

TABLE OF CONTENTS

CONTENT.....	PAGE
TABLE OF CONTENTS.....	I
ACKNOWLEDGEMENTS.....	III
ACRONYMS AND ABBREVIATIONS.....	IV
INTRODUCTION.....	1
OBJECTIVE OF THE REPORT.....	1
METHODOLOGY.....	1
BACKGROUND TO VULNERABILITY AND RISK ANALYSIS.....	1
LIVELIHOODS BASED VULNERABILITY ASSESSMENT APPROACH.....	1
INTERVIEWS.....	2
SHORT BACKGROUND ON SWAZILAND.....	3
INSTITUTIONAL BACKGROUND TO SWAZI VAC.....	4
RURAL AND PERI-URBAN LIVELIHOOD BASELINE PROFILES.....	6
INTRODUCTION.....	6
SWAZILAND LIVELIHOOD PROFILES.....	7
NATIONAL OVERVIEW.....	7
INTRODUCTION.....	7
GEOGRAPHY, CLIMATE AND ECONOMY.....	7
THE RURAL LIVELIHOOD ZONES.....	9
RURAL SOURCES OF FOOD AND CASH: MAIN FINDINGS AND IMPLICATIONS.....	10
SUMMARY OF SOURCES OF FOOD.....	11
SUMMARY OF SOURCES OF CASH.....	12
RURAL LIVELIHOOD ZONE SUMMARIES.....	14
THE HIGHVELD MAIZE AND CATTLE ZONE.....	17
MAIN CONCLUSIONS AND IMPLICATIONS.....	17
ZONE DESCRIPTION.....	17
MARKETS.....	18
SEASONAL CALENDAR.....	18
WEALTH BREAKDOWN.....	19
SOURCES OF FOOD.....	19
SOURCES OF CASH.....	20
EXPENDITURE PATTERNS.....	21
HAZARDS.....	21
RESPONSE STRATEGIES.....	21
INDICATORS OF IMMINENT CRISIS.....	22
THE TIMBER HIGHLANDS LIVELIHOOD ZONE.....	23
MAIN CONCLUSIONS AND IMPLICATIONS.....	23
ZONE DESCRIPTION.....	23
MARKETS.....	24
SEASONAL CALENDAR.....	24
WEALTH BREAKDOWN.....	25
SOURCES OF FOOD.....	25
SOURCES OF CASH.....	26
EXPENDITURE PATTERNS – A GOOD YEAR (2004-05).....	26
HAZARDS.....	26
RESPONSE STRATEGIES.....	27
INDICATORS OF IMMINENT CRISIS.....	27
THE WET MIDDLEVELD LIVELIHOOD ZONE.....	28
MAIN CONCLUSIONS AND IMPLICATIONS.....	28

ZONE DESCRIPTION.....	28
MARKETS.....	29
SEASONAL CALENDAR	29
WEALTH BREAKDOWN	30
SOURCES OF FOOD	30
SOURCES OF CASH	31
EXPENDITURE PATTERNS.....	31
HAZARDS.....	31
RESPONSE STRATEGIES	32
INDICATORS OF IMMINENT CRISIS.....	32
THE DRY MIDDLEVELD LIVELIHOOD ZONE.....	33
MAIN CONCLUSIONS AND IMPLICATIONS	33
ZONE DESCRIPTION.....	33
MARKETS.....	34
SEASONAL CALENDAR	34
WEALTH BREAKDOWN	35
SOURCES OF FOOD	36
SOURCES OF CASH	36
EXPENDITURE PATTERNS.....	37
HAZARDS.....	37
RESPONSE STRATEGIES	37
INDICATORS OF IMMINENT CRISIS.....	38
THE PERI-URBAN CORRIDOR LIVELIHOOD ZONE.....	39
MAIN CONCLUSIONS AND IMPLICATIONS	39
ZONE DESCRIPTION.....	39
MARKETS.....	40
SEASONAL CALENDAR	41
WEALTH BREAKDOWN	42
SOURCES OF FOOD	42
SOURCES OF CASH	43
EXPENDITURE PATTERNS.....	43
HAZARDS.....	43
RESPONSE STRATEGIES	44
INDICATORS OF IMMINENT CRISIS.....	44
THE LOWVELD MAIZE AND CATTLE ZONE.....	45
MAIN CONCLUSIONS AND IMPLICATIONS	45
ZONE DESCRIPTION.....	45
MARKETS.....	46
SEASONAL CALENDAR	47
WEALTH BREAKDOWN	48
SOURCES OF FOOD	48
SOURCES OF CASH	49
EXPENDITURE PATTERNS.....	49
HAZARDS.....	49
RESPONSE STRATEGIES	50
INDICATORS OF IMMINENT CRISIS.....	50
THE LUBOMBO PLATEAU LIVELIHOOD ZONE.....	51
MAIN CONCLUSIONS AND IMPLICATIONS	51
ZONE DESCRIPTION.....	51
MARKETS.....	52
SEASONAL CALENDAR	53
WEALTH BREAKDOWN	54
SOURCES OF FOOD – A GOOD YEAR (2004-05)	54
SOURCES OF CASH	55
EXPENDITURE PATTERNS.....	55
HAZARDS.....	56
RESPONSE STRATEGIES	56
INDICATORS OF IMMINENT CRISIS.....	57

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George Ndlangamandla
Swazi VAC Chairperson

Acronyms and Abbreviations

AIDS	:	ACQUIRED IMMUNO-DEFICIENCY SYNDROME
CFSAM	:	CROP & FOOD SUPPLY ASSESSMENT MISSION
CSO	:	CENTRAL STATISTICS OFFICE
DFID	:	DEPARTMENT FOR INTERNATIONAL DEVELOPMENT
EMOP	:	EMERGENCY OPERATIONS
FANR	:	FOOD, AGRICULTURE & NATURAL RESOURCES DIRECTORATE (SADC)
FAO	:	FOOD AND AGRICULTURE ORGANISATION
FEZ	:	FOOD ECONOMY ZONE
GOS	:	GOVERNMENT OF SWAZILAND
HH	:	HOUSEHOLDS
HIV	:	HUMAN IMMUNO-DEFICIENCY VIRUS
LZ	:	LIVELIHOOD ZONE (ALSO KNOWN AS FOOD ECONOMY ZONE)
MEPD	:	MINISTRY OF ECONOMIC DEVELOPMENT AND PLANNING
MoAC	:	MINISTRY OF AGRICULTURE & COOPERATIVES
MT	:	METRIC TONNES
Mz	:	MAIZE
NEWU	:	NATIONAL EARLY WARNING UNIT
NGO	:	NON-GOVERNMENT ORGANIZATION
NMC	:	NATIONAL MAIZE CORPORATION
NMS	:	NATIONAL METEOROLOGICAL SERVICE
NVAC	:	NATIONAL VULNERABILITY ASSESSMENT COMMITTEE
RVAC	:	REGIONAL VULNERABILITY ASSESSMENT COMMITTEE
SADC	:	SOUTHERN AFRICAN DEVELOPMENT COMMUNITY
SC SZ	:	SAVE THE CHILDREN SWAZILAND
SC UK	:	SAVE THE CHILDREN UK
SEG	:	SOCIO-ECONOMIC GROUP
SFDF	:	SWAZILAND FARMERS DEVELOPMENT FOUNDATION
SMI	:	SWAZILAND MEAT INDUSTRIES
SNL	:	SWAZI NATION LAND
SWAZI VAC	:	SWAZILAND VULNERABILITY ASSESSMENT COMMITTEE
UNAIDS	:	JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS
UNICEF	:	UNITED NATIONS CHILDREN'S FUND
VAC	:	VULNERABILITY ASSESSMENT COMMITTEE
VAM	:	VULNERABILITY ANALYSIS AND MAPPING UNIT (WFP)
WFP	:	WORLD FOOD PROGRAMME

Introduction

Objective of the report

This report sets out the livelihood baseline profiles developed during participatory field assessments in July and August 2006 in all of the livelihood zones in rural and peri-urban Swaziland. This report builds on the initial analysis generated in 1998 and 2002 with the additional analyses in November 2003 and April 2004.

This report is organised into three main sections: a brief introduction to the exercise and background to the study, institutional background to the Swazi VAC and methodology employed; Chapter 2 is the main section detailing the livelihood profiles throughout rural and peri-urban Swaziland; and Chapter 3 provides a few concluding comments and reasons for further development in this area.

Methodology

Background to Vulnerability and Risk Analysis

Understanding vulnerability or susceptibility of households and areas to shocks can only be achieved through a good understanding of the livelihoods patterns employed by different socio-economic groups in different areas of the country. The concept of zoning for food security and livelihood analysis in Swaziland dates back to 1997 when a national Risk Mapping Project took place. The Project, funded by the ECHO, Save the Children and the Ministry of Agriculture and Cooperatives, aimed to enhance the Government's decision-making capacity on food security as it affects rural livelihoods. The work culminated in the 'Report of the Swaziland National Risk Mapping Project' in October 1998. The livelihood baselines outlined in this report were the basis of assessments and analysis for food security and hunger between July and August 2006 and the livelihood profiles in this report represent an update of the earlier livelihood baseline profiles.

The subject of zoning was revisited by the Swaziland Vulnerability Assessment Committee (Swazi VAC) in the process of assessment of the persistent drought crisis (2001- 2006). In 2002, when the Swazi VAC wished to take analysis further than simply concluding on food aid requirements, the only information that was available dated back to 1998 from the Riskmapping Project. The Committee considered it a useful approach, but wished to revise/modify it for their purposes. The main requirement was to look again at the zone descriptions to see if they were all well-founded, bearing in mind the possible changes in food and incomes sources in a five-year period.

Livelihoods Based Vulnerability Assessment Approach

The basic principle underlying the livelihoods based approach¹ is that an analysis of local livelihoods is essential for a proper understanding of the impact of hazards at household level. Serious crop failure may, for example, leave one group of households destitute because the failed crop is their only source of staple food. Another group (in a nearby location) may be able to cope with these crop production problems because they have alternative food and income sources that can make up the current production shortfall. They may, for instance, have livestock to sell or have the ability to gain local paid employment. The idea of maintaining food economy / livelihood baseline information is to capture essential facts on local livelihoods and coping strategies², making it possible for a combined analysis on relative vulnerability following the impact of hazards or shocks.

Livelihood patterns clearly vary from one area to another according to local factors such as climate, soil and access to markets. **The first step in a livelihoods based analysis is therefore to prepare a livelihood zone map**, i.e. a map delineating geographical areas within which people

¹ The RVAC and NVACs agreed to adopt this approach at a regional meeting in Pretoria March 2003.

² The way in which households normally cope when faced with adverse conditions that do not deplete the socio-economic basis of the households e.g. sale of productive livestock (termed survival strategies).

share similar patterns of access to food (i.e. they grow the same crops, keep the same types of livestock, etc.), income and have the same access to markets. The Swazi VAC has recently updated its livelihood zone map and livelihood profiles to include 7 zones and 28 livelihood profiles¹.

Where a household lives is one factor determining its options for obtaining food and generating income and another is wealth, since wealth determines access to the means of production and/or additional income generation. Wealth groups are typically distinguished from one another by differences in land holding, extent of cultivation, livestock holding, financial and physical capital, education, skills, labour availability and/or social capital. **Defining the different wealth groups in each zone is the second step in a livelihoods analysis**, the output from which is a socio-economic breakdown.

