GRAIN MARKETING POLICIES AND FOOD AID IN LESOTHO:

IMPLICATIONS FOR FOOD SECURITY

BY

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I hereby certify that, unless specifically indicated to the contrary in the text, this dissertation is the result of my own original work.

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ABSTRACT

Food security is a necessary condition for the survival of every nation, household and individual. With the failure of the food self-sufficiency policy in Lesotho alternative food security objectives are suggested. Supply and demand factors need to be considered to develop a holistic and balanced view of food security. Maize marketing and pricing policies as well as food aid impact on food (in)security since they affect the movement and trade of maize grain and maize meal, the primary staple of Lesotho.

A study was conducted amongst policy makers, government officials, retailers and millers in Lesotho to review the maize marketing system and procedures for setting maize prices at producer, mill-gate and consumer levels. Set prices distort price signals which influence decisions to allocate and distribute resources to provide goods and services for markets. Lesotho is a net importer of maize grain, the major staple, implying that maize pricing and marketing policy affect food security. Results indicate flexible informal marketing channels, fixed formal marketing channels and declining real producer, mill-gate and consumer prices in recent years. Falling real South African Maize Board export grain prices and evidence of subsidies to commercial Lesotho mills explain these price trends. Changes to the one channel formal marketing system and nationally administered price structure that would encourage an open market system with less restrictive interregional maize trade are recommended.

The extent of food aid dependence in Lesotho and the possibility of reducing reliance on food aid are also analyzed. Primary data on food aid statistics were collected from various food aid agencies and institutions, supplemented with secondary data obtained from government

documents. Results show that reducing food aid dependence is unlikely in the longer term, which has implications for the level of food (in)security in Lesotho. Food aid to Lesotho supplements commercial imports to meet the shortfall in local cereal production. It improves nutritional and consumption levels of vulnerable households, but shows no correlation with producer and consumer prices. Food aid reduces government budgetary expenditures on food, saves on foreign exchange to pay for food imports, and when used as 'food for work' to build infrastructure, has multiplier effects on agricultural growth, leading to expanded income and employment in other sectors of the economy. Poverty alleviation measures and income generating activities must be the primary focus if food aid dependence is to be reduced.

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INTRODUCTION

Lesotho is one of the poorest nations in the world and is currently unable to provide enough food through its own productive capacity. It currently employs a single-channel maize price support system that has been under review due to criticism that it contributes to the country's severe food insecurity problems and has negative budgetary implications. Maize marketing policies are currently subject to intense debate, publicly and within government, with a view to establishing alternative systems, particularly in light of new and evolving maize marketing policies in South Africa. Regionally, the Southern African Development Community has undergone changes resulting in attempts to improve regional economic cooperation and trading arrangements within member states and in general with the world economy.

Food flows, particularly of staples (maize grain, sorghum and wheat), whether through commercial imports or as food aid to Lesotho, have been subject to considerable debate. Food aid has historically been important for Lesotho, especially since the early 1930's when food deficits in the basic grains have been experienced. The current local, regional, and world socio-political and economic climate make it imperative to understand the importance of these food flows to Lesotho. Politically, Lesotho and members of the Southern African Community have undergone political transformations, leading to democratically elected governments, whilst in the midst of relatively negative economic conditions compounded by frequent negative climatic conditions. The world community faced slow economic growth in the late 1980's and early 1990's, and when the *Cold War* ended most donor countries adopted tighter controls on aid. The Ministry of Agriculture for over two decades, since independence in 1966, followed a food self-sufficiency policy programme. Since 1986,

initiatives to modify food and agricultural policies have gained acceptance and there has progressively been a policy shift from food self-sufficiency towards national and household food security.

The purpose of this study is to evaluate the different policies adopted with respect to maize marketing and pricing controls in Lesotho, and the impacts of food aid and food aid policies on food security in Lesotho. The study investigates the relative merits of these policies and suggests alternative policy packages that may be available. It uses data on prices, quantities, costs, and then estimates subsidies used to maintain price fixing and controls. Data were obtained from various government ministries, agencies, commercial mills, the donor community and other non-governmental institutions.

Chapter 1 provides a brief background to Lesotho, its economy, the agricultural sector, and the factors affecting production and consumption of maize grain and maize meal. Food security and the role of trade and marketing in food security in general and in Lesotho in particular are discussed in Chapter 2, while chapter 3 deals with policy programmes and the implications of maize marketing and pricing controls in Lesotho. Food aid and food aid dependence in Lesotho are analyzed in Chapter 4, while a synthesis of the maize marketing system, maize pricing, and food aid's role in Lesotho's food security which are discussed in chapters 3 and 4 are presented in the last chapter. Some policy implications and conclusions are drawn with respect to policy options in the face of a rapidly transforming market caused by a changing economic, political, and social environment.

CHAPTER 1

BACKGROUND AND THE AGRICULTURAL SECTOR IN LESOTHO

1.1 Background and economic setting

The mountain Kingdom of Lesotho gained its independence from the United Kingdom in 1966. It is one of the smallest countries in the world, comprising 30 588 square kilometres, and is totally land-locked. It is unique in that it is the only country in the world entirely surrounded by one other country, namely the Republic of South Africa. Lesotho is situated in the southern part of Africa between the southern latitudes 28^{o} and 31^{o}, and eastern longitudes 27^{o} and 30^{o}.

History indicates that the British expected Lesotho to be incorporated into South Africa, hence had little incentive to invest in or improve the economy of Lesotho (Jones, 1977; Makoa, 1995; Sechaba, 1995). The Basotho and the Boers had numerous territorial wars during the 19th Century which resulted in Lesotho losing tracts of land west of the Caledon river. The relatively rich farmlands to the west of the Caledon river stretching towards Bloemfontein in the Free State, and as far south as Matatiele in KwaZulu-Natal, were ceded to the Boers by Britain when Lesotho became a protectorate in 1858, as a concession to appease the Boer republic. The Basotho, led by their founder Moshoeshoe I, were understandably reluctant to give up their lands, but to prevent total conquest by the Afrikaners they ceded some of their land. What remained of Lesotho was the small lowland areas east of the Caledon river as the main areas of arable land, and the harsh inhospitable mountains to the east. Even today the land to the west continues to be claimed by the government as

lost territory (Mirror, 1995).

Within the modern boundaries, Lesotho is characterised by the bare rock outcrops of the Drakensberg ranges along the north and south east border with KwaZulu-Natal province and the Eastern Cape province to the south. These ranges include the highest point in Southern Africa and are relatively unpopulated and not suitable for production of staple grains. Phororo (1995) believes they are suitable for livestock grazing if range management practices can be improved. Across the central to western regions lie the Maluti range of mountains. To the west of the Maluti's and bordering the Free State lie the lowlands that comprise the bulk of suitable arable land (3 448 square kilometres) which account for only nine percent of the total land area (30 588 square kilometres), most of it lying between 1 524 to 1 829 metres above sea level (Bureau of Statistics, 1992). The lowlands comprise 5 200 square kilometres (17 percent), the foothills 4 588 (15 percent), the mountains 18 047 (59 percent) and the Senqu river valley 2 753 square kilometres (9 percent).

Figure 1.1 provides a topographic map of Lesotho while Table 1.1 shows the different regions of Lesotho and their areas.

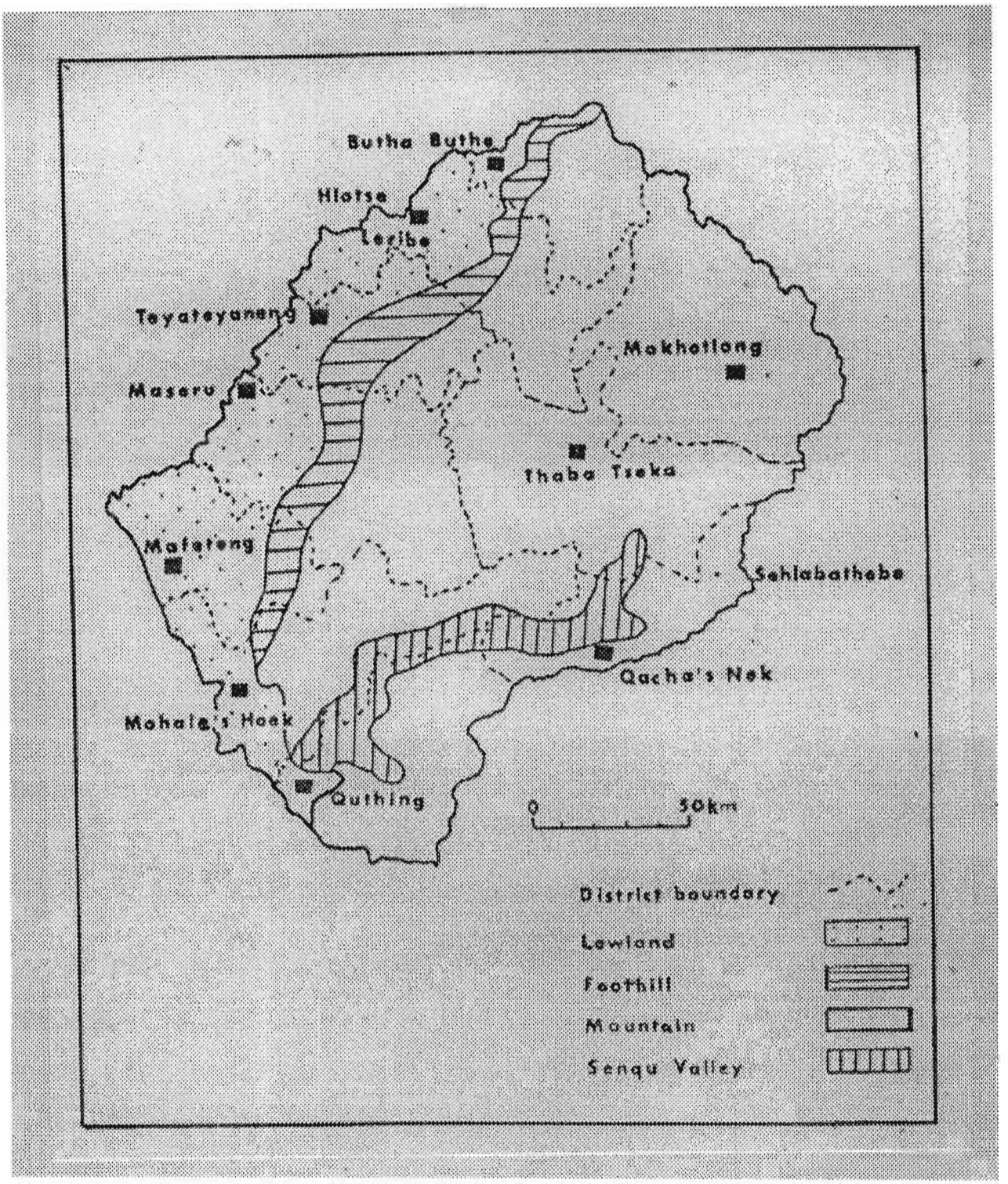

Figure 1.1 Topographic Map of Lesotho
Source : Ministry of Agriculture (1995)

Table 1.1 Lesotho's topographical regions and areas

Topographic Land Category	Area (Km^2)	% of Total Land Area
Lowlands	5 200	17
Foothills	4 588	15
Mountains	18 047	59
Senqu River Valley	2 753	9
Total	**30 588**	**100**

Source: Ministry of Agriculture (1995)

Lesotho has a temperate climate with harsh, cold, dry winters, particularly in the mountain regions, and hot summers that frequently come with violent rainstorms. The country is divided into four zones on the basis of its geographical and topographical features. The zones are: the lowlands, the foothills, the mountains, and the Orange River valley. The Orange River valley is home of the rich red soils and the arable tracts most suitable for irrigation and horticultural production. The lowlands and the foothills to the west represent the areas where most dry-land agricultural production occurs, whilst the mountains are mainly suitable for livestock grazing. The rainy season lasts from October till April, but monthly variations are high and rainfall infrequent, leading to drought periods.

Lesotho has a population estimated at about 2 091 260 people in 1995, growing at 2,6 percent

per year (Bureau of Statistics, 1995). The existing labour force comprises about 1,4 million people of whom 635 000 are estimated to be active, and some 18 000 to 22 000 new persons are entering the labour market each year (Bureau of Statistics, 1995). The unemployment rate is estimated at 23 to 25 percent (Gay *et al*, 1994), and when adjusted for under-employment, is in the order of 35 to 45 percent.

Cobbe (1983), citing Ward (1967), describes Lesotho as being an economic hostage of South Africa. History shows that it was once a relatively prosperous country and for a while enjoyed comparative advantages over South Africa in marketed agricultural products (Cobbe, 1983). The decrease in farm earnings, increased landlessness and reduction in farm employment brought about labour and employment changes, whereby by the turn of the last century, Basotho increasingly migrated to South Africa for work, as migration became the most profitable way to support households. The retrogression in agriculture from the 1930's accentuated the economic dislocation of rural farming communities, disrupting social cohesion and cultural patterns that were important factors in maintaining agricultural productivity (Okai, 1995).

The principal source of revenue for the Lesotho government comes from payment of the income from the Customs Union agreement with South Africa (fixed between 17,5 and 22,5 percent of expenditures by Lesotho nationals in South Africa). Imports are largely financed by migrant earnings which, with a reduction in employment opportunities in South Africa, are unlikely to grow (Mochebelele, 1994; Central Bank, 1994; 1995; Sechaba, 1995). Apart from the massive undertaking of the Lesotho Highlands Water Development Project (which started in 1986 to supply water and electricity to South Africa, and to reduce local

dependence on South Africa for electricity), the opportunities for investment have been extremely limited.

In 1994, about 101 973 people were migrant workers working in South Africa (Bureau of Statistics, 1995). Migrant remittances form the major source of income in the economy, and as such have accounted for about 40 percent of Lesotho's Gross National Product (GNP[1]) (Bureau of Statistics, 1993). Migrant labour is therefore an essential feature of the economy and has a profound impact on all macro-economic and micro-economic activities in Lesotho (Cobbe, 1983; Rwelamira, 1987; Setai, 1984; Central Bank, 1994; 1995). The Central Bank (1995) has estimated that 71 percent of all mine workers' earnings finds its way back into the Lesotho economy, through both direct payments and indirect contributions. GNP is significantly larger than the Gross Domestic Product (GDP[2]) largely as a result of migrant remittances. Customs Union revenues, on the other hand, account for over 50 percent of all government revenue. This situation shows the strong link of Lesotho's economy to that of South Africa.

Lesotho had a GDP of 1,669 billion Maluti in 1991 (1 Maluti (Loti) = 1 Rand), growing at an annual rate of 7,2 percent over the previous decade from 1980 (Bureau of Statistics, 1993). The GNP for 1991 stood at M2,525 billion, with growth of 5,7 percent per annum over the same period. However, per capita GDP (of M927 in 1991) showed a growth of 4,6 percent per anum, whilst the per capita GNP (of M1,433 in 1991) showed a growth of only

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[1]. GNP = Income earned by Basotho residents for contributions to current production both in and out of Lesotho (Lipsey, 1989).

[2]. GDP = Value of total output actually produced in the economy over a year (Lipsey, 1989).

0,6 percent from 1980 to 1991 (Bureau of Statistics, 1993). Inflation in the early 1990's was generally high and in 1991 averaged 19,5 percent (Bureau of Statistics, 1993).

The linkages with the South African economy extend to Lesotho being a member of the Common Monetary Area and the Southern African Customs Union. Membership of the Common Monetary Area ensures that Lesotho's currency, the Loti (Maluti plural), is pegged on par with the South African Rand, which is also in circulation in Lesotho. This means that Lesotho's monetary policy follows closely that set by South Africa, therefore having a determining impact on monetary instruments such as interest rates on savings and loans, and also on Lesotho's rate of inflation.

Membership of the Southern African Customs Union in partnership with South Africa, Botswana, Namibia and Swaziland is meant to allow goods and services to flow freely within the Union, but this in not always the case. Members of the Customs Union are protected by a common external tariff with a minimum of internal trade restrictions between each other. The arrangement benefits Lesotho since it provides it with easy access to goods and raw materials, with South Africa the cheapest source of basic consumer goods. However, it also prevents it from following more independent trade, monetary and fiscal policies. Some discretion has been allowed through bilateral negotiations for limited imports of mostly agricultural products, such as maize from Zimbabwe during drought years. As a direct result of the common external tariff under the Southern African Customs Union, Lesotho receives a rebate from the customs duties that is marginally higher than the proportionate amount of trade into the Union that goes to Lesotho. The South African government, however, having the largest and most powerful economy of the Customs Union members and within the

Southern African Development Community, does impose its own tariffs and restrictions, as will be discussed later with respect to maize marketing and trade. Lesotho's balance of trade, although having improved in the last decade, is dominated by imports which have exceeded exports tenfold. Exports as a percentage of imports for the period 1988/89 to 1993/94 were estimated at 11,7, 10,0, 7,0, 9,9, 13,3 and 12,7 percent respectively (Central Bank, 1994).

Economic indicators and the contribution of various sectors to the Lesotho economy are presented in Table 1.2.

Table 1.2 Sector contributions: Gross domestic production by activity from 1984 to 1993 (1989 = 100) in millions of rands.

