negative while it is positive with the rest of the world.

The overall balance of payments has been positive since 1986, after deficits of E10.8 million and E12.3 million in 1984 and 1985, respectively. A provisional net balance of E42.9 million was recorded for 1987.

Gross domestic product (GDP) has increased by an average of 6-10 percent per annum since 1986 and is projected to be in the high end of this range for both 1989 and 1990. GDP per capita in 1986 was estimated at E680. Based on projected economic growth rates since then, 1989 per capita GDP is estimated by the author at E750.

After several years of stagnating employment growth in the mid-1980s, an increase in the number of wage and salary workers is projected for 1988. While the economy slowed in 1987, renewed economic growth in 1988 is consistent with a projected increase in employment by 6.3 percent to about 101,000 (Development Plan, 1989). Private sector employment in 1988 was just under 3/4 of total employment, about the same as in 1982. An additional 17,500 workers are employed in the South African gold and platinum mines. Although employment gains in recent years have been greater than the net population growth rate, a large backlog of unemployment and underemployment remains.

SECTION II

OVERVIEW OF AGRICULTURAL PRODUCTION IN SWAZILAND

Swaziland is predominantly a rural nation. Official statistics indicate that more than 3/4 of the estimated 1986 population of 681,059 resided outside the major towns and urban areas. Of the 77 percent residing in rural areas, 473,374 individuals, representing 63,586 homesteads (90 percent of rural homesteads), resided on SNL. The remaining 52,706 individuals, grouped into 7,336 homesteads (10 percent of rural homesteads), resided on smallholder ITL homesteads.

The estimated 7,336 smallholder ITL homesteads controlled some 11,097 hectares (ha) of land, of which 9,455 ha were planted to crops. The 63,586 SNL homesteads were allocated 93,680 ha of land, with 80,873 ha planted to crops.

Rural households in 1985 reported that in-kind agricultural production from their own lands provided almost 32 percent of total household income, with about 58 percent coming from wages and other cash sources including transfer payments. Money income from sale of agricultural products comprised just under 5 percent of total income with the remaining 5 percent from other business sources (National I&E Survey).

In contrast, the CAPM baseline survey of commercial agricultural homesteads reported that 72 percent of the respondents cited crop and other agricultural sales as their major source of income, with 28 percent reporting wages or mine remittances as their major income source (Robins, 1989).

In addition to the smallholder homesteads, a 1983/84 agricultural census reported 256 responses, representing management of 443,292 ha of land, organized as ITL estate lands and Tibiyo lease lands. Of this, 103,898 ha were in commercial forests, 255,027 ha in grazing land, and 43,933 ha in crop lands. Of the 43,933 ha cropped, just over 60 percent was planted to sugarcane.

A. General Indicators of Smallholder Agricultural Activity

Agriculture provides income or produce in-kind to most rural homesteads. However, most commercial production is located on a small number of ITL estates. As noted above, there are some 7,000 ITL smallholder homesteads.

In this section, information from the 1983/84 agriculture census is presented to provide a comparison between SNL and smallholder ITL. These comparisons suggest that agricultural

activity on ITL small holdings are quite similar in many respects to those on SNL and quite dissimilar to commercial activities on ITL estate lands.

Although the information does not provide current values, it is valuable in that this was the first time comparable information for SNL and ITL smallholder homesteads was available. In the past, comparisons of SNL commercial activities were limited only to those made with large estate lands.

The census also provides information disaggregated by rural development areas (RDAs), thus indicating a measure of difference which could be related to development activities and programs conducted by the MOAC. In general, areas with greater agricultural potential receive more development resources. These were designated Maximum RDAs. Those receiving fewer development inputs were designated Minimum RDAs. (A complete discussion of the program is found on page 21.)

Less than 6 percent of all rural homesteads grew no crops during the period covered by the census. However, about 15 percent of ITL homesteads indicated that no crops were grown.

Table 1. Total Smallholder Area Under Different Crops, 1983/84

Crop	Land Area	
	Ha	%
Maize	68,824	76.2
Cotton	6,834	7.6
Sorghum	1,541	1.7
Pumpkins	1,502	1.7
Groundnuts	1,383	1.5
Beans	1,185	1.3
Sweet Potato	1,131	1.2
Orchard & Garden Crops	982	1.1
Jugo beans	770	.9
Cowpeas	664	.7
Melons	547	.6
Tobacco	287	.3
Other Vegetables	196	.2
Other Crops	4,482	5.0
Total	90,328	100.0

Source: 1983/84 Census of Agriculture

Over a longer time frame, more than 90 percent of ITL homesteads reported that they were able to achieve maize self-

sufficiency at least some of the time while only 65 percent of all smallholder homesteads indicated success by this criterion.

Maize is the single most important crop grown by smallholders. As shown in table 1, maize planting of 68,824 ha accounted for more than 3/4 of the area planted to crops. Cotton was the next most widely grown crop with 6,834 ha. Less than 2 percent of all cropland was planted to sorghum.

About 3.5 percent of all homesteads reported tractor ownership with about 47 percent reporting ownership of plough-oxen. By comparison, over 6 percent of ITL homesteads reported tractor ownership, but only 40 percent reported plough-oxen.

An indication of general standards of living can be gained by reviewing data on driving access to homesteads and the use of modern construction materials for dwellings or sheds. These data, shown in table 2, are tabulated according to the RDA/non-RDA classifications used in the census and suggest that ITL homesteads, on average, were slightly better off economically than SNL homesteads, but were about the same as homesteads in maximum RDAs.

Table 2. Homestead Access to Roads and Housing Materials Used, 1983/84

Category	Driving Access to Homestead	Modern Construction Materials for Dwellings or or Sheds
	%	%
ITL homestead	77.7	58.4
Minimum RDA	76.1	43.0
Maximum RDA	78.6	55.0
Non RDA/SNL	72.3	54.4
Total	75.8	52.2

Source: Census of Agriculture 1983/84

B. Commercial Orientation of Swazi Smallholder Homesteads

The census of agriculture for 1983/84 suggests a similar commercial orientation for homesteads in both the SNL and the ITL homestead tenure classifications. Data are summarized in table 3.

The data do not indicate how many homesteads produced more than one commercial crop. If it is assumed that there is no overlap between any of the commercial activities, a maximum of

12,323 homesteads reportedly engaged in commercial agricultural production. That is just over 21 percent of all homesteads identified by the census. Commercial sales reported by ITL homesteads on the same basis were just under 21 percent. It should be recognized that the definition of a commercial farm, used by the census, is a rigorous one. There were undoubtedly additional homesteads with small, unplanned commercial sales.

Table 3. Commercial Agricultural Activity on Rural Homesteads, 1983/84

Category	Fruit & Vegetable	Cotton	Tobacco	Poultry	Dairy	Total in Universe
	percent of all homesteads in category					
ITL Homestead	7.5	7.8	2.6	1.1	1.7	4,955
Minimum RDA	7.2	11.5	2.9	.6	.4	13,292
Maximum RDA	9.7	4.0	5.0	2.1	.6	19,810
Non RDA	7.0	9.5	2.4	.9	.5	19,944
Total	8.0	8.0	3.4	1.3	.6	58,061
Total Commercial	4,645	4,625	1,970	735	348	12,323

Source: Census of Agriculture 1983/84

The data also indicate that 9,485 homesteads reported growing enough maize year-round for their needs. An additional 10,860 reported maize self-sufficiency most of the time. As a result, a majority of the maize self-sufficient group will have surplus for sale most of the year and many of the partial self-sufficient group will have surplus for sale some of the time.

Recognizing that any of the above groups could sell agricultural produce during any one year, the data suggest that from 35 to 55 percent of all homesteads will produce agricultural products for sale at sometime.

C. Smallholder and Largeholder Commercial Production

While the aggregate census data suggest similarities between ITL and SNL homestead tenure patterns, disaggregation of agricultural production by crop indicates major differences in production patterns between small- and largenolders.

1. Maize

Maize is produced primarily by smallholders. The MOAC estimates that about 70 percent of area planted in the RDAs, for

which statistics were available, was dedicated to maize in the period 1985/86-1986/87 (Annual Report, 1987). The 1983/84 census of agriculture provides a figure of 77 percent.

Because of differences between sampling procedures used to derive national production estimates and production estimates on RDAs, precise comparisons between smallholder and largeholder production cannot be determined. However, available MOAC data for the period 1983/84 through 1986/87 suggests that 70 to 85 percent of the nation's total maize is produced on smallholder farms located in the RDAs. A consultant report completed in 1986 estimates that 80 percent was produced by smallholder farms (Malone, 1986). More recent MOAC data suggests this figure may be close to 90 percent.

Comparisons for the census period are summarized in table 4.

Table 4. Land Under Maize: Average Yields and Total Production, 1983/84

Tenure Class	Planted		Total Production		Average Yield
	ha	%	mt*	%	mt/ha
SNL (total)	63,582	90.7	186,504**	97.5	2.71
Maximum RDA	25,164	35.9			
Minimum RDA	15,874	22.6			
Non RDA	22,544	32.2			
ITL Homestead	5,242	7.5	(included with SNL)		
ITL Estate	1,293	1.8	4,707	2.5	3.64
Total	70,117	100.0	191,211	100.0	2.73

*mt = metric tons
**includes production for ITL homesteads
Source: 1983/84 Census of Agriculture

Data in table 4 suggest a still greater concentration of maize production on SNL smallholder farms than suggested by the MOAC data for later years. However, if ITL homestead and non-RDA lands are removed from the census estimates of total ha planted, RDAs represent less than 60 percent of total area planted to maize. Thus up to 35 percent of total ha planted to maize on SNL may be planted outside the former RDAP areas.

2. Cotton

Cotton is produced by both small- and largeholders. The distribution varies from year to year, but it is consistently

the second largest crop grown by homesteads, as measured by number of ha planted. Land planted to cotton by smallholders usually ranges between 6,000 and 8,000 ha compared to 65,000 to 75,000 ha for maize.

The 1987/88 crop was the largest produced in Swaziland at the time, over 26,000 mt. Average value was about E1/kg. Production in 1988/89 increased to 30,000 mt. Grown primarily in the lowveld, the major production constraint is lack of rainfall. Accordingly, annual yield variations can be large. With irrigation the area can produce two crops per year, which could be maize or another winter crop.

About 45 percent of 1988 total seed cotton sales, or some 12,000 mt, were produced by SNL farmers. The remaining 55 percent, or 14,617 mt, was produced by larger-scale farmers on ITL. By comparison, in 1971/72 only 18 percent of all seed cotton sales were from SNL farms. Most SNL cotton farmers plant from 1 to 2 ha in cotton.

Current input costs for growing smallholder cotton are about E400/ha. With yields averaging over 1 ton/ha, this implies net returns ranging upwards from E600/ha for the 1988/89 season. By comparison, 1986/87 yields were less than 900 kg/ha. During dry years, yields less than 500 kg/ha are not uncommon.

There is a tendency for large growers to produce a greater share of the crop during drought periods as many are in the position to apply irrigation. SNL homesteads generally do not have irrigation capabilities, resulting in lower yields during dry periods.

The census data for 1983/84 indicated that some 6,834 ha were planted to cotton by 4,625 smallholder homesteads, of which only 388 were ITL. This is approximately the share ITL smallholder households represent in the total population of smallholder households. However, average ITL plantings were about .88 ha compared to about 1.52 for SNL homesteads. An estimated 4,546 ha of estate cotton were planted based on this data source.

3. Tobacco

Tobacco is produced primarily by smallholder homesteads. Most is grown in the southern, wetter part of the middleveld in the Nhlangano area. Annual production has tended to vary considerably. From 1975/76 to 1984/85, total production ranged between 100 mt and 200 mt per year, except for 1982/83 when it fell to 83 mt. Production declined sharply to less than 40 mt in 1986/87 but recovered somewhat in 1988/89. Meeting quality standards required for the higher priced markets remains elusive.

To obtain increased prices and greater market stability, the government in 1983 approved the entry of a Belgium firm, Cassalee, to begin marketing tobacco for export to Europe. After conducting a feasibility study the firm decided to commence production using the existing small grower production base. The firm provided inputs and credit in-kind, recovering costs through deductions from produce sold.

Small growers were instructed in production of fire cured tobacco, but were unable to meet the quality standards required of this export market. Consequently, Cassalee began growing tobacco on estate lands and at its peak some 130 mt were produced for export with about 26 mt coming from some 400 smallholders. The largest tobacco grower, with about 50 ha, was Tibiyo. However, growers were unable to produce tobacco of the necessary quality and Cassalee closed down after the 1988 crop.

About 1,000 farmers are members of the Tobacco Cooperative, which is now the sole buyer. However, technical problems associated with producing quality tobacco remain.

Comparative data for 1983/84 from the census of agriculture indicate that some 1,970 homesteads produced tobacco for commercial sale on 287 ha. Of this total, 120 ha were planted on 128 ITL homesteads. Average holdings for all SNL homesteads were less than .1 ha, while ITL homesteads planted an average of 1 ha. An additional 4 ha were recorded on ITL estates.

4. Citrus

Virtually all commercial citrus is produced on large estates. Small homesteads are not involved in commercial production but some will keep a few trees for home consumption. About 2/3 of commercial citrus sales are in the form of fresh export. The remainder is sold as juice or processed fruit. The major buyers are Scandinavia, Canada, and Ireland. Recently, the Middle East and Japan have become importers.

Just over half of the grapefruit volume and close to 3/4 of oranges are exported fresh. Exports to South Africa are small and have declined in recent years as the market is not as lucrative as in northern areas. About 35 percent of commercial volume is processed, both as juice and slices. Less than 5 percent of the processed fruit is sold domestically with the remaining exported, primarily to the EEC.

Fresh citrus sales in 1988 should represent an increase of almost 200,000 cartons over 1987 and 700,000 above 1984. Since 1986, sales to the RSA have been reduced from a peak of 1.3 million cartons. Local citrus processing has increased from 713,000 cartons in 1984 to almost 1.6 million in 1988.

Distribution of citrus sales for 1988 are summarized in table 5.

Table 5. Disposition of Swazi Grown Citrus, 1988

Category	Outside Southern Africa		South Africa		Local Processing		Total
	cartons (000)	%	cartons (000)	%	cartons (000)	%	cartons (000)
Grapefruit	1,389.3	56	29.9	1	1,055.9	43	2,475.0
Oranges	1,438.6	72	33.8	2	516.0	26	1,988.5
Total	2,827.9	63	63.7	2	1,571.9	35	4,463.5

Note: The weight of a carton of fruit averages about 15 kg
Source: Development Plan 1989/90-1991/92

5. Milk and Dairy Products

Milk is produced for commercial sale by 173 SNL and 55 ITL estate farmers. The dairy plant processes about 8,000 liters per day. SNL farmers produced 1.3 million liters in 1988 from 481 cows. Of the total, 17 smallholders delivered milk to the Swaziland Dairy Board (SDB). Five were located in northern RDAs, 10 in the Luyengo settlement, and the remaining two in Nhlangano. The SDB has milk cooling centers in these areas, but total volume delivered is well below tank capacities. With a maximum annual capacity of 292,000 liters, assuming daily pickup, only 45,796 liters were delivered from the northern RDA center, 14,579 from the Luyengo center, and 1,231 from Nhlangano in 1988. Review of SDB records suggests that deliveries from smallholders declined to 2.6 percent of the total delivered by producers to the SDB in 1988, but was a slight increase over 1987. Although unrealized in recent years, the capacity for expansion exists at the rural centers.

6. Meat and Meat Products

a. Red Meats

Cattle holdings are quite extensive, with an estimated 650,000 head--approximating total human population. Three-fourths of all cattle holders are on SNL and have an average of about 18 head per homestead. A small commercial industry exists. Annual offtake is estimated between 10 and 15 percent. Slaughter at rural and urban abattoirs and at the export abattoir represent about 1/3 of this total, the rest are butchered at home.

The national goat flock is estimated at about 300,000, the sheep flock about 28,000, and pigs about 21,000. Goat numbers have held steady during the 1980s but sheep numbers have declined from 40,000 in 1982 and pigs have increased from 16,500. Slaughter figures for these animals are not available.

b. Poultry and Poultry Products

There are 11 poultry cooperatives in Swaziland producing an average of 1,500 dozen eggs and 2,600 live broilers per week. Several independent commercial producers are located in the southern lowveld, along the Komati River and in the Malkerns Valley. The largest sells about 1,300 dozen per week. Although firm data are not available, over 80 percent of all eggs consumed in Swaziland are imported from the RSA.

Capacity of the four commercial hatching facilities is about 140,000 chicks per week, including the government hatchery at Mfumbaneni which produces 20,000 weekly.

Three large poultry operations, including one owned by a major RSA supplier, operate in Swaziland to produce some 35,000 broilers per week. Large commercial growers sell birds at eight weeks of age, mostly on a live basis at local markets around the country. Cooperative producers often hold birds an extra week or two with sales being concentrated in their neighboring areas. Small producers are more likely to concentrate major sales around the end-of-year holiday season. Larger producers have sufficient economies of scale to sell birds for up to E1 less than small producers, who typically charge E7 per live bird.

In 1989, imports of frozen broilers were estimated at 60,000 to 85,000 birds per week. Adequate hatchery and growing facilities exist for the country to become self-sufficient on a live bird basis. However, slaughter, packing, and freezing facilities do not exist to meet the urban demand for oven-ready frozen birds, now imported from the RSA (Freeman, 1989).

7. Sugar

Sugar is the major commercial crop grown in Swaziland and the single largest export commodity. Grown almost exclusively on irrigated land in the lowveld, annual production ranges between 400,000 and 500,000 mt per year. A record high of 537,000 mt was produced in 1986/87. Canada is the leading importer of Swazi sugar followed by the EEC. The United States has considerably reduced its imports since 1984/85. The value of sales in 1988 was about E260 million.

Some 30,000 ha of land is devoted to sugar cane production, virtually all on ITL estate land. The only exception is the Vuvulane smallholder scheme composed of some 1,100 ha operated by

263 smallholders. The scheme has operated since 1962 and is the most intensive smallholder commercial production operation in the country.

8. Pineapple

Pineapple is grown on some 1,500 ha of large estate lands owned or leased by Swazican, a Tollgate-owned company. The smallholder Mpetseni cooperative, composed of 19 farmers, is the only other commercial Swaziland producer, operating about 160 ha. All sales are to Swazican. Discussions with industry leaders indicate that smallholders produce higher quality fruit at a lower per unit cost than on estate lands. Virtually all the crop is processed for export.

In recent years Swaziland has not produced sufficient pineapple to fully utilize the capacity of the processing facility located at Malkerns. Local fruit provides close to 40,000 mt (including smallholder deliveries) out of about 50,000 mt annually processed. The remainder is imported from the RSA. The industry is actively seeking to expand local land under fruit, but unstable price and market conditions make it difficult for individual farmers to enter production.

Pineapple has a life cycle of about five years. The first crop after planting is not harvested until the 23rd month, with a second harvest following after about 58 months. For yields maintained by the smallholder scheme, annual average gross returns at 1989 prices (E152.50 mt) were about E3,800/ha averaged over the five-year life cycle. Thus, while average annual returns can be quite reasonable, income is available only on two and three-year cycles.

Most canned pineapple is exported to the EEC under a preferential quota negotiated under the Lome Convention for ACP countries. However, given existing low prices and uncertainty surrounding the size of the quota to be granted to Swaziland, future production is unclear.

When operating at full capacity, Swazican may employ up to 4,000 workers, of which 1,200 are permanent staff.

9. Forestry

Unbleached kraft wood pulp production has remained steady in recent years at around 180,000 mt. All wood pulp is exported with about 60 percent to southern African countries. Value of wood pulp and saw timber exports is second only to sugar exports. Wood pulp sales make up about 90 percent of total value from all wood product exports. The industry is dominated by commercial estate production operations with over 100,000 ha planted on ITL, mostly in the highveld.