Having grouped households according to where they live and their socio-economic group (wealth), **the third step is to generate livelihood baseline information for typical households in each group for a defined reference or baseline year**. Food access is determined by investigating the sum of ways households obtain food — what food they grow, gather or receive as gifts, how much food they buy, how much cash income is earned in a year, and what other essential needs must be met with income earned. Once this baseline is established, then an analysis can be made of the likely impact of a shock or hazard in a bad year. Assessments examine how food access and income will be affected by the shock, what other food sources can be added or expanded to make up initial shortages, and what final income/food deficits emerge. Clearly the more detailed and credible the livelihood baseline profiles the more accurate the outcomes from the analysis. It is paramount that detailed livelihood baseline profiles are established and are regularly updated as time passes.

The objective is to investigate the effects of a hazard/shock (e.g. drought or price increase in staples) on future access to food and income, so that decisions can be taken about the most appropriate types of intervention to implement. The rationale behind the approach is that a good understanding of how people have survived in the past provides a sound basis for projecting into the future. Three types of information are combined; information on normal or baseline access to food and income, information on hazards (i.e. factors affecting access to food/income, such as crop production or market prices) and information on response strategies (i.e. the sources of food and income that people turn to when exposed to a hazard). The approach can be summarised as follows:

Baseline + Hazard + Response = Outcome

The Swazi VAC wishes to take a holistic picture when analysing livelihoods that incorporates nutrition, health, water and sanitation issues, employment, food and cash crop production, wild foods, livestock, markets and prices. While multi-sectoral indicators are important for supporting analysis of relative vulnerability, food security and livelihood progress or decline remains the key tenet of analysis.

The data collection phase was rapid and was carried out a precursor to a food security and livelihood assessment. However, understanding rural (and urban) livelihoods is critical if policies and programmes activities are to actively support the varied livelihood strategies being employed throughout the country.

Interviews

The interviews that formulated the livelihood baseline profiles took place during in July and August 2006. The four week process included training, data collection, cleaning and analysis. Interviews took place with 3-6 key informants representing different sectors. A total of six teams each with four participants managed the interview process with support from two regional experts and the international consultant.

¹ Most aspects of the livelihood baselines are highlighted later on the relevant sections of the report.

Short Background on Swaziland

Swaziland borders the Republic of South Africa and Mozambique. Landlocked and mountainous it is 17,364 km² in size. Arable land makes up about 11% of the total surface area. Significant cattle populations utilise the extensive mountain range lands and semi-arid areas of the Lowveld in a mixed farming system. The country is divided into four agro-ecological zones – the Lubombo Plateau, the Lowveld, the Middleveld and the Highveld. The sub-tropical climate is characterised by wide ranges in total annual rainfall including periods of droughts that particularly affect the Lowveld and Middleveld. However, in addition to protracted dry spells, heavy rainfalls, storms and flooding also negatively impact agricultural production. This is especially so when summer tropical cyclones (Jan-March) strike the southern coast of Mozambique. Maize is the main cereal crop grown. Between 1990 and 2000 the area under maize has fallen by 40%. While average yields have gone up, the net effect was that production in 2000 was down (-10%) on what it was in 1990. Swaziland normally imports cereals (maize, wheat and rice) estimated to be about 28% of national consumption needs. However, in the past four years there has been a significant fall in the self-sufficiency ratio with significant increases in the imports of wheat and rice. Swaziland has an economy that is heavily dependent on South Africa from which it receives 83% of its imports and sends 74% of its exports. South Africa's economic success has had negative effects on the Swaziland economy as a result of its attraction to foreign investors. In 2001 Swaziland only attracted US\$20 million in foreign direct investment.

Agriculture and the agro-industry form the basis of the economy with sugar, citrus and wood pulp as the main products. Subsistence agriculture employs about 60% of the population.

The country is divided into four regional administrative divisions – Hhohho, Manzini, Shiselweni and Lubombo. These are further subdivided into Tinkhundla which commonly include four or five chiefdoms. Depending on their size and populations - 1-3 poling divisions are located within individual Inkhundla. There is considerable scope for confusion between the Lubombo administrative region and the Lubombo agro-ecological region. The latter is defined by the Lubombo Mountains and is made up of three Tinkhundla – Tikhuba, Lugongolweni and Lomahasha. The Lubombo administrative region is much bigger and is made up of a total of 11 Tinkhundla and occupies most of the northern Lowveld and the Lubombo Plateau.

Local production and market relations define seven Livelihood Zones (LZs) within the overall parameters of four agro-ecological regions. The Highveld has been divided into two main zones - the **Timber Highlands** and the **Highveld Maize and Cattle** zones. The **Peri-Urban Corridor** traverses the Highveld and forms a tract of dense peri-urban settlement that links Manzini, Mbabane and surrounding areas to the Oshoek / Ngwenya border. The corridor also crosses the central Middleveld and terminates just east of the second city of Manzini. The Middleveld is split into two areas based on agro-ecological reasons and logically called the **Moist Middleveld** and **Dry Middleveld**. As a whole the Middleveld forms a long broken escarpment between the wetter Highveld and drier Lowveld. The Lowveld has now been made to one zone **Lowveld Cattle, and Maize** due to the sudden collapse of the cotton industry consequently negatively affecting cotton farming in the commonly cotton farming parts of the Lowveld. Within the Lowveld there are large tracts of industrial sugar production. The Lubombo Plateau has also been rezoned to one zone as the trading early believed to be taking place around the Lomahasha zone did not show in the data collected during the assessment. The reason for this is entirely due to the fact that most of the trading that takes place in the zone exclusively happens around the border with Mozambique other in the surrounding rural communities, thus its now called **Lubombo Plateau**. The sugar estates, national parks, forest reserves and all urban areas are excluded from the LZ and the estimates of LZ populations.

Institutional Background to Swazi VAC

The VAC process is coordinated at regional level by the Southern Africa Development Community (SADC) Food, Agriculture, and Natural Resources (FANR) Directorate's Regional Vulnerability Assessment Committee (RVAC), in collaboration with international partners (WFP, FEWS NET, SC (UK) and FAO). The Swazi VAC is part of this regional vulnerability system initiated by FANR Ministers to improve vulnerability monitoring and broaden early warning systems within member countries. The Swaziland Vulnerability Assessment Committee is currently chaired by the Agriculture and Extension Department within the Ministry of Agriculture and Cooperatives (MoAC). The Secretariat of the Swazi VAC includes the National Early Warning and Marketing Advisory Units (MoAC), Central Statistical Office (CSO) of the Ministry of Economic Planning and Development (MEPD), WFP, Save the Children Swaziland (SC), National Meteorological Service of the Ministry of Public Works and Transport (MoPWT), and the Poverty Unit of the Ministry of Economic Planning and Development (MEPD).

Established in 2002, the aim of the Swazi VAC is to incorporate a unified and deeper understanding of livelihoods in emergency and development programming and broaden early warning systems. VAC analytical outputs are aimed at informing policy decision-making at the highest levels of Government, United Nations and NGOs. In 2002, the focus had been on carrying out emergency assessments focusing predominantly on identifying food aid needs. Since 2002, there has been an increasing demand for broader assessments focusing on the complex set of economic, social and cultural factors (including HIV/ AIDS) that embody and affect people's livelihoods in Swaziland providing strong indications of relative vulnerability, the reasons underlying the vulnerability and what types of interventions may be appropriate as a response mechanism.

Following formation of the Swazi VAC, three emergency food security/livelihood assessments were carried out in Swaziland in July/August 2002, November/December 2002 and May/June 2003 and formed the basis of the Swazi VAC work guiding emergency interventions of UN agencies, NGOs, and the Government of Swaziland. The Swazi VAC has gone on to establish regular food security and livelihood monitoring exercises such as that completed in March 2004 and May/June 2004¹ after the declaration of national disaster by the Government of Swaziland in February 2004. Further annual livelihood vulnerability assessments have continued in May/June 2005 and in May/June 2006 prior to the Baseline Profiling exercise in July/August 2006. In addition, a national survey to analyse the impact of HIV/AIDS on the demography and livelihoods of the rural population was undertaken in 2003 to further understand the factors underlying vulnerability in Swaziland². The Swazi VAC represents one of the few fora that channels national technical guidance for UN agencies, NGOs and Government Ministries to ensure that necessary humanitarian and livelihood support is directed to the most vulnerable people at the correct time.

Commitments to improving Swaziland's vulnerability assessment and analysis information systems have been made by Swaziland Government Ministers at several regional fora. Some of these commitments and fora are listed below:

- Regional vulnerability analysis consultation in Kariba, Zimbabwe in 2000 which articulated a set of recommendations through a communiqué. It was agreed to: *"To improve the understanding, collaboration, and use of Vulnerability Assessments to enhance the effectiveness and utility of food security information and analysis in the SADC region"*.
- FANR Ministers in August 2001 convened a special meeting to develop strategies to mitigate against the food shortages that were already evident at the time
- By the Swaziland Minister of Agriculture and Cooperatives at the FANR Ministers meeting during February 2004 in Dar es Salaam, Tanzania in preparation for the "Extraordinary Summit on Agriculture and Food security" planned for May 2004. At the meeting it was agreed that member states would: "...strengthen Early Warning Systems and vulnerability monitoring capabilities

¹ Report is available: <http://www.sarpn.org.za/documents/d0000829/index.php>

² Report is available: <http://www.sarpn.org.za/documents/d0000784/index.php>

including the rapid collection, analysis and dissemination of credible information" in an attempt to enhance disaster preparedness.

Rural and Peri-Urban Livelihood Baseline Profiles

Introduction

This section describes the livelihood baseline profiles developed during participatory field assessments in November and December 2002 in each of the nine livelihood zones in rural and peri-urban Swaziland. The profiles provide a basis for us to understand what areas are more susceptible to shocks, who will be most affected by these shocks and extent to which households will be able to cope.

The story of livelihoods that we seek largely concerns the economic operations of rural and peri-urban *households* - of how they succeed, and sometimes fail, in making ends meet from season to season, year to year. The story is increasingly based on the cash economy rather than the subsistence economy, which means not only the marketing of livestock, cash-crops and surplus cereals, but casual and formal employment as well as remittances which brings an important part of the overall income of the poorer half (and more) of the rural population. As we shall see, even in areas regularly producing cereal surpluses, the poorer families rely for more than half of their food on working for others and being remunerated in cash or kind. At the heart of food security is not simply overall food production but its distribution amongst the population. In this, seasonal employment both within home localities and sometimes farther away, plays a great role. But this is informal employment and thus mainly invisible in formal economic data.

The patterns of livelihoods outlined in this report provide an evidence base for geographical areas and socio-economic groups that are more vulnerable to social and economic decline. Households' vulnerability is determined by the extent or size and type of the shock facing each household (e.g. the price of food increases, redundancy, illness or drought) and the resilience of households to respond or adapt to the shock (e.g. find additional employment, collect wild foods, sell firewood). Livelihoods that are diversified and are not overly reliant on one or two ways of accessing food or income are inherently less vulnerable to social and economic decline than households that for instance rely primarily on agriculture or remittance from one employed bread-winner. A concise description of vulnerability is given below.

Vulnerability = Size and Type of Shock x Resilience of Households to Cope

The livelihood patterns in this report clearly show the huge importance of income to households throughout the country. It is false to assume that agricultural production by households is the key to their socio-economic status or overall well-being. Similarly it is false to assume that the poor are always the most vulnerable. Wealth status is not the only determinant of vulnerability. In most instances shocks or hazards e.g. drought or retrenchment hits the better off and middle wealth groups the hardest because they gain most of their income and food through these sources that are directly hit. However, the main reason why we do not rush humanitarian aid to support such households is that they have build up cash and asset reserves that can support themselves during difficult times. Furthermore, their social and human capital means that they have the necessary social networks/contacts and skills/training to find other ways to cope with the shock such as finding a new job or trading goods. Difficulties for better off and middle income households occur when shocks are multiple and occur in rapid succession. This has been the case between 2002 and 2006.