Name of Activity	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Primary Sector:										
Agriculture: a) Crops	32,1	41,2	43,4	52,5	86,6	82,8	126,2	69,1	31,1	68,0
b) Livestock	50,3	47,9	57,1	58,6	103,7	132,0	113,2	88,7	126,8	190,6
c) Services	6,6	8,1	7,2	8,7	11,2	12,0	12,5	19,6	21,7	24,9
Mining and Quarrying	0,6	1,6	1,9	1,9	0,8	4,4	6,2	3,7	3,2	3,2
Secondary Sector:										
Manufacturing	43,3	50,4	66,0	89,0	120,3	150,5	166,5	208,1	265,1	325,1
Electricity and Water	2,5	3,7	5,5	4,7	9,3	13,8	14,8	18,1	35,5	52,5
Building and Construction	50,8	78,3	71,5	98,5	124,4	252,9	368,5	395,1	483,6	556,7
Tertiary Sector										
Total	180,1	221,6	256,7	283,7	359,9	429,8	540,8	669,0	803,9	922,7
GDP at Factor Cost	366,4	452,8	509,3	597,8	816,2	1078,1	1348, 7	1471, 3	1769, 8	2142, 8
GDP at Market Prices	455,5	551,1	631,2	753,2	1016, 8	1338,4	1649, 8	1820, 7	2184, 4	2587, 0
Percentage Distribution:										
Agriculture	24,3	21,5	21,1	20,1	24,7	21,0	18,7	12,1	10,1	13,2
All Primary	24,5	21,8	21,5	20,4	24,8	21,4	19,1	12,3	10,3	13,3
Secondary	26,4	29,2	28,1	32,2	31,1	38,7	40,8	42,2	44,3	43,6
Tertiary	49,1	48,9	50,4	47,5	44,1	39,9	40,1	45,5	45,4	43,1

Source: Bureau of Statistics (1994)

A portfolio of the principal sources of income for households, based on a poverty mapping exercise (Gay *et al*, 1994:20), shows that remittances from migrant labour was reported as the principal source of income by 27,3 percent of households, followed by formal sector wages at 25,1 percent, informal sector wages at 23 percent, gifts 10,7 percent, livestock 4,0 percent, wages from other employment in South Africa at 3,4 percent and crop farming at 1,3 percent. About, 5,2 percent of all households received no cash income at all.

1.2 Lesotho's agricultural sector

Agriculture plays an important role in the economy of Lesotho with about 80 percent of the economically active population subsisting from agriculture (Phororo, 1987; Ministry of Agriculture, 1995). The main crops grown are maize, sorghum, wheat, beans and peas. Only about 5 000 hectares are planted to other crops such as barley, oats, and fodder (Bureau of Statistics, 1993), with approximately 6 000 to 10 000 hectares available for irrigation and the production of vegetables and cash crops (Ministry of Agriculture, 1994a; Bayley, 1993a). Of the estimated area available for irrigation, less than 3 000 hectares have ever been utilized in any given period, and the projects that had been set up have mostly been abandoned and the land reverted to dryland farming. The projects set up to utilize irrigation potential were a major initiative of successive plans by the government to improve returns to agriculture through major investments and high capitalization. These projects were implemented using the 'top down approach', without sufficient consultation with all stakeholder's, especially the landowners who were expected to supply labour and land. Furthermore, the economic viabilities, social and cultural considerations for the projects were "sufficiently analyzed", resulting in projects being undertaken that might otherwise have been rejected (Mhlanga,

1994; Ministry of Agriculture, 1994b; and Department of Economics and Marketing, 1995). For example, the BAUER project located on the Senqu River basin in the early 1980's invested over M30 million in equipment and infrastructure (Department of Economics and Marketing, 1995), but today is in disrepair and the project shut down. Other examples include the Thaba Bosiu Integrated Rural Development Project, Thaba Phatsoa Project, and the Tsikoane and Peka irrigation schemes under the Lesotho Agricultural Production and Institutional Support Project.

Marketing of livestock products, primarily wool and mohair for export, and production of intensive livestock, eggs and dairy products have also been targeted as areas for economic growth. The livestock sector has outperformed the crop sector in recent years, yet investments in crop production have continued to exceed those for livestock. The livestock sector contributes nearly two thirds of the agricultural GDP (Ministry of Agriculture, 1994a; 1995; Food Studies Group, 1995).

The contribution of the agricultural sector to Lesotho's GDP has normally varied between 10 and 20 percent, though a peak of 24,7 percent was reached in 1974 and a low of 7,1 percent in 1984. Although remittances and mine wages contribute more to the economy of Lesotho, agriculture in many ways is important for the economy (Setai, 1984; Ministry of Agriculture, 1995; 1991; Mochebelele, 1994), and contributes mainly supplementary income and employment to about 80 percent of the rural population (Government of Lesotho, 1992; Ministry of Agriculture, 1991). However, close to 20 percent of the rural population has no access to the 13 percent arable land available in the country.

The economic contribution of households engaged in agriculture is very skewed, with five percent of households producing close to 30 percent of crop production (Bayley, 1993a citing from Hesling, 1984; Gay *et al*, 1994; Okai, 1995). The agricultural sector is no longer the principal source of income for most households with only 1,3 percent listing crop farming as the primary source whilst four percent list livestock production as the main source of income (Central Bank, 1995; Gay *et al*, 1994:20). The greater government's consumption of GDP through recurrent expenditures and spending, the less that remains for overall investment and less specifically for agriculture; hence, this also contributes to lower agricultural growth (Cleaver, 1985). The Lesotho government is often criticised for its inability to utilize all foreign investments and capital (due to its low absorptive capacity resulting from staff shortages, poor infrastructure, and inadequate skill capacity to implement and sustain programmes and projects), and its failure in sustaining recurrent budgets (Food Studies Group, 1995; Department of Economics and Marketing, 1995).

Successive governments have pursued policies that have tried to increase productivity, improve rural incomes, create employment and to attain food self-sufficiency of the staple grains (Mhlanga, 1994; Ministry of Agriculture, 1991). Ultimately, the objective since 1987, has been to promote agriculture as a means of attaining increased food security (Phororo, 1987). However, some distinction must be made between desired policy objectives and real policy objectives. This is important since desired policy objectives are often stated in government documents and reports such as the Five Year Development Plans and sectoral reports (Government of Lesotho, 1992; 1986; 1981; Ministry of Agriculture, 1991), but these policies are neither followed up or implemented (Department of Economics and Marketing, 1995; Mhlanga, 1994). Often, the government's actions are seen to contravene

or contradict stated policies, probably as a result of political considerations (Department of Economics and Marketing, 1995). An example is the stated policy of privatization of government assets and machinery services (Department of Economics and Marketing, 1995), yet recently government has purchased and put into service new tractors.

Over the past decade agricultural producer prices have fallen relative to consumer prices, producer prices in related sectors and to prices of agricultural inputs (Bureau of Statistics, 1995; Ministry of Agriculture, 1994b), thus reducing farmers' incentive to produce (Bayley, 1993b; Food Studies Group, 1995). According to Bayley (1993b), returns to producers have fallen significantly over the past few years. Part of this has been attributed to poor market and pricing policies pursued by the government. Domestic prices are often distorted by agricultural and non-agricultural policies. However, prices determine actual transfers that take place (Van Heerden, 1992).

1.2.1 Policy instruments used in the agricultural sector

Numerous attempts have been made by the government, using various policy instruments, to boost agricultural production and increase efficiency. There has been extensive use of price incentives (producer prices higher than comparative producer prices in South Africa), for farmers in Lesotho for a number of years and these, according to Bayley (1992a; 1992b; 1993b), have played a major role in the development of agriculture. Government has tried to shelter farmers from direct competition of local goods with goods from South Africa by imposing restrictions on imports and on direct trade.

Conditions in the agricultural sector have been influenced by the impact of grain marketing legislation on import and export controls (Low, 1986; Bayley, 1992a; 1993b). Policy measures include the following: a) import quotas on such goods as maize, wheat, sorghum, eggs, milk products and livestock; b) monopoly powers and restrictive legislation given to certain boards, by imposing production quotas that discourage entry of competitors and give rents to those already in (Land and Agricultural Policy Centre, 1993); c) statutory powers given to co-operatives (eg. Lesotho Poultry Co-operative Society and Coop Lesotho) limit entry and reduce competition; d) pan-territorial and pan-seasonal pricing; e) subsidies; and f) the promotion and pursuit of the goal of self-sufficiency has protected the small commercial sector and to a lesser extent subsistence farmers believed by Bayley (1993b) to be at the expense of consumers.

Legislation likely to have had the most impact recently on local production and marketing of grains is the Marketing Act of 1979, also known as the Price Control Act (Mhlanga, 1994; Motsamai, 1994; Department of Economics and Marketing, 1995). The Act created a) a single-channel fixed price system for maize grain; b) single-channel pool schemes; c) surplus-removal schemes; and d) supervisory schemes. The 1979 Price Control Act in Lesotho was based on the 1967 Marketing Act, since this Act laid the foundations upon which all subsequent authority is based.

The type of price policies that can and have been implemented by various governments in Sub-Saharan Africa including Lesotho to influence and impact on agricultural production are the following (Cleaver, 1995):

a) Those aimed at keeping consumer (retail) prices for staples (maize, wheat and sorghum)

in Lesotho artificially low or high. The two main variations of this policy are: i) low official prices paid to farmers by parastatals, or semi-parastatals and companies enjoying state protection. These institutions set their own margins, then sell to consumers at lower than market prices, thus undercutting farmers who bear the cost of the price differential; or ii) offer relatively high prices to producers, then sell cheaply to consumers by receiving support from government through subsidies or protection that prevents the entry of other competitors. These institutions import foodstuffs and/or distribute food aid and can sell to consumers at more or less than the commercial (market) value.

b) Pan-territorial and pan-seasonal pricing where producer prices are fixed at the same level throughout the country, and throughout the marketing year. The same may apply for wholesale and consumer prices throughout the country.

c) The existence of uncontrolled parallel (free) markets for food products. One of two scenarios may occur: the state discourages the existence of parallel markets, or the state ensures that these prices are regulated. Prices paid in parallel markets follow and are influenced by prices paid by competing agencies and institutions.

d) Subsidies on farm inputs. These include low interest rates on credit, subsidies of fertilizers, seeds, services (such as mechanized services), and government extension services.

e) Land taxes where these may be applicable.

f) Income tax on producers. An implicit tax accrues to producers as a result of exchange and

price policies that prevent farmers and consumers from engaging in a free market to sell and/or buy their produce.

g) Over-valuation of the exchange rate. The policy is combined with import quotas and duties which protect locally produced goods against imported ones. The exchange rate is adjusted in line with the currency with which it is pegged, and when the domestic price inflates differently from prices experienced by the principal trading partner, over-valuation results.

There is however no stereotype price policy package used by all these countries and the depth of their policy problems differ considerably, as do policy objectives and other constraints (land, water, markets, social and political).

1.2.2 Problems in the agricultural sector

Progress in the agricultural sector faces institutional, environmental and other constraints which inhibit agricultural production optimisation and therefore growth. Production optimisation is very closely linked to efficient resource allocation and use within a sustainable system (Van Zyl, 1992). These constraints include the following problems: a) Inadequate supply and provision of agricultural finance and credit. Lack of agricultural credit is a constraint to agricultural development and increased production since the majority of farmers cannot access credit (Low, 1986; Bayley, 1992a; 1992b); b) inadequate input supply due to inconsistent and poor delivery systems for inputs (Bayley, 1992a; 1992b); c) poor infra-structural support services and marketing caused by generally poor roads and other transport

systems that would facilitate delivery of food transfers; and d) poor extension and technical support services resulting from few adequately trained extension agents who often do not receive the necessary technical backup (Bayley, 1992a; 1992b; Mhlanga, 1994).

An additional constraint involves labour. There is high incidence of unemployment, with male labour opting for off-farm employment, typically as migrant mine workers. Low (1986) attributes the migration of household members to the comparative advantages of wage employment over farm employment for males and for educated females. Higher real off-farm wages relative to agricultural wages remain as one of the likely disincentives to further investments in agriculture. The opportunity cost of time spent in agricultural activities is high for some household members, hence they migrate. Setai (1984:4) notes that efficient allocation of labour in the rural or farming sector is "inter-alia, a function of cropping patterns and improved technology". He further contends that areas in which high yields are obtained proportionally have more able-bodied men available to work the land.

Okai (1995) identifies another labour problem as the changing pattern of production-labour relationships in Lesotho. In the past, there was a well organized arrangement (through established social and cultural institutions) that encouraged informal and formal cooperation by pooling and utilizing of production resources, particularly of labour through the use of "Matsema". "Matsema" are traditional collective arrangements where villagers and families join hands to plant, weed and harvest their fields. This traditional arrangement helps overcome resource constraints by shortening the time spent by individual effort and in organization. Unfortunately, this group effort has progressively broken down in most rural farm communities (Okai, 1995; Sechaba, 1995). Furthermore, other growing changes in the

productive relationship are those between the roles of men and women. Whilst most farm operations are carried out by women and there is no shortage of labour, custom dictates that decision making remains with men. However, a significant proportion of male households heads are not at home for long periods due to migration to off-farm jobs, therefore delaying vital production decisions. In addition, certain farm operations, such as ox ploughing and planting, are best performed by men and again they are often away at crucial periods.

Another traditional cooperative system to have declined significantly over time is that of share-cropping, traditionally known as "Seahlolo", whereby farmers pool their resources and labour on a given field and then share in the harvest equally (Sechaba, 1995).

Environmental constraints are also important. Lesotho experiences persistent and recurring droughts and other adverse climatic conditions. The country has experienced two major droughts in the last decade, the severest being that of 1991/92, reportedly the worst in living memory (Bayley, 1993a). Snow disasters, periodic damaging hailstorms, excessive winds, flash foods and major fluctuations in temperatures are common. Bayley (1993a), citing from Hesling (1984), reports that between 1977 and 1979, 59 percent of households reported at least one crop failure. Of these households, 83 percent responded to crop failure merely by buying more food than normal. Drought and the possibility of drought are important considerations facing producers each year. Average rainfall over a ten year period (1980/81 to 90/91) was 785,6mm per annum (Ministry of Agriculture, 1994a), but it is very seasonal and varies dramatically between regions.

Lesotho's natural water and land resources are limited. Though endowed with rich mountain

springs, the Senqu river basin and numerous rivers and streams, affordable harnessing of water is difficult such that over 95 percent of all farming is carried out under dryland conditions. Land as a resource is under stress due to growing human and livestock populations. The soils are overworked because there is little enrichment of the soils with manure or chemical fertilizers (Sechaba, 1995). The pattern of mono-cropping also causes undue stress on soils.

The performance of the agricultural sector and the factors contributing to its performance in the economy determine to some extent the livelihood of Basotho households, their levels of poverty and their ability to feed themselves. This background to Lesotho's economy and the role of the agricultural sector forms the basis for the next chapter, which deals with food security.

CHAPTER 2

FOOD (IN)SECURITY: EVIDENCE FROM LESOTHO

This chapter deals with the nature of food (in)security, impacts of trade on food security, and the food security situation in Lesotho.

2.1 Definition and nature of food (in)security

The most widely accepted definition for food security is the World Bank (1986: 216) definition of "access by all people at all times to enough food for an active, healthy life". Eicher and Staatz (1985), the World Bank (1986) and the Food and Agriculture Organization (1986) in their definition of food security include national, regional, and household levels of ability to assure on a long term basis, food systems that provide all the people access to timely, reliable, and nutritionally adequate supplies of food. Valdes and Konadreas (1981) equate the ability of a household, region or country to meet target consumption levels on a yearly basis as a sound definition for food security. Eicher and Staatz (1985) found that the exclusion of demand issues in the definition of food security is problematic (Van Zyl and Kirsten, 1992). The processes of production, access, availability, and procurement are all part of the "food system" and relate specifically to it being timely, reliable and nutritious. The Economic Commission for Africa (1993) refer to the concept of food security to entail food availability, whether through local production, storage and trade. They also point to the importance of access to food through production, operations of various market mechanisms and food transfers. Food security is influenced by both micro and macro economic factors and conditions, from technology, institutional support, monetary, and fiscal policies to trade

practices that affect the overall rate of growth and distribution of income (Van Zyl, 1992).

The term "food security" was first coined at the World Food Conference held in Rome in 1974 (Van Zyl and Kirsten, 1992). The term highlighted the efforts of experts who were attempting to deal with the World Food crises of the 1970's. The conference released the World Food Security Compact, which placed food security at the forefront of United Nations' (UN) agendas (Food and Agriculture Organization, 1986). The UN saw food security as a moral commitment, with the need to ensure that all people could at all times produce or procure the basic food they required (Food and Agriculture Organization, 1986). Food insecurity was deemed to be unacceptable and food security a world wide concern (Food and Agriculture Organization, 1985; 1986).

Because the world was experiencing food shortages on a wide scale, the early focus was to increase production in those countries where shortages occurred. Thus the early definitions paid little attention to demand issues but rather focused on national independence from food imports, implying the attainment of food self-sufficiency (Mangahas, 1984). Food self-sufficiency committed a country to a strategy that directed its economic and other energies towards local production, a position Valdes and Konadreas (1981) viewed as politically risky. Failing to meet food self-sufficiency requirements meant a dependence on concessionary imports of food, but also encouraged growth in protectionist policies. The strategy was compounded by difficulties poor countries experienced in reaching their food production targets, and in cases where successful, needlessly promoted exports and penetration of world markets at a cost. The argument and rationale against such a definition was based on the principle that making food security synonymous with self-sufficiency rejected pure economic

criteria of competitiveness and efficiency. Advocates of pure economic criterion assert that a country should look at its comparative advantages, and if these do not lie with food production shift their resources to more competitive or comparatively advantageous export activities. The rationale is that the resultant gains in foreign exchange earnings would compensate and in all likelihood exceed the foreign exchange savings of the displaced food crops.