There is no SNL production of sawlogs or wood pulp. The smallholder sector consists of about 5,000 ha of native wattle jungles mostly in the Hhohho and Manzini regions. Bark is sold to the RSA for use in the tanning industry, but the Swaziland Basic Bark Quota has been reduced in recent years. In 1987/88, gross sales from 86 farmers averaged about E1,100 each. Four government charcoal kilns are available for use by SNL wattle growers for the production of charcoal.

SECTION III

GOVERNMENTAL AND EDUCATIONAL INSTITUTIONS

A. Traditional and Modern Government

1. The Tinkhundla System

At independence in 1968 Swaziland was left with a "Westminster" constitution, simulating the British model. It provided a careful balance of interests which promoted development of rival political parties and separate executive, legislative, and judicial branches. This contradicted traditional Swazi governing principles which revolved around the King and Queen Mother, acting with the advice of their councils. The King rules on all important matters of state and appoints or dismisses lower chiefs, who rule in their jurisdictions with the advice of their own councils.

The absolute authority of the King and chiefs is an important element in the traditional governing structure, which has no direct parallel in modern parliamentary structures. Parliaments usually attain a political balance by defining co-equal branches to exercise judicial, executive, and legislative functions along with a balance of elected and appointed administrative, executive, and judicial officials.

The traditional structure in Swaziland balances the absolute power of the monarch and the chiefs in these three areas by seeking consensus from their respective executive and judiciary advisory councils. It is important that the titular leader, at all levels, be endowed with complete authority over his subjects. As a result, actions taken in the name of the office are above criticism, thus protecting the office from politically motivated attacks undermining its authority.

It is equally important, however, that the leader not make important decisions without advice from the appropriate council. This provides the necessary participatory and consultative input that ultimately reaches the local communities and the people themselves. It is the basis for the consensus decision-making practices found in all spheres of public life.

Secondly, the King and the chiefs rule from a base of traditional inherited rights, whereas power in a parliamentary system flows up from the people through the exercise of some form of individual voting.

In view of the inconsistencies between the two systems, King Sobhusa II suspended the Westminster style constitution in 1973,

dissolved Parliament and assumed all executive, legislative, and judicial powers into the monarchy. Political parties and lobbying were eliminated by decree.

Regional Councils Order No. 22 of 1978 provided a political structure representing both traditional (chiefs) and elected modern sector (parliamentary) leadership responsible to the King. The civil service provides technical and administrative support to the modern sector political leaders and provides technical advise to regional level traditional councils.

Order No. 22 expanded the 24 existing local chief councils or Tinkhundla (singular: Inkhundla) to 40. These Tinkhundla have administrative responsibilities to initiate, discuss, and provide traditional sector leadership to rural development projects and activities.

At four-year intervals local Tinkhundla committees meet to nominate, for election by citizens of the area, two representatives to form an Electoral College that nominates and elects 40 members of the House of Assembly.

The House then nominates and elects 10 members of the Senate. The King has the option of appointing 10 members to the House and 10 members to the Senate. The prime minister and the individual ministers are appointed by the King, usually from among his quota of 10 members. All members of Parliament serve for concurrent five-year terms, after which Parliament is dissolved and new elections and appointments are made.

The new system maintained the existing four administrative regions of Hhohho, Manzini, Shisilweni, and Lebombo. However, it provided for the appointment of new regional administrators, by the King, as the ranking traditional administrative officers for the regional Tinkhundla.

The office of the existing regional administrator, who had previously represented the civil service through the Ministry of Interior (MOI), was redesignated as regional secretary within the department for Tinkhundla. Regional secretaries, representing the modern sector, serve as technical advisors to the regional administrator. They also chair the Regional Development Committee composed of ranking regional officers of the line ministries. Although nominally a department within the MOI, the department of Tinkhundla has a principal secretary who reports to a traditional sector Indvuna.

After casting ballots for election of members of Parliament, members of the regional Electoral College assume the role of councillors to the regional administrator representing the traditional sector.

The Tinkhundla have responsibility over rural development issues within the traditional governing system. Issues and ideas are raised at local levels and move up through the regions. Local Tinkhundla can often serve as coordination centers for rural development activities and promotion of farming campaigns organized by the MOAC.

2. The Civil Service

The civil service is modeled on the British system with a strong Civil Service Board (CSB) located in the Ministry of Labour and Public Service. This board is responsible for all public service appointments, transfers, and promotions.

Principal secretaries are appointed within the civil service structure and are the highest ranking career officers in each ministry. Civil service appointments are made by the Ministry of Labor and Public Service. However, the King often exercises influence in the appointment of principal secretaries.

The principal secretary is usually assisted by two undersecretaries, one for administration, the other for technical purposes. These offices usually operate in a staff capacity. Ministries tend to be organized into departments, divisions, sections, and units.

Administrative coordination is maintained at regional levels by senior officers representing line ministries in the region who are organized into the regional development team. This committee is chaired by the secretary to the regional administrator who is an employee of the department of Tinkhundla. The senior extension officer in each region represents the MOAC on this body.

3. Formulation of Local Level Development Plans

Chiefs retain an important developmental and coordinative function through the Tinkhundla system. They can serve as initiators in the development process working through the local and regional Tinkhundla. Development ideas are first raised by individual chiefs at the local Inkhundla. If receiving positive consideration at this level, it moves forward as a proposal to the regional level where it is considered by the regional development team, chaired by the regional secretary.

As this committee contains technical expertise, it is in a position to determine whether the development proposal can be carried out using regional resources or whether it must be passed on to the national level. If the latter, it is transmitted to the prime minister by the regional administrator with the advice of the regional Inknundla.

The prime minister refers the proposal to the appropriate line ministry through the respective minister who in turn transmits it to the principal secretary for review by technical personnel. After review, the ministry prepares a cabinet paper with recommendations for action. It is then moved to Parliament for debate and action.

The Tinkundla development process has been described as cumbersome and as not effectively conducting the desired coordinative role it was meant to serve. Ways to improve and simplify the structure and its operation are being discussed.

B. Ministry of Agriculture and Cooperatives

1. Background

The first Rural Development Area Project (RDAP) was initiated in 1970 with assistance from British Overseas Development Agency (ODA). Four RDAs were identified covering about 7 percent of SNL. The second phase began in 1977, continuing through 1983. The area covered expanded to just over 50 percent of SNL and was supported by the ODA, the World Bank, the African Development Bank (ADB), and the European Development Fund (EDF). USAID also contributed to the program and the GOS provided counterpart funds.

The initial phase consisted of four maximum input areas (see discussion below). Six new maximum-input areas and eight minimum-input areas were added during the second phase.

The objectives of the RDAP were to:

- o increase production of crops and livestock;
- o improve living standards of rural people; and
- o protect natural resources

In pursuing these objectives the RDAs were chosen on the basis of agricultural potential, interest of the people in rural development, ecological homogeneity, and population density. In general, areas with greater agricultural potential received more development resources.

Differentiation of services provided to the Maximum and Minimum RDAs follow:

Maximum RDA	Minimum RDA
extension services; credit services; livestock development; land development and conservation; incremental farm inputs; social infrastructure; and technical assistance.	extension services; and credit services

The evaluation study completed by Hunting Technical Services in 1983 concluded that:

> The RDAP has had a significant impact in the rural areas, particularly in providing social infrastructure and fostering community self-help. It has had some impact, however marginal, on agricultural production, and has established extension and other services nearer to homesteads. Community involvement in the planning process is well established...and...there is now a much clearer understanding of the organization and needs of rural homesteads.

The evaluation report concludes that the initial targets for potential crop yield increases were "extremely optimistic and some of the fundamental assumptions were unsupportable." The growing availability of off-farm employment opportunities and interest of SNL homestead members to engage in off-farm jobs with earning potential in excess of those available from selling agricultural produce was not taken into consideration during the program design.

To support this conclusion, the report cited a 1978 survey of homestead women by Nxumalo which showed that 70 percent had husbands in wage employment. Another homestead survey by de Vletter, covering the 1978/79 period, indicated that four out of five homesteads had at least one member in wage employment (Hunting, p. 5).

Donors withdrew their support from the RDAP approach in 1983 after the completion of phase II.

2. Policies, Programs, and Projects

In recent years the MOAC has been developing a new program orientation promoting commercial agriculture and marketing, including agribusiness development. This is a shift from the earlier RDAP orientation which included a strong rural development focus. Rural development activities formerly

implemented by the MOAC are gradually being transferred to other ministries. The current national plan identifies four major agricultural policy objectives:

- o self-sufficiency in basic food products;
- o improved household nutrition;
- o expanded exports; and
- o increased agricultural and rural employment.

Important subsector program goals for the current planning period include:

- o achieve national self-sufficiency of maize;
- o expand fruit and vegetable production to increase rural income and improve nutrition;
- o promote more productive use of cattle and other livestock by SNL farmers, specifically expansion of poultry and dairy products to replace imports, more effective livestock marketing, and improved control of animal diseases and parasites;
- o ensure the country's forestry resources are optimally managed and conserved;
- o demonstrate the potential of fish farming to provide additional income and as a source of family nutrition;
- o promote the growth of employment and income in rural areas through encouragement of commercial enterprise;

Within the above framework the MOAC now conducts annual "farming campaigns" to promote intensification of smallholder agricultural production in all farming areas of the country. The national plan identifies four major policy objectives:

To assist MOAC program implementation, the following international donor agencies are providing funds and/or technical assistance for projects.

Canadian International Development Assistance (CIDA)

- o Groundwater Survey: 1986-1991

  Evaluate all hydrogeological units of Swaziland and conduct a nationwide drilling program to supplement existing data including comprehensive recordings of yields and chemical composition of boreholes.

European Economic Community (EEC)

- o Earth Dam Rehabilitation and Construction: 1989-1992

  Rehabilitate 16 earth dams washed out in the cyclone of 1984 and construct 10 new small- and medium-sized dams in the lowveld and middleveld to provide water for livestock and for crop irrigation.

Food and Agriculture Organization of the United Nations (FAO)

- o Agricultural Marketing for Rural Development: 1980-1989

  Supply MOAC with reliable information on marketing activities, including prices and production and to review and update marketing policies and strategies.

- o Planning, Monitoring, and Evaluation of Small Farm Development Strategies: 1988-1991

  Assist MOAC with annual farming campaign and strengthen the monitoring and evaluation unit.

- o Range and Development Training: 1988-1989

  Determine technical and socio-economic requirements for effective range resource management and prepare for a long-term follow-up project.

- o Early Warning System: 1987-1991

  Establish an early warning unit in the MOAC with the capacity to objectively measure crop areas and yields and to monitor food crop production.

International Fund for Agricultural Development (IFAD)

- o Smallholder Credit and Marketing (second phase): 1989-90

  Enhance production and marketing from smallholder irrigated vegetable production schemes.

United States Agency for International Development (USAID)

- o Cropping Systems Research and Extension Training (CSRET): 1981-1991

  Develop a program of on-farm research and cropping practices, improve extension training programs of the MOAC, and enhance the policy making and planning capability of the MOAC.

- Commercial Agricultural Production and Marketing (CAPM): 1989-1992

  Assist in expanding smallholder commercial production for national consumption and export marketing through development of agribusiness marketing systems.

3. Structure and Activities

MOAC is organized into three departments, Agriculture and Extension (DAE), Cooperative Development (CDD), and Veterinary Services (DVS). Until recently, the Research Division (RD), the Land Use Planning Section (LUPS), and the Economic Analysis and Planning Section (EAPS) reported to the principal secretary through the director of research and planning. This position was abolished by the CSB in November 1989. As a result, each division and section previously organized under the Department of Research and Planning (DRP) now report directly to the principal secretary.

An undersecretary for development administration and an undersecretary for personnel administration provide a staff coordinative role for the principal secretary. An indicative organizational chart reflecting these current reporting relationships is summarized in figure 1.

a. Research and Planning Activities

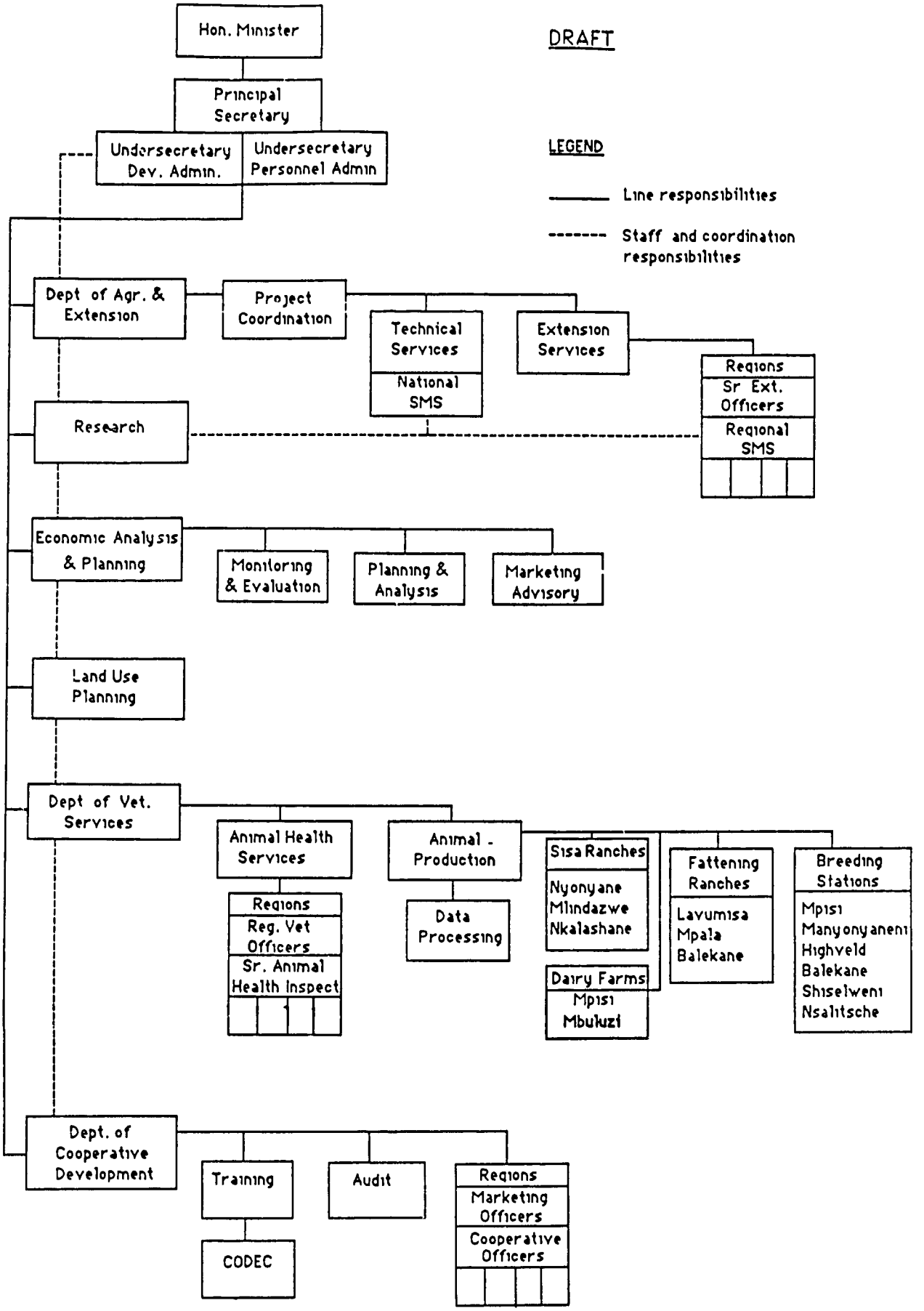
A Department of Research and Planning organized in 1978 contained three formal reporting sections or divisions: Land Use Planning, Economic Analysis and Planning, and Research. The department was abolished in November 1989. As a result, each division and section previously organized under it now report directly to the principal secretary through the undersecretary for development administration.

(1) Land Use Planning Section

The LUPS was located in the MOAC when first organized in the late 1960s. It was transferred to the Ministry of Natural Resources in 1984 and back again to the MOAC in 1986. The section contains 22 establishment posts, all of which have been localized.

The LUPS is a service unit and responds to requests from other MOAC departments and from elsewhere in government. Its major activities revolve around providing land use planning, design and soil survey work to support irrigation projects, land resettlement projects, and other specific development activities. A continuing effort in this regard is preparation of resettlement

Figure 1. Organogram, Ministry of Agriculture and Cooperatives
Technical Staff



plans to support the GOS program for repurchase of ITL estate lands for conversion to SNL and other economic development purposes.

From 1980 to 1984 the LUPS received assistance through the USAID/RDA Infrastructure Support Project which provided long-term participant training and technical assistance to support technical development of the division.

The LUPS also conducts soil surveys for farm planning, tree planting under the Control of Tree Planting Act, resettlement planning, and irrigation development. Engineering assistance is provided to other MOAC units to support irrigation development, small-earth dam construction, and canal alignment.

LUPS has become increasingly involved in regional programs supported by the Southern African Regional Commission for Conservation and Utilization of the Soil (SARCCUS) and the Southern African Development Coordinating Conference (SADCC). It is beginning to focus more specifically on national land use issues and expects to initiate work on a national land use plan. Assistance to upgrade present technical capabilities to carry out this work is expected under a United Nations Development Program (UNDP)-funded project to begin in early 1990.

(2) Economic Analysis and Planning Section

The EAPS is responsible for preparing the annual capital budget for the MOAC, conducting program monitoring and evaluation activities, collecting, analysis, and dissemination of agricultural statistics, and providing certain marketing related activities. It is staffed by 15 professional-level Swazi officers supported by three project-supplied expatriate advisors and one international volunteer.

The Monitoring and Evaluation Unit (MEU) was formerly responsible for monitoring progress of the RDAP. It has been assisted since 1988 by the UNDP-funded Planning, Monitoring and Evaluation of Small Farm Development Strategies Project implemented by FAO. The project is designed to assist the MEU in coordinating the annual MOAC farming campaigns. It provides an expatriate advisor to the unit, and is scheduled to continue through July 1991.

The MEU also conducts annual agricultural sample surveys on SNL to collect general agricultural farm management data. The unit provides MOAC leadership on an intergovernmental task force to rationalize the collection and dissemination of national agricultural sample survey data between the MOAC and the CSO.

A Marketing Advisory Unit (MAU) organized in the late 1970s, is attached to the section. The MOAC sought independent section status. This was denied by the CSB. The MAU remains as a unit

organized formally under the EPAS, although the MOAC continues to seek the upgraded section status originally requested.

The complement of professional staff requested by the MOAC for the MAU, including market reporters and market analysts, has never been approved by the CSB. Discussions with MOAC personnel indicate this issue prevents full realization of the market development and analysis activities assigned to it.

The MOAC has received technical and funding assistance since 1979 from the UNDP-funded Agricultural Marketing for Rural Development project, which collects, summarizes, and distributes marketing data from relevant organizations. The project contributes to the formulation and implementation of marketing policies and programs and prepares analysis supporting the gazetting of annual maize prices. One professional and two volunteer associates are supported by donor funds. The project expires in December 1989. There are no plans for its renewal.

(3) Research Division

The RD has 14 professional establishment positions. All but one are filled by local staff. Prior to 1979, the division was organized under the Luyengo agricultural campus of the UNISWA. Its mandate was unclear with most of the research effort oriented to issues and problems associated with large estate operations. Most professional staff were expatriates.

The division was shifted to the DRP in 1979 and given a mandate to conduct research supportive of smallholder agricultural development consistent with the Cropping Systems and Training Project (CSRET), then in the planning stage. By the time that the CSRET project started in 1981 most expatriate staff had been replaced with local staff drawn mostly from the extension service.

The division concentrates primarily on crop research through five research stations located in the highveld, the middleveld, and the lowveld regions of the country. The professional research staff consult with National Subject Matter Specialists (NSMS) in the DAE to develop the overall MOAC extension program.

Research activity is organized around the following 14 disciplines: general agronomy, weed agronomy, dry land crop agronomy, pasture agronomy, plant pathology, general entomology, cotton entomology, cotton breeding, soil fertility, soil chemistry, biometrics, rural sociology, agricultural economics, and animal nutrition.

b. Department of Agriculture and Extension

The DAE is organized into an Extension Service and a Technical Service. The NSMS coordinate all technical commodity activities of the department and provide technical backstopping to extension personnel who conduct the informal teaching program of the ministry. The NSMS involved in livestock and other animal production also provide technical assistance to the livestock and poultry ranches and farms managed by the DVS.