Swaziland Livelihood Profiles

National Overview

Introduction

The Swaziland Vulnerability Assessment Committee (Swazi VAC) requires baseline information on rural people as a reference point for judging the likely effects of climatic or other shocks. These may acutely affect people's ability to maintain their usual livelihoods, and official response needs to be based on information and analysis designed to give solid guidance for short-term relief or other support. Whether through direct distribution of food and/or cash, or through other subsidy or market action, the essential target is the household, since this is the basic and universal unit of economic operation, and the unit which must try to cope with shocks. For this reason, the Household Economy Approach (HEA) is the methodology of choice, giving both a geographical template of Livelihood Zones and within these zones an analysis of livelihoods typical of households within different wealth groups - since these exhibit different levels of vulnerability to shocks.

The National Overview as well as the specific Livelihood Zone Profiles which follow; set out the findings of the recent Swazi VAC field exercise to obtain this baseline information. However the detailed data is held in a separate spreadsheet database, and it is with this that the Swazi VAC is able to make a scenario analysis of the consequences of shocks, and thus construct early warning reports.

Geography, Climate and Economy

The Kingdom of Swaziland is the smallest of the land-locked countries in Southern Africa, surrounded by the Republic of South Africa except for the eastern border with the Republic of Mozambique. The territory covers 17,366 square kilometres, and the Kingdom is divided into four Administrative Regions, i.e., Hhohho, Manzini, Lubombo and Shiselweni. The estimated population for 2005 was 1,174,000, of whom some 70-80% are defined as rural. Almost half of the total population is aged 14 years or under. Even with the effect of the HIV/AIDS pandemic on mortality and the birth rate (Swaziland is among the three worst affected countries globally), the population growth rate was estimated in 2000 at 2.9% per annum - meaning a doubling of the population within roughly a generation, all other things being equal.

The country consists mainly of a set of undulating plateaus at different altitudes, descending eastwards from the mountain ridge and escarpment which defines the western border with South Africa. These give the four major agro-ecological zones. The Highveld lies between 900 to 1400 metres, the Middleveld between 700 and 800 metres, and the Lowveld between 250 - 400 metres. Finally the far east of the country consists of the Lubombo plateau bordered by the mountains which mark the frontier with Mozambique. The western mountain areas, containing extensive forests, are thinly populated, as is the lowveld in covering most of the eastern half of the country. The Highveld and Middleveld areas are by far the most densely populated parts of the country, containing also the big cities, so that less than one-half of the territory contains some three-quarters of the population.

The mountain ridges and plateaus are cut into by four major river systems, which inter alia feed irrigated agriculture, notably in three major commercial sugar cane plantations in the east of the country. There is one main rainy season for Rainfed agriculture, from October to March. The long-term mean annual rainfall is above 1100mm in the Highveld, around 830mm in the Middleveld, 650mm in the Lubombo plateau and 550mm for the Lowveld. The non-mountain Highveld and Middleveld climates, including cool-to-warm temperatures, are highly conducive to growing the ubiquitous staple crop, maize, whilst in the hotter and drier lowveld it requires a special regularity of precipitation across the growing season to allow a really satisfactory crop. On the other hand, the lowveld is generally good for cattle rearing, and the sparser human settlement and associated arable land allows for more extensive grazing (on and off ranches) than in the more crowded middle and Highveld. Smallstock include more goats than sheep. Apart from maize, other important arable products are cotton, sorghum, legumes, tubers and tobacco. However cotton production

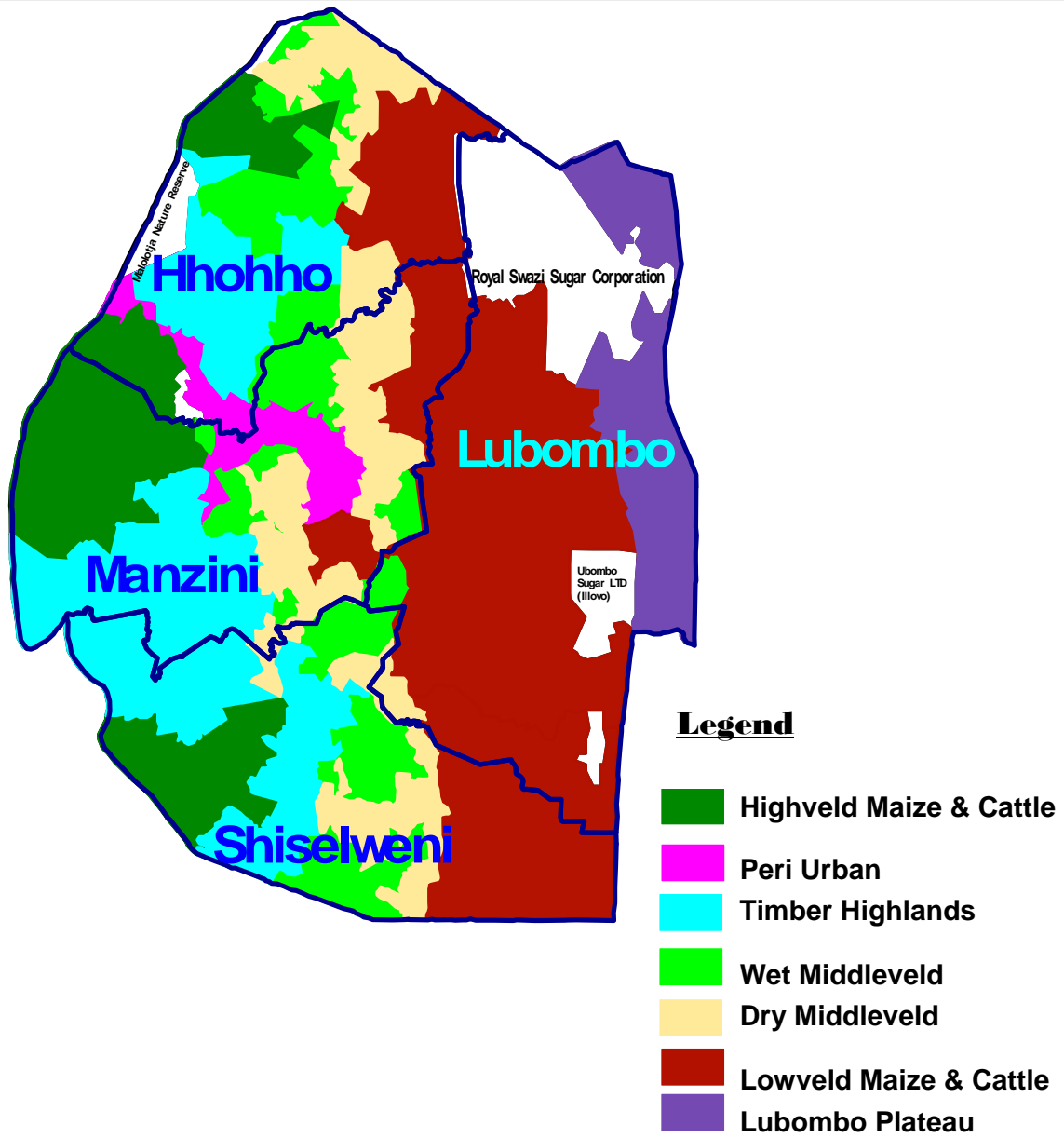
has been highly diminished in recent years due to persistent drought conditions and falling market prices.

Swaziland is a middle income (lower) developing country with a GDP of some \$2 billion in 2003 (US\$1,891 per capita), and a Human Development Index of around 0.5 (as calculated by UNDP for 2004 and 2005) hovering on the threshold between 'medium' and 'low' countries. Economic growth declined from boom conditions in the 1980s at 8% to around 3.75% in the 1990s, 2.5% in 2000 and 1.8% in 2005. The economy has always been tied tightly to that of South Africa, with a great part of commercial investment in agriculture and other sectors coming from South African companies, over 80% of imports coming from South Africa and over 70% of exports going there.

The new South African regime in the 1990s attracted some investment which had formerly gone to Swaziland, whilst migrant labour from Swaziland into South Africa's mining and commercial sector declined. More recently the Swaziland economy has suffered a number of blows which have impinged on ordinary rural people. Sequential years of drought early in this decade hit both crop and cattle production, and led to an unusually high net importation of staple food, including international food aid. The decline in international cotton prices and the closure of the cotton processing factory in 2002 has all but wiped out cotton production by smallholders in the lowveld, and much of the relief food aid for them has been distributed in recognition of this misfortune as much as that of drought. More recently, the sugar industry, which provides the country's greatest export income, has been struck by the cutting of the preferentially high export prices to the EU for ACP countries after a ruling by the World Trade Organisation, such that there is likely to be a 37% cut in price over a three-year period. Smallholding cash-croppers will find it particularly hard to adjust to this. There have also been lay-offs of commercial sugarcane plantation employees, which have also negatively impacted on the economy. The cattle industry, already subject to internal quarantine regulations in parts of the east due especially to endemic foot-and-mouth disease, has been struck by a 2006 EU ban on Swazi beef products due to failures to produce satisfactory certification of the provenance of slaughtered cattle and their inoculation history.

On the other hand, the timber and wood-pulp industry in the western highlands has not been similarly adversely affected either by climate or price changes, and the tourism industry continues to develop. Mineral resources include coal, clay and stone quarrying is also important. Other industry consists chiefly of food processing and light consumer goods. Swaziland remains a country with a large proportion of high-quality arable and ranching land, whilst rainfall drainage off mountain catchments not only offers further irrigation potential but also substantial potential for hydro-electricity development.

The Rural Livelihood Zones



Rural Sources of Food and Cash: Main Findings and Implications

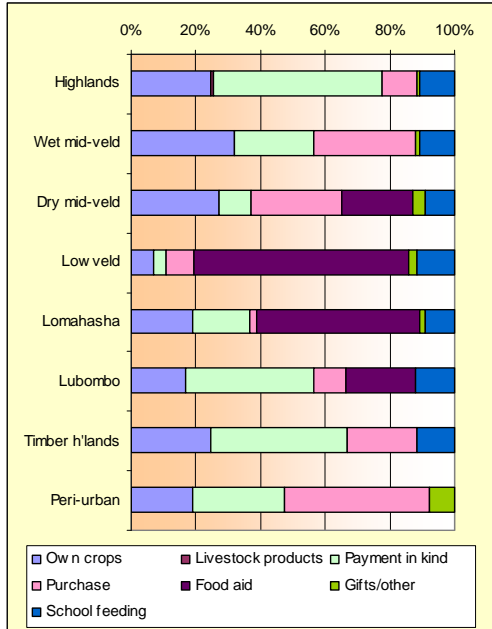
Swaziland's varied ecological and climatic picture is necessarily at the root of what distinguishes seven of the eight rural Livelihood Zones described below. There is another important factor: the odd-one-out, the Peri-Urban Corridor Livelihood Zone surrounding the urban complex of Manzini, Mbabane the capital, and Matsapha offers an extreme example of an aspect of *economic* geography that is somewhat independent of ecology. This is the rural-urban link which profoundly affects *all* the Livelihood Zones. Very few, if any, rural households pursue a simple subsistence living, even though agricultural and livestock production comprise the main economic activities for the poorer-half (roughly) of total households (the 'very poor' and 'poor' wealth groups). The other half (the 'middle' and 'better-off' wealth groups) possess much of the productive, small-holder land and own most of the livestock, but their main economic activity is elsewhere, largely in the urban and plantation sectors where government and private employment, and their own trading or other business, give them the greater part of their cash income, which comprises the greater part of their living. It is largely with this cash that they run their land-based household operations, and pay members of poorer households to provide their labour and skills, and also buy their craft products and cut fuel-wood and grass. Thus Swaziland shows a pattern of rural life based on a very high dependency on urban (or secondary sector) income, direct or indirect. It follows that although the Livelihood Zones are a geographical expression much influenced by ecology, the Livelihood Zone Profiles must reflect also the supra-zone urban/national employment and trade phenomena. This can be taken to include teachers and government employees in rural areas, since their main income is not from production activities. On the other hand, local business, including shop-keeping and trade, may be based on local rural production insofar as it mediates the trading of local produce, whether within the zone or exported to other zones or urban areas.