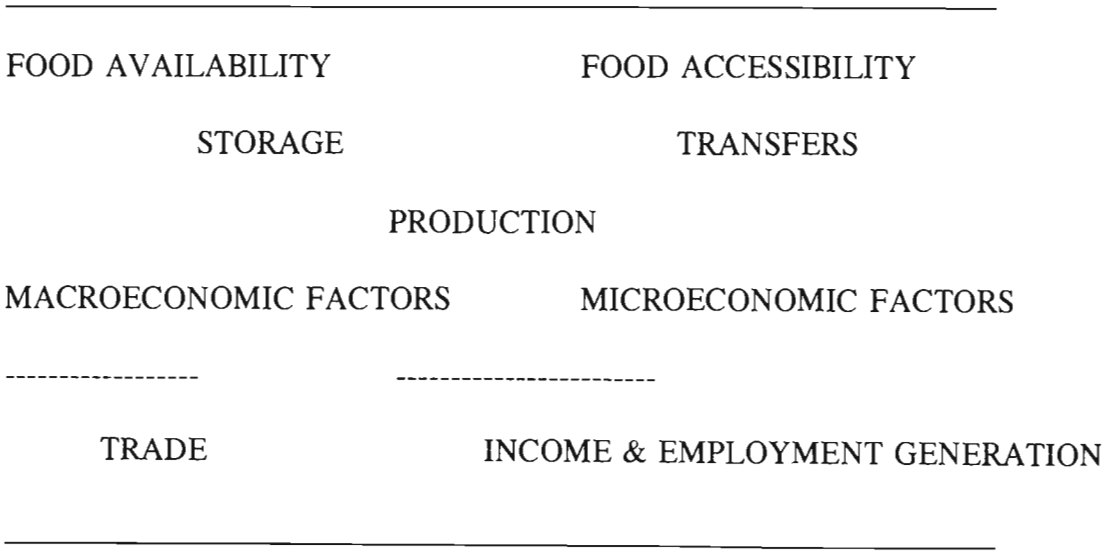
The World Bank (1986) broke down food security into the following components: a) ensuring production of adequate food supplies; b) maximizing stability in the flow of supplies; and c) securing access of available supplies to those needing them. The components identified by the World Bank are criticized by Evans and Diab (1991) and others because they focus exclusively on consumption and fail to take into account the link between food insecurity, poverty, vulnerability and malnutrition.

Falcon *et al* (1983), reviewing food insecurity, isolated the hunger problem as one of a shift from starvation or lacking in the necessary nutrients, to a state of chronic malnutrition that affects a wide range of vulnerable groups. Lipton (1988a; 1988b) says that the problem of food insecurity is more than just increasing production goals and meeting targets. Increased production does not deliver food to the poor and destitute nor does it distribute food to inaccessible areas. The poor, the poverty stricken, sickly and those otherwise constrained cannot procure or produce adequate food supplies (Lipton, 1988b). Mangahas (1984) supports the postulation that food insecurity occurs as a result of poverty and not the inadequacy of food production. Maxwell (1991) says that food security can only be achieved when the poor and vulnerable, particularly women and children living in 'marginal' areas,

have secure access to the food they want.

The more recent definitions therefore explain food security on the basis of the linkages between food availability, poverty and access to food. These linkages can be divided into what Sen (1981) describes as the supply and demand sides of the hunger equation. Eicher (1988) contends that strong empirical and policy evidence supports the fundamental premise that links food availability, poverty and access to food to form two sides of the hunger equation (Figure 2.1).

Figure 2.1 Food Security Equation



Source: (Rukuni and Bernsten, 1988:175)

Figure 2.1 illustrates the two sides of the food security equation, namely the demand and supply sides. Supply is influenced by factors largely dependent on local production, particularly in a developing subsistence economy. If production increases, so does availability. However, this is not itself a guarantee nor does it ensure that there is enough

to eat for all, nor does it necessarily eliminate hunger. Means must be available to ensure access through entitlements to food to ensure that food insecure households get food (Maloa, 1992). Food systems are unable to provide enough food where required at an affordable cost. On the demand side, food insecurity arises due to the inability of the national economy to provide jobs or alternative opportunities for households to purchase or acquire adequate food entitlements (Rukuni and Bernsten, 1988).

Maloa (1992) provides the view, stemming from his review of Van Zyl and Coetzee (1990), that assuring both adequate supply of food and access of the population to that supply requires certain measures to generate effective demand, usually including income generation via employment creation or income transfers. Addressing and assessing the adequacy of food supply is not simple, since there are various measures to determine adequate supply. They depend on the context in which adequacy of supply is used, and the measures may include set acceptable levels of food intake, minimum accepted nutritional and health status of vulnerable groups, and desirable target levels of diet. It is accepted that what foods consumers eat or prefer are a function of their different socio-economic circumstances, tastes, traditions, cultural factors and norms. They are to a large extent influenced by economic realities pertaining to the region, country and/or household. For example, a factor such as income may impact on food preferences. It means that assessing food adequacy in terms of determining the level of food (in)security can in a way become "a moving target" (Olson, 1987). The implication is that adequate supplies should be available in times of excesses and shortages (Food and Agricultural Organization, 1986; Reutlinger, 1987; Valdes, 1988).

Food security is by nature examined through measuring the levels of food insecurity. For classification purposes causal food insecurity factors are divided into: a) production fluctuations both in the food and non-food sector; b) price fluctuations; and c) reliance on imports (Reutlinger, 1987). These causal factors, though not fully inclusive, account for most explanatory variables. The causality of price is determined in the market (or by price distortions due to government interventions) and has many variables, whilst reliance on imports utilizes trade mechanisms employed by government.

It is easier to look at the level of food that is unavailable or inaccessible at all levels, than to look at the amount of food that is actually available. The food self-sufficiency index which measures total natural production over total requirements is used as a measure of some level of food security. Assurance of food security is the ability of households to meet target levels. Target levels of households and nations are different, hence it is conceivable and likely that at a national level, a country can experience dramatic food shortages, even though there is surpluses in the world. This has been the recent case of Sub-Saharan Africa, the extreme case being the famine in Ethiopia of 1986. The same is true where a household or an individual may face severe food shortages even though food may be in surplus in the country. To be food secure, the country and household must be able to acquire food either by means of production, purchase, exchange or even theft (World Bank, 1986; Food and Agriculture Organization, 1986).

At the household level of food security, whilst food must be available, it is more a matter of accessibility. The nature of a food insecure household varies according to a number of criteria such as income, earning opportunities, employment, access to land, inputs, location

and household size. Other factors like culture, religion, sex and education reflect more on consumer tastes (World Bank, 1988; Reutlinger, 1987). This means that household demand estimates differ between countries, regions, rural - urban areas and across income groups. Though income is an important criteria, by itself it can by no means guarantee or ensure food security. To households, national policies that determine the level of information they receive, the nature of the support services in terms of roads, markets, and gifts provided in kind assist directly towards attaining food security. Those at risk can be found throughout the different strata of the population and geographical regions of a country. Though distinctions can ultimately be made between urban and rural forms of food insecurity, these can often be attributed to household purchasing power. Typically, the food budget as a percentage of income is highest in low income groups and falls as household incomes increase. Sen (1981) has identified four forms of household ownership which he refers to as "entitlements", and which can be converted to purchasing power. These are production based, own labour, trade based, inheritance and exchange. On the basis of use or conversion of these entitlements, a household can attempt to meet its food supplies. Inadequacy of entitlements could lead to household food insecurity. The capacity of a household's purchasing power depends not only on the size of its entitlements, but also on the prices of food supplies required (Sen, 1981).

In dealing with food security, strategists and policy makers have shifted from medium-term strategies to short-term strategies with greater emphasis on a global perspective to deal with food insecurity at all its levels (Thompson, 1983). National food security is the prime concern of national governments, hence a commitment to provide adequate food supplies and maintain or increase per capita consumption levels of food. Viewed on a national level, it

is clear that linkages exist between economic growth, external adjustments, national and household food security. National food security, though a sufficient condition for household food security, is not a necessary condition (Valdes and Konadreas, 1981). The household, like a country, can meet adequate levels of food supplies through production, purchase and exchange. Food security at the national level means that the total supply of food available or at the disposal of a country is adequate in relation to the population needs. This can be estimated normally by computing an average cereal equivalent per capita (Olson, 1987).

Growth of domestic agricultural production is therefore important for national and household food security, since it provides for stable sources of food, incomes and employment (Bright, 1991). Per capita availability of staples allows for the release of resources that can be used to secure other foodstuffs to improve diets and contribute to the nutritional status of the individual. It is furthermore important that agricultural growth be considered in terms of equity as well as efficiency if the question of food security is to be addressed (Bright, 1991).

Food availability also has to do with the relationship between farm gate and consumer. Having food available at the farm gate (the production side) is no insurance that the food is available to urban or rural people (Blignaut, 1992; 1988). Nor for that matter does abundant food in one region of the world or country assure that food is available to all consumers. Because food is produced seasonally, whilst there is constant consumer demand, farm produce must then be allocated with respect to time, place and form. Olson (1987:2) remarks that "the concept of what constitutes food security and therefore the way of assessing it, varies with the level of aggregation and the time horizon". A time frame affects the concept of food

security in that it provides a perspective as to whether that incidence happens to be short term or long term. In the short term, food insecurity requires immediate and urgent attention. During emergency shortfalls chronic food insecurity occurs; for example, droughts and other natural disasters causing total crop losses resulting in famine. To deal with short term food insecurity countries appeal for aid, release national reserves, undertake massive efforts to distribute food and supply nutritional supplements. It reflects a state in which the basic adequate dietary requirements are not met (Valdes and Konadreas, 1981; Stevens, 1979).

The long term conditions for food insecurity are often reflected in terms of transitory food insecurity, which are largely a result of structural deficits and inefficiencies. Transitory or temporary food insecurity are described as being a result of short term fluctuations in production that result from movements and changes in household incomes, food consumption and the general availability of food at national and global level (Economic Commission for Africa, 1993; Sen, 1981). Temporary food insecurity is seen to be a manifestation of all the factors that lead to or contribute to a lack of access to sufficient food, and as such can be dealt with by corrective measures such as stocking, food aid, improved distribution and purchasing power (Food and Agriculture Organization, 1986; Economic Commission for Africa, 1993).

Alternatively, trade must be an instrument to substitute for seasonality. The various mechanisms that ensure this allocation are a function of monetary and other transfers that utilize the different marketing systems and institutions such as storage, transport, distribution, and retailing. Blignaut (1992) states that only when the processes have been accomplished successfully can the level of food availability be assessed.

This section has defined food (in)security and discussed the nature of food security. The next section investigates the relevance of trade and marketing in food security.

2.2 Trade and marketing: relevance to food security

No country is totally independent of others for all its material and physical needs. Every country engages in some form of trade and marketing of goods and services. The need to ensure food security makes it imperative then for countries to engage in trade and marketing as a means to reducing food insecurity. The country tries to assure "aggregate food security", ie. adequate national supplies of food at reasonable prices to feed its people (Valdes and Konadreas, 1981; Thompson, 1983). Food supplies, to enable a country to meet its food security requirements, should be provided at the 'right price' that ensure as little losses to total economic welfare as possible (Timmer, 1986). Within the normative framework of economic theory, welfare is maximised by using border / world (parity) prices to determine domestic prices, which implies that there is free movement of goods and trade. The determination of producer and consumer prices, and the functioning of the market system impact on consumer welfare. The effect of price discrimination results in discrepancies between domestic prices and border prices. Tariffs, quotas (import and export), barriers to trade such as duties and levies, have significant impact also on total welfare. The situation in which there is free trade is illustrated in Figure 2.2, which shows price formation with free and restricted trade.

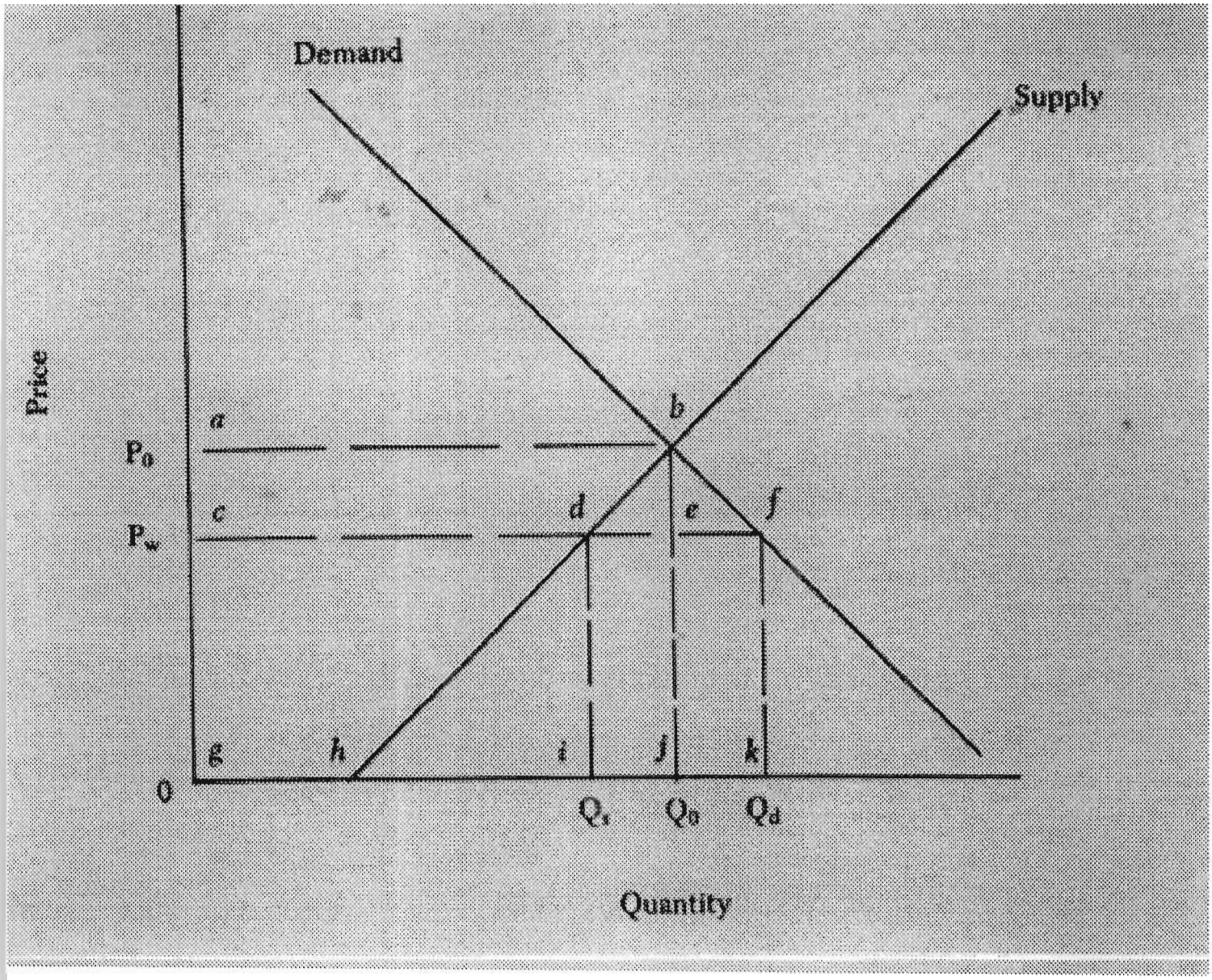


Figure 2.2 Price formation with trade

Source: Timmer (1986: 25)

In the illustration, world supplies of grain are abundant and traders can source grain readily at the border (or world) price at price P_w. In the absence of government restrictions or interventions trade occurs more or less on its own volition as traders seek opportunities to buy and sell on the market. The border price is below the domestic market clearing price (P_o) under autarky. Under these conditions consumers will not pay more than P_w, so farmers or the mills cannot receive more than P_w. The equilibrium quantities produced domestically and consumed are no longer equal, because demand increases to Q_d, while local farmers (mills) reduce their supply under pressure from South African (world) competition to Q_s. The gap, $Q_d - Q_s$, must be supplied by imports from the South African (world) market at a price of P_w.

A country must have sufficient purchasing power or enough national grain stocks to achieve this objective. Two channels of trade are important for food security, namely internal and external trade, each with its own considerations and barriers.

The efficient mobilization of resources, management and marketing of food supplies from both domestic and external sources, including imports and food aid (ie. increasing outputs, whilst reducing the per unit costs (resource or otherwise) of producing that level of output), are utilized to assure food security (Maloa, 1992). The acquisition of food supplies necessitates access to markets at low costs and free trade to supplement insufficient local supply. Access to supplies is linked directly to trade and market opportunities, whilst access to food by the poor or needy requires an understanding of poverty, food distribution and marketing, and of the natural and structural constraints that cause food insecurity (Food and Agriculture Organization, 1985). Food insecurity is not just a result of natural instabilities and insufficiencies in food production but also a result of restrictions in world trade through

closed and inefficient markets (Mangahas, 1984). The obstruction or reduction of trade in food through substitution by self-sufficiency is criticized by Maloa (1992). The case for food imports or exports is best illustrated by Falcon *et al* (1983) who argue that food imports are a necessary supplement to local supply to guarantee that poor people have enough to eat and avoid food shortages.

Food security, divided into the three components defined by the World Bank (1986), is based not just on national levels but also on regional and international levels. These links form the basis and justification for trade and an effective food security policy. Trade and open access to food transfer mechanisms through distribution and marketing are options offered through public and private involvement. The extent of involvement and relationship between private and public involvement in the trade of food grains determines the balance of costs associated with food transfers. Mangahas (1984) sees the role of trade in less developed countries as being dominated by state import and export enterprises and a few large corporations. At the margin, costs and benefits accrued by consumers vary depending on the efficiency of these agents (Temu, 1990).