The DAE contains 426 establishment staff (Annual Report, 1987) within the civil service rating of grades 6 and above and an additional 492 casual workers and artisans in grades 1-5. Some 54, or 12.6 percent, of the establishment staff are in the top professional grades of 18 and above. In 1988, 212 extension staff were located at regional and area levels, including 133 extension workers interfacing directly with farmers. An additional 21 home economists were located at regional and area levels.

The staff is augmented by two CSRET advisors in training and program planning. In 1985, the animal husbandry specialist technicians were transferred from the DVS to the Technical Services Division to bring technical activities within a single organizational unit. The present alignment of technical subject matter specialists and an expansion in the number of generalist extension agents was also adopted in that year.

(1) Technical Services

There are 22 technical sections headed by NSMS. They report to the senior agricultural officer (SAO). In some cases, the sections are quite large and contain several support staff (seed multiplication), while in other cases a single NSMS makes up the section (cotton production). In addition to the commodity-oriented sections identified below, there are information, rural youth, training, and inspectorate sections.

Cotton

The cotton specialist works in conjunction with the cotton field officer employed by the cotton board to maintain a program of technical assistance to cotton growers.

Horticulture

A program to promote self-sufficiency in fresh vegetables is centered around rehabilitation of 12 horticultural irrigation sites first established during the RDAP. An expatriate advisor arrived in October 1989 to coordinate this effort through the IFAD Small Farmer Marketing and Credit Project. This program

seeks to promote smallholder production of fresh vegetables through expanded focus on improving credit, production, and marketing infrastructure. The Swaziland National Fresh Produce Wholesale Market that recently opened at Nokwane is part of this program.

The DAE supports propagation and distribution of citrus and deciduous fruit tree seedlings to farmers under this section. Working in conjunction with the research division, an improved onion variety was introduced.

Maize

Increasing maize production is a major program focus of the MOAC. Promoting the use of hybrid seeds, most of which are produced in Swaziland, has been one aspect of the strategy to promote increased yields. In 1987, an estimated 49 percent of smallholder maize growers used hybrid seeds accounting for 71 percent of maize grown on former RDAs.

Tobacco

Technical advice to tobacco farmers is coordinated through this section in cooperation with the tobacco growers cooperative.

Seed Multiplication and Marketing

This section manages the seed multiplication project for the ministry. Parental material is supplied from six area seed companies. Certified seed is produced by local growers under the supervision and inspection of the Swaziland seed control unit which is also managed by the DAE.

Seed production is based on imported seed material under agreements with various companies, including Pioneer (RSA) Ltd., Siba-Geigy, Saffola Seeds, Asgrow S. A., Sensako Coop., and Seed Coop. Zimbabwe.

Ten to 15 growers are involved in commercial seed production with over half the total land area under seed production in 1988 (241 ha) offered by the Simunye Royal Swaziland Sugar Corporation. These growers produce up to 70 percent of the total maize seed requirements for the country. Bean seeds are also produced by local growers in association with the project.

Seed processing is coordinated through this section using equipment introduced in the early 1980s.

Seeds are marketed through local input suppliers including the Central Cooperative Union, Swaziland Milling Company, Swaziland Agricultural Supplies, Agricultural Development and

Advisory Services, Tobacco Agencies, Farm Chemicals Limited, and Enjingeni General Dealer. Several supermarkets also distribute seeds.

Range Management

The range management section provides technical expertise to farmers and to government ranches operated by the DVS in the areas of pasture and range development and commercial beef production. In fulfilling its mandate the section seeks to establish a national rangeland capability according to each ecological zone and potential for increased fodder and pasture production. Proper utilization by livestock owners is promoted in association with the rangeland improvement program. When carrying out these activities both modern and traditional sector institutions are used to achieve program objectives.

Beef Production

Beef production activities are jointly conducted with range management activities on SNL and in association with the ranches operated by the animal production section of the DVS. The beef fattening ranches are designed to take pressure from overgrazed SNL lands. Breeding ranches provide the basis for improving local beef herds and breeding stations provide improved bulls for use by groups of SNL farmers.

Dairy Production

The purpose of the dairy production section is to develop and promote milk production to achieve self-sufficiency. Dairy extension services are provided with particular emphasis to small-scale producers on SNL. The section also provides technical advice to other dairy farms, especially those operated by the DVS, and coordinates milk marketing activities of SDB producers. The section also manages an artificial insemination service for dairy cows.

Poultry Production

The poultry section assists development of smallholder poultry primarily through cooperative poultry societies. There are 11 functioning poultry cooperatives. The Mfumbaneni breeding and hatchery farm (managed by the DVS) has almost 4,000 parent broiler stock from which some 260,000 day-old chicks were distributed in 1987. Some 22,000 dozen eggs were produced by smallholders.

Fisheries Development

The fisheries program is designed to promote the expansion of commercial aquaculture. In 1987, 30 ponds were constructed

and 14 stocked with 1,500 tilapia fingerlings. The program has not met its targets in recent years because damage to holding ponds caused in 1984 by cyclone Domonia have yet to be fully repaired.

Irrigation

The irrigation section is responsible for providing irrigation technical advice to farmers and designing irrigation schemes for small farmers. Maintenance of irrigation systems on government supported schemes is provided by the section.

Forestry

The forestry section encourages development of an efficient timber industry and provides extension services to farmers by establishing woodlots for firewood and erosion control. It also coordinates timber harvesting, wildlife management, outdoor recreation, and identifies and protects endangered flora.

Most activity of the section relates to SNL lands although control over commercial timber cutting on national lands is maintained from this section.

Farmer management of wattle groves on SNL remains inadequate and improvement continues to be a major section activity. The section operates four charcoal kilns to support smallholder production.

Grain Storage

The section is responsible for coordinating construction of storage facilities and, in some cases, managing their operation. Under this section, government milking parlors, roof water containment tanks, and metal grain silos have been constructed. Under the national silo project, a 12,000-ton maize storage silo was constructed at Matsapha and five regional collection silos were constructed in four RDAs. The Matsapha silos are integrated into the national maize marketing system.

Home Economics

Home economics activities are conducted through some 170 associations, each with membership of 26-57 rural women. Close to 4,000 rural women are reached through these programs. Subjects taught include nutrition, vegetable gardening, soybean production and utilization, handicraft production, sewing, child development, soap making, petroleum jelly making, and bee-keeping.

Leadership training courses are conducted at several farmer training centers.

Land Development

The land development unit provides engineering and construction assistance to irrigation, dam development, resettlement sites, and general infrastructure development in rural areas. Current activities include irrigation construction on 12 sites for vegetable production being rehabilitated under the IFAD Smallholder Credit and Marketing Project. The unit is also conducting engineering works for the Ngwemphisi resettlement project.

Mechanization

RDA tractor hire services are administered through this section. Program support by IFAD will be withdrawn in 1990. The Ekhaya tractor-leasing program is coordinated through this section.

Soil Testing

Soil tests for acidity, phosphorus, and potash are carried out for farmers free of charge. Initiated in 1975, the number of samples tested annually has ranged between 1,200 and 2,300 in recent years. Lime-level trials are conducted each year for demonstration and research purposes.

Seed Control Unit

The Swaziland seed control unit was set up as a separate entity from the seed multiplication project in 1987. Its purposes are to:

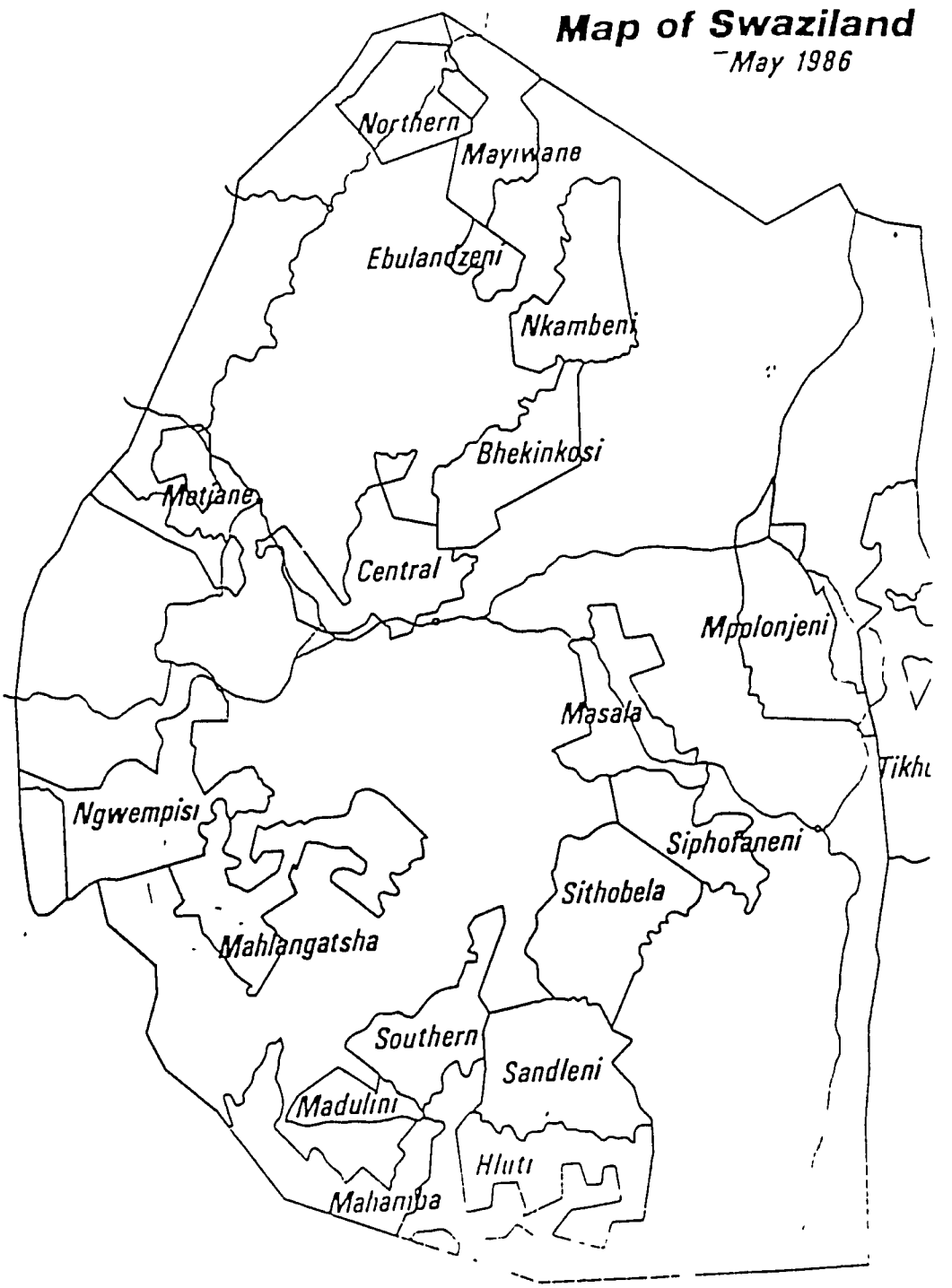
- o establish and operate a seed testing laboratory service;
- o set up and operate a field inspection seed crop service;
- o train Swazi national personnel to staff all positions;
- o maintain testing standards at international levels; and
- o prepare appropriate regulations for seed certification.

In addition, the service conducts field inspections of seed crops.

(2) Extension Service

Through 1984, a large number of specialist officers operated as field level extension agents with an area focus in the RDA (figure 2). With the change in program strategy to provide more effective MOAC coverage of all small-holder farming areas, modification in the extension service structure evolved.

Figure 2: RDA Locations, Swaziland



In 1985, the MOAC adopted the training and visitation (T&V) system. The T&V system is a generalist oriented extension approach and has four main attributes (MOAC Annual Report, 1986):

- o assuring timely delivery of appropriate messages;
- o improving extension worker accountability;
- o improving closer contact between the farmer and the extension worker; and
- o encouraging farmer participation in decision making and facilitating effective feedback between the farmer, the extension worker, and the administrator.

The initial operation was oriented around national monthly meetings by NSMS to develop "extension messages." Usually two messages per month, per subject matter were identified for introduction to field staff. Research officers participated in these meetings. The program emphasis was on assisting diversified smallholders.

NSMS met for two days with extension officers (EOs) and assistant extension officers (AEOs) in each of the four districts for two-day meetings each month to relate extension messages. The EOs would meet every two weeks with extension workers (EWs) in their district to present messages and prepare farmer campaigns. EWs met daily with contact farmers in their regions. Contact farmers, in turn, relayed messages to "following farmers."

The purpose of these meetings was to transfer appropriate, timely knowledge to farmers. However, the system did not function as anticipated. Problems included the following:

- o messages became distorted with repetition;
- o messages were delivered late;
- o some messages were irrelevant to particular farmers and not directed to specific commodity groups; and
- o field extension workers felt they were being used as messengers.

As a result, the MOAC determined in 1986 that the system was intrinsically sound but required additional modifications to make it more suitable to Swazi conditions. The modified T&V was reoriented to provide messages which had greater relevance to specific commodity production needs within each of the geographical areas of the country.

In 1989, an additional modification gave regional and local extension agents greater autonomy and responsibility in planning and managing their work programs. Instead of monthly meetings in which "extension messages" were developed, the NSMS senior EOs and ROs now meet twice monthly to develop training programs for

field staff. Quarterly training meetings are then held for three days with EOs, EWs, AEOs, project managers, or senior EOs, and credit advisors who are with the CDD.

In implementing the extension program, each of the four regional administration areas were divided according to geographical features and type of agriculture. All farming areas in each region are now included within the scope of extension activities. Within the assigned areas for each local EA, three subareas were defined. The EOs visit each area once a week. The process is repeated the next week except that Fridays are used to prepare reports. The two-week visitation and report writing cycle is then repeated.

The CSRET staff assist NSMS colleagues in conducting the monthly training which is designed to expand the knowledge base of the field-level staff. This heavy focus on subject matter training is almost complete. The next concentration will be on expanding the district and local staff skills in program planning.

Figure 3 schematically represents the new participatory planning process. Beginning with a national extension planning seminar before the start of the farming year, an overall conceptual framework is developed. A national research/extension collaborative planning meeting is held each June to set research program targets for the coming year. Drawing from local, regional, and national level extension staff and coordinated with regional and NSMS and research staff, an extension program is developed taking into account farmer needs. Bimonthly planning and training sessions serve to update and monitor field level activities.

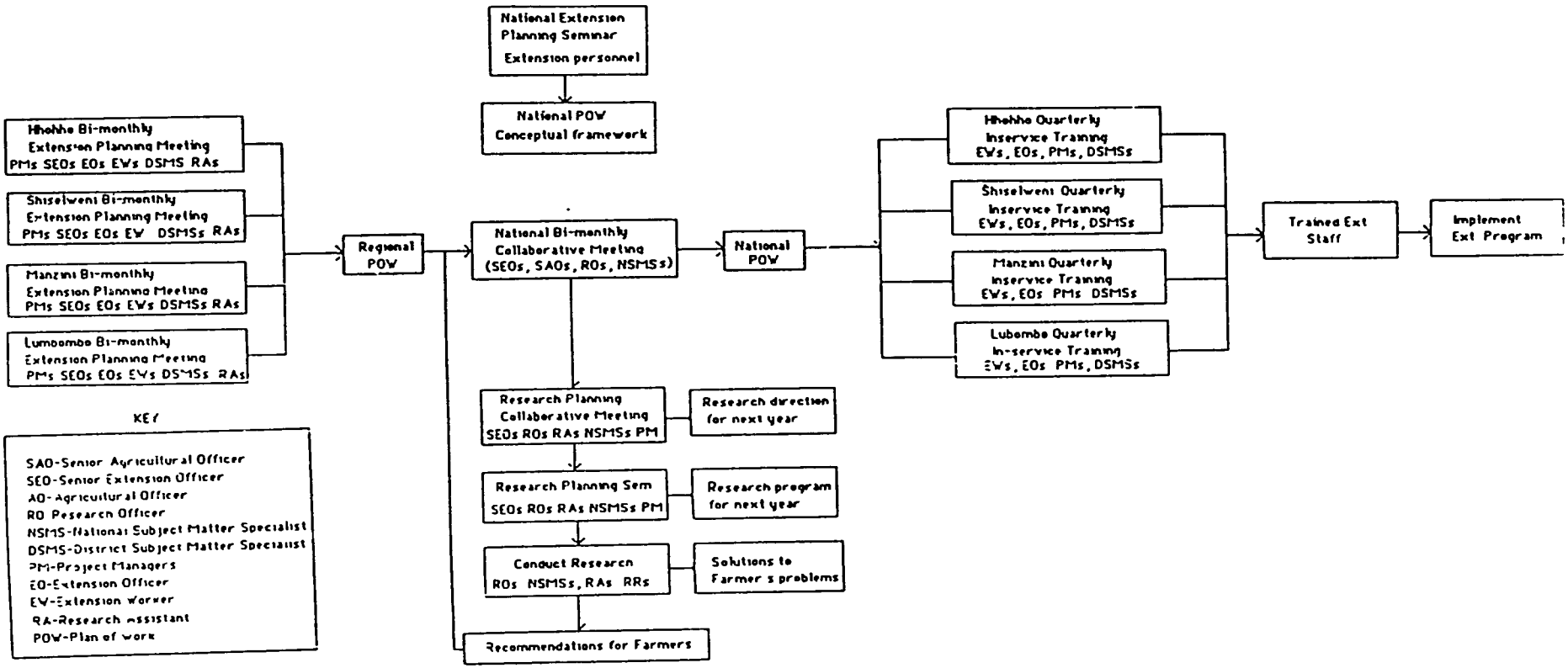
Lack of transportation at local and regional levels continues to hamper implementation of the extension program.

c. Cooperative Development Department

A department of cooperatives was introduced in the MOAC in 1963 to sponsor farmer cooperatives and supply farm inputs. It was moved to the Ministry of Commerce in the late 1960s but returned to the MOAC 1977. Current functions of the CDD include registration and supervision of cooperatives and development and improvement of primary marketing of farm inputs and produce marketing.

The department is headed by a commissioner who also serves as the registrar of cooperatives. He is assisted by a deputy and two assistant commissioners, one for audit and one for training. The Cooperative Development Centre (CODEC), organized in 1976, is located under the department and serves as the formal training institution for members, committees, managers and other employees

Figure 3: Extension and Research Planning Process



Time Schedule for Planning Process

	Reg Bi monthly Nat Bi monthly	In serv Trng	Reg Bi monthly Nat Bi monthly	In serv Trng	Reg Bi monthly Nat Bi monthly Res Plnng Collab	In serv Trng	Res Plnng Sem		Reg Bi monthly Nat Bi monthly	In serv Trng	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

of cooperative societies. Some training is provided to non-cooperative members.

The department, in addition to the commissioner, deputy, and two assistant commissioners, is supported at headquarters by a four-member auditing staff and a publicity officer. Twenty senior and assistant cooperative officers are distributed among the four administrative districts. A marketing section is supported by four establishment positions, one in each region. A senior marketing officer, maintained under the CDD establishment, is seconded to the MAU.

Farmer cooperative societies were initially organized along the three-tier European model with primary societies organized at local farmer levels. They related to secondary unions at the district level. These secondary societies were members of the Central Cooperative Union (CCU). Organized in 1971 and located in Manzini, the CCU was originally intended as an apex to organize and promote the cooperative movement. It has since become more closely identified with input distribution. District societies were recognized as an unnecessary administrative layering and were consequently disbanded in 1982, but the statutory requirements for their existence has not been amended. There are 87 cooperative societies of which 26 are functioning farmers cooperatives.

Assistance for cooperative development has come from various donors including British ODA, SIDA, USAID, and, in recent years, the EEC. The IFAD Credit and Marketing Project provides a revolving fund for the CCU along with the German Farm Chemical Fund. Japan has recently provided money to support a revolving fund to reduce farmer fertilizer costs.