The graphs below offer a summary view of two poles of household survival: how households get their food and how they get their cash. In the separate Livelihood Zone Profiles the reader will see details of a third pole, that of basic household expenditure, which underlines the message that cash is not only necessary for virtually all rural people to purchase staple food during some months of the year, but is also needed to pay for other essential household items, and for services and farming inputs. As a rule of thumb, in rural Swaziland, the poorer you are, the less you can rely upon your own farm production and the more you depend on earning cash (or direct payment in grain - 'in-kind' payment). Whilst the better-off you are the less you *need* to rely on your own farm production given the comparatively high level of remuneration for off-farm formal employment and commercial activity, mainly beyond the zone.

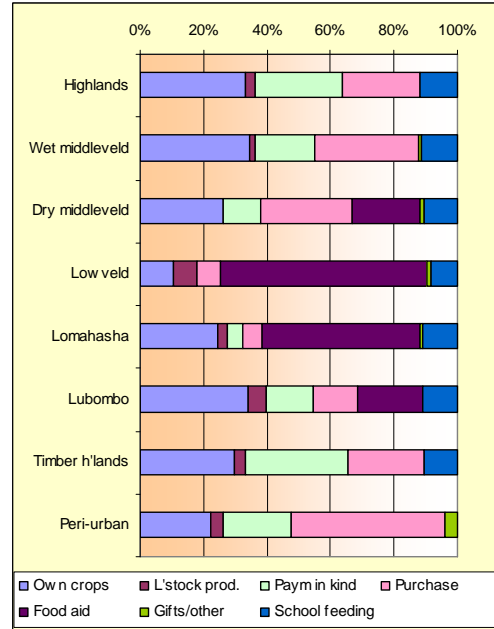
National statistics on the economy of this Middle-Income country point to a highly skewed distribution of resources. According to the Swaziland Household Income and Expenditure Survey (SHIES) report (2001), the richest 20% of the population consume 56.4% of national resources, whilst the poorest 20% consumed only 4.3 percent of national resources. The consumption of an average person in the richest quintile was more than 13 times that of an average person in poorest quintile. The livelihood profiles below offer a remarkable breakdown of this skewing from a rural perspective, via differentiated zones, differentiated wealth groups and the accounting of typical household economy within these groups.

Summary of Sources of Food

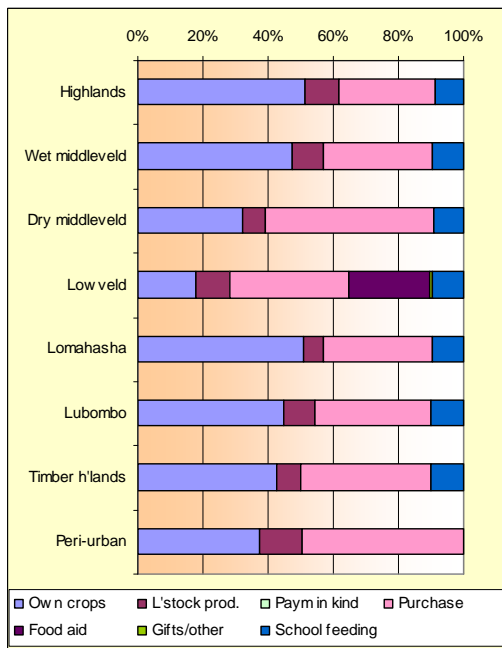
Very poor households



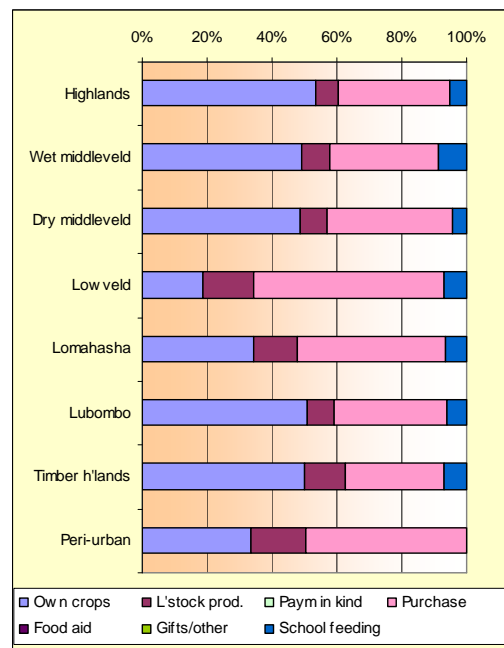
Poor households



Middle Households

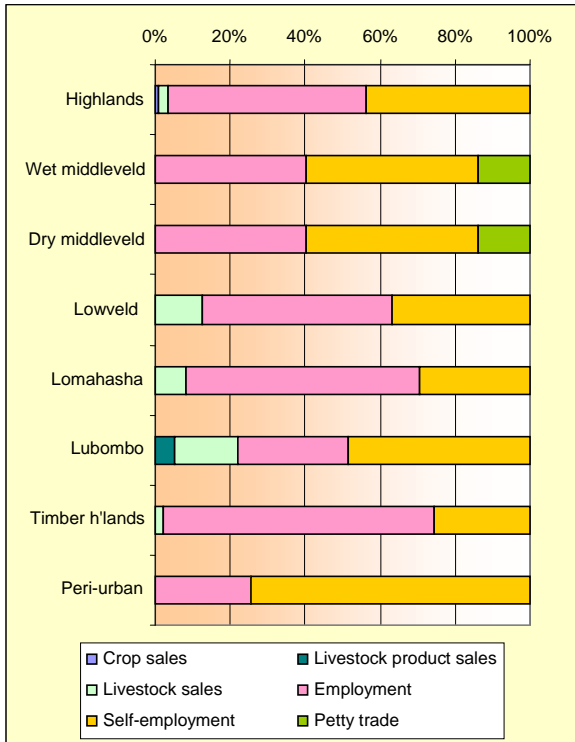


Better-off Households

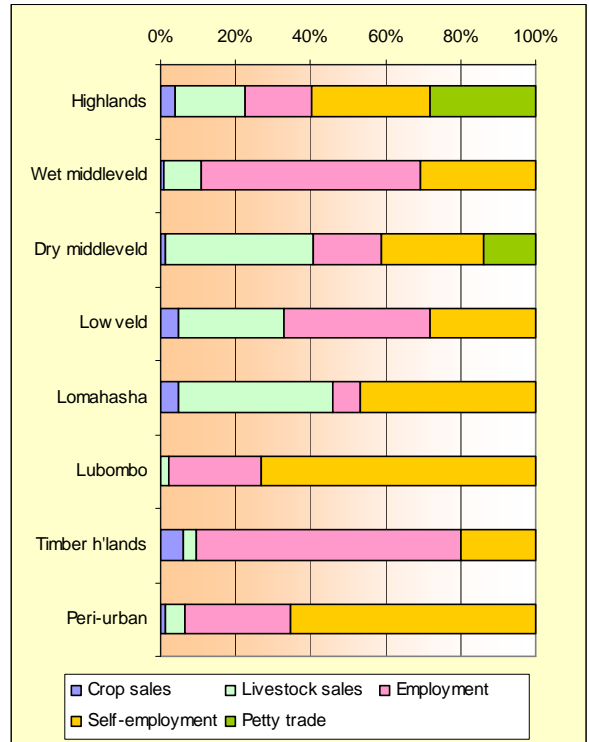


Summary of Sources of cash

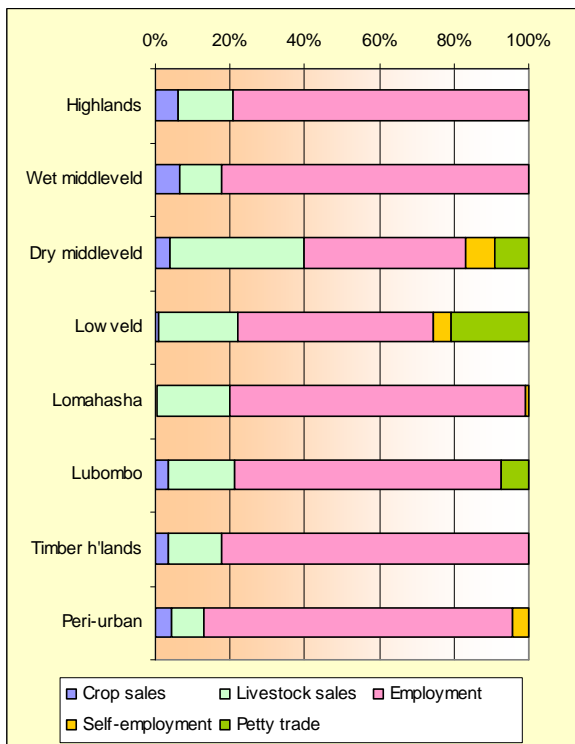
Very poor households



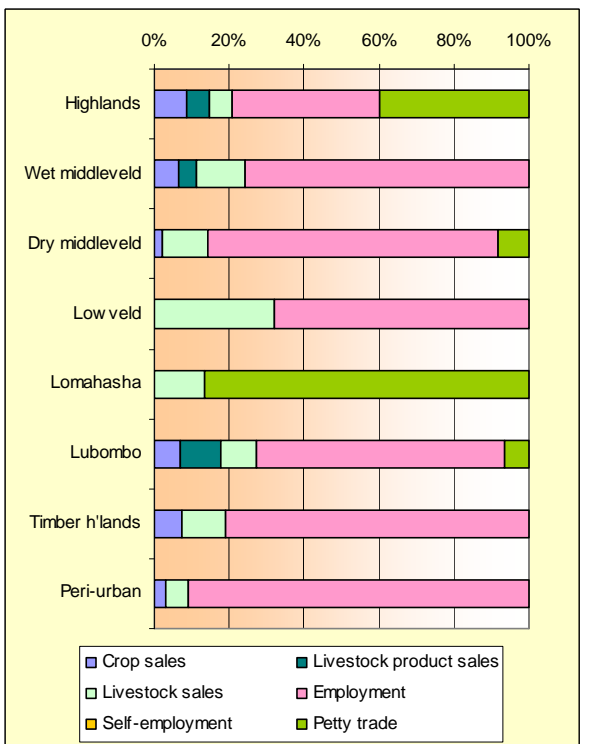
Poor households



Middle Households



Better-off Households



The summary graphs above show a number of patterns worthy of comment, but first it is important to point to one or two factors that only become clear in the separate Profiles. The Sources of Food charts show where households obtain the food they actually consume, but in the case of most better-off households and some middle households, the fact that they purchase a substantial amount of staple food during the year doesn't mean they don't produce enough for household needs or indeed a surplus. Many do but they tend to sell a good part of their harvest early on either to meet pressing cash requirements, including school fees due in January, or to avoid the risks of loss if they store maize for several months. On the other hand, poorer households who never produce enough for the household for the year are also forced to sell early a part of their harvest to meet immediate cash needs; but their income from crops is small, and does not pay for more than a few months, or perhaps only weeks, of subsequent grain purchase. Thus many better-off households make a profit from selling a part of their harvest which may well cover basic food purchases for as many months as necessary; but poorer people must find earnings elsewhere to cover the greater part of their staple food purchases.