The public sector normally constitutes official channels, which may be relatively consistent in the price and type of product they offer urban consumers. However, the proliferation of an informal or parallel market system would tend to indicate that rigidities in the official and monopolist system do not efficiently serve rural or urban consumers. Van Rooyen and Van Zyl (1990) argue that distribution systems link a country's production system to demand through the creation of time, form and place utility. When distribution systems are under stress to timely deliver adequate food supplies due to inefficiencies, they result in higher

prices affecting acquirement and affordability for poor households (Maloa, 1992). One key indicator of household food security is informal prices at the village level, since they show the demand and valuation for local food supplies.

Population pressures are an important political yardstick, as countries seek to choose between food self-sufficiency ahead of self-reliance (security) that can be assured through trade. Mangahas (1984) observed that such issues are often more political than economic, and for smaller, less-developed countries the economic consequences are important.

The global economic environment plays a significant role in trade. World commodity prices, different supply and demand factors, and interrelationships that determine the pattern and terms of trade, all influence food transfers amongst nations. Reduced export earnings, a negative growth in balance of payments, and reduced official development assistance flows in real terms, coincide with reduced export earnings to finance imports (Kingsbury, 1989). Within Southern Africa, interdependency among countries was originally sought to lessen dependence on South Africa. This led to the formation of SADCC (Southern African Development Coordination Conference), evolving later into the eleven member Southern African Development Community (SADC). It has sought to establish a trading strategy that attempts to attain regional food security (Kingsbury, 1989). To some extent self-sufficiency of the individual member states, through increased production or holding of regional and national stocks to avoid reliance on South Africa, was encouraged. Tola (1988) clearly advocated such a strategy for Lesotho's food security before political changes in South Africa occurred. Intra-regional trade is an important aspect since all SADC members face prohibitive costs of importing on the world market (Lipton, 1988b). Trade and market

liberalization that allow for freer movement of imports and exports offer alternatives to the storage of grains either at national or regional levels (Johnson, 1981). Whilst grain reserves can be managed to reduce variability in supplies and prices, the costs of stockholding are often prohibitive in the long term and the combination of poor economic returns and associated political risks lead to further price increases (Johnson, 1981).

Trade also impacts on the input sector and therefore on production. Kingsbury (1989) argues that from a food security point of view official imports may rarely reach isolated centres and villages. Bayley (1993b) supports this and feels that food commodities sold through official channels at gazetted prices do not accurately reflect the true costs of production, storage, processing and distribution; this leads to the creation of parallel markets. Domestic markets handle volumes that are difficult to estimate or predict, possibly rendering analysis of official trade flows incomplete (Kingsbury, 1989). Implicit subsidies, whilst reducing transitory food insecurity effects, may impact on trade, and also contribute towards parallel markets. The analysis of parallel markets is important for examining or predicting the impact of trade on food security.

The existence of parallel markets indicates symptoms of economic malaise. Private traders and sellers can discriminate against disadvantages consumers, most at risk from food insecurity (Temu, 1990). They thrive due to shortages and inefficiencies of marketing systems to provide a valuable service to consumers.

Policies that affect the trade, marketing and pricing of maize grain and the implications thereof are examined in detail later. The description and characteristics of the food security

situation in Lesotho are dealt with next.

2.3 Food security in Lesotho

"Lesotho like most other African countries suffers from a crisis in food and agricultural production, it is a crisis that underlies the food security problem which is characterized by poverty, malnutrition, and food insecurity" (Phororo, 1987:2).

2.3.1 Factors influencing food (in)security in Lesotho

Contributing factors to food insecurity are typically the result of distortions in the economy in both rural and urban sectors. Tola (1988) also points to government inaction in stimulating peasant farmers to grow more food, which is basically food self-sufficiency driven. As mentioned before, food insecurity typically is caused by low incomes and poverty (Sen, 1981; Food and Agriculture Organization, 1985; Christensen and Thomas, 1993), and poverty is rampant in Lesotho (over a quarter of the population is affected), with surveys showing that lack of food is listed by Basotho households as their principal problem, and where average per capita earnings are R1 403 per annum (Gay, *et al*, 1991; Bureau of Statistics, 1993). Average per capita earnings are very low, hence Lesotho is classified as a '*less developed country*' and these are largely distorted with Lesotho having an estimated *gini coefficient* in excess of 50 percent (Molapo, 1995). At any given time, over 60 percent of all basic foods, nearly all of it processed food, and other consumer goods, including 67 percent of all inputs, are imported. The largest supplier of agricultural inputs in Lesotho, Coop Lesotho (prior to 1992) was trading inputs with a 20 percent mark-up (Motsamai, 1994). In addition the price

of fertilizer in Lesotho may have been 50 percent above the real South African market price (Cekwane, 1994).

Production in any one year is limited by crop failures that account for 8 to 10 percent (20 000 to 25 000 ha) of the total area planted. The case worsens in years of drought, such as in 1992/93 which affected close to 85 percent of the crop (Bayley, 1993a; Drought Relief Implementation Group, 1993; 1992; Ministry of Agriculture, 1992). Recent indications are that two out of every five years in Lesotho are drought-prone (Bayley, 1993a; National Early Warning Unit, 1994a). Figures show that crop losses amounted to about 25 000 tons annually during the 1980's (Phororo, 1987; Ministry of Agriculture, 1994a), an amount enough to have fed half of Maseru's existing population (Bureau of Statistics, 1994). Post-harvest losses due to lack of storage, pests and moisture damage, contribute significantly to this figure. It is estimated that if post-harvest losses were substantially reduced (about 80 percent), savings could provide the needs of 126 000 people and about 17 percent of the total grain for home use (Phororo, 1987).

Population growth helps create a widening gap between food needs and availability, ameliorated by the steady deterioration of local food production. Increased trade and marketing can only meet part of a net food shortfall (Rwelamira, 1987). In some areas, such as the south and highlands, under-nutrition occurs seasonally, particularly before harvest in the March to May period. It marks the period when household food stocks are low or depleted. In households where there are no migrant wages available to supplement incomes it may lead to famine or extreme cases of under-nutrition (Phororo, 1987; Rwelamira, 1987).

Studies show that the average household (5,4 persons) needs an estimated 0,4 hectares to produce the cereals required for each member of the household (Phororo, 1987). Cereals are used as a bench-mark for assessing calorie intake since they form the bulk of most rural and peri-urban diets. Land holding sizes vary considerably, with the national average skewed towards the average smallholder farm size. Figures for 1987 show that out of a total of 242 881 households, 92 926 (38 percent) were without land. The figures indicated a rise compared with 1980, when out of 239 216 households, 52 443 households (22 percent) were without land. This can be attributed to an increasing population. The gap in the area available between landowners and the landless is growing (Bureau of Statistics, 1995; 1994; Ministry of Agriculture, 1994b).

Basotho rely on cereals as their staple foods, which leads to unbalanced diets and exposure to malnutrition and food insecurity. The use of livestock products (protein) in the diet is limited due to social, cultural and income constraints. Skewed distribution of income, land, livestock, and other resources has meant that those without livestock generally suffer a higher incidence of dietary inadequacies. Regional differences in climate and topography also contribute to dietary variations (Phororo, 1987). Lesotho imports about 50 percent of its food grain requirements annually, since its local capacity to produce is inadequate (Tola, 1988; Ministry of Agriculture, 1994a; Mokotjo, 1990). There is a widening gap between domestic food production and requirement (Tola, 1988). Local consumption and demand is met through domestic production and imports. The reliance on imports can be shown by comparing quantities required for national cereal supply. Table 2.1 indicates the difference between local availability, national requirements and anticipated imports of cereals.

Table 2.1 Estimate of national cereal supply in Lesotho (1993/94)

Figures in '000 tons				
Year: Estimates for 1993/94	Maize	Wheat	Sorghum	Total
A. DOMESTIC AVAILABILITY				
A.1 Opening Stocks (@ April 1993)	15.7	30.0	0.0	45.7
A.2 Estimated Production	91.8	13.2	52.0	157.0
A.3 Total Domestic Availability	107.5	43.2	52.0	202.7
B. REQUIREMENTS				
B.1 Gross Cereal Requirements (Feeds + Other)	257.6	76.5	52.0	361.0
B.2 Carryover Stock Requirement	7.0	10.0	0.0	17.0
B.3 Total Annual Requirements	264.6	86.5	52.0	403.1
C.SHORTFALL / SURPLUS (A.3 - B.3)	-157.1	-43.3	0.0	-200.4
E. FOOD IMPORTS	185.7	51.9	0.0	237.6
F. PROJECTED SURPLUS	28.6	8.6	0.0	37.2

Source: National Early Warning Division (NEWU) of the Food Management Unit (1993).

Some far reaching implications facing many households result from having to allocate almost all their resources (financial, physical, material) towards food security in the short term,

which normally renders the household vulnerable to food insecurity in the long term. The extent to which households rationalise to meet immediate needs may be contrary to long term needs or demands. The lack of natural resources, pressure to crop and use of 'marginal' lands (with respect to alternative uses and opportunity costs) has important implications on the nature and sustainability of the environment and long term future of the resources themselves. The pressure to utilize these resources often inappropriately causes environmental degradation that further erodes the household and national capability to improve or sustain a reasonable livelihood (Setai, 1984).

Van Zyl (1992) describes how access to the political market can help increase access to resources and further to push for entitlements and empowerment which need to work effectively. He further contends that structural and legislative constraints (that obstruct the farm sector from efficient operations) act as further impediments to food security. For a resource-scarce, low-income developing nation this can have grave consequences at both the national and household level. Structural adjustment measures undertaken to increase long term growth of both income and employment have so far had little effect (Mhlanga, 1994; Ministry of Agriculture, 1995). Successful adjustment measures can ensure increased local production which plays an important role in assuring availability of food (World Bank, 1988; Van Zyl, 1992).

2.3.1.1 Production and supply

Bayley (1992a; 1992b) suggests that responses to repeated government efforts to boost production by encouraging and promoting better agricultural prices have largely been

unsuccessful. Price policy extends to pricing of inputs and of agricultural produce. Cost-plus pricing has been suggested as possibly an effective method for increasing incomes and returns to successful farmers and their households (Ministry of Agriculture, 1988), which impact on the level of farm household food security (Van Zyl and Kirsten, 1992). However, there is no effective or reliable cost measure as to what extent this brings insecurity to farm households and other sectors of the population. Bayley (1993b) suggests that fixed prices effectively act as a subsidy for successful surplus producing farmers but impinge on the non-farm sector and subsistence farmers. Price supports transfer income to food producers by raising prices above market clearing levels (Davies, 1987).

Import controls and restrictions on import licensing may have led to the creation of virtual monopolies. Milling companies in Lesotho are virtually the only importers of grain that enters formal markets (Bayley, 1993b). Individuals are allowed to import their own grains and other foodstuffs, but the law prohibits any quantities larger than 50 kg (for home consumption) at a time (Department of Economics and Marketing, 1994). Milling companies, which are in practice state-supported monopsonists, can purchase directly from Control Boards in South Africa and are likely to have favourable returns by virtue of size economies. Mills receive indirect price supports and subsidies from the government to stabilize the market (Makenete, *et al*, 1996).

Setai (1984) and Mokotjo (1990) posit that in the event of there not being surpluses created from higher local prices or the impact of import controls, those with surpluses will dispose of their produce in the internal market at higher prices. The government uses a parity pricing approach so that prices in South Africa are comparable to those in Lesotho. The parity price

system has the objective of reducing real prices and making food more accessible to consumers.

There has been a widening gap between producer and consumer prices locally, and both prices are influenced by events in South African markets. Between 1985 and 1991, consumer food prices rose by 163 percent, compared to a rise in all consumer prices of 135 percent (Bureau of Statistics, 1995). This has been attributed to wage inflation, declining productivity in food manufacture, the removal of some subsidies, and the impact of VAT. In Lesotho, the inclusion of Sales Tax in 1986 (increased in 1992 to 14 percent) contributed to increases in food prices. Bayley (1993b) contends that interventions of the South African Maize Board results in above free market increases in the maize price to Lesotho consumers. Lesotho consumers pay about R120 per ton of maize product (1992 figure) purely as a result of the levy set by the South African Maize Board. Wright and Nieuwoudt (1993) calculated that the South African consumer pays an extra R26 (1992) per ton, above which an additional R21 per ton is charged to the Lesotho consumer (Bayley, 1993b). This additional amount is due to transportation costs, insufficient domestic production (only three percent of local grains enter mills) and the high gazetted milling margins.

2.3.1.2 Availability and securing of grains

Food grains are available locally from traders, the mills and directly from farmers, whilst direct imports are limited by legislation. Grain imports are available throughout the year and supplement local production. Formal trading relationships have long existed between Lesotho and South Africa, with formal trading regulations established as early as 1871 (Mokitimi,

1990). However, since many consumers are unable to procure or produce sufficient food, they receive food aid which is an important source of food grains.

Households acquire their food grains through direct purchase, intra-household and village transfers, through food for work schemes, the school feeding programme, supplementary feeding programmes initiated by the Ministry of Health and direct food donations. Food grain shortages in the formal trade sector have not been reported as sufficient grain is imported, brought in as food aid or purchased from local producers in surplus areas to meet local shortages. The security of food grains for Lesotho households would appear to depend on what Sen (1981) referred to as "entitlement to food". Assuming that food grains are generally available, price becomes one of the important criteria in determining the ability of the individual or household to secure adequate amounts of food to assure food security. Maize marketing and pricing in Lesotho is discussed in the next chapter.

CHAPTER 3

MAIZE MARKETING AND PRICING IN LESOTHO

3.1 Introduction

The Lesotho government's overall agricultural policy objectives have been to improve rural incomes, provide employment and to improve national food security (Government of Lesotho, 1986; 1992). Mechanisms to stabilize producer and consumer prices of maize and reforms to maize marketing are some of the policy instruments used to improve food security (Government of Lesotho, 1986; 1992). Strategies for food security in the 1980's were based on increasing local capacity to produce staple cereals, through increased agricultural development and food production, to maintain critical food reserves (Tola, 1988; Eckert, 1983; Swallow and Borris, 1988). Maize is the major food staple, constituting some 50 - 60 percent of the diet of average Basotho households (National Early Warning Unit, 1994a).

The fear was that world sanctions against South Africa, and potential break down in political relations between Lesotho and South Africa, would put Lesotho under severe risk of food shortages, as about 50 percent of its food supplies came from South African commercial imports (Government of Lesotho, 1981; Tola, 1988; Swallow and Borris, 1988; UNCDF, 1993). This prompted the government to engage in the Food Self Sufficiency Programme (1979/80) to expand food grain production (Government of Lesotho, 1981; 1986; Tola, 1988; Swallow and Borris, 1988; Eckert, 1982; 1983), with the first objective to achieve self-sufficiency in maize and sorghum production within five years. Maize pricing and marketing regulations were established to support this initiative (Government of Lesotho, 1981; 1986).

By the start of the 1990's, political changes in South Africa reduced fears about reliance on South African imports. Commercial imports of staple grains had also not appreciably declined, as regional trade envisaged under the Southern African Development Community (SADCC) had not provided Lesotho with food imports. The costs to the government of the large scale Food Self-Sufficiency Programme were mounting. Between 1980/81 -1982/83, the Republic of China provided loans totalling US$6,6 million, the Government of South Africa provided a line credit of R2 million and government of Lesotho secured various loans and overdraft facilities in excess of R19 million (Swallow and Borris, 1988). Hanneken (1993) estimated losses and bad debts of over R17 million for 1992 alone. These considerations and pressure from multi-lateral donors for the government to pursue macroeconomic reforms to reduce government expenditures and debt (Government of Lesotho, 1994; Ministry of Agriculture, 1995) drew attention to maize marketing and pricing regulations (Motsamai, 1994).

Maize and grain market reforms were proposed under both initial and enhanced Structural Adjustment Programmes (Government of Lesotho, 1994) and by Ministry of Agriculture guidelines (Ministry of Agriculture, 1993) initiated in the 1980's and early 1990's. The Structural Adjustment Programmes suggested that government stop supporting and subsidizing parastatals such as Co-op Lesotho which was the principal supplier and buyer of farm inputs and produce and the main formal purchaser of grains. They also recommended the privatization or commercialization of all parastatals in the agricultural sector and of government owned agro-industries. Suggested reforms to the Food Self Sufficiency Programme included the phasing out of government support and subsidies to the Technical Operations Unit and the Lesotho Agricultural Bank administered credit component of the

programme (Government of Lesotho, 1992; Ministry of Agriculture, 1993).

Past research by Olson (1985) on long term demand for maize in Lesotho, has shown that despite shifting consumer trends and rising incomes, demand for maize would continue to grow and local supply factors would increasingly be unable to cope with this demand. Brokken (1986) reported that most agricultural produce in Lesotho was for home consumption or marketed locally in the informal market with little farm produce entering the formal market, while marketing infrastructure was poor. Mokitimi (1990) found the formal maize marketing system was very small and would need to expand to meet growing consumer demands, whilst a very active informal market operated parallel to the formal market. Bayley (1993b) deemed the maize marketing system in Lesotho to be inefficient and overly regulated, protecting the commercial millers at a significant cost to government and consumer welfare.

This chapter extends past research by investigating policy measures applied to maize marketing and maize price setting in Lesotho and their impact on consumers and the government. It recognizes the need to re-orientate food security objectives in Lesotho away from those that applied in the 1980's when sanctions could have limited grain imports from South Africa. The need for government to implement liberalization of the maize grain trade as suggested by Bayley (1993b) is supported. Reduced subsidies to the commercial mills and the removal of price regulations are also recommended.