Objectives of the current development plan period are to:

- promote agricultural production by supplying input and marketing services to cooperative members;
- promote farm input marketing and consumer services to rural areas;
- provide services to members at least cost; and
- provide education and training to department personnel and to members of cooperatives to improve effectiveness and efficiency.

Priority activities include:

- restructuring the cooperative network by reducing the number of primary cooperatives from 100 to 30, dissolving

district unions, and restricting each RDA to one multi-purpose cooperative society operating with branches, if necessary;

- o providing a standardized accounting system to apply strict viability criteria prior to registration of new societies; and

- o Training 1,230 government officers, cooperative managers, and cooperative committee members at the cooperative development center.

Within the context of the RDAP, cooperatives provided important input and product marketing services in support of agricultural and rural development. Some cooperatives were subject to major financial problems associated with injudicious distribution of credit and with inability of farmers to pay back society-guaranteed loans because of poor growing conditions. In some cases, members who had received loans in-kind from commodity marketing cooperatives chose to sell produce to private buyers, thus contributing to the financial instability of individual commodity societies.

The National Association of Savings and Credit Cooperative Societies was formed in 1987 after several years of successfully promoting development of savings and credit cooperatives. This was an effort to promote increased individual participation in the cooperative movement by bringing about greater direct participation by farmers and others in the affairs of their primary societies.

As of the beginning of 1988, 3,749 members organized into 29 societies had deposited E518,989 against which E388,358 were outstanding as member loans. The 1986 report of the CDD indicates that expansion of savings and credit cooperatives may have resulted in a slight decrease in membership of farmer cooperatives as farmers have joined the new organizations.

d. Department of Veterinary Services

The DVS is organized into two sections, animal health and animal production. The animal health section addresses both veterinary and public health matters. In addition to the substantive activities conducted by the two sections, the department issues import permits for all animals and animal products based on absence of disease or health related problems.

(1) Animal Production Section

This department manages existing government farms and ranches identified below.

Cattle Breeding Ranches

Cattle breeding ranches are managed at Mpisi, Manyonyaneni, Highveld, Balekane, Shiselweni, Nsalitshe, and Khubuta. Some 3,000 head are carried on these farms primarily for producing high-grade animals for sale to farmers. Sales and out-transfers of almost 1,850 head were recorded in 1987.

Sisa Ranches

Sisa ranches provide farmers with high-quality bulls to service their cattle. In 1987, nearly 500 farmers took advantage of the services provided at Nyonyane, Mlindazwe, and Nkalashane. Bulls are also leased to farmers to service SNL herds under communal grazing conditions.

Dairy Farms

Technical assistance is provided to government dairy farms managed through the DVS at Mpisi, Mbuluzi, and Gege. These farms also breed and raise improved dairy stock for sale to farmers.

Fattening Ranches

Fattening ranges are operated in Lavumisa, Mpala, and Balekane. Over 5,000 head are grazed each year for farmers prior to commercial sale. About 60 percent of the cattle fattened are from SNL farmers. The remainder are from title deed farmers and royal cattle.

Auction sales

The division holds cattle auction sales to promote sale of local cattle. Most cattle from the fattening ranches are sold at these government-sponsored auctions.

Mfumbaneni Breeding and Hatchery Farm

The farm has capacity for close to 4,000 breeding stock and annual sales of chicks are upwards of 280,000, mostly broilers.

Data Processing Unit

A data processing unit is maintained to provide farm records and information on livestock marketing and stock census figures. Annual census counts for animals brought to dip-tank centers are made in July and August.

(2) Animal Health Section

The animal health section is responsible for all animal health related activities, including prevention and

treatment of communicable animal diseases and providing diagnostic advice and treatment of animals belonging to individuals.

The division implements a nation-wide dip-tank operation to control tick borne diseases in the animal population. Dipping centers are open year-round and are the major field activity of department staff. Annual estimates of small and large stock numbers are determined from this activity and reported through the MAU.

A foot and mouth vaccination program and strict border surveillance is carried out to control disease infestation from illegal cattle wandering or brought into Swaziland from Mozambique. Mass vaccinations of cats and dogs against rabies takes place annually.

C. Ministry of Commerce, Industry, and Tourism

The MCIT regulates internal trade and commerce and assists establishment of small and large industries, including agribusinesses. It maintains the infrastructure at the Matsapha, Nhlangano, and Ngwenya industrial estates. All licenses to conduct trade in Swaziland are issued by the Department of Commerce. Approval to engage in food processing activities is usually required from this ministry. A business loan guarantee fund is presently being negotiated by the ministry with the Swazi Bank to provide development loans at discretionary rates for small- and medium-sized businesses operated by Swazi citizens. This facility would be available for qualifying agribusiness enterprises.

D. Educational and Training Organizations

The MOAC maintains two types of formal training and educational facilities for farmers: the Cooperative Development Educational Centre (CODEC) and the Farmer Training Centres (FTC). The Luyengo campus of the University of Swaziland (UNISWA/ Luyengo) provides agricultural education and training and the Mananga Agricultural Management Centre (MAMC), a private sector institute, provides training for high-level management of agri-businesses and other agricultural-related organizations. The Manzini Industrial Training Centre (MITC), a non-governmental organization, provides basic training in agricultural production and marketing.

1. UNISWA/Luyengo

UNISWA/Luyengo is the principal center for formal training of individuals at the post-secondary level in agricultural sciences. It is has some 250 students and is located in the Malkerns Valley. Courses are offered in:

- o agricultural economics and management;
- o agricultural education and extension;
- o crop science and plant pathology;
- o home economics;
- o land use management; and
- o animal production.

The faculty of agriculture has completely reorganized its diploma and degree programs to emphasize skills for students to become self-employed. A Department of Agricultural Economics and Management was formed in 1988. The curriculum is being expanded and a five-year bachelor of science degree program will be initiated starting with the August 1990 school year. The existing diplomate program will expand from two to three years. With this change, student enrollment is expected to increase to 350. Students opting for the degree program concentrate on their specialty area during the last two years.

Emphasis on teaching business management, marketing, and computer skills will broaden course offerings in agricultural economics. Additional emphasis across all disciplines on conducting research and publication by faculty and students will result in additional program depth. There will also be emphasis on student exposure to hands-on farming activities.

Expansion of research and farming activities will require associated improvements to classrooms, housing, farms, and equipment. The strengthening process now underway is expected to broaden the professional Swazi agricultural resource base of the country.

2. Mananga Agricultural Management Centre

The MAMC was organized by the Commonwealth Development Corporation (CDC) in 1972. Located in northeast Swaziland near the border with Mozambique, it provides training for midlevel managers ready to take on higher positions.

Presently, most of the students are from outside the CDC management base with about 85 percent from Africa, including 60 percent from the SADCC countries.

Course offerings provide an individual management development program. Group participation and discussion, exchange of ideas, and problem solving provide the basic teaching methodology. The approach is designed to promote managerial self-confidence in the solution of difficult problems faced by their organizations.

CDC provides about 30 percent of the annual operating expenditures for MAMC with participant fees providing the remainder.

A 1986 World Bank report recommended that the institution be re-established as an independent foundation with an international board and that it substantially increase its teaching staff. MAMC is recognized by SADCC as the appropriate institution for meeting its regional management training requirements and it is expanding its Portuguese language training capability.

3. Cooperative Development Educational Centre

CODEC was organized in 1976 under a technical assistance program with SIDA. Located in the Ezulweni Valley, its initial focus was to train business managers for cooperative societies and provide training to executive committees of cooperative societies in discharging their management functions. Courses taught include bookkeeping and cooperative management. The primary orientation of CODEC is still to the formal cooperative sector, but it has extended its program of management training to other rural groups. Although most courses are still taught at the main campus, instructors provide courses at local levels, using either FTCs or other community facilities.

Instructors are trained to the diplomate level and are thus not qualified to teach higher level management and financial courses.

4. Manzini Industrial Training Centre

The MITC is registered as a non-governmental organization and a non-profit institution. It was founded in 1982 and gains its principal support from the Catholic and Anglican Churches in Swaziland. The instructional approach is to combine classroom teaching with on-the-job training in a commercial skills development setting. Remedial English and mathematics are taught to upgrade these skills among trainees. Technical training is offered in:

- o building and construction;
- o carpentry and joinery;
- o mechanics;
- o metalwork;
- o electrical repairs;
- o plumbing;
- o printing;
- o upholstery;
- o sewing; and
- o agriculture.

The center has some 150 trainees between the ages of 18 and 25 enrolled in courses of 15 to 24 months in duration. A staff of 17 instructors supervises the trainees and manages the commercial activities of the sections under their control. Space for 14 trainees in agriculture is available and a community

agricultural training center in the lowveld provides agricultural and sewing training for married women, most of whom are heads of households.

5. Farmer Training Centre

An FTC training and boarding facility is located in each administrative region: Nhlangano, Big Bend, Ngomina, and Mpisi. Each is administered by the senior EA of the MOAC in each region. There is no permanent teaching staff at the centers, but they serve as community facilities for courses and training activities by extension and other organizations.

SECTION IV

AGRIBUSINESS ORGANIZATIONS, INSTITUTIONS, AND ACTIVITIES

This section discusses agribusiness activities associated with marketing and processing of agricultural products produced in Swaziland. Activities are generally grouped around the organizations responsible for regulating, processing, or marketing the agricultural product under discussion. Hence, marketing board activities are discussed under this heading regardless of whether they meet the government defined criterion of a "public enterprise" or not. Similarly, agricultural marketing and processing cooperatives are discussed within the context of the activities performed along with other private sector marketing and processing organizations.

In the discussion of specific marketing boards, some have been identified as public enterprises under the Public Enterprise Control Act of 1989. Where so identified, this definition will be accepted as valid. In general, it is assumed that an enterprise is classified as a public enterprise if the government or a legal entity of the government has asset holdings of at least 50 percent.

A. Input Supplies

1. Marketing Fertilizers, Seeds, and Chemicals

a. Central Cooperative Union

The Central Cooperative Union (CCU) was founded under the Cooperatives Societies Proclamation of 1964 as the organizational apex of the cooperative movement in Swaziland. It also provided credit in-kind, and an input supply and product marketing service for farmer members. At the same time, it was seen by the government as a conduit through which public development policy could be channeled. This tended to compromise, from time to time, the cooperative spirit of the grass roots development philosophy inherent in all such movements.

Major operating problems with the CCU came to a head in 1985. Most were the result of government directives that were inconsistent with business management cost realities. After a period of difficulties the CCU was suspended as the apex cooperative union for the movement. Most problems related to a rapidly increasing debt, caused primarily by unrecoverable loans issued during the early 1980s. The existing board and top management team were replaced after funds for farmer loans were misused.

The CCU, now operating in effect as a MOAC supervised parastatal, continues to supply inputs through 20 existing RDA and local farm depots. It has reporting requirements to the public enterprises unit (PEU).

CCU has recorded positive gross margins since 1986, not including deductions for interest payments on debt incurred prior to the removal of the former management committee in 1985. While functioning as an input supply and marketing cooperative, the CCU was unable to give patronage dividends to its members, which is a common form of registering success with cooperative membership. At present, it sells to both cooperative and non-cooperative members and supplies from 80 to 90 percent of inputs purchased by smallholders in remote rural areas.

It is recognized by industry leaders that the CCU is serving a market (scattered smallholder farmers) which would otherwise not be served by private sector dealers who require higher profit margins. As such, its operations are viewed by many as an important marketing implementation arm for government policy to expand the commercial activity of smallholder agriculture around the country.

Some of the horticultural produce marketing functions conducted by the CCU have been taken over by the new Swaziland National Fresh Produce Wholesale Market. However, the CCU is now expanding its involvement in purchasing maize from smallholder farmers and delivering it to the National Maize Corporation's (NMC) mill and silos in Matsapha.

b. Other Major Suppliers of Fertilizers, Seeds, and Chemicals

Farm Chemicals Ltd. (FCL) and Swaziland Agricultural Supplies (SAS) are the major private sector suppliers of agricultural fertilizers, pesticides, and seeds. The SWAKI group of companies is the majority shareholder in FCL and SAS is an associated company.

FCL holds the distributorship for inputs produced by the RSA firms, Kynoch, SASOL, and Omnia. Prices to other distributors are based on RSA published wholesale prices. They do not, as standard practice, offer quantity discounts to large suppliers such as CCU. Swaziland distributors are unable to negotiate quantity discounts with RSA suppliers with whom FCL has agency status.

SAS operates primarily in the lowveld with small- and large-holder cotton producers and other commercial operators.

2. Credit

a. Swaziland Savings and Credit Development Bank

The major source of formal credit to farmers is the Swaziland Savings and Development Bank (Swazi Bank). Barclays Bank and Standard Chartered also supply farm loans but primarily to large estate operators. In the past, many smallholder farmer loans were made through the CCU from funds supplied by the Swazi Bank. Poor recovery during the early 1980s led to a complete removal of the lending portfolio of the CCU. The CCU now accepts a purchase authority, guaranteed by the Swazi Bank, for inputs supplied to farmers.

The Swazi Bank follows a commercial lending policy, requiring collateral for farm loans. Cattle are the most common form of collateral since existing tenure laws prevent SNL from attaining a market value for this purpose. For lending purposes cattle are pledged against loans at a value of E300. In an attempt to provide an additional form of security, the bank is encouraging farmers to open savings accounts and deposit 1/4 of loan value each year to build up equity against which loans can be made.

Current commercial lending rates are 22 percent. Concessional rates are available for qualifying smallholders at 14 percent under the three major programs listed below. A management fee of 10 percent, with a maximum of E100, is charged against each loan.

The IFAD Smallholder Credit and Marketing Project

This fund is restricted to seasonal loans up to E1,000 for use by smallholder vegetable growers.

Economic Development Fund

This fund provides seasonal loans to cotton farmers in the amount of E300 to E1,000 and for medium-term investment from E1,000 to E50,000. Loans are available for smallholders with 20 ha or less.

STABEX

Funds through the Lome III STABEX convention have been made available as seasonal loans from E1,000 to E5,000 for cotton growers. The funds are available to qualifying ACP countries under income stabilization provisions for selected commodities traded with EEC countries.

b. Other Suppliers of Farm Credit

Loans in-kind are available to cotton growers through Cotona and Clarke Cotton, RSA associated private sector companies that buy seed cotton in Swaziland. Credit in-kind is extended through inputs provided to growers with cost of inputs and interest charges deducted at the end of the season against the receipt of seed cotton. Swazi Bank makes loans at commercial rates.

These agribusiness firms are experiencing loan recovery problems as some farmers will sell cotton under another name to escape loan repayment. Farmers, however, are concerned because accounting information supplied them does not effectively separate the interest rate charged or amount of credit provided from the actual cost of inputs supplied.

The Vuvulane sugar production scheme (whose producers sell through Mhlume Sugar Company) and the Mpetseni pineapple cooperative (which sells through Swazican) both include in-kind credit and input supply features. Loans are deducted against produce supplied for processing.

B. Marketing Milk and Dairy Products

The Dairy Act No. 28 of 1968 authorized formation of the SDB (founded in 1971) to direct and control the marketing of dairy products and the development of the dairy industry. The SDB is considered a public enterprise under the Public Enterprise (Control and Monitoring) Act of 1989. At its inception, the SDB was given a wide range of powers including:

- o regulation of the industry through registration of dairies;
- o determination of grades and manner of grading and sampling dairy products;
- o setting and enforcing all standards for production, distribution, storage, packaging, conveyance, manufacture and processing of dairy products; and
- o setting and enforcing standards of hygiene for operating dairies, cow-sheds, and milk processing plants.

In carrying out its these powers the SDB was given authority to:

- o construct buildings and plants and install equipment;
- o buy, sell, treat, grade, pack, store, process, adapt for sale, insure, advertise, and transport dairy products;
- o accept money, goods, and other property as a gift or otherwise for implementation purposes;

- o enter into agreements regarding the production, handling, transportation, storage, manufacture, processing, pasteurization, sale, importation, and exportation of dairy products;
- o conduct or contract surveys, investigations, and research work related to the dairy industry;
- o borrow money with approval of the Minister of Agriculture; and
- o buy, sell, or otherwise deal in dairy animals, animal semen, and dairy requisites.

The SDB can recommend prices for milk and dairy products and set levies on milk production to support its own operations, subject to approval by the Minister of Agriculture and Cooperatives.

In an effort to quickly promote the dairy industry the SDB, in many respects, became the industry. The SDB bought an existing private sector plant in 1974 and operated it until 1979. With technical assistance and funding from the Canadian International Development Agency (CIDA), a new plant, with a capacity of 30,000 liters/day, came on line in 1980. A small feed mill was also constructed at the same time on the Matsapha dairy plant site under the same assistance program.

The SDB also promoted development of dairy herds through direct management of farms. The Malkerns dairy, situated on ITL, was equipped with CIDA assistance in 1978 and managed by the SDB. The objective of the farm is to raise dairy heifers for purchase by smallholder dairy operators. Milk is also sold to the SDB processing plant.

Management of the 1,250 ha Balekane dairy farm was transferred from the MOAC to the SDB in 1982. Major capital investments were undertaken to bring this farm up to commercial production levels. At its peak, it supported over 100 milkers.

The government also transferred management of its Buselani farm to the SDB for growing yellow maize for dairy feed.

By 1984 the SDB operated five economic activities, each through a separate division: a dairy processing plant, a feed mill, the Malkerns dairy farm, the Balekane dairy farm, and the Buselani maize farm.

Table 6 provides a summary of fresh local milk processed by the SDB plant since 1982. Local production increased steadily through the early 1980s, peaking in 1985 when 3.7 million liters of local fresh milk were processed. The trend has been downward since that time.

Table 6. Sources of Raw Milk Processed by the Swaziland Dairy Board, 1981-1987

Year	Private Sector			SDB Farms	Govt. Farms	Total
	Large Farms	Small Holdings	Tibiyo			
	percent of total					liters (000)
1982	15.8	2.8	30.0	40.3	11.1	2,402.8
1983	16.9	3.6	38.1	31.3	10.1	2,675.4
1984	21.0	4.6	33.7	30.1	10.6	2,566.3
1985	30.0	4.2	33.4	29.4	3.0	3,668.1
1986	30.6	1.1	35.6	29.1	3.6	3,427.0
1987	27.0	2.2	39.8	26.1	4.9	2,871.0

Source: Dairy Industry Study 1984, other SDB records, MOAC Annual Reports

Beginning in 1980, local supplies of fresh milk were supplemented by World Food Program (WFP) milk powder on a grant basis to utilize the unused capacity of the processing plant. As a low cost supply source, it was expected that profits would be used to develop the smallholder sector of the industry.

Although the government supported a smallholder dairy herd development program, pricing decisions made to encourage the delivery of quality milk worked to the detriment of this sector. Smallholder producers, generally located great distances from the plant, could receive more than double the plant price by selling fresh milk locally. Only three milk cooling and pickup centers were constructed, one in the Luyengo settlement, one in the northern RDA and the third in Nhlangano.

The share of milk received by the plant from smallholders never reached 5 percent of the total delivered. In 1986 it dropped below 2 percent. SDB records suggest that small holder production continued to decline in 1989. It remains well below 2 percent of total receipts.

For extended periods in 1988 the smallholder pickup centers became non-functional due to lack of available transport. Discussions with industry officials suggest that about 55 percent of total fluid milk consumption in Swaziland is now supplied by home production and direct fresh sales by producers.

Acting under government policy to divest itself of commercial activities, the equipment and cattle on the Malkerns farm were sold to Tibiyo effective December 1988. (As a result, Tibiyo now provides upwards of 60 percent of fresh milk supplied to the plant.) The Buselani farm was returned to the government

August 1, 1989. However, as of November 1989, SDB had not yet divested its non-land assets held in the Balekane farm nor had it seriously considered divesting itself from managing the operations of the feed mill and the milk processing plant. Private sector organizations with an interest in managing these operations report limited interest by the SDB in entering into discussions which would implement a transfer to the private sector.