It should be further noted that the summary graphs show the *proportion* of cash coming from different activities; but in absolute terms, middle households typically earn five to six times the amount of cash earned by poor households (and some ten times what very poor households earn), and in turn better-off households typically earn nearly twice what middle households earn. Thus, for instance, in the reference year poor and better-off households in the Timber Highlands both typically obtained 6-7% of their annual cash earnings from crop sales, but the difference in absolute cash was between 390 emalangeni for the poor and 4,545 emalangeni for the better-off. In terms of re-purchase of maize with these sums later in the year, the poor household might hardly have been able to buy three 70kg bags of maize, representing about 12% of the basic food requirement (in calorie terms) of a household of eight people. By contrast, the better-off household would have been able to purchase more than the entire year's requirement of basic food.

In broad terms, the above graphs show a rural economy which is very far from subsisting on basic food production. Even given substantial grain surpluses amongst at least the better-off in the favourable middle and Highveld areas, the country's rural smallholders collectively do not produce enough to cover their requirements, and overall Swaziland is a net food importer. From the point of view of households in the different wealth groups, it is clear that the greater part of their basic food comes either from market purchase or from payments in-kind for their labour. The very poor seem particularly to be the recipients of in-kind payment, and especially in the highland areas and the Lubombo Plateau, suggesting perhaps that isolation from markets makes in-kind payment more attractive. Given that the ownership of livestock, especially cattle, is a cardinal aspect of wealth, it is no surprise that the wealthier half of households get substantially more of their calories from dairy products, whilst the poor get far less and the very poor virtually none. The tendency to consume rather than sell dairy products is such that only the better-off in favourable zones gain significant income from this. On the other hand, at the household level sales of livestock themselves are more important across the board than crops (although of course the same differentiation in absolute earnings between wealth groups exists as in the crop sales example above).

The picture of sources of food is somewhat distorted by the presence of food aid in the Lowveld, Dry Middleveld, and Lubombo Livelihood Zones. This is unfortunately not simply a one-year blip, but the result of several years of drought and, in the lowveld area especially, a catastrophic decline in cotton earnings which have not been replaced by another cash crop or other additional sources of income. The food aid has had the knock-on effect of reducing the value of crop sales from the middle and Highveld areas, since it has substituted for these and/or dampened rises in market prices for maize. Another form of aid with food which is school feeding is significant across the board except in the peri-urban zone. This shows that a household of 7-8 people with three children at school has upwards of 10% of its basic food consumption covered by school feeding; this may be an incidental gain for better-off and middle households, but for very poor and at least some poor households it is what brings them just up to the threshold of satisfying the household's basic food requirement. This is an indicator of severe poverty and skewing of wealth in what is, after all, a middle income country.

The sources of cash graphs tell perhaps the fundamental story about the economy, which is about 'employment'. For the poor and very poor, there are essentially two types of employment: paid employment by other people (on their fields or with their livestock or in and around their homes as domestics or handymen) and 'self-employment'; which means such activities as cutting and selling fuel wood and grasses, making wood or basketry handicrafts, brewing etc.. Most of this depends upon the other half of the story, which is the employment status of the middle and better-off wealth groups. For as noted earlier, these people are largely employers in turn of their poorer neighbours, and the customers for their (poor and very

poor) 'self-employment' products. The middle and better-off get by far, the greater part of their cash income from government or commercial employment (including on sugar plantations), whether as salaried staff or skilled workers, depending on their level of education. A minority run businesses of greater or lesser size, including grocery stores and transport enterprises. Since many commute weekly or more frequently between the city and their rural residence, it is perhaps a moot point whether they are counted as urban or rural people; which is another indication that in Swaziland there is such a strong rural-urban link that the two spheres are almost inseparable in economic terms. In very many cases the spheres are also inseparable in family terms, since city-employed people, even if their main residence is in the city; commonly go to their rural homes and farms at the weekend and for any holidays. They maintain their rural properties with the help of rural relatives; indeed many such home farms are like smallholdings run at a 'loss' on which they not only keep a rural establishment going but help poorer members of their extended family to survive. It is a major form of redistribution of wealth in the country.

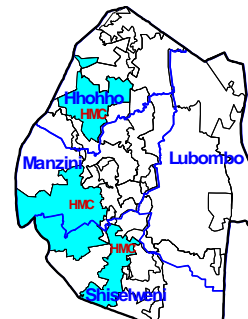
This leads finally to the observation that although there are differences between the Livelihood Zones, including differences in proneness and levels of vulnerability to shocks, these differences are not as acute as one might expect given the sharp differences in ecology, between middle and Highveld areas especially conducive to successful maize production (but where a dense population means small amounts of land per capita) and the hotter and dryer middle and lowveld where the balance of value goes more towards livestock production except where there are irrigated cash-crops; and from mountain areas where grazing declines in the winter due to dampness and frost, to lowveld areas where grazing declines in the dry months through heat and lack of moisture. These differences are there, and are particularly shown up in years of drought. The overall pattern of livelihoods is not acutely different between Livelihood Zones, and this is very largely due to the similarity everywhere; the masking effect, perhaps of the rural-urban link.

Rural Livelihood Zone Summaries

Highveld Maize and Cattle Zone

At an elevation of 900-1400 metres above sea level, and mean annual rainfall of up to 1200mm, this Livelihood Zone is one of the most productive in the country for maize and supports a relatively dense population of ≈140, 000. Farmers also grow beans, sweet potatoes, and groundnuts, whilst fruits, especially wild guava, are a source of cash. Cattle and smallstock are kept in relatively high numbers, although grazing deteriorates in the cold and wet winter conditions. Better-off people sell milk to the local market.

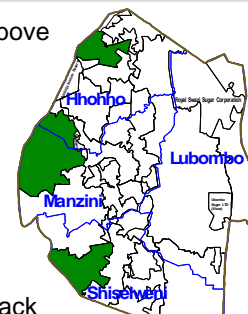
The zone suffers little from drought and is relatively food secure. However, harvests are periodically damaged by severe hailstorms. Many localities are relatively isolated from the main road and market network of the country.



The Timber Highlands Livelihood Zone

This rugged zone contains the highest elevations in the country of over 1400 metres above sea level, and is characterised by the one product that thrives in this cold and rocky environment: trees. The timber and wood-pulp industry is central to the support of a population of some 95,000, whether through direct employment or through supplying goods and services to those employees who migrate in from elsewhere. However, labouring wages are low, so that poorer households also need to make the best they can of their smallholdings. They are hampered in this by leached and eroded soils, overly moist and cold conditions in winter which also affects grazing; relatively low numbers of livestock are kept.

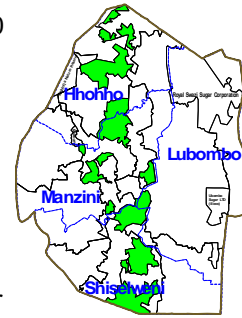
The zone is not drought prone, and poorer people are relatively food secure, but they lack diverse income opportunities, whilst because of the timber industry the Middle and better-off households have more local employment opportunities at their level than in most other livelihood zones.



The Wet Middleveld Livelihood Zone

With annual rainfall upwards of 900mm, moderate temperatures at altitude of 700-800 metres above sea level, this zone provides Swaziland's best environment for maize production, as well as other crops such as sweet potatoes, beans, and groundnuts, which are both consumed and marketed. A moderate population density leaves some room for livestock grazing commons, although not the mobile pastoralism of historical times, but there is little room to expand arable land available to the population, currently $\approx 110,000$, so that continued growth will mean increasing land shortage.

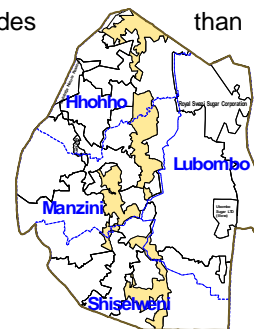
The zone is only affected by drought in its southern extremities, and these also suffer from being farthest from the cities of the north-west of the country and their market for goods and labour. However, on the whole this is the best-favoured zone of the country.



The Dry Middleveld Livelihood Zone

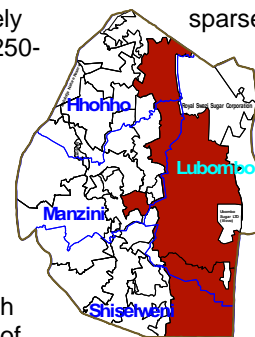
With some 600-650 mm annual rainfall and with warmer temperatures at lower altitudes than the neighbouring Wet Middleveld, this zone suffers by comparison from a number of disadvantages in supporting a not-sparse population of $\approx 116,000$. It has poorer conditions for maize production, and is within the drought-prone lower-lying belts of the east of the country, so that not only is it more risky for farmers to invest in farming inputs, but in fact a significant amount of the arable land available to households is not cultivated. Poorer households get vital cash income not only from working for wealthier people but from collecting and brewing marula, as well as cutting and selling firewood and grasses. Livestock are held in some numbers by the wealthier households, although disease, and even quarantine regulations in one locality, limits this sector.

This is a food insecure zone, which has been the subject of some drought relief food aid; and it is amongst the poorest in the country in terms of levels of household cash income.



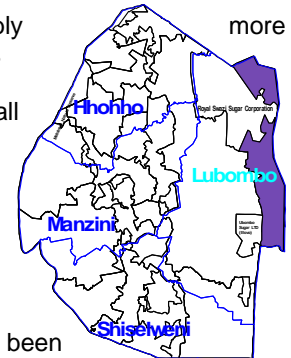
The Lowveld Cattle and Maize Livelihood Zone

This is by far the largest of the Livelihood Zones in terms of area, but it has a relatively sparse population of $\approx 175,000$. With the lowest elevations amongst the livelihood zones at 250-400 metres above sea level, hot temperatures and rainfall of only 400-550mm per annum, the environment is more suitable for cattle raising than for a dependency on maize or most other rain-fed crops. In the current decade successive years of drought, as well as the collapse of the cotton industry, have respectively obliterated maize harvests, severely reduced livestock holdings, and nullified cash-crop incomes. As a result, the poorer households (and even some middle households) have received regularly and very substantial food aid as relief. The upshot of this is that food aid, which used to provide relief from food-crop failure for poorer people at not more than 25% of their overall food consumption, has recently provided them with 70% of their basic food as well as some cash income from the sale of at least a part of their oil and beans rations. However, longer-term solutions to acute local poverty must rely on something else, possibly an extension of the irrigation which feeds the neighbouring sugar cane plantations. Otherwise, poorer people from the zone will increasingly depend upon employment in the cities as well as the plantations, but with far lower and less regular remuneration than that received there by the better educated members of wealthier households.