3.2 Maize marketing system in Lesotho

The marketing of maize and other agricultural products in Lesotho is primarily governed by

the 1967 Agricultural Marketing Act, the 1979 Marketing Amendments Act and various Legal Notices. The 1967 Marketing Act empowers the Minister of Agriculture to gazette regulations and/or intervene in aspects such as product pricing, trade and marketing. Seasonal forecasts for production are made before and after harvest and a trading account constructed using projections of existing and/or expected national stocks from imports and food aid monitored by the National Early Warning Unit and the Food Management Unit. Most maize grown in Lesotho is consumed by households and there are few surplus producers. Most domestic maize (about 70 percent) is grown in the northern and central districts of Lesotho (Ministry of Agriculture, 1994a). The commercial mills are strategically located in the border towns of Maseru (centre) and Maputsoe (north), which are convenient for importing maize grain. The maize is imported from South Africa through the South African Maize Board which is the sole exporter of maize in South Africa. The South African Maize Board transports the maize mainly from silo's in the Free State by rail to Maputsoe and Maseru (Lesotho Milling Company, 1994).

Imports, including food aid, constitute over 50 percent of total annual consumption of maize in Lesotho. Consumption figures for maize show an average of 126 kilograms per capita for the period 1981 - 1993 (Bureau of Statistics, 1994; Austin, 1993; Food Management Unit, 1994a).

3.2.1 Informal sector

In the informal sector maize is primarily consumed at the household / village level and very little enters the formal marketing chain. Maize is ground at home or by hammer millers who

charge milling fees. A few surplus producers also sell maize privately or engage in maize trade for bartering purposes, particularly in exchange for livestock. Bayley (1993b) and the Ministry of Agriculture (1992) report 70 kilogram bags being exchanged for one or two sheep in the Highlands (Sheep sold for about R250 each in 1994).

3.2.2 Formal sector

Data for the period 1981/82 - 1993/94 show that most households are deficit producers (Ministry of Agriculture, 1994a; National Early Warning Unit, 1994a; Food Management Unit, 1994a). Formal maize marketing channels are very limited and there are only three mills in Lesotho. The parastatal, Lesotho Flour Mills, milling maize as Lesotho Maize Mill in conjunction with a management team from Spillers (UK) since 1986, is located in Maseru. Two other mills, Maputsoe Milling and Maseru Roller Mills are both operated under Lesotho Milling Company, a partnership between Tiger Oats and the Lesotho National Development Corporation (government parastatal). Maseru Roller Mills has been milling maize for 23 years. The mills process and package maize meal and maize by-products (animal feeds), wheat meal, and sorghum. Lesotho Flour Mills also packages and distributes other commodities such as sugar. The bulk of maize processed in the formal sector comes from commercial imports and food aid. Both Lesotho Flour Mills and Lesotho Milling Company report that less than 10 percent of their intake is from local production. Table 3.1 shows the amount of local maize milled and its proportion to all maize milled commercially in the period 1987/88 - 1992/93.

Table 3.1: Local versus imported maize milled commercially in Lesotho, 1987/88 - 1992/93.

YEAR	LOCAL MAIZE[1] (Tons maize milled)	IMPORTED MAIZE[2] (Tons maize milled)	TOTAL MAIZE (Tons maize milled)	LOCAL MAIZE MILLED (Percent)
1987/88	8 906	83 865	92 771	9,6
1988/89	11 156	75 305	86 461	12,9
1989/90	8 805	89 028	97 833	9,0
1990/91	23 760	135 703	159 463	14,9
1991/92	3 400	132 600	136 000	2,5
1992/93	1 593	143 288	144 881	1,1

Sources: 1) Lesotho Milling Company (1994) and Lesotho Flour Mills (1994); 2) Food Management Unit (1994a).

Lesotho Flour Mills also milled 3 000 tons of donated food aid on behalf of government in 1988/89 and 4 000 tons in 1989/90 above local intake and commercial imports. Lesotho Flour Mills in 1991/92 received direct commercial imports from Zimbabwe. Lesotho Milling Company has not processed any food aid in the past five years and receives direct commercial imports through the South African Maize Board and its agents. Maize throughput at Lesotho Flour Mills has been rising since the mill's inception (1986) with a 39 percent per year increase from 1988/89 - 1992/93 (Lesotho Flour Mills, 1994). Annual turnover increased from R78,67 to R164,17 million over the same period. Sugar packing, wheat processing, animal feeds production and other operations contribute more to Lesotho Flour Mill's revenue

than maize milling. Revenues from the processing of maize averaged only 6,35 percent of turnover over the five year period considered.

At the Lesotho Milling Company's Maputsoe mill, throughput of maize in the years 1989/90 to 1992/93 varied from 50 532 to 67 342 tons. Annual turnover over that period rose steadily from R34,64 to R60 million. Maize revenue averaged 94,3 percent of overall turnover over the four year period. For the Lesotho Milling Company's Maseru Roller Mills annual maize throughput and revenue averaged about 25 000 tons and R23 million respectively from 1990/91 - 1992/93, with maize revenue averaging 96 percent of total revenue (Lesotho Milling Company, 1994). Table 3.2 summarises annual throughput and turnover for the commercial mills.

Table 3.2 Maize throughput and annual turnover (R million) of maize mills in Lesotho, 1988/89 - 1992/93.

YEAR	Lesotho Flour Mills		Lesotho Milling Company			
			Maputsoe Mills		Maseru Roller Mills	
	Maize Milled (Tons)	Turnover (R mill)	Maize Milled (Tons)	Turnover (R mill)	Maize Milled (Tons)	Turnover (R mill)
1988/89	16 171	78,669	******	******	******	******
1989/90	******	103,127	57 821	34,644	******	******
1990/91	60 059	115,775	50 532	34,951	26 409	23,458
1991/92	80 869	149,795	65 749	52,364	23 804	24,218
1992/93	85 641	164,171	67 342	60,000	21 537	22,590

****** Indicates that these figures were not available.

Sources: Lesotho Flour Mills (1994) and Lesotho Milling Company (1994).

Based on 1992/93 figures, Lesotho Flour Mills produced 49,1 percent, Maputsoe Mill 38,6 percent and Maseru Roller Mills 12,3 percent of commercially milled maize meal in Lesotho.

Both Lesotho Flour Mills and Lesotho Milling Company are reluctant to expand purchases of domestic maize because of high transaction costs, relatively high local prices and inconsistent quality compared to maize from the South African Maize Board. Local producers supply irregular and small quantities of maize and often have to travel long distances to reach the commercial mills. The government stipulates that all domestic maize delivered to the mills must be bought (Motsamai, 1994). Co-op Lesotho (prior to the 1992/1993 marketing year) and other traders buy locally produced maize at the legislated price and sell it to the mills at the government gazetted price (Legal Notice No 142 of 1992), as do farmers who deliver to the mills. The price offered by Co-op Lesotho to farmers was the price set for traders. Private traders are known to offer more than this price (Ministry of Agriculture, 1992), but they rarely buy in maize with the intention of selling to the commercial mills. Bayley (1993b) and Motsamai (1994) suggest that private traders are not convinced that the price they receive from the mills for delivery of maize is sufficient incentive compared with higher expected returns from informal market sales. Co-op Lesotho, after incurring trading losses for over a decade, was closed during the 1992/93 marketing year in terms of Structural Adjustment Programme clauses to reduce government expenditures and sell non-profitable parastatals (Ministry of Agriculture, 1994b).

All of the commercial maize meal produced is sold locally. Reports of illegal imports of both maize grain and meal are common. The commercial mills have challenged certain stores and border controls (posts where they suspect or have information that maize grain/meal is entering the country) over import infringements. Only the Lesotho Government, through the Department of Economics and Marketing, can legally issue import trading licences and permits for commercial and non-commercial uses of maize. Imports are restricted to maize

grain. The areas adjacent to South Africa are not closely policed as customs officials rarely search and there are large sections without border controls, so maize import regulations can be avoided. High internal transportation costs make illegal maize meal imports from South Africa cheaper than the locally milled maize. Inconsistent supply and the lack of available credit place constraints on the trading of local maize meal. Lesotho Milling Company only makes bulk deliveries upwards of eight tons and extends only limited credit to traders. Discounts are available only to large buyers. Where infrastructure is well-established, the mill delivers to all 10 districts of Lesotho.

The new maize marketing system operating in South Africa since 1 May 1995 has not altered existing formal trade arrangements and marketing opportunities with Lesotho. While maize can now be traded freely within South Africa, with market-related regional pricing replacing the old cross-subsidized "single-price" system, the South African Maize Board remains the sole exporter of maize. The commercial mills in Lesotho therefore still cannot buy directly from South African producers and agents.

3.2.3 Marketing opportunities

Most local producers in Lesotho can sell their grain either to the mills (formal) or to informal buyers (other households and local traders / millers). Surplus producing households with large quantities of maize grain participate in the formal market as suppliers when they sell to the mills, particularly immediately after harvest. This is probably due to 1) a cash need after harvest as farmers cannot wait to sell on the informal market once home grown grains have been consumed; 2) a need to repay bank financed Food Self Sufficiency Programme

loans or loans for contractor services; and 3) high transaction costs (storage, handling, etc) which make formal producer prices competitive with the informal price (Bayley, 1993b). Reasons 1 and 3 suggest that the informal market price after harvest is low and closely approximates the formal market clearing price. Selling to the formal sector is thus the most attractive economic option for large surplus producers whose supply is net of own subsistence needs. These conditions plus the producer price determine the quantity of grain sold to the mills and the quantity sold to the informal market.

For grain deficit producers (most households), grain can be obtained by either purchasing commercial maize meal from traders and retailers, and/or buying grain on the informal market. Bayley (1993b) and the Ministry of Agriculture (1992) contend that in most areas the price of maize grain tends to approach the retail price of refined maize (RP) minus informal milling costs (MC). Due to the availability of commercial meal, (RP - MC) effectively becomes a ceiling price for transactions within the informal market. Supply of maize at this price is perfectly elastic to rural consumers. Maize suppliers will sell at the market clearing price as determined by local demand conditions. Trade flows of local maize grain are limited to the period just after harvest. Hence, there is an inflow of commercial maize meal to grain deficit areas despite local consumer preferences for coarser (local) maize meal.

3.3 Price setting, margins and controls

Farmer representatives, officials from the Ministry of Agriculture and senior personnel from Lesotho Flour Mills and Lesotho Milling Company are involved in setting prices at different

levels in the maize marketing system. Farmer representatives in the major producing districts are nominated by field extension staff and have to be approved by the Ministry.

3.3.1 Producer price

Producer prices are set by the Ministry of Agriculture for producers who deliver to the three commercial mills. Prices are also set for deliveries to trading stores by calculating handling charges plus a variable margin - dependent on the import parity price which is based on the South African Maize Board price (Motsamai, 1994; Bayley, 1993b), and local production costs. The producer price is based primarily on local production costs derived from cost calculations made by the Food Self Sufficiency Programme and quoted contractor prices. These price calculations are determined by the Ministry of Agriculture and farmer representatives (Motsamai, 1994), and then published and gazetted by the Minister of Agriculture before the planting season. Uniform or pan-territorial pricing strategies have been used for the whole country. This system benefits producers in surplus areas who otherwise would receive lower prices (Masters, 1993).

Real maize producer prices have declined steadily in the last ten years from around R430 per ton to just under R350 per ton in 1994 (1989 = 100). This is largely due to falling real prices of maize grain imports from South Africa which are used as a reference, and pressure on government from the three mills to not support high local producer prices (Motsamai, 1994). South African producer prices have consistently been lower than Lesotho producer prices and direct cross-border purchases from South African farmers would allow Lesotho buyers to acquire cheaper grain. However, the new South African regulations

stipulate that the South African Maize Board remains the sole exporter of maize.

3.3.2 Informal miller price

Informal millers do not have their prices set by government. In 1992 a study carried out by the Department of Economics and Marketing in Lesotho showed average informal milling costs to vary from R1,00 to R2,50 per 12,5 - 15 kilogram container (Ministry of Agriculture, 1992). Informal millers in both urban and rural areas can buy directly from local farmers without their buying and selling prices being monitored or enforced by the government.

3.3.3 Formal miller and consumer prices

3.3.3.1 Mill-gate price

The government consults with miller personnel on maize milling margins and then determines and legislates the mill-gate price (Lesotho Milling Company, 1994). Prices are based on the border parity price, costs of production (for local producers and reflected in the producer price), processing, refining and packaging, plus what Motsamai (1994) and Lesotho Flour Mills (1994) claim is a 10 - 15 percentage mark-up. Border parity pricing is necessary, since the bulk of grains milled is imported from South Africa. The mills' transport and procurement costs are in respect of imports. Quoted transport figures per ton for 1991/92 and 1992/93 for Lesotho Flour Mills were R38,91 and R44,20 compared to R48,00 and R67,00 for Lesotho Milling Company. Some of these discrepancies are due to Lesotho

Milling Company reporting mean transport costs for two mills at two different locations (Lesotho Milling Company, 1994).

Lesotho mill-gate prices for maize meal have generally declined in real terms since 1983/84. In 1984/85 the price was a high of R637,37 per ton, dropping to a low of R441,40 per ton in 1993/94 (1989 = 100). The trend is similar for smaller volumes of maize meal. South African mill-gate prices appear to have declined over a comparative period, from R712,25 per ton (1981/82) to R674,71 (1993/94) per ton (Directorate of Agricultural Information, 1994), as the South African Maize Board has paid lower net producer prices which reflect export losses (Vigne, 1995; Wright, 1992; Wright and Nieuwoudt, 1993). The mill selling price in South Africa, prior to the 1995 policy change, covered South African Maize Board prices, agents' costs, milling costs and mill profit margins.

The Lesotho government gives *de facto* monopoly powers and subsidies (effected through amendments and bills provided by the 1967 Marketing Act) to both Lesotho Milling Company and Lesotho Flour Mills. There are no reported figures to show the extent of subsidization, but the total level of subsidy is estimated in Table 3.3 by the difference between South African and Lesotho mill-gate prices. The rationale is that the alternative to purchasing locally milled maize meal would be to import maize meal from South Africa. The estimates are a lower limit as transport costs have been ignored. The estimated total level of subsidies has risen in real terms (1989 = 100) since 1989/90, and for the 1992/93 season was some R38,05 million (assuming estimated mill throughput of 174 550 tons). Subsidy amounts are estimated after converting 80 kilograms of sifted maize meal to a one ton equivalent. Under the Customs Union agreement, the movement of goods and services between Lesotho and

South Africa is not subject to any tariffs, taxes or trade barriers.

Table 3.3 Estimated Lesotho government subsidies to mills, 1989/90 - 1993/94, in real terms (1989 = 100).

YEAR	SA Mill-gate real price * R/ton	LESOTHO Mill-gate real price R/ton	Estimated real SUBSIDY R/ton
1989/90	713,60	585,77	127,83
1990/91	718,63	576,91	141,72
1991/92	705,44	563,20	142,24
1992/93	705,78	487,79	217,99
1993/94	674,71	441,50	233,21

* Converted 80 kilogram sifted maize meal to a one ton equivalent.

Source: Directorate of Agricultural Information (1994), Bureau of Statistics (1994), and Department of Economics and Marketing (1994).

Close to 100 percent of the commercial grain market in Lesotho is controlled by Lesotho Milling Company and Lesotho Flour Mills. Informal millers and the general public cannot make direct bulk purchases without import licences that are limited at the discretion of the issuer, normally the District Marketing Officer (Legal Notice 78 of 1992). For the period July 1992 to June 1993 permits were granted to the general public to import 5 395 tons of maize (barely 2,9 percent of commercial grain consumption) compared to 184 050 tons by the commercial mills (Department of Economics and Marketing, 1994; Bayley, 1993b). Informal mills probably continue to exist due to 1) indigenous rural and some urban preference for coarser maize meal; 2) convenience with respect to time and location; and 3) lower direct milling costs (Motsamai, 1994; Bayley, 1993).

3.3.3.2 Consumer price

Since 1988 retailers and wholesalers have been free to determine their own prices for maize meal, except in 1992 when a severe drought was experienced and government set the price. Consumer prices for maize meal, taken from Bureau of Statistics CPI estimates for 12,5 kilogram and 2,5 kilogram quantities, declined in real terms between 1988/89 - 1993/94. For the 12,5 kilogram unit, prices dropped from R8,99 to R7,60 (or 15,46 percent) over the five year period. A direct comparison between real consumer prices in Lesotho and South Africa shows that Lesotho consumer prices have fallen from R719,20 per ton to R608,00 per ton, whilst South African consumer prices have remained fairly constant at around R1 080 per ton (1990 = 100) (Directorate of Agricultural Information, 1994). Over the past five years, the differences between consumer prices in Lesotho and South Africa have grown, with South African consumer prices being higher. The Lesotho government's subsidy to the mills and the withdrawal of maize subsidies in South Africa from 1993 probably explain these differences. In real terms South African Maize Board prices fell at a slower rate than South African producer prices and the Maize Board - producer price margin increased, due to the need to finance export losses (Faminow and Laubscher, 1991; Directorate of Agricultural Information, 1994).

3.4 Conclusions

Lesotho is likely to remain a net importer of maize grain in the medium to long term, as over 50 percent of total annual grain consumption is made up of imports. This situation has not been reversed despite major investments and capital infusions made in the 1980's to increase

food self-sufficiency in maize. Maize pricing and marketing policy measures to support food self-sufficiency initiative have had the following impact. Net real producer prices have declined in real terms over the last ten years and most farmers remain net deficit producers. Farmers producing small surplus quantities of maize grain for sale generally sell to the local informal market. Efforts have been made to change the producer price setting mechanism - based on cost of production and border parity pricing criteria - by using improved cost of production estimates, with a shift from data supplied by the Technical Operations Unit of the Ministry of Agriculture to estimates from individual farm machinery operators. Costs for inputs are no longer based on Co-op Lesotho prices but on prices from private sector input suppliers (Ministry of Agriculture, 1994b).