C. Marketing Fruit and Vegetables

1. Domestic Marketing of Fresh Produce

a. National Agricultural Marketing Board

NAMBoard was created by Act No. 13 of 1985. The board is appointed by and is responsible to the MOAC. It is considered a parastatal with reporting responsibilities to the PEU. The executive secretary to NAMBoard is seconded from the MOAC but remaining staff are hired by the board and paid from funds available to it through its legislated activities. Staff are not on the civil service establishment register.

Enabling legislation authorizes the Minister of Agriculture and Cooperatives to make regulations regarding scheduled products which come under the purview of the board's regulatory provisions. NAMBoard is authorized to charge levies on imports and control issuance of permits on scheduled products to promote orderly marketing of domestic produce and prevent dumping. This authorization provides the basis for promoting development of local agricultural production by maintaining reasonable producer price levels for domestic produce and restricting imports during periods of high availability of domestic produce.

Management of scheduled products is regulated by agreement between the GOS and the RSA under provisions of the South African Customs Union Agreement (SACUA) of which Swaziland is a member.

Scheduled products are assessed import levies and imports are controlled by permit. They include maize and maize products, rice, fresh fruits, and fresh vegetables.

Poultry and eggs are currently being considered for inclusion in the list of scheduled products. Imports of maize based animal feeds have been subject to import levies from early 1987 at the request of the SDB to protect its animal feed mill from RSA competition. The SDB mill, the only commercial feed mill in the country, hoped to increase supply to meet the requirements of local poultry and beef producers. The levy was removed in 1988 on the grounds that the mill had not met that demand and that its higher prices adversely affected the competitive position of local producers.

All importers of scheduled products must register with NAMBoard to receive an import permit. Permits are valid for one month and limit the kind and amount of produce permitted. New permits may be granted upon surrender of expired permits containing official customs declarations of kind and quantity of produce imported. This information is used by the board to compile official statistics of imports and exports of scheduled products.

Only individuals or companies holding a valid trading license can be registered. Trading licenses are issued by the MCIT. This responsibility has been delegated to regional administrative officers stationed in each district. Only NAMBoard has authority to issue permits for actual importation of scheduled products. Levies for fruit and vegetable imports are 7.5 percent of declared value and 3 percent for maize and wheat.

b. Swaziland National Fresh Produce Wholesale Market

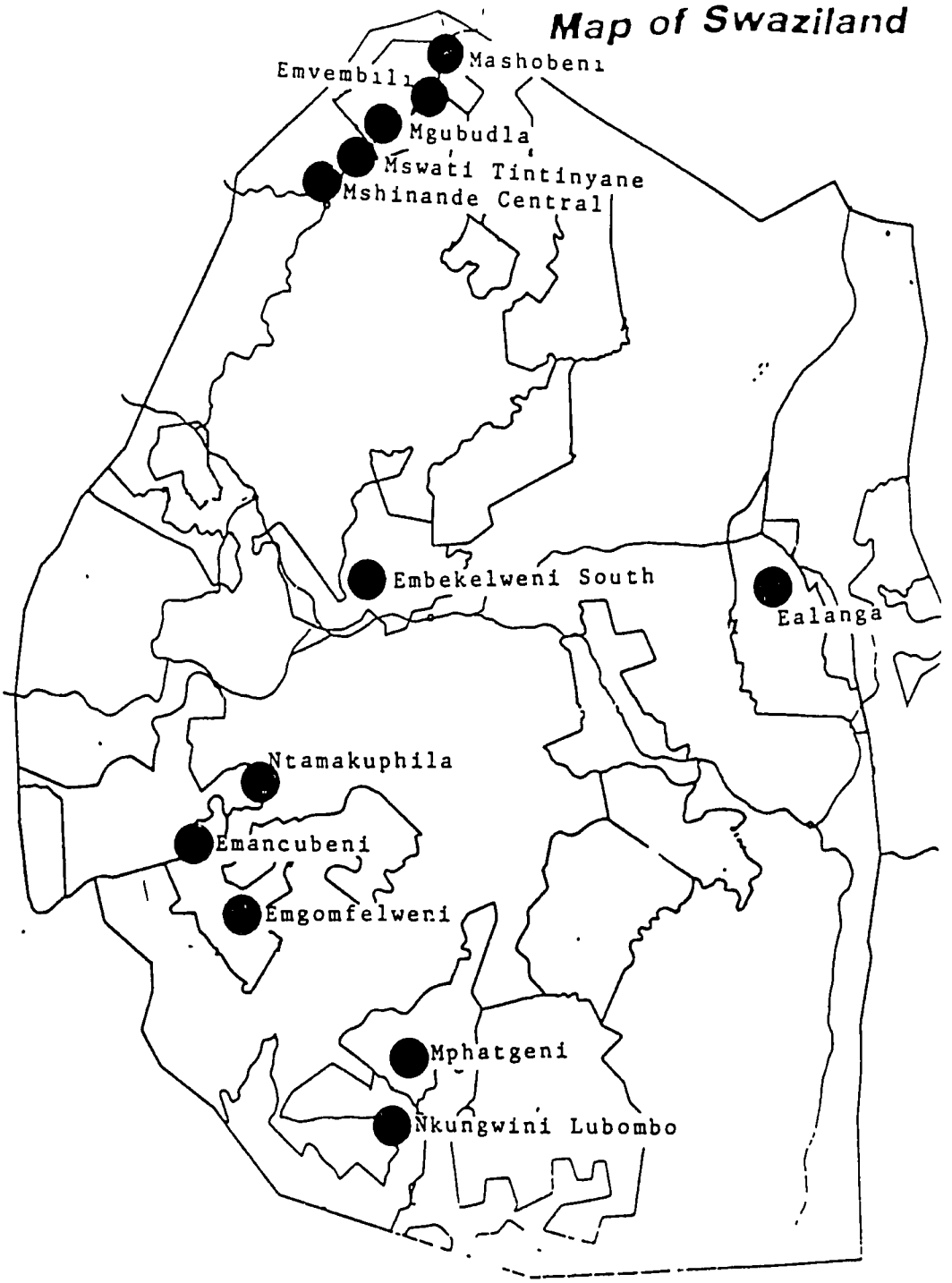
The National Fresh Produce Wholesale Market was built with financial assistance from IFAD and was designed inter alia to promote expansion of smallholder marketing of fresh produce. To complement the market, IFAD has supported the establishment of 12 irrigation schemes for the production of fresh vegetables. These are identified in figure 4. Sites vary from 10 to 50 ha and total 276 ha in all.

With IFAD support, field packing and grading sheds have been constructed at each site. However, the lack of available technical assistance, either in the form of expatriate or local extension service advisors, has prevented utilization of these facilities. Commercial production from these sites remains at suboptimum levels. Grading and packaging equipment is stored at nearby Chinese project sites for safe keeping. With arrival of an IFAD project coordinator in November 1989, implementation of the production component is proceeding.

The NAMBoard currently operates the national market adjacent to the board premises. It is within 5 km of the Matsapha Industrial area. The market initiated operations in April 1986. It is expected to come under separate management from the NAMBoard in early 1990.

Three commission agents are licensed to handle all produce flowing through the market on a commission basis. Two traders are associated with RSA produce trading or production operations, the third is a Swazi. Traders charge a commission of 5 to 7.5 percent on produce handled. An additional market fee of 5 percent of selling price is charged by the market to cover operating costs. All trading is conducted by agents. Payment to

Figure 4: IFAD Small Holder Irrigation Sites



local farmers is guaranteed by NAMBoard. The expected average period for issuing checks to farmers is two weeks after date of sale.

The operating idea of the market is to serve as a wholesale outlet for local production. To encourage imports, produce handled by the three approved agents are exempt from import levies. By restricting commodities during peak local production periods, favored market conditions for local producers can be created. (For example, because of the current RSA potato surplus, imports are now restricted so normal price levels for local produce can be maintained.)

At this time, the process of restricting permits is quite intuitive. Based on available knowledge of local production, the executive secretary will deny issuance of new permits for specific commodities when they come due. By staggering issuance dates, a rough degree of control can be exercised if reliable information exists on supply conditions relative to demand.

At the border post, customs officials check each incoming load against the remaining amount authorized for importation listed on the trader permits which must accompany each shipment. When a trader applies for a new permit, the old permit is surrendered to the NAMBoard. The certified customs entries of imports are used as the basis for statistics on the level of imports. Knowledgeable individuals estimate that underreporting of scheduled products reaches 50 percent or more of actual import value while reported produce values are estimated to be only 30 percent of the actual wholesale value. About 40 percent of imports of scheduled products pass through the national market and are thereby exempt from import levies.

Incentives are offered to induce smallholders to use the national market. Field men are hired by the market to locate supplies from smallholders. Once producers are located, subsidized transport is provided to haul their produce to the market for sale. Hauling charges are a flat 25c/km, even though average transport costs on a full load basis has been calculated at E1/km.

If the incentive program is successful it is expected that traders will also be encouraged to increase use of the market to obtain their supplies. The major advantages of the market are its location near major consumption centers and the availability of a large assortment of fresh produce. These factors reduce the need for traders to travel long distances to buy produce to supply their customers.

c. Municipal Markets

In addition to many local markets, major municipal wholesale markets operate in Mbabane, Manzini, and Mahlanya. The first is open six days per week (Monday through Saturday), the latter two are open seven days per week. The markets are managed by municipal officers and are open for trading from about 6 to 10 a.m. However, it is common for trading to last until noon as merchants attempt to move all of their produce.

It is estimated that about 20 major traders, all licensed with the MCIT, sell at each of the three markets. These traders (who buy and sell fruit and vegetables wholesale and transport these commodities) buy from either Swazi farmers, at the national market, or from RSA farmers. They resell to small shops, restaurants, small venders, or in their own retail shops. Most sales are conducted through facilities offered by the municipal markets.

Prior to opening of the national wholesale market, most supplies originated from RSA markets or farms or from larger Swazi farms. The national market provides an alternative to direct importation from the RSA. The last choice of buyers are small Swazi farmers as their supply is limited, not regularly available, and quality is not uniform. However, when borders are closed there is a tendency for traders to buy from small farmers as they can forego the commission and handling costs of the national market. Smallholders have an incentive to sell to traders, even though prices may be lower than at the national market, as many lack transportation and they can receive immediate payment for their produce.

Most traders operating on the domestic markets are organized into the Ngwane Farmers Association. Membership is reported to be about 125. This organization challenged the authority of the NAMBoard to control imports through permits and to charge levies for produce not handled by NAMBoard registered commission agents. This issue has been subsequently resolved in favor of the NAMBoard. It is reported that interest in the organization has since declined.

2. Export Marketing of Fresh Produce

a. Swaziland Citrus Board

The Swaziland Citrus Board is organized under the Citrus Act No. 22 of 1967. It commenced operation on February 8, 1969. The board is not considered a parastatal and does not have reporting requirements to the public enterprise unit. Board membership is composed of the permanent secretary of the MOAC, plus two elected grower representatives from each of the three production regions (north, central, and south). In practice,

there are seven major estates producing citrus. All are represented on the board. Although the responsible ministry under the act is the MOAC, most of its past association has been with the MCIT.

Salaries of professional and support staff of the board are covered by levies deducted from grower sales. The board has four employees: a manager, a coordinator, a secretary, and a clerk. The coordinator arranges transportation with growers to the RSA and coordinates other logistics with the South African Citrus Cooperative Exchange (SACCE). The manager handles general administration, accounts, trading, and marketing. The board issues all permits for export of citrus fruit. It also imports tree replacement stock and issue permits.

With the formation of the NAMBoard, the citrus board has been defined into a statutory relationship with the latter, which has responsibility for issuing export and import permits for all scheduled products, including citrus. As the primary interest of NAMBoard is currently in maintaining a competitive domestic market environment for scheduled Swazi agricultural produce, its emphasis is on monitoring imports. It is expected to monitor exports in the future.

b. Other Export Marketing Organizations for Fresh Fruit

The citrus board uses the RSA marketing infrastructure of the SACCE but exports under a separate label, "Swazigold." Services provided by SACCE are financed by a levy deducted from grower sales. The major export markets are Scandinavia, Canada, Ireland, and the Middle East, and recently, Japan. To date there have been no serious problems with major importers using the RSA as a marketing agent (although recent problems with Japan resulted in a temporary curtailment of exports to that country). In the opinion of industry representatives, the loss of RSA export market infrastructure could greatly reduce industry profits in the short run as marketing costs increase. The issue is under discussion by the board.

Actual commercial trading is handled through a private company, Swaziland Citrus Sales Ltd. (The act says this is a cooperative, but the small number of growers in the industry indicate that the co-op form is not required.) The company has its own marketing agents who increasingly handle sales in sensitive markets where it formerly relied on RSA agents.

Most export shipments are via Durban, although there is some movement out of Maputo. Under peacetime conditions Maputo would be the preferred shipping port because of its proximity to Swaziland. Current losses through use of this port are about 5

percent of volume transshipped through Mozambique. Return to peacetime conditions would result in a major expansion of exports through this port.

3. Processing Swaziland Fruit for Export

A fruit processing facility owned and operated by Swazican is located at Malkerns. It operates throughout the year, except for a brief period from the end of November to the beginning of January. Pineapples are processed from January to early June and again from August to the end of November. During the June and July interval, citrus juice and segments are processed. The plant also processes a limited amount of preserves and marmalades.

D. Cereals Marketing

1. Maize

Maize for commercial sale is grown primarily by smallholders on some 70,000 ha. Most does not reach the formal market for milling as it is consumed by producing households or sold in small quantities to nearby households or at local markets. Very little is produced by large estates.

Maize has been milled commercially since 1959 when the first modern mill was constructed at Matsapha and operated by the Swazi Milling Company (SMC). SMC held a monopoly on maize imports until 1978, and remains the principal importer of whole maize for milling into maize meal. Local storage capacity of 2,000 mt is maintained to handle normal turnover requirements. From the start, the purpose of the mill was to provide retail grade milled products, primarily for sale in urban markets.

A new mill with a monthly three shift capacity of 4,800 mt became operational in 1980. About the same time, the government began encouraging greater purchase of domestic maize for milling. Since most maize was grown by smallholders and consumed locally, little was historically offered for sale to the mill. Moreover, the good road linkage with the RSA supported the commercial interests of SMC to make regular purchases in large bulk quantities from the RSA Maize Board rather than develop transportation and marketing systems to draw small commercial sales in bags from scattered smallholders.

Annual purchases of local maize by the mill never exceeded 5,500 mt through 1983. With favorable growing weather and improved marketing capability, 12,000 mt of local maize was sold to the mill in 1984. A peak of 23,000 mt was sold in 1986. In 1987 and 1988 about 8,000 mt of local maize was purchased for milling.

To ensure viability of local milling operations, the government discouraged imports of mealie meal by restricting issuance of import permits, while at the same time promoting purchase of domestic maize by the mill. Up through 1984, prices established by the MOAC maintained a parity with landed costs of RSA whole grain imports.

To promote increased domestic grain sales, the MOAC in 1985 established a minimum domestic producer price well above RSA landed costs, and at the same time reduced restrictions on imports of mealie meal. RSA suppliers are alleged to have used the freer import environment to sell their products at reduced prices to gain a larger market share at the expense of SMC which is not associated with any of the three major milling companies in the RSA.

These pressures appear to have been responsible for the SMC decision to close its milling operations in early 1985. Within this crisis setting, the National Maize Corporation (NMC) was formed with the National Industrial Development Corporation as its major shareholder. The principal secretaries of the MOF, MCIT, and MOAC serve as its directors. The NMC replaced the SMC as operator of the milling facilities which were leased by NMC from the SMC. The NMC is considered a public enterprise under the Public Enterprise (Control and Monitoring) Act of 1989.

With the NMC assuming responsibility, the mill increased its operations to near full capacity within a short time. It continues to lease the milling facilities from the SMC, and retains a management contract with SMC for day-to-day milling operations.

Minimum prices for domestic maize purchased by NMC are presently established by the MOAC to reflect local production costs and subsidies given to foreign competitors rather than import prices (National Development Plan 1989/90-1991/92, p. 74). Prices are to be announced at the beginning of the cropping season instead of just before harvest.

For the 1989-90 marketing year (domestic sales to the NMC usually do not extend beyond November) domestic maize delivered to the mill was purchased at E369.29/mt plus average handling charges of E26/mt. (The minimum established rate is E371.42.) Imported maize landed at the border was E395/mt to which an import levy of E10/mt and haulage of E25/mt are added. In comparison, producer prices for maize in the RSA for the current marketing season are R212/mt. Zimbabwe producer prices are Z$215/mt, equivalent to E273/mt at official rates of exchange.

In addition to the Matsapha mill which produces both sifted and unsifted meal, up to 200 hammermills operate in rural areas. They produce an unsifted meal which is not a retail product, but

provides an important source of freshly ground meal for rural residents who supply their own whole grain for grinding.

2. Wheat

All flour is presently imported from the RSA. The government has adopted a policy of achieving self-sufficiency in flour and wheat production and has approved, in principle, the construction of a flour mill. It is anticipated that wheat production can be developed to reduce dependence on foreign imports, but in the interim, the mill can provide employment and retain, in Swaziland, value added from processing imported grain.

E. Seed Cotton Marketing and Processing

1. Swaziland Cotton Board

The SCB is set up under the Cotton Act of 1967 with reporting responsibilities to the MOAC. All members are appointed by the Minister for Agriculture and Cooperatives. It is considered a parastatal and therefore reports responsibilities to the PEU. The executive officer has held this position since 1983. He had previously represented the MOAC on the board.

The SCB regularly produces audited accounts and submits annual reports to the MOAC through the director of agriculture.

The board has wide powers which include growing and marketing cotton, purchasing inputs on behalf of its growers for resale, and storing growers' cotton. However, the board does not actively grow or market cotton, leaving the former to individual farmers and the latter to two RSA firms. Board activities associated with promotion of the industry include funding a research program and advising the minister on importation and control of cotton seed.

In addition to advising the minister on the statutorily defined matters, the board has limited its activities to:

- importing approved cotton seed and arranging for its sale through private retail establishments, cooperative outlets, and gins;
- coordinating and funding of the cotton research program through administration of the Cotton Improvement Fund;
- managing the Cotton Stabilization Fund; and
- providing technical assistance on cotton growing through a fieldman who negotiates with the extension service.

The board administers the Cotton Improvement Fund which supports the national research program through a 1/2 cent per kg deduction from seed cotton sold. The fund balance at March 31, 1989 was E100,340.

An additional special levy of 4.375c per kg is deducted for the Cotton Stabilization Fund introduced in 1988. The fund balance at March 31, 1989 was E1.3 million.

Cotton is marketed through the RSA cotton board and the executive officer of the Swaziland cotton board sits as an advisory member.

2. Private Sector Seed Cotton Marketing Organizations

All sales of cotton by growers are through two private sector cotton buyers, Clarke Cotton and Cotona. The latter is a subsidiary of Tongaat. Both are RSA-registered companies. The two cotton gins are owned by Cotona, one at Matsapha, the other at Big Bend. Clarke purchases Swazi cotton for processing in its RSA gins and has increased its recent share of purchases to about 1/3 of the total, with Cotona buying the remainder.

F. Marketing Animal Products

1. Red Meat and Meat Products

Most locally-consumed beef and mutton are butchered in local abattoirs or at homesteads for family consumption. Commercial cattle slaughter in 1985 and 1986 was estimated at 43,974 and 43,195, respectively. About 60 percent of the total was slaughtered by the Swaziland Meat Corporation (SMC) facility located at the Matsapha Industrial Estate with about 16,000 to 18,000 slaughtered annually by small rural and urban butchers.

Management and hygiene problems since 1987 have caused a reduction of slaughterings at the SMC facility, as the plant was unable to meet export health standards. The facility was closed for much of 1988. The SMC was reorganized in December 1988 under the name Swaziland Meat Industries (SMI) and as of November 1989, the abattoir is again increasing its share of slaughter. Swaziland has an EEC export quota of 3,640 mt of boneless beef annually.

About 40 percent of the kill at the SMC was exported in 1987, almost half to the RSA, with 41 percent to West Germany and 11 percent to Reunion Island.