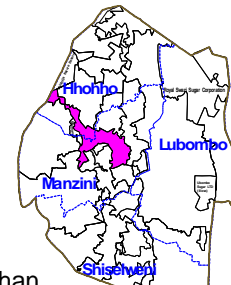
The Lubombo Plateau Livelihood Zone

This relatively small zone lies above the lowveld to its east and receives appreciably rainfall, amounting annually to about 800mm, but it has few other advantages. It is isolated from the main market and urban centre of the country, and whilst employment on the neighbouring sugar estates is a resource for this relatively small population of $\approx 23,300$, it is one which must be shared with many more people from other areas, notably the lowveld. A good mix of food crops (often intercropped) includes maize as staple, and pulses, sweet and Irish potatoes, leaf vegetables and pumpkins and melons. This production has not stood up well to successive drought, so that the plateau population has regularly received food aid, although not at the level of the lowveld population. The return of satisfactory rains will bring food security, but will not solve other economic problems. A major one of these is that any advantages in trading with neighbouring Mozambique has been eclipsed by the losses of substantial livestock assets to cross-border rustling, whilst endemic foot and mouth disease and an associated quarantine on exports from the zone has further depressed what used to be a valuable sector for the Plateau.



The Urban Corridor Livelihood Zone

This is a crowded zone of $\approx 135,000$ people living in a middle-to-highland ecological and climatic setting. The livelihoods of the zone are dominated by the proximity of the city complex which effectively stretches from Manzini through Matsapha to Mbabane, but cultivation of the relatively small plots of land is serious enough to produce up to half of overall basic requirements if the rains are good; and if the ownership of this harvest is heavily skewed towards the middle and better-off groups, it nevertheless gives the poorer households local farm labouring employment, often paid directly in grain. Thus although a good number of householders are effectively city residents who live on the outskirts due to reduced costs of housing and taxation, the poorer section at least are classifiable as rural people, even if amongst them more people do casual labour in city than is the case in other zones, and they have the advantage of the nearby city demand and prices for their cut fuel wood and handicrafts. As such these poorer households are probably more economically secure than their fellows elsewhere, and in fact earn somewhat more cash in the year, but also need often to pay city prices for grain, transport and other items.



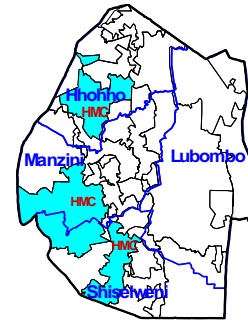
Swaziland Livelihood Profiles

The Highveld Maize and Cattle Zone

August 2006¹

Main Conclusions and Implications

This is a relatively high-rainfall and drought-free area with high maize yields for those who can afford to use fertilizers in appropriate quantity. However, the absolute volume of crop production is limited by the rocky terrain where arable land is a somewhat scarce resource, and the cold and frost of the winter limits the quality of grazing as well. Regulated formal market maize prices offered by the National Maize Corporation and the effect of food aid supplies to the Lowveld populations together discourage optimal investment of inputs and labour into crop production.



Therefore a great part of the wealth of households comes directly or indirectly from beyond the zone; for the middle and better-off, it comes from employment and business in the urban sector or plantations; for the poorer half of communities it comes largely from local rural employment and the sale of handicrafts; and the employment is offered by the better-off and some middle households, who use their urban income to pay for it. There is a great divide between the poorer and wealthier halves of the population: in terms of cash income, the latter earn 4 to 6 times more than the former.

Employment is therefore the key, and the very poor and poor are explicitly conscious of the barrier formed by their low education levels, and the problem of keeping children at school beyond the lower primary level. The seasonality of employment, on local farms or on plantations, also means that there are fluctuations in cash/food availability during the year. Overall, this zone is not prone to climatic shocks, but it has quite severe constraints on increasing wealth through local production.

There is a need to promote inter-zone market exchange through relevant Ministries such as MOAC & Ministry of Enterprise and Employment (MEE). Imported food aid should be reviewed in the context of development activities and its effect on local agriculture; maize procurement from local farmers by donor agencies to promote local production. When local production is affected by hailstorms, very poor and poor farmers should be helped with seed/implements for replanting, equally, when there are livestock disease outbreaks, livestock drugs and vaccinations should be made more accessible to all wealth groups (the distance and therefore transport cost to the major towns being prohibitive for poor people). For the poorer half of the population help should also be given in gaining market outreach to other regions for their handicrafts which is one of their very limited numbers of income sources.

Zone Description

The Highveld is located in the western half of Swaziland. It is in three blocks of land neighbouring the three blocks of the Timber Highlands Zone. Together they cover the upper part of the overall escarpment consisting of a divided plateau from which numerous steep slopes run, and associated hills, valleys and basins. The Highveld has an elevation of 900 to 1,400 metres above sea level, and receives annual rainfall of 700mm to 1,200mm. The typical vegetation cover is short to moderate grasses interspersed with patches of forest. This is the wettest and coolest part of the country, and grasses lose nutritive value in the winter, also becoming sour, so that useful grazing lasts only 7 to 8 months under normal management. Frost is common in the winter, discouraging winter cropping.

With a relatively dense population of just under 140,000, the zone is normally self-sufficient in staple food, and indeed exports some surplus to other zones. The area is the country's most successful maize producer in terms of average yields; but beans and sweet potatoes are also important food crops, which

¹Fieldwork for this profile was undertaken in late July-early August 2006. The information presented refers to the consumption year from July 2005, i.e. from the time when the maize harvest was largely in. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five years (i.e. until 2011).

are also sold. Ubiquitous fruit trees, including wild guava, give another source of cash, and some groundnuts and pumpkins are also produced. However, the rocky terrain limits the amount of arable land available and leaching/erosion of topsoils increases the need for fertilizer application.

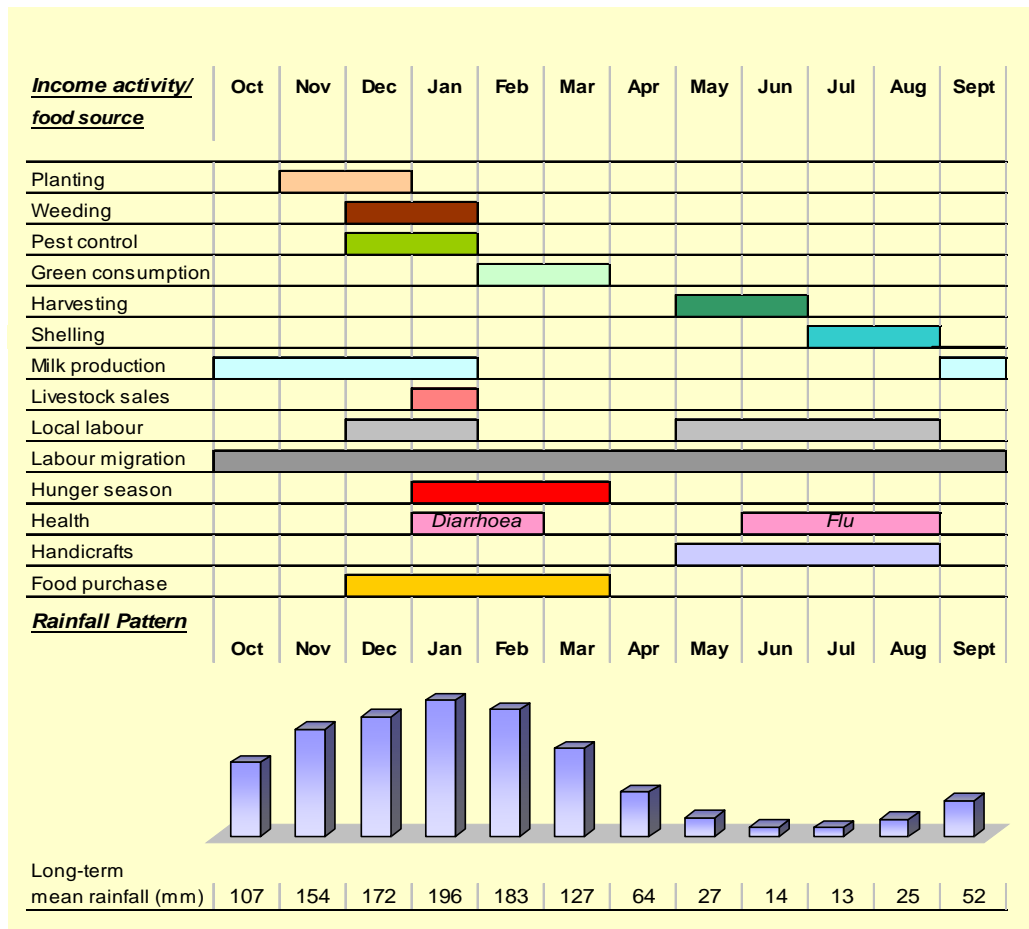
The main livestock are cattle, with milking stock especially maintained by middle and better-off people. The stover from the maize provides a major part of cattle feed from May through August; otherwise communal grazing provides the crucial support for livestock here as elsewhere in the country. However, reproduction rates for cattle are in general slower than at lower altitudes with better conditions,

Markets

Maize and beans are significant cash crops for those able to produce a surplus. Sweet potatoes and some of the beans, as well as some milk, are also sold locally. The bulk of the maize is sold to the National Maize Corporation (NMC), and the bulk of milk to the local market. In recent years profits from maize have reduced due to the high production costs, and from the reduction in demand due to high volumes of food aid distribution in the Lowveld zone. No significant amount of staples comes into the Highveld zone on the market from elsewhere. The zone has a relatively good road network, but the distance between the chiefdoms and major markets is large and the money required for travel restricts the commercial activity of poorer people.

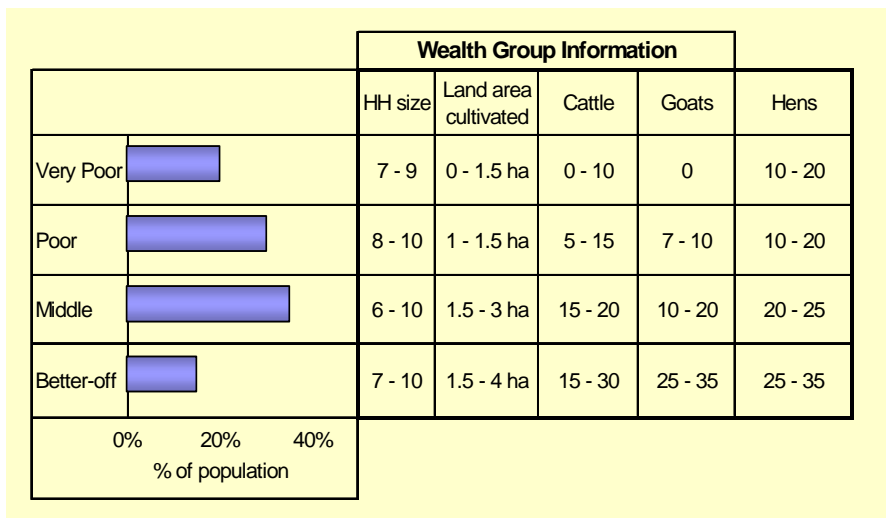
During and a bit beyond the harvest season (May-June) the crop prices are low, but they increase during the months of October to January. By December poor people have usually consumed their harvest and begin substantially buying staples at the rising prices. This therefore, heralds the beginning of the annual 'hunger season'. It is also a high expenditure period in terms of Christmas shopping and the annual school fees paid in January: altogether a difficult period especially for the poor. On the other hand, livestock sales are highest around this time (December –January), with prices increased by the quality of livestock which are mostly well fed by the middle of the rainy season.