Lesotho production cost estimates are, however, difficult to obtain since production is influenced by different production systems, technological and environmental conditions. Costs that influence farmer decisions (opportunity costs) are subjective (Takavarasha, cited in Krishna, 1990), and basing price supports on cost of production is not a justifiable concept (Pasour, 1980; Belongia, 1983).

At the mill-gate level, the most important factor is the border parity price, as most commercially milled maize is sourced from South African Maize Board exports. The South African Maize Board export price affects the Lesotho government's decisions on both maize milling margins and mill-gate prices in Lesotho. Government pricing policies also prevent competition between mills, and reduce trader and wholesaler competition for market share. If maize prices are to remain affordable to Lesotho consumers when most households are deficit producers and government subsidy costs are rising, the present one-channel marketing

system and administered price structure are possibly inappropriate. It may be possible, for example, to obtain maize grain at relatively lower prices directly from South African farmers, but this would have to be negotiated with the South African Maize Board. Consumers and traders should be allowed to trade and market maize grain in an open market system with less restrictive interregional maize movement (remove restrictive licensing). More competition would be stimulated between the three major mills and local hammer mills by removing quantity controls on maize grain imports.

Local consumers would have a wider range of product choice and sources if trade was deregulated. There would, however, be a trade-off between deregulation of maize marketing and the removal of price controls and government subsidies. The expected maize meal price increases when subsidies are removed would be partly offset by expected price reductions due to more competition and less control on grain imports. Government (taxpayers) would benefit from reduced subsidies and less administrative procedures required to police, monitor and regulate maize pricing and marketing.

CHAPTER 4

FOOD AID DEPENDENCY IN LESOTHO: ISSUES AND CONSIDERATIONS

4.1 Introduction

Food aid is a form of food commodity transfer from one country or organization known as the donor, to a recipient country or agency (Jones, 1977) on a totally grant basis or on highly concessional terms (Food and Agriculture Organization, 1994). This type of aid has become a permanent feature of international assistance from the developed world to developing nations (Cathie, 1982). Isenman and Singer (1977) point out that the primary aim of food aid is to feed the hungry, particularly the nutritionally vulnerable, without significantly increasing government budgetary support. This creates an income transfer by raising real incomes and savings of low-income households who allocate proportionally more income to food grains and less to savings. Food as a form of aid has been used in a variety of ways, impacting mainly on nutrition, consumer prices and agricultural production, particularly in less developing countries (Cathie, 1982; Mellor, 1984; Stevens, 1979). These impacts may be direct or indirect, though difficulties arise in making distinctions (Stevens, 1979).

This chapter analyzes the issues relevant to food aid dependency in Lesotho, particularly the link to food security and their policy implications. Lesotho has a long history of food aid beginning in the 1930's, when it was last self-sufficient in the staple grains, but it only started to receive large quantities of food aid in 1966 to cope with the serious drought (Jones, 1977), and the trend has since persisted. The need to investigate the role of food aid in Lesotho's economy is that the economic and political environment has in the three decades since

Lesotho's independence undergone tremendous transformations. The most significant of these are: 1) the democratization of South Africa which has reduced world sympathy and support for Lesotho which was perceived to be isolated within a hostile environment; 2) failure to transform the Lesotho economy and increase agricultural growth; 3) changing donor countries agendas due to internal political and economic pressures, resulting in calls to reduce or reform their aid contributions.

Past food aid studies in Lesotho did not focus on the food security aspect of this aid. Jones (1977) investigated how food aid to Lesotho was administered, and in particular the United Kingdom's role in granting food aid to Lesotho. Austin (1993) studied the contribution of food aid to cereal supply and utilization, focusing on the its impacts on nutrition and the nutritional status of Lesotho households. The intervention of food aid was important in maintaining vulnerable groups. Cathie (1982) used Lesotho as a case study of the political economy of food aid, whilst Stevens (1979) used Lesotho as an example of how such aid can be supplied and used by a recipient developing country. Nziramasanga (1987) investigated food aid within the Southern African region and its role in trade and economic development, but ignored Lesotho. Tola (1988) considered food security issues facing Lesotho in the late 1980's. He argued that food reserves should be guaranteed (through food aid and commercial purchases), and that the Lesotho government should increase production of staple grains since the political climate in the 1980's created some doubt as to whether South Africa would continue to provide staple food supplies.

Long term reliance on food aid is problematic since there is no guarantee of support from the donor community. Lesotho's balance of payments and trade deficit cannot assure continued

and sustained commercial imports from either South Africa, Zimbabwe or the European Union. Production of maize surpluses in South Africa may decline if real maize prices there continue to fall.

4.2 Food aid objectives

Most food aid is provided on the basis of bilateral agreements that are largely influenced by political considerations (Cathie, 1982) and world responses to dramatic food shortages (Food and Agriculture Organization, 1985). Foreign aid in general can be said to combine altruistic activities along with political and economic investment considerations (Pinstrup-Anderson *et al*, 1995). Food aid arose primarily as a response to the surplus disposal programme of the United States of America in the 1950's, and has evolved conceptually, politically and institutionally. Food aid made it possible to: 1) dispose of surpluses (mainly cereals); 2) form a mechanism of exchange between orderers and disposers of surpluses whilst attempting not to cause harmful disruptions and interfere with normal patterns of production and international trade; and 3) find a consultative approach for governments with respect to engaging in food transfers (Food and Agriculture Organization, 1985).

Food aid in the sub-Saharan African context is now typically seen as a means to enhance food security - a situation in which the people of a country reliably receive all the food they require for normal health all the time (World Bank, 1986: 216). The conceptual evolution of food aid, particularly towards its role in combating food insecurity, stemmed from the use of food surpluses in: 1) food for work projects; 2) the stabilization of food supplies; 3) specialized feeding programmes aimed at vulnerable target groups; and 4) subsidization of

new food uses. Food aid can be used indirectly to provide support or as an incentive to initiatives for community and economic development. Mellor (1984) concludes that food aid can and does improve food security by providing the means of protection and ways to raise the dietary status, nutrition and consumption of the poor. Cathie (1982) refers to food aid being used for additionality, whereby it adds to overall consumption by the poor (diets and nutrition are improved). The additionality principle is supported by agencies and organizations that focus on low income households and vulnerable groups as recipients of food aid.

The donor community is increasingly programming food aid policy to support or be consistent with other forms of development aid (Clay and Benson, 1990), without necessarily increasing the amount of aid. There have been clear signs of donor reluctance to provide food aid as part of development assistance, with world figures of food aid as a percentage of overseas development aid dropping from 11,7 in 1981 to 5,4 percent in 1992 (Food and Agriculture Organisation, 1994). Aid has now also been tied to economic and political reforms. The lack of individual country support of programmes initiated by the developed nations and international institutions may lead to reduced total aid for developing countries. It has been described by some as a sense of hopelessness due to lack of progress in development or reduced dependence on aid (Ministry of Agriculture, 1994b; Food Management Unit, 1994b). Many donor states, after years of slow economic growth, pressures to reduce their own subsidies to agriculture, the worldwide movement to freer trade and less control, are less eager or able to act as willing donors (Ministry of Agriculture, 1994b). In the United States, like much of Europe, there is growing internal political pressure to reduce foreign aid and to concentrate on local interests. In Lesotho, the democratization effort of the 1990's,

culminating in an elected government, can in part be explained by donor pressure on the then military regime of impending cuts in foreign aid, including food (Sechaba, 1995).

Transfers have traditionally been in the form of food - primarily cereals (maize grain, flour, wheat, rice) - or convertible currencies for barter or 'swap' arrangements (Clay and Benson, 1990). The flow of aid has traditionally been from the developed Western countries, including Japan and Australasia, to the developing countries of Latin America and sub-Saharan Africa.

4.3 Food aid in Lesotho

4.3.1 Background

Food aid substitutes for the food gap experienced by countries due to their inability to produce or import enough commercial imports to meet residual local demand. The important food question in Lesotho is whether Lesotho imports enough food to make up the shortfall in production, an amount equivalent to about 60 percent of national consumption annually (Ministry of Agriculture, 1994a; Bureau of Statistics, 1994). Due to the high incidence of poverty (said to affect over 26 percent of the population) and poor natural physical resources, Lesotho has over the years developed a system of reliance on continual cereal importation. Because cereals constitute over 75 percent of the national diet in Lesotho (National Early Warning Unit, 1993a), "food security" in the Lesotho context refers to "staple cereal food security" (National Early Warning Unit, 1993b).

Commercial imports of cereals are authorized by the Government of Lesotho through purchases of maize from the South African Maize Board and wheat from the world market. Imports are arranged by the commercial mills (Lesotho Flour Mills and Lesotho Milling Company which includes Maseru Roller Mills), but are never sufficient to cover effective demand (National Early Warning Unit, 1994a; Ministry of Agriculture, 1994b; Cekwane, 1995). Effective demand is defined as the desire of consumers to buy, combined with their ability to pay for, cereals they want or need (Takavarasha, 1993). Therefore, the Lesotho government and food aid agencies supplement supply requirements with food aid which is clearly used for additionality purposes (although some aid, such as wheat sold onto the commercial market through Lesotho Flour Mills, is not in this category).

Food aid contributions to Lesotho are the combined efforts of foreign governments, organizations and agencies, most notably the United States Agency for International Development (USAID), the European Union (20 000 tons of maize in 1993/94), the World Food Programme of the United Nations, and the United Kingdom mostly through the Save the Children Fund (50 000 tons of maize in 1993/94). The largest contributor to the World Food Programme component for Lesotho has generally been Japan. Other agencies include the United Nations International Children and Education Fund, and the World Health Organization (WHO) who distribute food to schools and provide supplements for pregnant mothers and undernourished children under six years of age.

Since Lesotho's main staple is white maize and most world surplus stocks used as aid consist of wheat or yellow maize, most of the food aid sent to Lesotho is white maize purchased from South Africa or Zimbabwe in terms of tri-lateral agreements (Food Management Unit,

1994b) over and above commercial imports from these countries. These tri-lateral arrangements are a recent development, as Zimbabwe previously did not export substantially within the region and donor nations were prohibited from dealing with South Africa. Gay *et al.* (1994) indicate that about 49 percent of Lesotho's population can be categorized as poor, with a further 26 percent as below the poverty level (consume respectively less than half and a quarter of the diet requirements of an average healthy adult equivalent, calculated at R140,96 per month based on a 1993 Baseline survey). Some 75 percent of Lesotho's population thus can technically qualify for food aid in Lesotho.

4.3.2 Food aid management

The targeting and distribution of food aid has large internal and external transportation and transactions (handling, storage) costs. The Food and Agriculture Organization (FAO) (1985) estimates these to be about two thirds of the cost, including insurance and freight (cif), of food transported in some sub-Saharan African countries. Data collected from the Food Management Unit in Lesotho show cost estimates for white maize grain of R0,41 per kg in 1990 and R0,58 per kg in 1993 for transport and transactions costs, while consumer prices of sifted maize meal were R0,62 per kg in 1990 and R0,71 per kg in 1993. These prices also reflect the subsidies provided by the government to commercial mills and to consumers through price controls. These figures represent actual prices quoted from the Ministry of Agriculture to the World Food Programme (Food Management Unit, 1992; 1994c). Freight figures in 1990 for railage from South African ports into Lesotho were R0,99 per kg (Food Management Unit, 1992).

Prior to the lifting of sanctions in South Africa, food aid was purchased or delivered from Europe, and North and South America. In 1990, freighted costs of food aid were 33 percent higher than for commercially imported maize, derived from landed cost figures to the mills (Lesotho Flour Mills, 1994). The Lesotho government takes delivery of food aid landed in its silos and recovers costs for delivery (donors absorb transport and transaction costs) (Food Management Unit, 1994a; 1992).

Aid must often be accompanied by institutional support, technical assistance and the policy capacity to integrate it into a holistic food security framework. Food aid in Lesotho is handled through government authorized institutions, primarily the Food Management Unit, located within the Ministry of Agriculture (but responsible to the Office of the Prime Minister). At various times in the past, aid has been managed under different ministries/institutions, but there has always been a centralized distribution office, which Stevens (1979) attributes to the political sensitivity of food aid.

Since 1992, the Food Management Unit has worked directly with the Drought Relief Implementation Group whose mandate includes the identification of vulnerable groups and the distribution of food. These groups work directly with aid agencies spearheaded in Lesotho by the World Food Programme, USAID, the European Union, and Overseas Development Agency of the United Kingdom. Also included are the Cooperative of Relief Everywhere (CARE), the Catholic Relief Services (CRS), various other church organizations and non-governmental organizations such as the Save the Children Fund. Some of these institutions do not physically handle food aid or make direct contributions, but ensure delivery from the Food Management Unit stores to distribution points around the country. Private

agencies, institutions and traders have also been involved in food distribution but the ultimate responsibility of targeting lies with the Food Management Unit. This unit is helped by nutrition assistants in the districts, health workers, chiefs and extension agents in identifying vulnerable groups and households. These cases are listed on a roll that is controlled at the village and ward level. Cases are placed on or taken off the roll at the discretion of the identifying bodies, who are also responsible for verifying data and ensuring aid reaches target groups.

Food aid can be classified as programme aid (to assist in programmes or for sectoral support) and project aid (for specific projects). Lesotho receives both programme and project aid and often the donor chooses the type of aid provided; for example, some of the ODA aid comprises "food- for-work" projects that assist in conservation works and tree planting.

4.4 Food aid issues in Lesotho

Food aid issues relate to the effects of such aid on domestic food production, food prices and human nutrition (Isenman and Singer, 1977). The impact of food aid in Lesotho is reflected by trends in cereal self-sufficiency, producer and consumer food prices and nutrition and consumption patterns.

4.4.1 Cereal self-sufficiency indices

Prior to the 1930's Lesotho was a net exporter of food, but today it is a large net importer of food (Swallow *et al*, 1988; Jones, 1977), highly dependent on food aid and commercial

maize imports from South Africa. Food self-sufficiency indices for maize and wheat remain very low, meaning that Lesotho produces a low level of its national requirements. Table 4.1 shows Lesotho's self-sufficiency indices for major cereals over the period 1983/84 to 1992/93. The difference between domestic production and total supply shows the substantial contribution of imports and donated food.

Table 4.1 Cereal self-sufficiency indices, food aid and commercial grain imports to Lesotho, 1983/84 to 1992/93.

Year	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Domestic Production (1 000 tons)										
M	79,4	92,4	86,5	94,9	159,7	137,2	171,6	48,9	61,1	45,0
W	17,1	10,4	11,0	18,5	19,2	29,7	33,2	7,0	11,9	8,9
S	33,8	54,8	33,5	31,2	53,4	31,1	36,1	10,0	19,5	11,0
Commercial Imports (1 000 tons)										
M	94,9	99,8	102,3	97,9	110,5	106,9	158,3	131,7	110,0	152,9
W	31,8	32,0	32,0	32,0	41,4	54,2	37,1	56,8	25,0	60,5
S	1,0	1,0	1,0	1,0	3,4	0,5	0,9	1,7	0,0	0,0
Food Aid (1 000 tons)										
M	9,0	15,0	15,0	15,0	20,5	19,8	10,9	10,4	37,0	30,6
W	20,6	30,7	31,0	31,0	42,9	16,2	8,6	15,0	28,0	10,0
S	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0
Total Supply (1 000 tons)										
M	183,3	207,2	203,8	207,8	290,7	263,9	340,8	191,0	208,1	228,5
W	69,5	73,1	74,0	81,5	103,5	100,1	78,9	78,8	64,9	79,4
S	35,1	55,8	34,5	32,2	57,7	31,6	37,0	11,7	19,5	11,0
Self-Sufficiency Index (Domestic production/total supply) as a percentage										
M	43	45	42	46	55	52	50	26	29	20
W	25	14	15	23	19	30	42	9	17	11
S	96	98	97	97	93	98	98	91	100	100
Food Aid / Commercial imports plus Food aid (as a percentage)										
All	19	26	25	26	29	18	9	12	33	16

Source: Agricultural Situation Report (1994); National Food Security Data-book (1993); and Bureau of Statistics (1994).

* All figures in whole maize grain equivalent.

Key: M = Maize; W = Wheat; S = Sorghum; All = All three cereals

Average maize self-sufficiency over the period 1983/84 to 1992/93 was 40,6 percent and the last three years of that period show a sharp decline in the index, which extends beyond the drought in 1991/92. The situation with wheat and sorghum is somewhat different. Very little wheat is produced locally, whilst very little sorghum is imported. The reasons why Basotho farmers produce wheat and sorghum have not been thoroughly investigated, but subsidies and price supports have not been as comprehensive as for maize. Whilst there is evidence that wheat was previously grown extensively (Sechaba, 1995), with Lesotho a net exporter before the 1930's, the reasons for sorghum production over time being close to self-sufficiency need further study. Data on comparative yield statistics show that sorghum has performed better than maize under Lesotho's climatic conditions (Ministry of Agriculture, 1994a; Food Management Unit, 1994a) as it is more drought resistant. The government also encourages agencies to explore more uses for sorghum (Ministry of Agriculture, 1994b). It is expected that sorghum production and consumption may increase under prevailing conditions (Government of Lesotho, 1992; Ministry of Agriculture, 1991).