2. Poultry and Poultry Products

Virtually all eggs marketed commercially in Swaziland are imported from the RSA. One large commercial operation sells

about 1,300 dozen/week to a Mbabane supermarket. Eleven cooperatives, with an average of 75 members each, produced about 1,600 dozen/week in 1988. One cooperative, with 190 members, produced over 60 percent of the total. Virtually all eggs produced by the cooperative sector are sold locally to capture retail prices. Figures of total imports are not available as import records are not maintained.

Large commercial broiler producers include Tinkhukhu, a subsidiary of Delmas Kuiken of RSA, which produces about 12,000 broilers weekly. Almost all supply is sold live at local markets. In addition, some 5,000 frozen oven-ready birds are imported weekly from their RSA operations and marketed under local label. Two other large operations provide up to 16,000 broilers for live sale, either through agents or local market stalls. Capacity is available to produce up to 30,000 birds weekly.

The cooperative sector, consisting of the above mentioned organizations, provided an average of 2,600 live birds for sale weekly in 1988. Most sales are in local areas. Cooperatives reportedly must receive about E7.00 to show a profit while the larger producers tend to sell the same product for E6.00.

Total estimated local production of broilers for 1988 was 35,000 with an estimated 60,000 to 85,000 frozen oven-ready birds imported weekly. Local demand could be easily met by several commercial producers of the size currently available in the country, but additional dressing, packaging, and freezing facilities are needed. Because of the economies of scale involved in broiler production, expansion of smallholder cooperative production can supply only limited local market demand and family self-sufficiency requirements.

G. Public and Private Agribusiness Holding Companies

1. Tibiyo Taka Ngwane

King Sobhusa II created Tibiyo Taka Ngwane by Royal Decree in August 1968 as a Crown Enterprise. The King, as head of state, is the ultimate head of Tibiyo. Policy management is vested in a seven-man committee of senior Swazi citizens appointed by the King. Day-to-day management is guided by a managing director, assisted by a permanent staff headed by a general manager.

Formal objectives of Tibiyo include:

- o increase formal sector employment;
- o create income in the hands of citizens;
- o foster economic independence and self-sufficiency;

o earn or save foreign exchange; and
o develop rural communities of Swaziland.

Tibiyo was initially established to invest revenues received from mineral royalties. In 1975 it was decided that future growth of Tibiyo could continue with funds generated from existing investments. A new fund, Tisuka Taka Ngwane, was established to manage mineral royalty revenues. Revenues from this fund have been used primarily to build low income housing.

Tibiyo has the status of a development agency although it is a profit making company. It has been instrumental in the repurchase of more than 1 million acres of title deed land for redesignation as SNL and redistribution to Swazi citizens. It also provides scholarships to UNISWA students and supports institutions which promote cultural and traditional values and customs.

Tibiyo identifies and formulates proposals for commercially viable projects and usually takes a minority position to enable a wider spread of interests. However, in strategic sectors, such as mining and agriculture, it often takes a majority asset position to ensure operation of these enterprises in the national interest as represented by the King.

Tibiyo holds equity in 19 companies and owns another 10 outright. Major Tibiyo investments are valued at E54.7 million. Its agricultural holdings include, Mhlume Sugar Co., Royal Swaziland Sugar Company, Ubombo Ranches, Sivunga Estate, Sihoye Estate, Tibiyo Dairy Project, Tibiyo Maize Project, Tibiyo Rice Project, Tibiyo Cattle Project, Sivandze Shiselweni, Inyoni Yami Swaziland Irrigation Scheme, Tibiyo Forests, Tibiyo National Milling Co., Tibiyo Graneries, and Swaziland Meat Industries.

2. Swaziland Industrial Development Corporation

Swaziland Industrial Development Corporation (SIDC) was incorporated in June 1986 with operations commencing on October 1, 1987. It is a development finance company established by the GOS and other governmental and private investors, to mobilize domestic and external resources to finance private sector projects in the industrial, mining, agribusiness, tourism, commercial, and service sectors.

SIDC assumed certain assets and liabilities from the predecessor National Industrial Development Corporation of Swaziland (NIDCS) which is now managed by SIDC. The GOS is the major shareholder in SIDC. Other shareholders include Commonwealth Development Corporation (CDC), the German Finance Co. for Investments in Developing Countries, the International Finance Corporation, the Netherlands Development Finance Company,

Barclays Bank (Swaziland), and Standard Chartered (Swaziland). Shares of the latter two organizations were transferred from NIDCS.

NIDCS presently manages a dryland cotton project at Nkalashane and may be a vehicle for developing other government commercial farms.

SIDC operates completely with risk capital which does not have government guarantee. On June 30, 1988, SIDC investments were E37.7 million.

3. SWAKI (Pty) Limited

SWAKI is organized as a limited liability company with 50 percent of its shares each held by the SIDC and by Kirsch Holdings Ltd., an RSA based company. Kirsch Holdings provides the operational management for SWAKI. As a holding company, it has interests in many areas of the Swazi economy including finance, distribution, trade, transportation, and agribusiness. SWAKI investments are valued at over E16 million.

Its agribusiness holdings include:

Swazi Milling Company

Swazi Milling Company (SMC) is a division of SWAKI involved with maize milling, distribution of cattle feeds, seeds, industrial chemicals, and the production of malt products. It was the first Kirsch investment in Swaziland and has a management contract with the NMC to operate the maize milling facilities at Matsapha.

Farm Chemicals Ltd.

FCL blends and distributes fertilizer, agrichemicals, seeds and veterinary products. It is the agent for Kynoch, SASOL, and Omnia fertilizers suppliers in the RSA.

National Textile Corporation of Swaziland Ltd. (NATEX)

SWAKI owns 50 percent of this project which is involved in the spinning, weaving, printing, dyeing, and finishing of cotton yarn fabrics. It uses about 10 percent of locally grown and ginned cotton. Long staple cotton is imported from Pakistan and Egypt to provide a higher quality blend.

Swaziland Agricultural Supplies Ltd.

SAS, an agricultural input supply firm selling fertilizers seeds and other chemical inputs, is an associated company with SWAKI.

SECTION V

GOS POLICIES AND PROGRAMS AFFECTING AGRICULTURE

The broad sectoral policy of the MOAC as defined in the development plan 1989/90-1991/92 includes the following goals:

- o achieve basic food self-sufficiency;
- o improve nutritional levels;
- o increase agricultural exports; and
- o boost rural income and employment.

Within these policy goals, individual implementation programs are in place, subject to available domestic funding and local personnel constraints. The implications of these programs are discussed in greater detail in section VI.

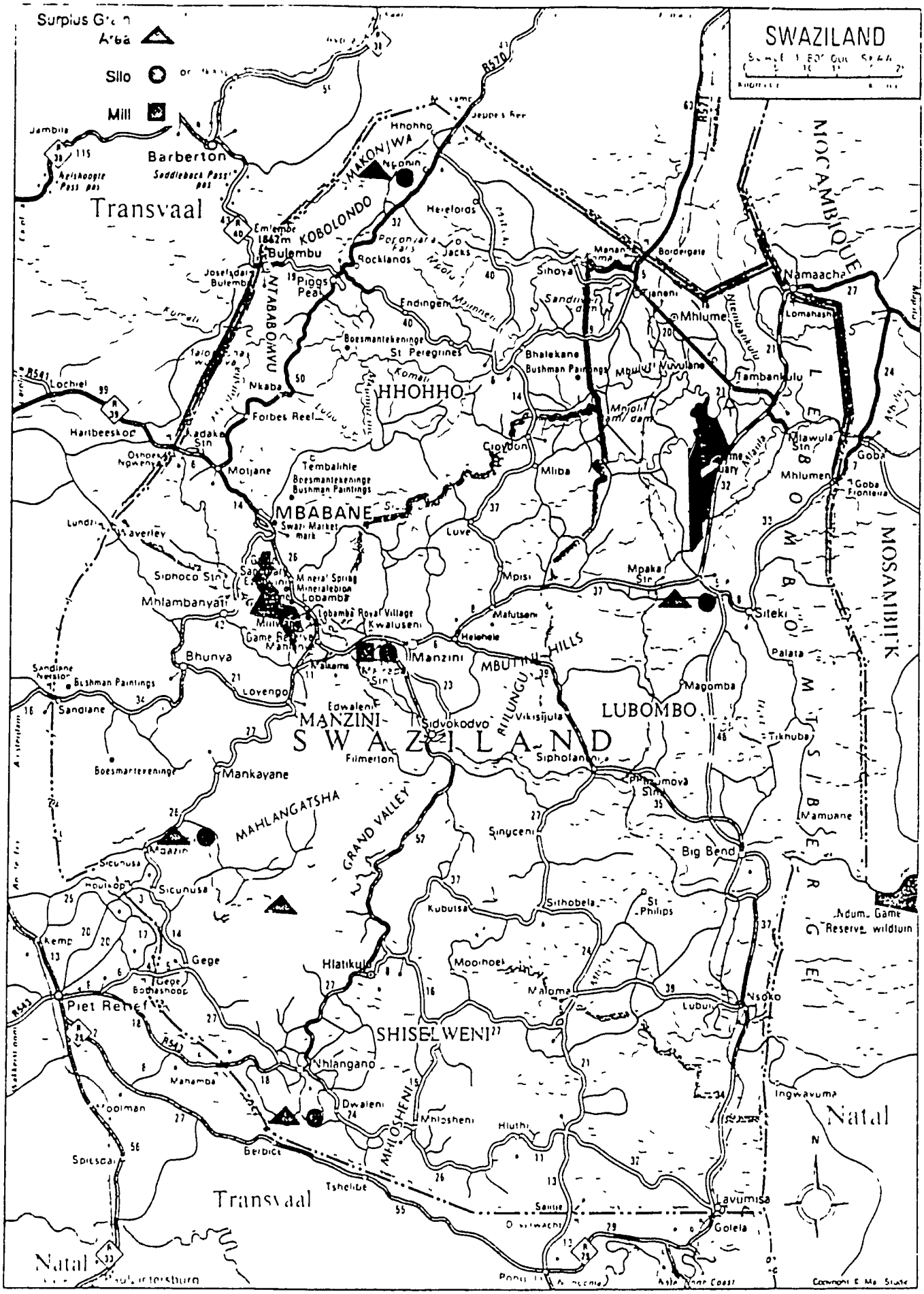
Following is a discussion of specific commodity, land, credit, input supply, monetary and fiscal, and public and private sector development policies and programs. These provide the framework within which the above policy goals are implemented. Data systems, required to develop, monitor, and evaluate program performance, are included within this framework.

A. Commodity Policies and Programs

1. Cereals

Maize and maize products are scheduled products under the Marketing Act of 1985. A minimum producer price for maize is gazetted annually. In the price determination process, both cost of local production and subsidies to foreign competitors are considered rather than import prices. Maize is a scheduled product and can be imported in bulk only by permit issued by the NAMBoard.

To promote government policy of national food self-sufficiency, expanded marketing of domestic maize is encouraged. The CCU has storage sheds for bagged grain at its sales depots with an estimated total capacity of 12,000 mt. A network of five silo centers was constructed in 1986 as part of a food security project (figure 5). Total storage capacity for 16,000 mt was provided. The largest silo complex with a capacity of 12,000 mt was constructed at Matsapha and integrated into the NMC production system in August 1987.


SWAZILAND
Surplus Grain Area
Silo
Mill
Barberton
Transvaal
MAKONJWA
KOBOLONDO
NTABABOMVU
HHOHHO
MBABANE
MANZINI
SWAZILAND
LUBOMBO
MAHLANGATSHA
GRAND VALLEY
MBUTI HILLS
SHISELWENI
MOCAMBIQUE
MOSAMBIK
Natal
Transvaal
Natal

2. Fruit and Vegetables

a. Fresh Fruit and Vegetables

Fresh fruit and vegetables became scheduled products in 1987 under the Marketing Act of 1985. Imports can be regulated by permit to promote orderly marketing of local produce. Prices are not gazetted but bear a relationship (although generally higher) to prices prevailing on the RSA markets.

b. Sugar

Domestic consumer prices are established by the Ministry of Commerce on recommendation from the sugar association.

About 40 percent of the raw sugar exported is under quota to the EEC and the United States. With about 90 percent of quota exports going to Europe, prices tend to approximate the EEC producer price and are negotiated annually. Most of the remainder is sold on the futures market which allows prices to be set in advance of the season in April.

The sugar association assumes ownership of all sugar received from the three mills. Mills are paid within one week of delivery to the sugar association and before the product is marketed. Each mill, in turn, is responsible for payment to its growers. The actual price is dependent on the sucrose content. The split between millers and growers is determined annually by the cane prices review committee, an independent body of experts not associated with the industry. It is based on submissions of production costs by both millers and growers.

The industry is highly regulated and growers must not surpass quotas allocated by the quota board, which are based on the total allocation for the country.

c. Pineapple

Pineapple is grown for processing with most of the processed crop exported. Swazican, a private estate, is the dominant producer and processor. Most exports are to the EEC under quotas and pricing structures negotiated under Lomé conventions. Product prices are negotiated by Swazican and announced periodically.

3. Livestock and Livestock Products

a. Red Meat

There is no formal policy regarding marketing or pricing of red meats. The government has a negotiated quota to export up to 3,640 mt of deboned meat annually to the EEC.

Legislation does not exist to regulate entry of cattle or small-stock products into Swaziland for reasons other than health- or disease-related causes.

b. Eggs and Poultry

There is no formal policy regarding marketing or pricing of poultry or poultry products. No figures of egg imports or domestic consumption are available.

Again, existing legislation provides for import regulation only in the case of health- or disease-related causes. However, as perishable products, poultry and eggs may qualify as scheduled products under the NAMBoard. Some support exists for including them.

c. Dairy Products

Overall, dairy policy consists of four main objectives:

- o reduce national dependence on imports of milk and milk products;
- o develop commercial milk production by smallholder Swazi farmers;
- o provide improved dairy animals for smallholders by raising dairy heifers on government dairy farms; and
- o offer artificial insemination services to smallholders.

The SDB was given a wide range of regulatory, production, processing, and marketing powers to implement the objectives of the government. It recommends prices for milk products subject to the approval of the MOAC. It can authorize a levy on milk products to maintain board operations.

Government policy states that the SDB shall regulate and control the activities of milk producers, processors, and handlers to promote the objectives identified above, but that it shall not engage in these economic activities itself.

To promote development of a smallholder improved dairy herd, the MOAC operates dairy breeding farms at Mpisi and Mbuluzi. Also, the dairy section of the DAE manages an artificial insemination program.

4. Cotton

Most cotton is sold to the RSA, using its infrastructure to determine prices. As there are no export controls for cotton, local buyers may have difficulty in acquiring this commodity. The present marketing agreement with the RSA is due for renegotiation in 1991.

5. Forestry Products

Wattle bark for tanning is sold under a quota to the RSA. Unprocessed timber is exported without control.

B. Input Supply Policies and Programs

1. Fertilizers, Seeds, and Chemicals

The MOAC supports development of an input supply system to promote self-sufficiency in maize production and other basic foods. Implementation of this policy has been through the CCU, which has established a network of supply depots in areas where smallholder agriculture is practiced. Since 1985, CCU has operated as a defacto parastatal, reporting directly to the registrar of cooperatives.

Self-sufficiency in production of maize and dry bean seed is promoted.

2. Credit

The major source of agricultural credit is the Swazi Bank. It is a full commercial bank and handles discretionary lines of credit supplied by international lending and development agencies. Both seasonal and capital loans are made to smallholders. Seasonal loans are made only for production of crops for sale to the market. Funds for expanded production of home-consumed produce are considered consumer loans.

C. Land Tenure Policies

Two forms of land tenure exist in Swaziland as it relates to agriculture; ITL and SNL. Most ITL are title deed lands but also include individual leases provided under certain conditions on SNL land. There are several subclassifications of these two tenure types but the policies relating to each are quite clear and provide the framework within which agribusiness growth and development will take place.

Swaziland customary land tenure is based on the concept that any married man pledging allegiance to a chief is entitled to a homestead on SNL. Homestead allocations are about 4 ha.

All SNL is held by the King in trust for the nation. For individuals meeting the requirement of allegiance to a local chief, there is no monetary value or user fee attached to the land, but normal considerations to the chief are expected. This land, held under customary tenure, may not be bought, sold, mortgaged, or leased. In short, as a commodity held in trust by the nation, a market for SNL land does not exist.

Swaziland has, for many years, followed a policy of converting as much rural land as possible from ITL title deed to SNL status. The policy was initiated in the 1920s under King Sobhuza II as a means of recovering land for the Swazi Nation which had been distributed by the British colonial leaders to expatriate settlers under title deed. The policy was reaffirmed at Independence in 1968 when the British government provided funding for the purchase of existing concessionary ITL on a "willing buyer/willing seller" basis. Lands so reclaimed are subject to redistribution based on land use plans developed by the MOAC and approved by Parliament and the King. Once repurchased in the name of the King and redesignated to SNL, the land cannot be resold or restored back to ITL status. In addition to the British funded land repurchase program, Tibiyo has purchased ITL land in the name of the Swazi Nation for redesignation as SNL.

Based on the land use plans, some repurchased ITL has been converted to normal individual SNL homestead tenure while some has been leased for commercial purposes to agribusiness entities. Most of the SNL land under such commercial leases is highly suited for export crops or commercial timber production. It is quite common that these leases are with non-Swazi owned agribusiness corporations. Tibiyo, which is ultimately responsible to the King, often takes a controlling equity interest in such agribusiness enterprises to ensure that commercial development is consistent with the national interest.

ITL lands purchased in the name of the Swazi Nation are titled to the King and designated Crown lands. Many farms operated by the government are on these lands. They cannot be sold by government to the private sector. However, physical improvements located on the land can be sold to the private sector at their market value. Government operated lands can be converted to SNL individual or group customary tenure. The latter is often in cooperation with donor-funded development projects.

D. Macroeconomic Policies and Programs

1. South African Customs Union Agreement

Swaziland is a member of the SACUA along with Botswana, Lesotho, and South Africa. The agreement, in effect since 1969,

consists of a public document amended by public and secret memoranda of understanding. The secret memoranda provide specific working arrangements and interpretations of public clauses. Article 12 of the SACUA sets terms under which agricultural commodities are traded by the member nations.

Although the SACUA defines a free trade area between member countries, it does not prevent regulation of agricultural imports. It does require, under Article 12, that such regulation be the subject of a bilateral agreement between the countries involved and enacted as part of a program to promote orderly marketing of domestic agricultural products. It contains a reciprocity provision which requires that arrangements regulating the marketing of an agricultural commodity in one country, shall be applied equitably in the others.

The SACUA permits an industry to be protected as an infant industry for up to eight years. Moreover, imports can be regulated through the issuance of permits to promote the orderly sale and marketing of products in the receiving country without recourse to formal negotiation, once a general marketing agreement has been instituted and recognized by the member states.

Administrative mechanisms available under the agreement to promote orderly trade in agricultural commodities are regularly used by all members. In this regard, each country has enacted legislation to promote the orderly marketing of its produce, which includes anti-dumping regulations. The RSA has instituted the most comprehensive set of such marketing arrangements for the protection of its agricultural and agribusiness industry.

Agricultural marketing boards in all four countries provide mechanisms within the context of Article 12 to promote development of local commercial agricultural and agribusiness industry.

Article 12 also supports the promotion of professional discussions and exchange of technical information between SACUA members and for "the improvement and extension of marketing arrangements."

2. Monetary and Fiscal Policy

Swaziland is a member of the Common Monetary Area (CMA) jointly with the RSA and Lesotho. Its currency trades at par with the South African Rand. As a member of the CMA, it adheres to RSA monetary policies, and has ready access to RSA currency and capital markets.

Swaziland levies a flat tax of 37.5 percent on business income with the exception of mining which is eligible for a 27 percent rate on the first E20,000 of taxable income. Agri-

cultural income earned by homesteads on SNL is not subject to business tax. Certain capital expenses including irrigation and fencing can be depreciated within the first year. Up to 50 percent of new plant and equipment can be depreciated within the first year. New manufacturing plants can receive a five-year tax holiday.