Seasonal Calendar



It is notable that whilst local labour employment naturally occurs in the peak months of agricultural activity, labour migration takes place regardless of the seasons. This indicates that either households have extra members who are not needed for local work on the family farm or that migrant work brings a greater profit than local work; whether on the family farm or for neighbours.

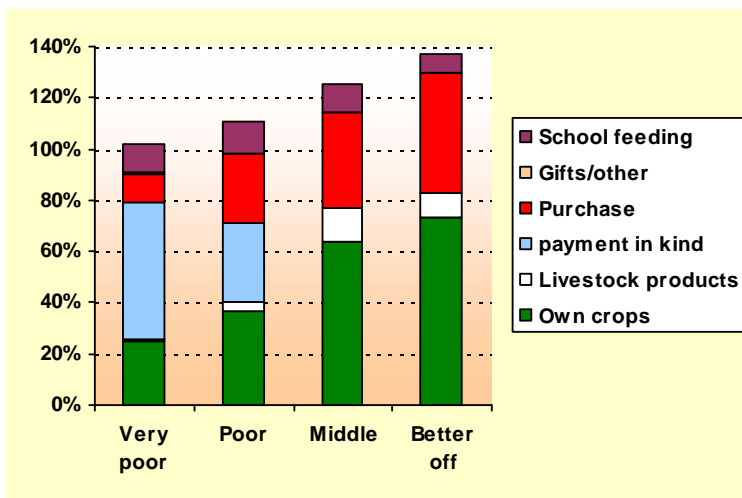
Wealth Breakdown



The land areas cultivated by the middle and better-off include renting in of up to 1 hectare (from some of the poorer households who rent out up to half a hectare). On what they cultivate, the very poor and poor households are usually only able to produce food enough to cover 4-6 months of household consumption. The middle and better-off households not only use more land but are able to afford more agricultural inputs, so that their production is substantially higher than that of the poorer groups. The poorer households do use the kraal manure from the cattle they keep under contract (Sisa cattle) for the middle and the better-off. However, they lack the capital to invest significantly in other income generating activities.

Sources of Food

The bulk of the staple food of the poor and the very poor comes via employment off their farms. The difference between them, apart from the proportion of food they get from their own fields, is that the very poor are mainly paid in kind, whilst the poor depend more on market purchase. Both groups depend on the level of production achieved in a given season by the middle and better-off households for whom they provide the main agricultural labour and also indirectly because the volume of surplus production affects the prices of staples on the market.

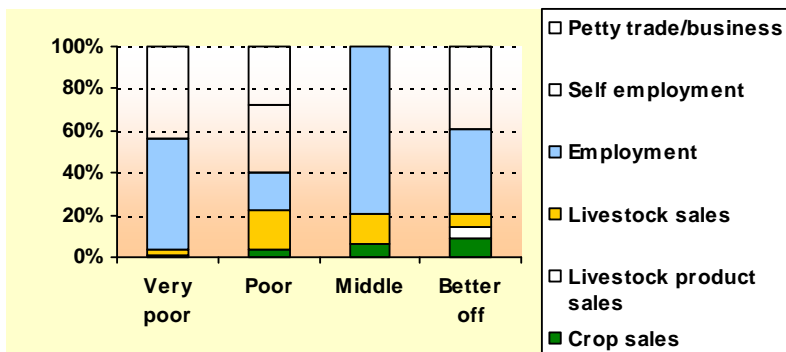


In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

To alleviate the hungry season poorer people harvest green maize which is dried then milled into maize meal; resulting in a reduced overall harvest yield. At times of lesser problems in food access, those paid in kind may request other items than the basic maize, candles or paraffin, soap, sugar, pulses and cooking oil. For the very poor and poor, school feeding tips them above the basic food requirement threshold as shown on the graph above.

The fact that the middle and better-off do not depend absolutely on their own crops for staple consumption is not because they do not produce enough, but mainly because they don't take the risk of storing maize long into the year, preferring to sell early and buy later. They also buy other preferred foods for consumption instead of maize. Their consumption of their own animal products, chiefly milk, adds significantly to the quality of their diet although it offers only a modest source of calories.

Sources of Cash



The graph provides a breakdown of total cash income according to income source.

Annual income in emalangeni	2,739	8,550	37,850	60,496
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The pattern seen here is of two different but related spheres of economy. The poor sphere is based heavily on local work: agricultural labour for neighbours, handicrafts, brewing and very small-scale trading. This is the sphere of less than SZL 10,000 per household per annum. The other sphere operates at 4 to 6 times that level of income, and is largely based on employment and trade outside the local economy; urban skilled or salaried employment and business activities although middle households do have small

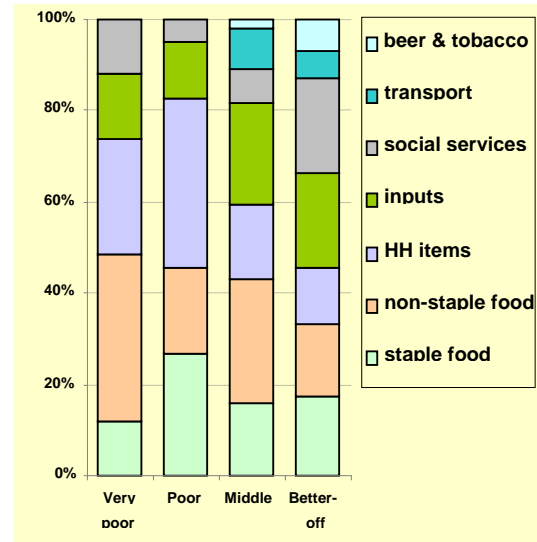
businesses with more local clientele. Some better-off and middle household members find salaried work in the nearby timber industry areas.

It is striking that crop sales are a small part of income at any level (for the poor only coming from vegetables), but it is not so surprising when we see that apart from a few individuals, even the better-off cultivate only a modest three hectares; in other words, they have substantial homesteads and a good number of cattle, but they are not really farmers by profession. They largely employ poorer neighbours to undertake the labour on their farms, often paying them in maize, and that is the chief relationship between the two spheres of economy.

Expenditure Patterns

The modest expenditure by the very poor on staple food needs to be seen in relation to their relatively greater earnings in-kind, seen in the sources of food graph above.

It is interesting to note that very poor people devote a bigger *proportion* of their expenditure to education (by far the greater part of 'social services') than the poor or middle groups. Given that the absolute expenditure differs greatly between wealth groups, the poor still hardly manage to pay for their children to complete primary school. Likewise, the most basic non-staple foods cost the very poor nearly 40% of their total expenditure, but this only buys them half of what the poor are able to buy with some 20% of their total expenditure.



Hazards

Chronic hazards: This zone is not prone to drought. Hail storms periodically harm maize at tasseling / cobbing stages which greatly affects plant performance and eventual yield. This tends to happen in the middle of the growing season, it may well be too late for replanting or too expensive especially for poorer households.

Periodic hazards: a combination of erratic rainfall and dry spells significantly reduces harvests. Livestock diseases such as black-quarter, heart-water, foot-rot, and newcastle amongst poultry.

Response Strategies

For failed crops, the only recourse is re-sowing/planting, if that is affordable and not too late. The very poor may not afford to buy seed and so depend on the seed stocks from their own production, and these would have been largely or wholly depleted by the first planting.

For livestock disease, veterinary drugs are purchased as far as means are available and mortality does not intervene. The livestock drug outlets are found in major towns, hence hardly accessible to the poorer half of households.

Given a loss or expected loss of food and income from the farm, **poorer people** double their quest for casual work, possibly elsewhere in view of reduced local farm labouring opportunities, and including domestic work for women in towns. They also try to sell more handicrafts, and more home-brewed beer. However the extra sale of livestock is a major step for those who have very few, even chickens are a significant asset amongst the very poor. **Middle and better-off households** reduce the amount of land cultivated, including the number of labourers employed, and sell off some livestock. They seek more remittances, and depend even more than usual on urban and other earnings from beyond the zone.

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	High and early consumption of green maize amongst poor and very poor
February	Continued high consumption of green maize
March	Early harvesting and drying of grains for household consumption. Increased drop-out of children going to school
April	" " " " " "
May	Increased dependence of poor on in-kind food payment for harvesting and shelling
June	" " " " " "
July	" " " " " "
August	More women appearing in the market places to sell handicrafts and other products
September	Unusual sales of chickens and goats to buy grain
October	" " " " plus heightened labour migration
November	" " " " plus heightened labour migration plus the reduction of numbers / size of daily meals within the household
December	" " " " " " "

Swaziland Livelihood Profiles

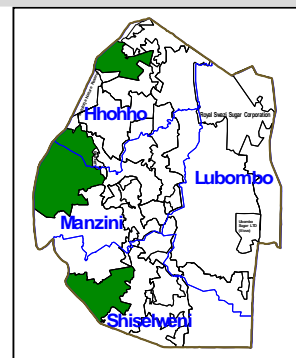
The Timber Highlands Livelihood Zone

August 2006¹

Main Conclusions and Implications

This is the single livelihood zone in the country within which there is one major local employer, namely the timber industry. This does not make the zone wealthier than many other zones in terms of the income of any wealth group, but it does mean that goods and services provided by local people are in demand by incoming workers of various levels.

On the other hand, the wages paid to poorer local people as timber workers are low, so that they do not ignore their own farming. In this zone, there are some constraints: limited arable land in this difficult terrain, excessive rainfall eroding soils, and poor winter grazing conditions limiting livestock holdings. Insofar as some households produce surplus maize, the prices offered by the NMC are not encouraging to further agricultural investment, given the high price of inputs. Higher returns and volume of off-take might arise if markets were operating efficiently. Even the poorer half of households, with such household labour as they have, might be encouraged to produce more food if supplied with seeds and other farming inputs so that they could make best use of the first good rains.



Zone Description

The Timber Highlands occupy some of the highest parts of the escarpment in the west of the country bordering South Africa, with altitudes of 900 – 1,400 metres above sea level. The zone comprises of three blocks of land, mirroring the blocks of the Highlands Maize and Cattle Livelihood Zone: in the north around Piggs Peak, in the middle the Mhlambanyatsi / Bhunya area and in the south the Nhlanguano area.

The land formation is rugged and rocky, and it is to make the best economic use of this otherwise unfavourable terrain that the area has been covered with man-made forest in a mainly organised and managed plantation pattern. Rainfall is the highest in the country at 1,000-1,500mm per annum, and temperatures amongst the coolest in the country. The precipitation engenders numerous springs and streams as well as some recognised rivers.

The zone has a population of just under 95,000 people in some 18,700 households. By Swaziland standards this is not a sparse population, and a principal reason so many can survive in this area is the existence of the timber industry. The timber companies offer full-time or regular employment to hundreds of salaried and skilled/semi-skilled people who are chiefly found amongst better-off and middle households. They also offer seasonal work to poorer people as labourers for six months or more in the year, albeit at low wages. For the other months they tend to look for casual employment with their wealthier neighbours, mainly farm work. Wealthier people also get other commercial and government employment here and elsewhere. By the same token, people from elsewhere, notably the neighbouring Highlands zone, compete for salaried and skilled timber industry jobs here.