Poor overall returns to agriculture as a result of falling yields have been evident for quite some time in Lesotho, with per capita food production declining from about 120 kg in 1969 to about 65 kg in 1992 (Central Bank, 1994). Population growth, lower soil fertility levels and a declining arable land base drawing less suitable land into production, have all contributed to a lack of production gains. This decline has occurred despite greater investments in agriculture and concerted efforts by government to promote food self-sufficiency (Government of Lesotho, 1992; Sechaba, 1995). Food production projections appear dismal and are compounded by a declining arable land base from 13 percent prior to 1980 (Stevens, 1979) to an estimated 8 percent by the year 2001 (Sechaba, 1995). This

decline will be precipitated by further soil erosion and land encroachment from urban and rural settlements. The pace of land reforms and land management practices that can possibly arrest this development is very slow (for example, implementation of the 1979 Land Act and subsequent revisions of that Act, and the failure to continue implementation of the Grazing Fee and Grazing Control legislation), with successive governments apparently lacking either the political will or power to implement the recommended reforms (Phororo, 1995; Food Studies Group; 1995). The government has lacked the full cooperation of various stakeholder's such as Chiefs, Grazing Associations, and rural households, and the judicial and policing mechanism's and powers to enforce such legislation when passed (Phororo, 1995; Department of Economics and Marketing, 1995). Estimated average domestic production by the year 2001 will be 113 000 tons of cereal which would barely feed 25 percent of the estimated population (Sechaba, 1995).

Over the years, consistent shortfalls in local production have necessitated commercial and food aid imports as shown in Table 4.1. Food aid between 1983/84 and 1992/93 averaged about 21 percent of (all commercial imports plus food aid) supplements to domestic cereal outputs, so it seems unlikely that Lesotho will be independent of food aid in the long term.

4.4.2 Impact of food aid on producer and consumer prices

Whilst food aid is only one component in the complex process of improving food security, it may be used in a favourable policy environment that ensures a proper balance between technical and financial resources required to have a self-reliant food economy (Food and Agriculture Organization, 1985). Real maize producer prices have declined steadily in the

last decade from around R430 per ton to just under R350 per ton in 1994 (1989 = 100). The decline in producer prices is largely due to falling real prices of maize grain imports from South Africa which are used as a reference, and pressure on government from the commercial mills to not support high local producer prices. Producer prices for maize, wheat and sorghum in Lesotho are legislated as are maize and wheat mill prices.

Consumer prices for cereals in Lesotho have been declining in real terms partly due to government food price policies and legislation (Makenete *et al*, 1996). Furthermore, real maize prices have declined in South Africa (1988/89 to 1993/94) which is the major source of Lesotho's maize imports (Food Management Unit, 1994a; Lesotho Flour Mills, 1994; Lesotho Milling company, 1994). The correlation between food aid and producer and consumer prices has not been established since the main reference point for producer prices is the border parity price, whilst for cereal prices it is the border price plus mill margin. The fall in real maize prices in South Africa would have affected the border parity price.

Fluctuations in food aid contributions were *not* correlated with relatively stable, but declining, real producer and consumer maize prices. Consumer prices for maize meal fell in real terms for the period 1988/89 to 1993/94 from R8,99 to R7,60 per 12,5 kg. Data are available only for this period from the Bureau of Statistics. Figure 4.1 plots consumer prices versus food aid contributions in Lesotho and clearly shows no correlation between the two.

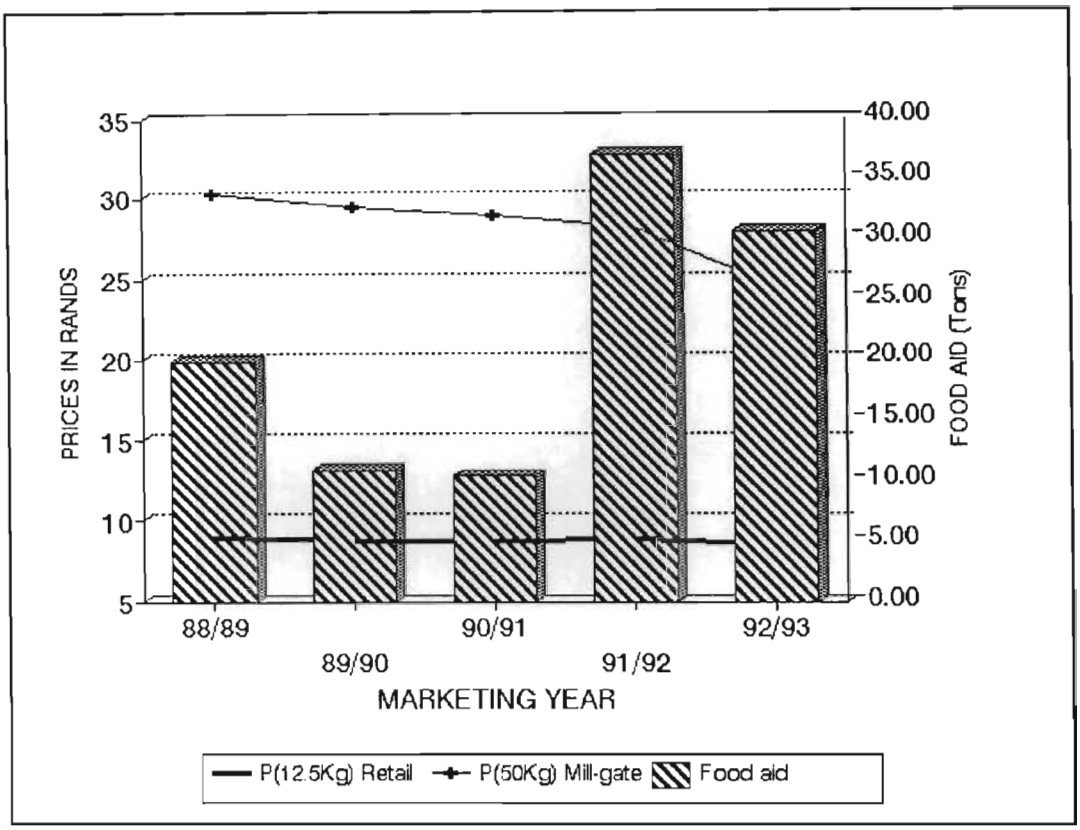


FIGURE 4.1 Maize Food Aid Impact on ConsumerMaize Meal Prices (April 1989 = 100)

Source: Bureau of Statistics (1994) and National Early Warning Unit (1993b).

Food aid appears to have had little effect on both the producer price for maize grain and on the consumer price of maize meal in Lesotho. Government setting of producer and mill gate prices that influence consumer prices has probably distorted the adjustment of consumer prices in response to food aid. Government determines how much aid should be received through direct appeals to the donor community after considering the commercial mills' ability to provide maize meal for the internal market. Increased demand for maize should translate into higher consumer prices and producer prices, resulting in increased production and less reliance on aid (Nziramasanga, 1987). Mokitimi (1994) has shown that producer (supply) responses to producer price and other incentives such as subsidized inputs and credit have been poor. Constraints such as small farm size, poor climate, and low soil fertility have contributed towards the stagnation of local food production, with better opportunities from off farm earnings. Most agricultural production in Lesotho is for subsistence; most farmers are deficit producers (net consumers). Thus, increased demand is met through commercial imports and food aid.

4.4.3 Impact of food aid on nutrition and consumption

Existing consumption patterns indicate that overall per capita levels are declining for cereals from about 180 kg in 1981 to about 120 kg per person in 1990 (Bureau of Statistics, 1994; Ministry of Agriculture, 1994a). Figure 4.2 illustrates consumption patterns of cereals and maize over the years 1981 to 1993. Maize production relative to consumption over the period 1981 to 1993 shows a declining trend.

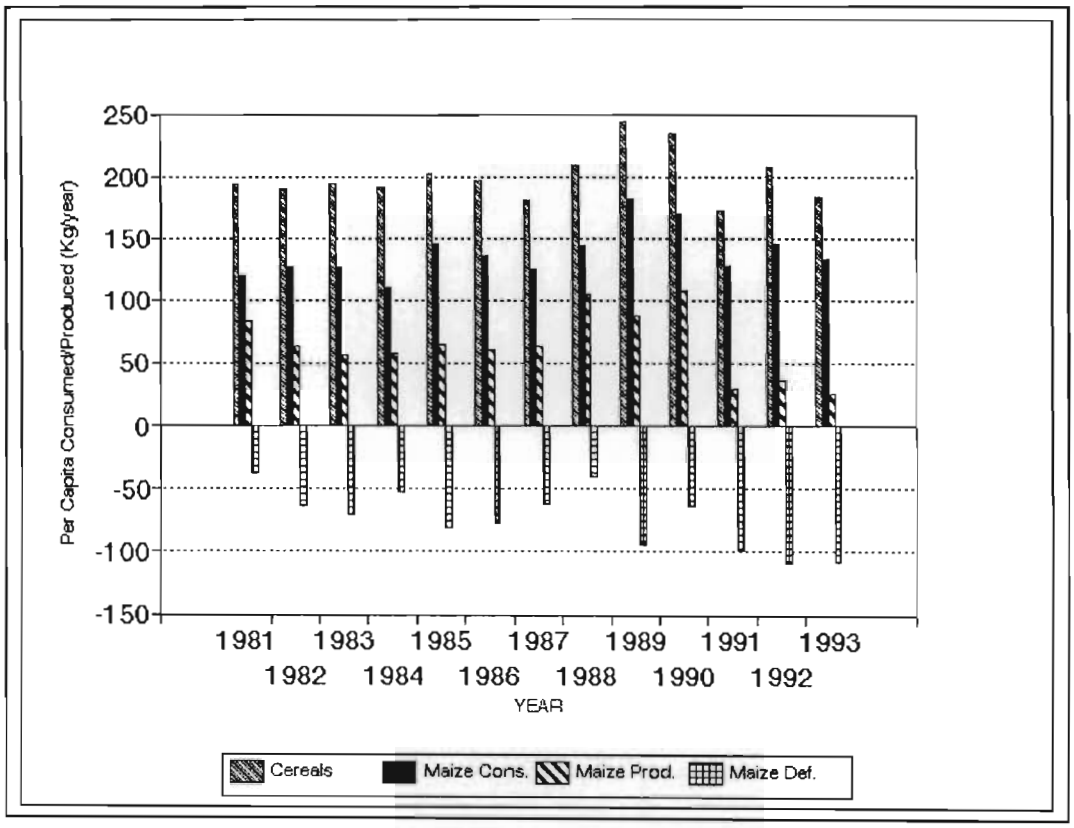


Figure 4.2 Per Capita Consumption Rates Cereals vs Maize vs Local Production

Sources: Bureau of Statistics (1994) and National Early Warning Unit (1993b).

According to FAO and WHO food energy requirements, a person needs 2100 calories of cereal amount equivalent of energy per day for a healthy and sustainable diet (National Early Warning Unit, 1993a). Of this, 78 percent can be derived solely from cereals (FAO Food Balance Sheet cited in National Early Warning Unit, 1993b), which is equivalent to 597 870 kilocalories per annum.

In 1973/74, between 180 000 and 190 000 people out of a resident population of 950 000 relied on food aid, which accounted for 25 to 35 percent of net cereal imports (Jones, 1977:205-206). Based on data collected by Mokotjo (1990:204-211), about 140 000 to 150 000 residents received their regular meals from food aid over the period 1983/84 to 1987/88, which accounted for some 25 percent of cereal imports. Extended over a ten year period to 1992/93 the aid share drops to about 21 percent. During 1992/93, food aid fed about 259 400 Basotho or 13 percent of the population directly (Austin, 1993; Food Management Unit, 1994a; 1994c).

These figures mask food access issues but do indicate that food aid, though feeding less people, reaches over 10 percent of the population. Both nutrition and consumption levels in the absence of food aid are likely to drop significantly, thus increasing food insecurity. With food aid targeted at vulnerable groups and no evidence of increases in deaths due to malnutrition and starvation (Bureau of Statistics, 1994 - Ministry of Health Survey Statistics), it seems that 'minimum' consumption and nutrition levels are sustained through food aid. Lesotho's population is growing at 2,6 percent per annum, and with Basotho mine-workers (whose remittances account for over 20 percent of household incomes (Bureau of Statistics, 1994; Central Bank, 1995)) being retrenched from South Africa, the need for food aid in the

short and long-term is likely to continue.

4.5 Contributions of food aid to the Lesotho economy

Lesotho has some intractable food security problems and food aid in the form of free gifts, grants or low credit sales is imperative to prevent mass hunger. Provision of food aid releases financial resources for development and away from balance of payments priorities, debt servicing, and government expenditures by freeing valuable foreign exchange. In terms of a growing economy and increased imports from South Africa there is little evidence of displacement of commercial trade either internally or externally. Quasi estimates for food aid donations are based purely on financial criteria such as savings which amounted to about R15,9 million in 1992/93 (based on import 'price' of commercial maize imports).

The developmental benefits and investment contributions are difficult to establish and would need more information than is currently available. Schuh (1979) contended that analysts of food aid had neglected to *explain* the use of food aid to develop human capital. The school feeding program and the food-for-work programmes are examples of food aid contributing to the development of human capital. The food-for-work programme utilizing the Labour Construction Unit which was formed as a direct result of the availability of food aid (Jones, 1977), provides both employment and skills empowerment to beneficiaries. The feeding of pregnant women and lactating mothers by the Ministry of Health are other examples of the development of human capital as well as food aids contribution to consumption and nutrition. Table 4.2 shows yearly contributions to Food for Work Programmes and the School Feeding Programme and the beneficiaries reached between 1988 and 1993. These are examples of

food aid being used to form and develop human capital.

Table 4.2 Contributions of food aid to the School Feeding Programme and Food for Work Programme in Lesotho, 1988 to 1993.

YEAR	School Feeding Programme		Food for Work Programme	
	Tons	Beneficiaries	Tons	Beneficiaries
1988	9 745	1 308 244	5 971	300 875
1989	6 997	1 343 560	1 838	110 440
1990	13 424	783 961	5 797	379 785
1991	12 023	837 434	5 694	378 390
1992	10 481	696 082	6 416	350 225
1993	9 743	892 145	2 459	267 695
Average	10 402	976 904	4 696	297 902

Source: Food Management Unit (1994b)

* Figures are in Maize Ton Equivalent

During the period the Food for Work Programme provided a yearly average of 4 696 tons of food to 297 902 beneficiaries or some 15 percent of the total population (1993 estimate of 1,98 million: Bureau of Statistics, 1994). The School Feeding Programme provided 10 402 tons of food to an average of 976 904 beneficiaries per annum. The government has tried to reduce the number of beneficiaries from the School Feeding Programme which may explain the relative decline in overall numbers. The aim was to target only vulnerable groups (not all school children fit this classification) and encourage greater self reliance by schools through production of their own food (Molelle, 1994).

Food aid also provides budgetary support in the form of income from the proceeds of food

sales. These proceeds are often used to set up counterpart funds to finance the local costs of transportation and distribution of the food (Molelle, 1994). The main commercial mills claim that food aid contributions help to hold down food price increases and fluctuations (Lesotho Flour Mills, 1994; Lesotho Milling Company, 1994); the extent of this contribution is however difficult to establish. The monetization of some food aid through commercial sales by Lesotho Flour Mills may also impact on the overall food price index by dampening food prices rises.

The possibility that aid may stop or be reduced would sorely test Lesotho's ability to expand imports due to its limited foreign exchange reserves. Currently foreign aid contributes about 90 percent of capital expenditures (Ministry of Agriculture, 1995), since domestic savings are too low for investment and there are foreign exchange constraints.

4.6 Conclusions

Lesotho's physical production resource constraints, high poverty levels, and high effective cereal demand require that food aid be a necessary condition to assure adequate food security in the short to medium and even long term. Maize yields have remained at around 650 kg/hectare in the past decade, compared to South African farmers' yields of around 2 000 kg/hectare. Lesotho soils are of low fertility, low quality and degraded due to poor management practices coupled with the slow land reform process (Sechaba, 1995; Mhlanga, 1994; Phororo, 1995). Investments in agriculture have given low returns in the last 15 years, and the political costs associated with land reforms and changes to policy initiatives are prohibitive (Ministry of Agriculture, 1995). Surveys have shown that Basotho households

list the lack of food as their principal problem (*Gay et al*, 1991). Poverty alleviation through increased economic development, increased employment, improved incomes and less external dependence are long term goals that are not immediately compatible with short to medium-term food security concerns in Lesotho.

Short-term alternatives for national food security in Lesotho, such as the establishment of food reserves, have been rejected since they were likely be very expensive (Molelle, 1994; Ministry of Agriculture, 1994b). The long-term approach previously defined in terms of food self-sufficiency has been de-emphasized and replaced with a more rigid food security approach (Government of Lesotho, 1986; 1992). This would be based on increased trading through improved access and availability of commercial imports and more secure and sustained food aid contributions. These must meet present and future cereal requirements, whilst the productive sector looks towards comparative advantages that may improve opportunities and incomes in the rural sector.

A key point to note is that food aid has associated transportation, administration and storage costs (Faminow, 1995). The inherent contradiction is that in the face of increased dependence on food aid, the Lesotho government is committed to reduce imports of agricultural commodities (Phororo, 1995). Food aid effectively acts as a grain reserve. Alternatives sought within the framework of food aid need to examine more extensively how the in-kind benefits can better be transferred to households and consumers who need them. Lesotho, as a food insecure country needs some form of food aid insurance scheme which would cover staple cereal supply deficits estimated to be 28 percent per annum. The figure is based on a normal (average) shortfall calculated over the period 1983/84 to 1992/93, and

varies from 48,15 percent during severe drought in 1991/92 to 9,93 percent in 1989/90 (successful production season). It does not assume productivity gains since these are likely to be offset by population increases, the declining land base, the inelastic supply response of Lesotho farmers to price and other production incentives (Mokitimi, 1994), and constrained growth of the economy (lower real incomes and employment levels).

Food aid will always have an important role to play in famine relief (concern for basic welfare need). Drought is a recurring phenomena in Lesotho, now believed to occur in 2-5 year cycles (National Early Warning Unit, 1994b). Food aid must therefore be used to systematically stabilize food supplies and to provide food to the poor and vulnerable. The crucial point is that Lesotho's food aid programme must be aimed primarily at the way aid is both given and used (Food and Agriculture Organization, 1985) to promote sustainable economic growth and development. Losses due to inefficiencies in the distribution and allocation of food aid must be minimised.