Swaziland authorities do not attempt to compete with homelands in offering businesses short-term incentives. Instead, they promote the favorable political climate and labor force stability as major attractions for foreign investors with intentions to make long-term commitments to the country.

3. Commercialization and Private Sector Development

The MOAC is actively pursuing separation of business activities from the regulatory activities of the marketing boards for which it has ministerial oversight. The following two components are involved in this policy:

Privatization

Privatization involves transfer of existing government or parastatal business activities to the private sector through limited liability companies in which the government is a minority shareholder or is not involved in asset holdings. In the case of a joint venture, day-to-day management control remains with the private sector.

Commercialization

Commercialization refers to situations where government or a marketing board retains a majority or equal share holding with a private sector company through a joint venture. Although a public sector enterprise, day-to-day management control is retained with the private sector partner.

4. The Public Enterprises (Control and Monitoring) Act, 1989

To improve the regulation of public sector enterprises, Parliament has enacted (with the consent of King Mswati III), the Public Enterprises (Control and Monitoring) Act, 1989. The MOAC has under its jurisdiction several public sector agribusiness enterprises (PSAEs) included in the act.

In recent years the government has become increasingly concerned about the performance of these and other PSAEs under the jurisdiction of the line ministries. This concern was expressed in the Fourth Development Plan which highlighted the need to improve "control over parastatal expenditure and policies" (p. 297).

PSAEs accounted for over 43 percent of the public or publicly guaranteed debt in 1984/85, up from about 22 percent in 1981/82 (Coopers and Lybrand). Moreover, the government has no means of predicting requests for financial support from enterprises since no formal financial projections or monitoring of parastatal performance have been carried out. While line ministries are responsible for monitoring the PSAEs and for presenting requests for subventions, loans, or grants to the Minister of Finance, little contact has taken place. Ministry involvement with PSAEs was usually provided through allocation of a seat on the board to the principal secretary of the responsible ministry. More often than not, representation was delegated to junior officers. Additional formal oversight responsibilities were usually not required under the respective organizational charters.

Consequently, most PSAEs operated with a high degree of autonomy but with little accountability or formal performance review. The Coopers and Lybrand report concludes that the belief exists in some quarters of government that the "mere creation of a parastatal entity relieves government of a financial burden since parastatals are automatically self-supporting."

To address the concerns of government over the operation of PSAEs, the PEU was established in the Ministry of Finance under the Public Enterprises (Control and Monitoring) Act of 1989, following recommendations contained in the Coopers and Lybrand report. PSAEs falling under the jurisdiction of the PEU as defined by the enabling legislation are: Central Cooperative Union, National Maize Corporation, Swaziland Cotton Board, Swaziland Dairy Board, and National Agricultural Marketing Board.

Under the terms of the act, each PSAE is required to submit to the PEU, within four months of the end of its financial year, a "report on its operations which together with a copy of its annual audited accounts as well as any report by the auditors on its management and accounting practices." In addition, quarterly financial and operating statements are to be submitted to the PEU within one month of the close of the quarter.

On an annual basis, to promote orderly development and planning, each PSAE is required to prepare and submit to the PEU annual estimates of its profits and losses, capital expenditure, cash flow, and balance sheet projections for the next financial year.

The act affirms specific management reporting responsibilities of the PSAEs to the "responsible minister." In the case of the PSAEs identified above this is the Minister of Agriculture and Cooperatives. A PSAE must gain approval in writing from the

minister (acting in consultation with the Cabinet standing committee on public enterprise, created by the act) before undertaking the following actions:

- o any major adjustment to the level or structure of tariffs, prices, rates, or other fees or charges;
- o any major investment;
- o any major expansion of its operation;
- o any major adjustment to the level or structure of staff salaries and wages or other terms and conditions of service of its staff; and
- o close, sell, liquidate, or divest any major part of its business.

The act further provides that the minister can take direct control of any of the above actions after consultation with the PEU. Also, it may, with the approval of the standing committee, determine the policy of the PSAE in the case where current policy is not adequate.

Finally, the act provides for the creation of a disciplinary tribunal, including senators and members of the House of Assembly to address and determine appropriate action against officers and members of the PSAE board. Matters are brought to the attention of the tribunal by the Minister of Finance, to whom the PEU is responsible.

The Public Enterprises Act, for the first time, clearly states the planning and financial reporting obligations of the PSAEs to their responsible line ministries, and the oversight and management responsibilities of the ministries to PSAEs in their jurisdiction.

E. Agricultural Data Systems

1. Animal and Crop Production and Yields

Agricultural production and yield data are collected by the Central Statistics Organization (CSO) and by various units in the MOAC. The CSO conducts the agricultural census, in principle, on a decennial basis. This provides baseline information on crop production activities of rural homesteads and areas under cultivation by crop. It is scheduled to conduct annual surveys of crop plantings and yields to update census information.

The MOAC extension service has provided administrative data of crop sales based on farmer estimates and livestock numbers. Coverage is limited to areas serviced by extension service staff. Output estimates of cotton and maize, and use of inputs, is conducted for a sample of farmers.

The MEU conducts field surveys in the RDA covering crop production, yields, and other development indicators.

The DVS provides annual smallholder-owned livestock numbers based on diptank registers in the July/August period. Information on cattle breeding, auction sales from breeding ranches, livestock slaughtering, and nutritional value of grass are collected from administrative sources, then tabulated and published.

With the exception of livestock numbers provided by the DVS, the remaining data systems in the MOAC and in the CSO have been unable to collect and release required data over the past few years because of shortages in trained personnel.

The animal husbandry division maintains a well functioning data processing unit able to process, tabulate, and release information on a regular basis.

Extension surveys have continued, but have been poorly focussed. Lack of personnel has made it difficult to tabulate and publish the data.

The conceptual base for data collection by the MEU declined after donor support for the RDA program was not forthcoming. While data are being collected, it is not processed or tabulated on a regular basis.

An interministerial task force has functioned since early 1989 to rationalize the data collection processing and publication activities of the various ministries and units. Technical assistance has been provided to the MOAC by IFAD and the USAID/CSRET, and to the CSO by the Statistical Organization of the European Communities (SOEC).

An agreement has been reached, to be implemented in 1990, allowing MEU field enumeration staff to supplement CSO staff in collecting annual production and yield data using the CSO rural household sampling frame. The severe personnel shortages of a few years ago have been largely overcome and it is expected that the new conceptual framework will eliminate the duplication of agricultural survey and data processing efforts by the CSO and the MOAC.

The extension service data collection program will be reoriented to collect farm management data from a wider sample of farmers.

2. Early Warning System

An early warning unit (EWU) was started in 1987 through SADDC. Funded by FAO, it uses a meteorological data base to

project crop yields within a standardized forecasting formula. Production surveys conducted at several stages during the growing season provide a second set of data from which crop forecasts are made. In Swaziland it makes forecasts for maize only. The activity is implemented in the MAU.

3. Inputs

Beginning in 1989, the CDD is collecting data on imported and distributed fertilizers, chemicals and veterinary products distributed, and maize marketed through the CCU.

4. Commodity Marketing

The FAO has implemented the Marketing for Rural Development Project since 1979 to develop marketing services for SNL produced maize and other crops. The first Market Information Bulletin was issued in January 1980 with information on livestock and fruit and vegetable sales published on a monthly basis. Coverage was reduced in 1984 with the loss of a market reporter and further staff cutbacks in 1986 led to the discontinuation of fruit and vegetable information. Publication of livestock data has continued.

The opening of NAMBoard in April 1986 again provided the basis for collection of fruit and vegetable data. In January 1989, AgriView, a quarterly market news report, was begun by the MAU. It contains updates of commodity price and marketing information, and articles on topical marketing issues.

The NMC maintains monthly records of milling throughput, imports, domestic purchases, and prices for maize and maize products.

SECTION VI

IMPLEMENTATION OF AN AGRIBUSINESS DEVELOPMENT STRATEGY IN THE MOAC: ISSUES NEEDING FURTHER REVIEW

The previous sections identified existing patterns of subsistence and commercial agricultural production among smallholder homesteads, both on SNL and on ITL. These patterns were contrasted with commercial production conducted on large estate ITL. Existing policies, programs, and institutions defining the framework within which substantive MOAC policy objectives are implemented were also identified. In this final section, implications and policy frameworks of these production patterns are assessed within the context of:

- o achieving expanded smallholder commercial production through deliberate demand-side market interventions; and
- o strengthening MOAC capability to effectively promote commercial agricultural development including planning and monitoring activities, education and training, and information gathering and dissemination.

A. Achieving Food Self-sufficiency in Basic Commodities and Promoting Export Development

Expansion of commercial agriculture is consistent with the major MOAC policy objectives to achieve self-sufficiency in basic foods and to promote expansion of export crops. To develop this issue, it is useful to separate the discussion into two parts, homestead or family self-sufficiency, and national self-sufficiency and export development.

The objective of homestead self-sufficiency is primarily related to improved family welfare, including improved nutrition, through expanded home production of a diversified group of crops. This objective is achieved primarily by reducing the cash outlay for food through expanded production for home consumption. To the extent that a surplus exists it may be sold, but production for sale is a secondary, not a primary, purpose.

National self-sufficiency relates primarily to meeting food needs of non-farming homesteads and landless urban residents. The CAPM project seeks to develop marketing systems, institutions, and organizations to facilitate the commercial production process associated with achieving national self-sufficiency by maximizing the welfare of the Swazi consumer.

Similarly, marketing systems to promote export expansion are developed along commercial lines and are generally expected to be self supporting in the long run. These production and marketing

systems must also provide products able to compete in regional and world markets.

1. Production Issues Associated with Achieving Household Self-sufficiency

Crops grown for home production save cash. Reduction of cash outlay can be an important incentive for the homestead to engage in diversified agriculture.

Using maize as an example, 70 kg of mealie meal purchased at retail in 2.5-kg bags would cost about E75. This is the amount of money saved by growing maize for home consumption. However, for maize that is sold as whole grain on the formal market, the price for the 1989-90 marketing season is only E26 per 70-kg bag. With this differential between own use value and commercial sale value there is limited incentive for smallholders to plan production beyond their regular household need, especially if other sources of income are available.

It is generally accepted that most rural Swazi males (and some females) would prefer to work off-farm for wages than to expand production of basic food crops. This suggests that attempts by the MOAC to promote marketable agricultural production on a regular basis, beyond that required for household consumption, will fail unless the surplus provides the farmer with more money than can be earned by working for off-farm wages.

The review of maize production in section II indicated that maize was the single most widely grown crop by both SNL and ITL homestead farms. More than 3/4 of all land planted to crops in 1983/84 by smallholders was planted to maize. Recent data provided by the MOAC suggest that these trends still prevail (MOAC Annual Report, 1987).

A relatively small amount of maize is now being produced on estate ITL farms. Total commercial maize sales from smallholders varies widely from year to year. A high of 23,000 mt was sold to the NMC in 1986/87, with sales since 1985 holding at about 8,000 mt. By comparison, during the drought years of 1983/84 formal sector marketings dropped below 100 mt. As a result, it is concluded that most Swazi smallholders grow maize primarily for home consumption, with only the surplus destined for market sales. During favorable growing seasons, commercial marketing may be quite high, but will drop off during poor years.

Other basic food crops for which self-sufficiency objectives may apply include sorghum, beans, and vegetables. In all cases, the amount of land devoted to these crops does not exceed 1,500 ha or less than .3 ha per homestead. The same set of characteristics apply to all other homestead-produced food crops grown primarily for family consumption. The value to the family

to replace food items purchased at retail is considerably higher than its value when offered for sale in commercial markets. Therefore, it can be reasonably concluded that, as with maize, most homesteads will raise these other food crops primarily for home production.

2. Production Issues Associated with Achieving National Self-sufficiency

A steady supply of produce must be available to supply existing and potential demands beyond the farming homestead, either in urban areas or in other non-farming homesteads. It is not possible to continuously meet national food self-sufficiency objectives simply with production from homesteads whose motivation is to produce primarily for home consumption. It requires, in addition, production from smallholders and often from largeholders who consciously produce, on a regular basis, a surplus beyond their own family requirements.

Discussion of commercial production is often limited to crop related activities. There is major commercial potential in animal and aquatic production as well. Dairy development has long been a MOAC priority objective. More recently, poultry for meat production has received additional attention. Smallholder egg production to meet local demand may have commercial merit. With the abattoir under new management, programs to promote smallholder commercial beef and mutton production require further analysis. Expansion of commercial pig production may be feasible. Reconstruction of the system of dams destroyed by Hurricane Domoina may again provide the basis for fish production on a commercial basis.

3. Marketing Implications for Achieving Self-sufficiency

Production to meet food requirements of the urban or non-farm rural consumer are handled through either informal or formal marketing systems. Additional activities incurred in the formal marketing process cause costs to increase thus raising the price to the consumer. Marketing economists usually refer to these "costs" as value added. This is because marketing services either result in an improved product or save the consumer additional money or preparation time.

Two major components in the marketing of most agricultural products are transportation and commodity aggregation. Provision of these services for farm-produced commodities provides the consumer with more goods at lower prices than would be paid if bought directly at the farm.

Because transportation is such an important cost component, it often determines where a commercial crop is grown and where, if applicable, it is processed. For example, sugar mills are

located near the source of supply as the cost of transporting sugar in cane form is considerably higher than transporting it in the first processed form. This is true for all bulky farm products.

Similarly, farmers growing perishable fruits and vegetables near large urban markets have an advantage over farmers located far from such markets. When developing smallholder commercial enterprises, distance from major marketing centers is usually the principal factor affecting the potential for successful long-term survival.

The role of a wholesale or retail market is to efficiently provide commodity aggregation services for the farmer. By aggregating agricultural products, marketing services reduce costs to consumers and offer a greater variety of produce.

Hence, the cost of transportation and commodity aggregation services will be lower if a large regular supply is forthcoming from farmers. Similarly, consolidation of farms into larger units or grouping smallholders into contiguous blocks will result in reduced transportation and product aggregation costs.

This discussion greatly oversimplifies the wide range of services provided by modern marketing systems. However, it illustrates the point that farms located near marketing or consumption centers produce and sell large quantities on a regular basis and will be most cost-effective.

4. Marketing Systems to Promote Development of Export Crops

The logic for developing and operating marketing systems for export commodities parallels that for achieving national self-sufficiency in basic food supplies. Such commodities will have to be produced on a commercial basis and competitive commercial marketing systems will have to be developed for targetted markets. Marketing systems will also have to support smallholder production requirements.

B. Implications for MOAC Marketing Policy and Implementation Strategies to Achieve National Self-Sufficiency and to Promote Smallholder Export Development

Operating costs of a marketing system designed to handle surplus homestead production for commercial sale can be significantly higher than a system designed for farms which produce from a commercial set of production objectives. As as result, there is little incentive for the private sector to establish a commercial marketing system for subsistence crops.

Subsidies will generally be needed to market surplus subsistence crops if the objective of national self-sufficiency is to be addressed using produce from homesteads producing primarily for family consumption.

Marketing systems developed to achieve national self-sufficiency and to handle export commodities will most likely be self-supporting, at least in the long run. In some cases, however, public support systems to provide grading and quality control may be needed.

The same economic principles apply for marketing input supplies. Distribution systems to serve a large number of smallholders in rural areas will result in higher costs than those designed for a smaller number of large farmers concentrated close to supply sources.

Achieving homestead self-sufficiency is closely related to a long-standing MOAC policy to promote improved rural homestead well-being and nutritional standards. Public costs incurred for providing input and product marketing services can be justified as legitimate social costs. At one time incorporated into the RDAP and supported largely by donors, most of these costs now are covered by the Swazi government.

Conversely, marketing costs associated with input and produce marketing systems for commercial production to meet self-sufficiency objectives should be free from public subsidies. MOAC policies and programs are not yet developed to achieve these objectives.

1. Marketing Services Provided by the CCU

In developing national MOAC planning priorities to support homestead self-sufficiency, CCU can be expected to have a major role. The following questions are relevant in discussing this role:

- What is the long-term role of the CCU input and produce marketing system? Should it be converted to a bona fide farmer cooperative? Should it remain as a public marketing institution? Should it be transferred to the private sector? If it is eliminated, would the private sector offer alternative and better services?

- If CCU reverts to a bona fide farmer cooperative, or a private sector operation, can it serve the needs of cooperative and non-cooperative members? Can it cover the social costs associated with implementing a marketing strategy to support homestead self-sufficiency? Are subsidies needed in the long run?

- o If CCU is converted to a farmer cooperative, are farmers capable of operating a marketing organization designed to carry out government social policy? If so, is this consistent with the basic objectives of farmer cooperatives? How will potential conflicts between farmer and government interests be equitably resolved?

- o If CCU is converted to a private sector operation, how can the social costs of implementing a homestead self-sufficiency policy be addressed? Are subsidies needed?

- o If CCU remains a public marketing organization, how can long-run efficiency be maintained while addressing social requirements of a marketing system designed, in part, to implement a policy of homestead self-sufficiency?

- o In all cases, how can social costs associated with maintaining a marketing system to support a homestead self-sufficiency policy be maintained? Where will necessary funds be found?

- o What should CAPM's role be, if any, in the future evolution of the CCU marketing system?

2. Additional Marketing Systems to Meet National Self-sufficiency Requirements

In developing a commercial strategy to achieve national self-sufficiency, existing marketing institutions may need to be modified and additional systems developed. In addressing these issues, the following questions are relevant:

- o Can existing marketing systems and organizations be used to meet needs of new products or to meet requirements of existing products which will be produced commercially?

- o Will short-run subsidies be required to initiate new marketing systems? If so, where will funds be found?

- o Under what situations can vertically-integrated structures be most efficiently used? Under what situations will processing activities be required?

- o Under what situations will special storage or transportation systems be required? Under what situations will production depend on obtaining special quotas or other market protections?

- o What should CAPM's role be in the future development of marketing institutions to promote national self-sufficiency?

3. Marketing Systems to Expand Commercial Export Opportunities for Smallholders

Marketing export commodities often requires development of specialized marketing organizations to meet needs of specific commodity growing, processing, and marketing conditions. Additional considerations may be required to ensure viable long-term smallholder participation. In addressing this issue the following questions need to be considered:

- o What crops provide the best opportunities for export expansion? Are they now being produced? If not, can they be easily produced by smallholder commercial units?
- o What kind of marketing institutions are required for each crop? Can existing systems or institutions be used?
- o Will subsidies be required to initiate production? Will special import quotas be required? Will special storage or transportation requirements be needed?
- o Will a partnership between smallholders and largeholders be required to effectively carry out marketing and trading activities? If so, can these relationships be maintained in favor of the smallholder in the long run?
- o What is the CAPM role, if any, in developing individual smallholder export opportunities?

C. MOAC Infrastructure to Promote Basic Food Self-sufficiency and Export Development Objectives

1. Regulating and Monitoring Commercial Production and Marketing Activities

The MOAC has statutory authority to regulate imports of food products to maintain orderly marketing of domestic products. It can regulate and monitor the operations of marketing boards and parastatals and has further authority to set farmer prices for certain agricultural products. In the past, it exercised only a few of its authorized powers to promote development of commercial agriculture among Swazi citizens, having deferred many of these to the MCIT. The MOAC is currently exercising more authority, but organization and implementation procedures are still not completely in place.

Important implications for both public sector agricultural enterprises and line ministries flow from responsibilities and activities allocated to each under the Public Enterprises (Control and Monitoring) Act of 1989 and the formation of the PEU in the MOF. For the first time, a set of common working relationships between responsible ministries and Public Sector

Enterprises (PSEs) has been defined. In both cases, greater effort is required to achieve improved performance expected under the terms of the act.

MOAC authority to regulate, monitor, and promote commercial agricultural expansion to achieve national food self-sufficiency and export development and to meet obligations under the act require further review and analysis. The following questions are relevant to such a review:

- o What are the statutory authorities available to the MOAC to support development of national food self-sufficiency and export expansion? Is further analysis of these powers required?

- o What are the MOAC's organizational, staffing, and staff training needs for implementing its authorities with respect to monitoring, regulating, and managing marketing boards and other agricultural parastatals? Can existing MOAC units be combined or expanded to carry out these activities? If so, how?

- o What are the MOAC's organizational, staffing, and staff training resources for analyzing and gazetting prices of scheduled agricultural commodities? Can existing MOAC units be combined or expanded to carry out these activities?

- o Where in the MOAC should the PSE monitoring and policy responsibilities reside? What are the organizational, staffing, and staff training implications? Can existing MOAC units be combined or expanded to carry out these activities?

- o Is an agribusiness division or department needed to coordinate the disparate marketing activities now scattered throughout the ministry?

- o Are additional MOAC powers required to facilitate commercial production to achieve national self-sufficiency and export development? What activities or powers need to be curtailed or modified to encourage expanded private sector development?

- o What is the CAPM role, if any, in assessing existing MOAC authorities and addressing modifications required?

2. Program and Project Analysis and Planning

A MOAC programmatic orientation for homesteads with commercial production capabilities and with self-sufficiency objectives is required. It must shift analytical and planning

resources away from the familiar long-term project planning/ programming/monitoring/evaluation cycle associated with major donor activities.

A focus on rapid turnaround "commercial action assessments" which include preparation of business plans based on objective cost and return information may be more appropriate. This is because the focus is on identifying discrete commercial opportunities rather than introducing new public infrastructure which requires widespread coordination of ministerial activities. Moreover, the object of these plans is private sector commercial expansion rather than expansion of public sector entities.

The planning and analysis of commercial entrepreneurship and management skills for implementation of new agricultural undertakings should come from local sources. To be successful, motivation must come from Swazi staff. An appropriate expatriate role is to provide advice and specific technical skills not locally available.

The most appropriate location for these planning activities is the economic analysis and planning section of the MOAC. However, interaction and coordination with crop, livestock, and other subject matter specialists and with appropriate research officers is desirable. Modalities for achieving this coordination will need to be worked out.

Preparing commercial action analyses to promote agribusiness projects and activities is the logical follow-on to the recently completed subsector strategies prepared in the MOAC with USAID program assistance. This document can assist in identifying areas where specific commercial development can take place.

Before implementing a commercially oriented planning and analysis program within the MOAC, the following issues need to be addressed:

- What process is used to identify potentially viable commercial agribusiness undertakings? Where should this process be located? Is there a need for a special staff analysis unit attached to the office of the principal secretary?

- What is the role of district extension staff in the MOAC planning process? What is the role of farmers? What is the role of headquarters staff?

- What criteria should be used to develop commercial action assessments? Who should be involved in making them?

- What impact will involvement of NSMS and research division staff in making these assessments have on their existing workloads? Do new priorities have to be set? Can work be initiated within existing priorities?

- What role can be played by marketing staff now assigned to the MAU in preparation of commercial action assessments? Is there a role for district marketing officers?

- What is the CAPM role, if any, in promoting MOAC involvement in preparing commercial action assessments?

3. Data and Information

The MOAC has a wide variety of available data and information regarding production and marketing statistics, but has been unable to systematically collate and publish it. Consequently, the data is not easily accessible for program and project development needs associated with commercial agribusiness efforts. An interministerial task force has been meeting for the past few months and plans have been prepared to rationalize data collection and publication activities between MOAC departments and the CSO. It is not clear to what extent this data will support development of commercial action assessments.

Development and management of commercial agribusiness activities require commodity-specific data and information generally not supplied by public sector information systems. Most will have to be obtained specifically for each potential commercial development project.

General and specific production and marketing data available on a commodity-by-commodity basis is required for planning and monitoring purposes. For example, if the basic viability of a project is determined, additional site-specific information soils, weather patterns, road and transportation systems, marketing and processing facilities, infrastructure, and input supply availability will be necessary. Finally, the potential for overcoming constraints associated with each individual commercial venture will need to be assessed.

Specific questions regarding data and information availability include:

- What information can be generated from available surveys and data systems for use in developing commercial action assessments?

- What additional information is required? What can be provided through recurrent public data systems? What needs to be provided through commodity specific data systems?

- o Is there a role for NSMS in maintaining commodity specific data bases for use in making commercial action assessments? If so, what is it? Can all be involved or just some?

- o What information is needed to manage new commercial ventures? Can this information be general or must it be specific to each business activity?

- o What MOAC organizations should be charged with collecting and publishing general production and marketing data? Are new organizational units required? Can existing units do the job if priorities are better articulated?

- o What is the CAPM role, if any, in developing generalized data systems and specific data systems?

4. Education, Training, and Research

Several education and training institutions and organizations exist which can impact on promoting commercial agribusiness development. These include the Luyengo campus of the UNISWA where a CAPM-affiliated visiting professor of management is assigned. The Mananga Agricultural Management Centre (MAMC), a privately funded organization associated with the CDC, has long provided management courses related to agricultural enterprise. CODEC, organized in 1976, has provided business management training to managers of cooperative marketing enterprises and to cooperative movement executive committees. In recent years training has been available to non-cooperative members as well. The MITC in Manzini provides basic training in agricultural production and marketing, using an on-the-job approach. Farmer training centres (FTC) in each region provide venues for farmer short courses.

The MOAC extension service has a wide range of NSMS available, but only limited emphasis has been placed on providing training targeted to farm management as a business discipline.

The research division coordinates its program with the extension service, but is not administratively linked with it. Its current program more strongly supports development of homestead self-sufficiency than it does national self-sufficiency or export promotion. Moreover, the faculty of agriculture at Luyengo is seeking to strengthen the research activities of its faculty and students.

Education and training activities to promote private sector development with technical business management skills including bookkeeping and accounts management require effective integration of education and research institutions. Further, development of

course curricula and research programs to implement the desired activities must be developed. In achieving this capability, the following questions are appropriate:

- Should the training facilities of CODEC be used only by members of the cooperative movement? Or should they be, as a matter of policy, available for all individuals for whom agribusiness management training is required?

- Is specialized training to upgrade the skills and professional levels of CODEC staff required to permit it to effectively conduct a broader and more comprehensive program of business training and education? If so, what is needed? How can this be coordinated? Who will prepare the new course curricula?

- What additional training is required to upgrade the business management skills of the MOAC extension staff? Are there roles for the MAMC, Luyengo, and CODEC?

- What curriculum development activities are necessary to make more effective use of Luyengo, Mananga, CODEC, and MITC in conducting agribusiness related teaching and educational programs? Is specialized assistance required to update existing programs and curricula?

- What is an appropriate role for the MOAC extension service in promoting commercial agribusiness development? Is additional emphasis on teaching business-related subject matter skills to generalist agents required? If so, who should conduct this training?

- Is the MOAC extension service able to provide the specialized commodity specific technical focus required to operate effectively within a commercial development program? If not, what is required to make it more effective?

- Is the major extension role one of coordination and promotion to identify potential agribusiness development opportunities and commercial farmers? Or should it be teaching and demonstration? If the latter, how should programs be structured?

- Can and should individual field extension agents be reassigned to work specifically with a small group of commercial farmers on specific production sites? Is it feasible that these agents be under the direction of a commercial manager outside the extension service to provide more direct day-to-day supervision and on-the-job training of production activities?

- What program planning activities are required to make the MOAC extension service more effective in promoting commercial agricultural development?

- Will reorganization of research and extension into a single department provide a more problem-oriented approach to the research program? If so, is this desirable? Should the research program become more oriented to addressing problems of smallholder commercial farmers?

- What is the role, if any, for the research division to become more closely involved with the desired expansion of faculty and student research activities at the Luyengo campus of UNISWA? Can student research projects be coordinated with the proper research division? Should a more formal future relationship be defined between the research division and the faculty of agriculture?

- What is the proper mix between research addressing problems of homestead self-sufficiency, national self-sufficiency, and export marketing? Does the marketing research program of the division require strengthening? If so how?

- What is the CAPM role, if any, in developing or promoting educational and teaching programs to advance commercial agricultural research, production, and marketing activities?

D. Implication of Credit and Savings Policies on Expanding Commercial Smallholder Production

1. Commercial Credit

Credit policies of lending institutions provide the framework for commercial farm loans. Concessionary interest rates of 14 percent are available for seasonal credit to smallholders and in some cases for purchase of equipment. However, discretionary rates for seasonal credit are available only up to E1,000 with the exception of special arrangements for cotton growers. The lending limits of existing loan programs for smallholders are well below those normally required by many commercial farmers and therefore do not take into consideration requirements of smallholder commercial farmers with expanding businesses.

Consequently, additional study and possible action may be required to modify existing credit policies to foster more rapid growth of viable smallholder commercial enterprises.

The following questions are relevant:

- o Will smallholder commercial development proceed at a faster pace if existing limits are increased on loan amounts which qualify for discretionary interest rates? Are additional studies needed to determine the potential effect from such a policy change?

- o If it is determined that faster smallholder development will occur from raising loan limits eligible for discretionary rates, how can this best be implemented? By creating a separate agricultural development bank? By adding to the lending authority of the Swazi Bank for loans made at discretionary rates? Are there other options?

- o Is there a role for cooperative credit associations in administering developmental credit programs for expanding smallholder commercial farmers? If so, can they be structured to meet the requirements of commercial farmers and maintain the commercial viability of the cooperative credit organizations?

- o What is the CAPM role, if any, in this activity?

2. Credit Options for Producers Growing to Meet Household Self-sufficiency Requirements

Analysis of agricultural production to meet homestead self-sufficiency needs suggests that the primary purpose of farm production for many homesteads is for home consumption rather than for commercial sale. As a result, production generally does not provide the means for repaying seasonal input or long-term loans for equipment purchase.

This may be the major reason for the high default rates associated with many previous smallholder loan programs. It is also an important reason why commercial lending institutions adopt criteria which limit loan availability to homestead farm production units. The limited availability of commercial loans to homesteads producing for family consumption suggests that additional attention is required. Relevant questions include:

- o Are commercial lending sources the most suitable to meet credit needs of farms producing primarily for homestead self-sufficiency? If yes, how can such loans be provided to meet the needs of the producer and of the lender? If no, what are alternative sources of credit?

- o Can consumer credit institutions meet the needs of the farmer who produces primarily for homestead self-sufficiency? If yes, are they available or will they have to be created?

- o Is there a role for cooperative credit and savings programs to meet credit needs of this group? If so, how can this best be achieved? Does the current cooperative credit and savings program effectively meet homestead needs? If not, what modifications are required?

- o Is there a role for commercial banks in providing credit to smallholders within existing consumer credit policies and guidelines? Are there constraints which limit their abilities? If yes, what are they? How can they be overcome?

- o What is the role, if any, for CAPM in addressing this credit issue?

E. Land Tenure and Land Use

Land tenure policies are designed to provide all Swazi citizens with a permanent and inalienable access to farm land to meet basic food production requirements. Under this tenure system, all land designated as SNL is held in trust for the people by the King. Local chiefs are delegated to manage this land in his name.

For many years, the major orientation of MOAC policies was to promote homestead food self-sufficiency and general rural development on these SNL lands. In recent years, however, this orientation has expanded to include commercial production on SNL homesteads as well as commercial production on ITL homesteads. In addition, a greater emphasis on monitoring and regulating certain commercial production and marketing aspects of estate ITL has occurred. At the same time, many programs relating to general rural development have been phased out.

The Swazi nation continues to pursue actions to convert title deed land to SNL tenure status.

Clearly defined land tenure policies are being pursued. Commercial agricultural development will take place within them. Yet, the case can be made that the absence of a farm land market will retard certain types of commercialization as efficient or aggressive farmers will be unable to expand at the most optimum rate. In the initial stages of smallholder commercial development, limitations on the marketability of farm land are not expected to have serious consequences. In the longer run, however, difficulties might arise. Within this context several questions arise:

- o Is it possible to predict the limitations of SNL tenure, if any, on smallholder commercial agricultural development by commodity group? If so, are there ways to eliminate these limitations?

- o Do existing land tenure policies favor commercial development of certain commodities over others? If so, which ones are the most appropriate?

- o What is the scope for commercial agricultural development on ITL homestead? What are the constraints, if any, within existing MOAC policy for developing commercial agriculture on smallholder ITL?

- o What is the CAPM role, if any, in addressing these questions?

F. Farmer Cooperatives and Farmer Cooperation

The farmer cooperative movement has been a major development tool to promote farmer education and agricultural development through formation of cooperative business enterprises. Farmer cooperatives were organized under the Cooperative Societies Proclamation of 1964 to promote input supply and product marketing activities. The legislation requires adherence to complex articles and bylaws and purchase of shares by members. It allows the formation of societies with several categories of shareholding and permits voting rights to be distributed by shares rather than by one vote per member. It includes provisions to enable the registrar of cooperatives to grant a cooperative society with a monopoly marketing status once a percentage of market share has been obtained.

Within this context, the legislation provides for the organization of a legal business entity (the cooperative) to which farmers and others are members in support of furthering individual economic well-being through collective action.

In addition to its role as a farmer-owned business development tool, the cooperative movement has been used to implement government agricultural development policy. This creates the potential for conflict if government-supported actions detract from the business objectives of the cooperative. In the past, ill-advised credit promotion schemes have had negative effects on the business viability of cooperatives resulting in loss of confidence by farmers.

The cooperative structure initially developed for the cooperative movement in Swaziland followed traditional European models for a three-tier management arrangement. Local or primary societies report to regional or secondary societies, which report to a national or apex society. With experience, it was realized

that this structure was too complex for conditions in Swaziland and secondary societies were disbanded. However, the statutory authority requiring a three-tiered structure has not been amended.

Within the context of a business organization, it can be questioned whether the formal cooperative structure should be the only form of group production organization supported by the MOAC for commercial farmer development.

A cooperative's success depends greatly on its viability with farmers as a movement. Hence, it may be difficult for farmers who produce primarily to achieve homestead self-sufficiency to effectively manage cooperatives as a business enterprise. Other forms of cooperatives, such as a savings and credit cooperative, may be more appropriate for these homesteads.

Other organizational forms, such as associations, may be better suited to achieve farmer cooperation where understanding of commercial business requirements are minimal. In other commercial undertakings, private sector input supply or product marketing may be more efficiently conducted by a private company. Bargaining cooperatives may have a role in representing farmers selling products to private sector buyers.

To achieve a more pragmatic structuring of cooperative activity within the context of Swazi needs and traditions, the following questions must be considered:

- What forms of group organization could bring about desired commercial development of smallholders? What is the role of formal cooperatives? What is the role of formal and informal associations? What is the role of formal schemes? What is the role of other loose informal groupings?

- Should the Cooperative Societies Proclamation be amended to better reflect Swazi needs and customs? If so, how should this be done? When should this be done?

- Under what conditions, if any, can private sector business enterprises better serve commercial farmers than formal cooperative structures?

- What is the CAPM role, if any, in addressing these questions?

ANNEX A

INDIVIDUALS AND ORGANIZATIONS CONTACTED

	Individual	Organization
1.	Mr. Gordon Bailey	IFAD Marketing Advisor, Nokwane Market
2.	Mr. John Canty	Swaziland Representative, Commonwealth Development Corp.
3.	Mr. Peter Capozza	Managing Partner, Kalipha Investments
4.	Mr. Roger Carlson	Mission Director, USAID
5.	Sister Judith E. Dean	Adm. Manzini Industrial Training Centre
6.	Mr. T. De Guefe	Advisor, Swazi Bank
7.	Ms. Leticia Diaz	USAID Human Resources Officer
8.	Dr. James Diamond	Research and Extension Training
9.	Ms. Nomathemba Dlamini	Dir. Dept. of Research and Planning, MOAC
10.	Mr. Absolam Dlamini	Asst. Commissioner, Cooperative Development Department
11.	Mr. D.M. Dlamini	Commissioner of Taxes
12.	Mr. S.Z.S. Dhlamini	Chairman, Swaziland Cotton Board
13.	Prince Phinda Dlamini	Chief Animal Production Officer, Dept. of Vet. Services, MOAC
14.	Mr. L. Dlamini	Marketing Manager, Central Cooperative Union
15.	Ms. Phumelele Dlamini	Asst. Project Officer, MCIT
16.	Mr. D. Dube	Sr. Poultry Officer, MOAC
17.	Ms. G. Dludlu	Chief Publicity Officer, Central Cooperative Union
18.	Mr. Robert Firth	Farm Chemicals Ltd.

19.	Dr. John Fischer	Policy Advisor, CSRET Project
20.	Mr. M. Forsyth-Thompson	Management Consultant
21.	Mr. Alonzo Fulgham	USAID Private Sector Officer
22.	Dr. Tesfai Gebremeskal	Head, Monitoring and Evaluation Section, MOAC
23.	Mr. J. Ginindza	CCU Manager, Matsapha
24.	Mr. Wilson Ginindza	Chief Accountant, Cooperative Department
25.	Mr. D. Gooday	Farmer
26.	Dr. N. Gumedze	Dir. Dept. of Veterinary Services, MOAC
27.	Mr. John Hunter	Coordinator, IFAD Small Farmer Credit and Marketing Project
28.	Ms. M.K. Huntington	Deputy Director, USAID
29.	Mr. Sam Hlophe	Senior Agricultural Economist Economic Analysis and Planning Unit, MOAC
30.	Mr. R. Hussey	Consultant
31.	Mr. Tom Jele	Executive Officer, Swaziland Cotton Board
32.	Mr. Charles Jenkins	Agricultural Development Officer, USAID
33.	Mr. Dixon Khumalo	Sr. Agricultural Officer (Tech), MOAC
34.	Mr. R. Kremer	Swazi Bank
35.	Mr. Patrick Lukhele	Director, Department of Agriculture and Extension, MOAC
36.	Mr. Robert Lockyer	Manager, Swaziland Citrus Board
37.	Ms. Dumisile Magagula	Head, Industry Section, MCIT
38.	Mr. S. Mamba	Sr. Range Management Officer, MOAC
39.	Ms. S. Masina	CCU Manager, Ngwempisi

40.	Mr. Job Mavuso	Sr. Dairy Officer, MOAC
41.	Mr. Jack Mbingo	Director, Cooperative Department, MOAC
42.	Ms. T. Mdluli	CCU Manager, Motshane
43.	Ms. Phumzile Mdladla	Sr. Marketing Officer, MOAC
44.	Mr. W.S. Mshengu	Deputy Commissioner of Taxes
45.	Mr. Jerome Ndzinisa	Dep. Commisioner, Cooperative Department
46.	Mr. M. Ndzinisa	CCU Manager, Piggs Peak
47.	Mr. Magalela Ngwenya	Chief Projects Officer, MOAC
48.	Mr. Chris Nkwanyana	Director, Research Division, MOAC
49.	Mr. Willard Nxumalo	Sr. Agricultural Officer (Ext.), MOAC
50.	Mr. John Paton	Marketing Advisor, MCIT
51.	Mr. Neil Patrick	Agricultural Economics Adviser, Research Division, MOAC
52.	Dr. Charles Pitts	Team Leader, CSRET Project
53.	Mr. Ian Rossiter	EEC Advisor, MOAC
54.	Mr. Scott Reid	Managing Partner, Khalipha
55.	Mr. Edward Seidler	FAO Marketing Specialist, Rome
56.	Mr. Bill Shaner	Farming Systems Adviser, Research Division, MOAC
57.	Mr. N. Simelane	CEO, Central Cooperative Union
58.	Mr. M.J. Simelane	Swazi Bank
59.	Mr. Aubrey Shongwe	Chairman, National Agricultural Marketing Board
60.	Mr. Herman Steppe	FAO Marketing Advisor, MOAC
61.	Mr. G.G. Tambiah	Legal Advisor, Dept. of Taxes
62.	Dr. Byron Tarr	Director, Public Enterprise Unit, Ministry of Finance

63.	Dr. R. Twala	Dep. MD, Swaziland Dairy Board
64.	Mr. H.C. van den Burg	Marketing Analysis Unit, MOAC
65.	Mr. Jameson Vilikati	Sr. Land Planning Officer, MOAC
66.	Mr. Derek von Wissel	Managing Director, SWAKI
67.	Mr. B. Zimmermann	Asst. Marketing Manager, Central Cooperative Union

ANNEX B

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