Food aid continues to assure access of food to vulnerable groups and does not appear to negatively impact on local cereal production. It probably substitutes commercial imports of food that would have to be supplied by the state to feed vulnerable groups thereby freeing up foreign exchange for other uses. Consumer and producer prices of maize, the staple cereal, do not seem to be affected by food aid contributions to Lesotho. The nutritional status and quantity of cereals consumed by vulnerable persons would be negatively affected if supplies of food aid were reduced (as would the development of human capital). Without structural changes that would markedly reduce poverty and increase household incomes over the long term, food aid will continue to serve a vital role in enhancing Lesotho's food security.

POLICY IMPLICATIONS AND CONCLUSIONS

Agricultural policies, provision of agricultural services, availability and use of land and natural resources, and the state of the economy all contribute towards assuring national food security. Domestic agricultural production is particularly important for attainment of food security by households and at a national level, since it provides a source of food, income and employment. Furthermore, it is important that agricultural growth be considered in terms of equity as well as efficiency if the question of food security is to be addressed, particularly in Lesotho where inequities and imbalances with regard to income and distribution of resources exist.

Poverty alleviation through increased economic development, increased employment, improved incomes and less external dependence are long term goals that are not immediately compatible with short to medium-term food security concerns in Lesotho. Surveys have shown that Basotho households list the lack of food as their principal problem (*Gay et al*, 1991). The policy objective of food self-sufficiency has clearly not worked (Sechaba, 1995; Ministry of Agriculture, 1995), and alternative food security objectives are suggested.

Advocates who use pure economic criteria to increase food security would assert that a country should look at its comparative advantages, and if these do not lie with food production shift their resources to more competitive or comparatively advantageous export activities. The rationale is that the resultant gains in foreign exchange earnings would compensate and likely exceed the foreign exchange savings of the displaced food crops.

The issue is whether it is in fact a prudent policy instrument to judge self-sufficiency on the basis of ex ante competitiveness of food production relative to exports, without looking at the prospects of a balanced export-oriented measure along with the allocation of foreign reserves for food imports. Market liberalization through the reduction of state controls of markets, distributors, prices and of trade opportunities are important. The posit is that market distortions exist as a result of interventions that impact on food security. Crop production policies in Lesotho have tried to encourage aggregate self-sufficiency irrespective of the composition and local capacity to expand production, thereby ignoring potential benefits from trade.

The food self sufficiency programme implemented by the Lesotho government encouraged mono-cropping and highly capitalized maize production at the expense of food security objectives (Swallow and Boris, 1988; Government of Lesotho, 1992; Bayley, 1992a; 1993b). The government should phase out the Food Self-Sufficiency Programme and redirect agricultural transformation into the production of cash crops and other suitable agricultural products as envisaged in the more recent policy strategies for agriculture (Ministry of Agriculture, 1995; Food Studies Group, 1995).

The supply and availability of maize in Lesotho over the study period has fluctuated, whilst there has been a slight drop in the per capita demand for maize. Price setting in Lesotho does not appear to influence productivity. Government is slow to respond to market signals that are more responsive to deregulated trade, and does not have the research and data collection and analysis capacity to monitor and legislate appropriate prices. Most farmers are net deficit producers, and do not benefit from a set formal producer price. Surplus producers

sell small quantities of maize grain to the local informal market. There seems little benefit for setting producer prices since the local producer price is used as a reservation price by producers. Wholesale and consumer prices have fallen in real terms in recent years even in the absence of competitive markets. Consumer interests have been enhanced through lower and more affordable maize meal prices, reducing food insecurity for most of Lesotho's population (urban poor, rural landless, deficit producers) who are net purchasers of maize. Existing consumer subsidies of maize meal may be encouraging greater consumption while also negatively influencing consumption of other staple foods. However, per capita consumption levels have not risen to indicate this trend.

The Lesotho government's main policy goal in the maize industry - from its policy interventions with respect to maize price controls - could be interpreted as an attempt to ensure price stability. The government sets high and consistent prices for producers, and tries to maintain low and stable consumer prices for maize meal. Government interventions to control maize prices, whilst regulating maize marketing by limiting the number of sellers and buyers through subsidies are easy to administer and the subsidies can be paid directly from the treasury as a reflection of the governments social and political priorities (Timmer, 1986:138).

Government interventions tend to disproportionately favour minority surplus producers, who get subsidised credit, farm machinery services, and prices at the expense of majority deficit households. The maize marketing system is a virtual monopoly, especially in the processing of maize grain and marketing of maize meal. Current government legislation continues the proliferation of this status, and constrains a free competitive maize industry. Subsidies to

protect the monopolist commercial mills also hinder the growth of agro-industries in processing, distribution and merchandising. This allows the mills to achieve monopoly profits.

The Lesotho government's goal to stabilize producer and consumer prices cannot be guaranteed or sustained. Experience shows that successful stabilization occurs when basic agricultural commodities are based on the border (world) price, and the market is flexible enough to operate without government intervention. Executing a stabilization policy, even within a specific price band, involves analyzing market price trends, setting and controlling domestic prices, financial flexibility and the capability to subsidize imports that are necessary to enforce the domestic price guidelines; this is a difficult responsibility for governments to execute efficiently (Timmer, 1986).

The difficulty for the Lesotho government to maintain a price stabilization policy that keeps maize meal prices low, is that world and South African real prices have in the long run tended to decline, and Lesotho's small economy cannot influence this trend. It means that to have an impact, the price subsidy would have to grow in real terms, which may not be financially feasible or practical. The on-going macro-economic reforms suggested by the International Monetary Fund for Lesotho's Structural Adjustment Programme and the Enhanced Structural Adjustment Programme (Petersson, 1991; Government of Lesotho, 1994; Ministry of Agriculture, 1995), along with multi-lateral donor agencies (Food Studies Group, 1995; World Food Programme, 1994a; 1994b), are that implied subsidies through price fixing, controls, and market distortions have negative budgetary consequences that the government of Lesotho cannot afford.

The most important aspect of any pricing policy in Lesotho is the border parity price. The South African producer price plays a crucial role in determining Lesotho's producer price. The South African Maize Board price affects Lesotho maize milling margins and acceptable mill-gate prices, therefore the consumer price for maize meal. The spread between the parity and domestic price is indicative of the potential for trade and involvement of the private sector in marketing maize grain at the producer level, and maize meal at the consumer level.

If the parity price increases or fluctuates, the government tries to reduce its impact by adjusting maize milling margins and mill-gate prices. Parity pricing, however, hinders the functioning of an effective market process and fails to allow for differences in changes in productivity (agricultural and within the milling sector) over time (Pasour, 1990). Border parity pricing would make the effective differences in productivity even more disparate. Gray (1992) points to numerous problems with border parity pricing, primarily those of high internal transfer costs in relation to the parity price, and that calculation of external parities is specific to a given time and location. This situation will remain as long as the Maize Board is the sole exporter of maize from South Africa (cheapest import source for Lesotho).

The Lesotho government should also consider current price setting mechanisms where reforms are suggested. The likely reason for cost of production pricing is the Lesotho government's desire to meet self-sufficiency targets in staples (Gray, 1992), which may not be a sufficient or justifiable reason if relatively cheaper imports are available. Other changes considered include the removal of pan-territorial, and pan-seasonal producer and mill-gate prices. Use of pan-territorial pricing prevents both the private sector and parastatal bodies from engaging in profit-generating trade (Kingsbury, 1989; Muir and Takavarasha, 1989).

Uniform prices also "infer an implicit transport subsidy which distorts resource allocation by encouraging the production of maize, which is a low value, high bulk commodity even in remote and unsuitable regions" (Muir and Takavarasha, 1989:112). Price liberalization policy measures also need to be implemented, in conjunction with market / trade liberalization. This would mean that government would stop using both pan-territorial and pan-seasonal pricing tools.

Takavarasha (1993) argues for closer alignment to world (border) prices for developing states. Lesotho maize grain prices should be allowed to reflect the South African Maize Board prices or South African producer prices. These prices represent world prices for the Lesotho maize industry. The cif South African producer price of maize grain would provide relief to food insecure households following full maize trade liberalization. The Lesotho government should argue that Basotho consumers and traders are part of the common market within the Southern African Customs Union and should be entitled to buy directly from South African producers, hence avoiding the South African Maize Board and its levies. This would be negotiated in conjunction with the South African Maize Board and relevant ministries such as Agriculture and Trade. This could reduce marketing costs, by cutting size and length of the marketing chain. All maize grain trade restrictions such as limits on purchases by traders and households should be reduced and eventually phased out.

Both rural and urban consumers would then obtain their more preferred local coarser meal since more grain would enter the market and drive milling and transaction costs down. Unlike the trend in other Southern African states (eg. Zambia) where Grain Marketing Boards lost money in the 1980's due to trading deficits and other inefficiencies (Takavarasha, 1993),

their absence in Lesotho has meant no such losses. Lesotho Flour Mills already produces a wide variety of goods and its profit record suggests that it could survive with less maize milling. Lesotho Milling Company would need to diversify and operate in other commodities given that its physical infrastructure, financial resources and human expertise are transferable. The existing major mills would benefit from buying less local maize grain if the condition that they purchase all locally produced maize that is delivered were dropped.

Subsidies to the mills and consumers that primarily benefit urban consumers should be removed. These could be phased out over a short time to medium term period (eg. two years) for the impact not to cause major shocks in terms of consumer welfare losses (possibly with political and social consequences). In the short term the cost of food to the poor particularly maize meal could rise substantially. These negative impacts (higher maize meal prices) should be offset by the positive impacts (eg. lower maize grain prices, wider choices of maize meal to choose from) of the reforms suggested.

The removal of protective measures will also affect the commercial mills (which are highly capitalized) by causing their value of fixed investments to fall (Mellor, 1988). The impact of reforms on the mills may be negated if the mills spread their risk and portfolios by trading in other commodities. Market liberalization is meant to achieve principles of individual freedom of choice, efficiency, equity, sustainability and food security by allowing the market the full flexibility to make adjustments and regulate towards comparative advantages. Deregulation of the agricultural sector should be part and parcel of a holistic integrated approach to liberalization of the total economy.

No direct policy reforms are possible with respect to food aid dependence, though continued assurance of adequate supplies must be ensured. The government could redirect accrued savings from the removal of producer and consumer subsidies to increase direct assistance and interventions to ensure that food insecure households get food. The shift would signal to donors of the commitment government towards alleviating food insecurity. Food aid would continue to be very useful as a means of protecting the poor and food insecure from policy reforms and balancing the trade-off inherent in the adjustment policies (Mellor, 1988). Food aid use in development initiatives could be expanded to promote agricultural growth by supporting the switch from maize mono-cropping to cash crops and crops with higher returns / potential than maize. Mellor (1988:16) makes the point that food aid used in Food for Work Programmes to build rural infrastructure can decrease the cost of food production more than the potential depressing effect of food aid on producer prices. Furthermore, improved infrastructure has multiplier effects on agricultural growth, leading to expanded income and employment in other sectors of the economy (Mellor, 1988).

Food-for-work programmes that encourage and promote development initiatives may, for example, lead to economically self-sufficient households. Food aid used in promoting development objectives should further shift emphasis towards investments in human capital (improved nutrition of the young and of pregnant mothers) thereby increasing their contribution to economic growth as productivity increases with good health (Schuh, 1979). Considering the role women play in Lesotho, where a large proportion the male labour force are migrant workers in South Africa, human capital investment in women would be a long-term investment. If such programmes then are targeted at the poor, they will improve the distribution of income and provide the basis for increased growth.

Households already derive benefit from reduced reliance on direct food supplements, since these cause little disruption to normal production incentives. In-kind direct food transfers, monetized food aid and granting direct cash grants are all possibilities for more efficient use of food aid. Direct cash grants are hardly utilized in Lesotho, but deserve attention, as alternative uses of cash are limited for food-deficit households. Cash transfers could help alleviate the poverty crisis if transaction costs were reduced and food availability were not a problem. Monetized aid is already used in the Production Through Conservation Programme to reduce natural resource degradation (Ministry of Agriculture, 1994b).

Lesotho's relationship with South Africa will be affected by any changes in the Southern African Customs Union agreement which is currently being re-negotiated. Recent changes in South African Maize Board export policy mean that Lesotho is now classified as an export market, unlike the past where it was regarded as part of the South African domestic market. The South African government would provide access to Lesotho of vital cereal grains during periods of crisis. The relevant issues are: 1) whether Lesotho would fall under the ambit of South Africa if vital food grain reserves have to be used in emergency situations; and 2) would the South African government offer concessions (price and preferential status) to Lesotho, whilst facing its own economic problems?

Molapo (1995:16) emphasizes that "instead of proposing measures that lessen dependence, we talk about measures to reduce economic uncertainties". The way in forward in the longer term may lie in exploring opportunities that would lead towards a Common Market or Economic Union with South Africa that would allow for a free flow of capital and labour. Free mobility of labour would in the short to medium-term lead to a high labour shift towards

South Africa thereby reducing Lesotho's unemployment and poverty levels and a fall in food aid dependence, though it would have implications for unemployment in South Africa since Basotho would compete directly with South Africans for employment.

Lesotho and members of the Southern African Customs Union should in the short term consider a common agricultural policy. Such a policy would recognize and strengthen linkages between their commercial sectors whilst simultaneously encouraging development in the communal, subsistence sector (Otto and Darroch, 1992). Otto and Darroch (1992) and Molapo (1995) see possibilities for closer integration of economies in the region. The Lesotho and South African economies offer the closest linkages, and common agricultural development and the promotion of food security could be enhanced through a common agricultural policy, in light of the political and economic transformations that have occurred (Otto and Darroch, 1992; Molapo, 1995; Makoa, 1995).

In the immediate short term, the possibility of establishing long term supply contracts with maize producers in South Africa could be considered. This would have to be negotiated with the South African Maize Board which is currently the sole exporter of maize and the South African government. Food trade involves market and price liberalization of all food commodities and includes reforms to their related industries and institutional arrangements. Current government proposals, largely arising from external pressure (Ministry of Agriculture, 1995), include a comprehensive programme to review and reformulate agribusiness policy and development, with the primary aim to enable greater private sector participation and free market mechanisms.

The required trade-offs between consumption requirements (food security needs) and investments, between support to producers and consumers, must be explicitly made and clearly explained to policy makers and to the people that the decisions affect. Policy reforms with respect to maize marketing and pricing, and food aid considerations should be consistent with macro-economic reforms currently underway. These include full market liberalization and deregulation, privatization / commercialization of parastatals, civil service reforms, and moves towards regional economic integration. Consistency and harmonization must be achieved between policy-making and analysis of economic factors and conditions for there to be economic benefits and improvements to food security in Lesotho.

SUMMARY

Food security is a necessary condition for every nation, household and individual to survive. Food security is now generally defined to include both demand and supply factors. Poverty and low incomes appear to be the root causes of food insecurity. National food surpluses or national food self-sufficiency are not a sufficient condition for ensuring food security at the household level or for individuals. The failure of the food self-sufficiency policy objective makes it imperative for Lesotho to pursue alternative food security objectives. Households and individuals must have adequate and timely food available and accessible to them at all times. A holistic and balanced food security view is necessary. Appropriate policy mechanisms that can reduce food insecurity are a major concern of the Government of Lesotho.

This study has investigated impacts of maize marketing and pricing policies as well as food aid on food security in Lesotho. There are inherent policy implications resulting from suggested changes to government legislation and food aid policies aimed at improving food security. In essence, the study aims to provide a basis upon which modifications and restructuring of maize pricing and market policy reforms are enhanced. These would provide for new and more flexible trade arrangements so that progress can be made to ensure better food security at national and household levels.

The study concludes that set maize prices distort price signals which influence decisions to allocate, utilize and distribute resources for the growing and marketing of maize grain in Lesotho. Lesotho is a net importer of maize grain, implying that maize price fixing and

marketing policy affect food security. The study shows declining real producer, mill-gate and consumer prices, which can be explained by declining real maize prices in South Africa. This study supports the contention that subsidies do exist as a result of maize price fixing and controls, and confirms the existence of a highly regulated maize marketing system in Lesotho. It suggests that the maize marketing system should be liberalized, and that government phase out price fixing and price controls of maize grain and maize products to take full advantage of lower real maize prices in South Africa, Lesotho's principal trading partner. This may in the longer term increase both household and national food security by increasing affordability of maize grain and maize meal through lower market prices; improve access to maize grain and maize meal via open trade and market arrangements, with producers in South Africa, reduce budgetary expenditures of the government, and in the long term be more sustainable. The micro policy reforms at a sectoral level (agriculture) would also support macro-economic reforms (national goals).

Trade plays an important role in food security, but at present both the impact and the precise role of trade in food security in Lesotho are not well understood. Import prices under deregulated markets may fall, increasing competition with local supplies and benefitting consumers. A likely worsening of balance of payments (due to greater imports) and export losses would necessitate a critical assessment of the comparative advantages and disadvantages of agricultural production in Lesotho.

The role food aid plays in enhancing and maintaining food security in Lesotho is also very important. Food aid continues to assure access of food to vulnerable groups, without negatively impacting on local production and commercial cereal imports. Rather, food aid

to Lesotho supplements commercial imports to meet the shortfall in local production. If poverty cannot be reduced and household incomes remain low, food aid will continue to play a vital role in enhancing Lesotho's food security. Poverty alleviation measures and income generating activities should be the primary focus if food aid dependency is to be reduced. Food aid should be used to develop human capital, build infrastructure and support the transition from production of staple cereals to producing cash generating crops. These investments can provide the impetus for growth in the long term.

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