If the timber industry is paramount, crop production is nevertheless important for all wealth groups. Maize is the single cereal crop; leaching and erosion of topsoil increases the requirement for fertilizers, and frequently excessive rainfall means that a 'good' year here is a relatively dry year. Wealthier households, especially the better-off, typically expect a surplus; sales of maize are mainly within the area, including to the poor who cannot afford the necessary agricultural inputs and typically produce 25-30% of the maize they need to consume. Beans, sweet potatoes, pumpkins and groundnuts are also grown, often intercropped with maize, and a few common collected foods such as wild guavas are used or sold for relish especially during the summer (rainy season) months.

Livestock ownership is negligible for the poor and very poor, but significant for the wealthier groups, although they

¹Fieldwork for this profile was undertaken in late July-early August 2006. The information presented refers to the consumption year from July 2005, i.e. from the time when the maize harvest was largely in. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five years (i.e. until 2011).

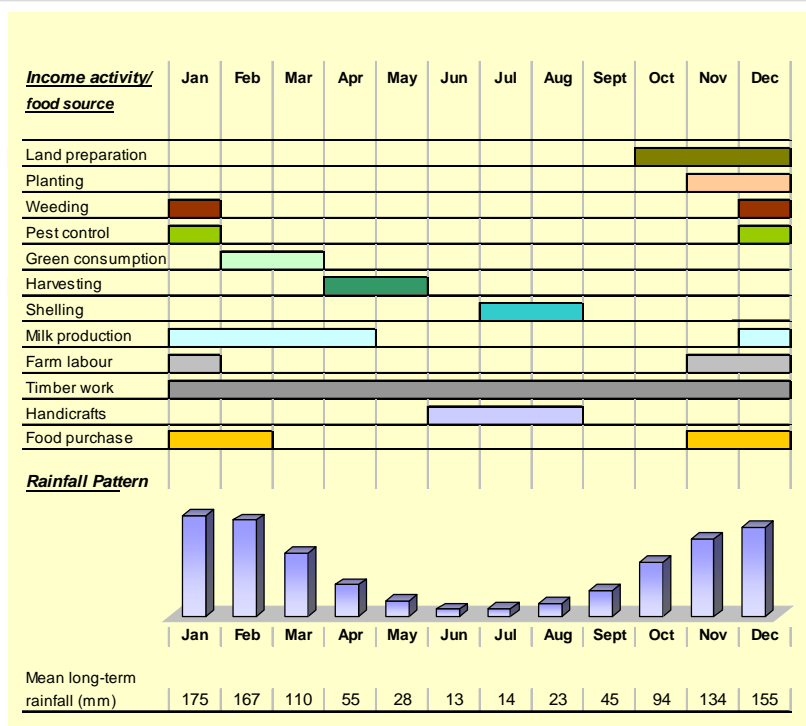
only own about half as many cattle as their counterparts in the neighbouring Highland Zone. The main husbandry is done with communal grazing. At the homesteads poultry are quite numerous and give the poorer households at least some pocket money.

This zone is not prone to food shocks, but poor people coping with unusual pressure on their household budgets will look to cash or food loans from relatives or neighbours, or will sell more chickens if they have them, and will double their search for casual employment.

Markets

Some livestock is taken to government sale yards on stipulated days, but the prices are imposed according to government standards, and if your animal does not meet these standards you may not sell at all. People prefer where possible to sell to relatives and neighbours, especially in times of stress for the household budget, because the seller has some negotiating power regarding the price.

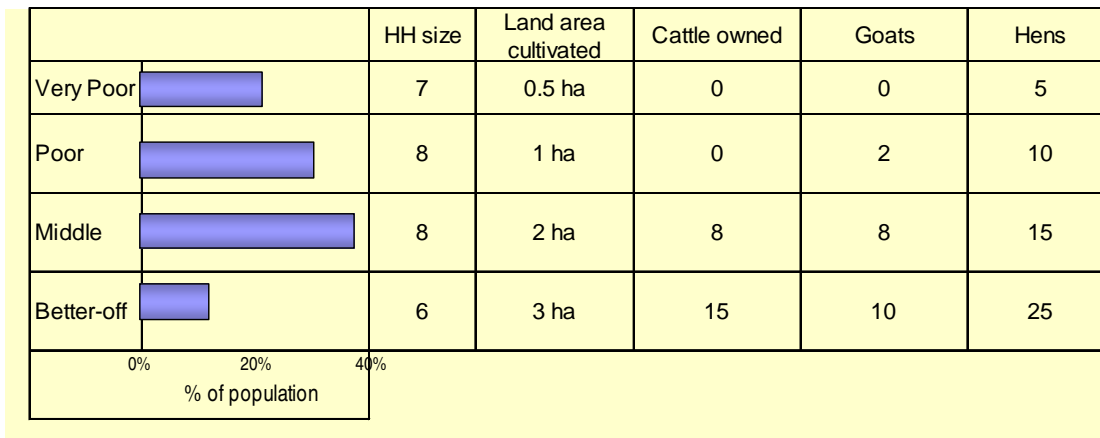
Seasonal Calendar



Land preparation is usually done within the rainy season, i.e. in the first three months from October to December. Planting activity is carried out by women, men and other family members, whilst milking is done by males. The tasks of weeding and pest control are done in December and January, and carried out mainly by women and their older sons and daughters. The green maize consumption in February and March serves different purposes at different wealth levels: for the poor and very poor, it is pounded into meal to serve as a contribution to the staple in the hungry period (which actually begins in November as they turn to the market for their staples supply). In middle and better-off households green maize is used whole, simply as a preferred snack.

In the timber industry, men and women and active teenagers get work: in the rainy months it is for planting activities, whilst in the dry season they are employed for fire control. On the farms, members of very poor, poor and some middle households, particularly women, avail themselves as labour for better-off and middle households whose main income is from salaried or skilled employment elsewhere. For female headed households, creating and selling handicraft items is an important strategy in making ends meet, especially in the dry period from June to August.

Wealth Breakdown



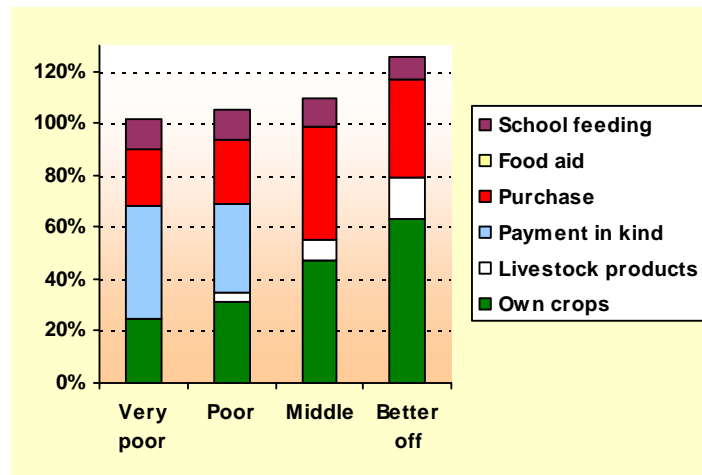
There are important differences between total land owned by households and the area actually cultivated. In general, households in all wealth groups own about three hectares of land, but only the better-off manage to use the full amount, sometimes hiring tractors. The reasons why others do not use their whole land include negative costs (i.e. profits do not outweigh labour/input costs); negative opportunity cost (work-time is better rewarded by employment off-farm); lack of capital for inputs or hiring labour; lack of sufficient able-bodied labour in the household, notably amongst the very poor. The lack of other assets amongst the poorer households, notably in livestock, makes them very vulnerable to any negative economic shift, whether climatic problems for production, or high food prices, or a downturn in the employment status of wealthier people and therefore in turn fewer offers of casual employment by them to poorer neighbours.

Sources of Food

The better-off and some middle households usually produce at least enough maize to cover their requirements for the year, but for various reasons, from storage risk to the need for immediate cash for school fees, they sell a substantial part of their harvest early and buy food later from the market.

Many very poor and poor are not normally able to put together 100% of their basic annual food requirement - at least without depending upon school feeding for two or three children to relieve some cash for other essential expenditure than food purchase.

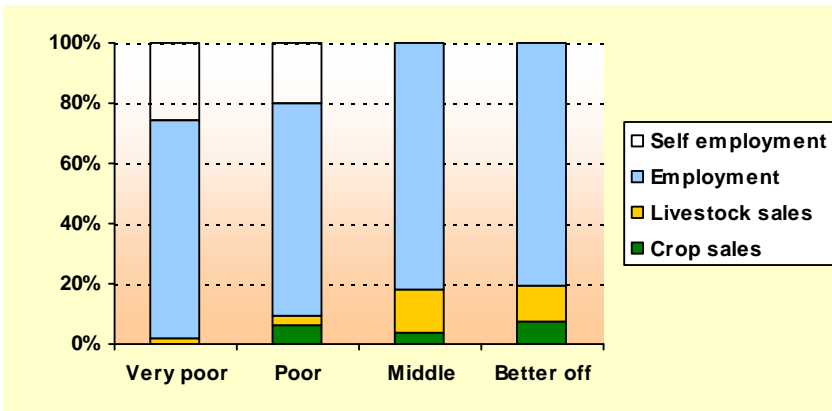
The dependence of poorer people on payment in kind points to mainly local employment and thus to increased vulnerability when things are going wrong with local production - i.e. crop failure leading to a reduced demand by wealthier people for crop-related labour and beyond that for other work.



In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcal per person per day.

Sources of Cash

The graph provides a breakdown of total cash income according to income source.



Dependence upon employment at all levels is greater in this zone than in any other zone. For the poorer households this is partly because self employment (e.g. selling handicrafts, cut timber poles, grasses) is limited by the absence of big, nearby town markets. It is also partly because of a lack of capacity to maximise own land use. They are employed both by the timber companies and by neighbours wanting farm-work done, as well as some domestic work. This means they do not work their own land at optimal times, and their limited earnings do not stretch to buying much fertilizer and other inputs.

Annual Income in emalangi	Very Poor	Poor	Middle	Better-off
	3,515	6,320	36,560	62,370

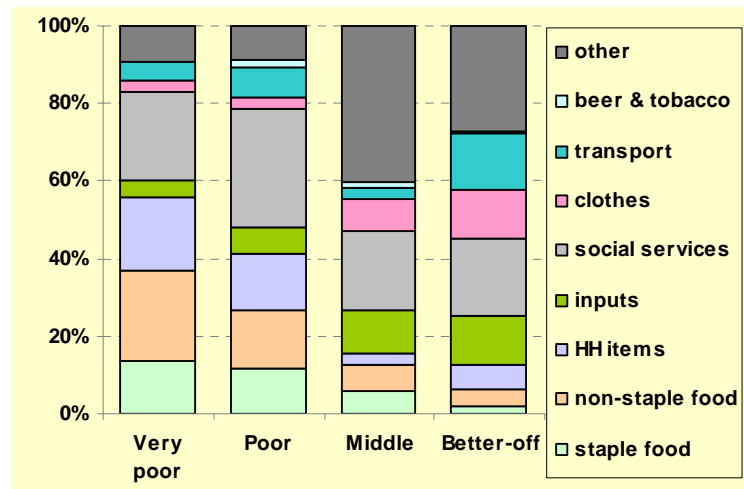
For the wealthier households, employment mainly in the timber industry offers far greater rewards than could be got from concentrating on farming; which they can afford to pay others to do for them. Livestock sales are however important more than crop sales.

Expenditure Patterns – a good year (2004-05)

'Other' includes social expenditure on celebrations or funerals, but for the better-off and middle it also includes substantial expenditure on agricultural labour (planting, weeding, top dressing, harvesting and shelling) as well as maintenance or construction on the homestead, e.g. employing labour and buying materials for brick making, yard clearing & fencing around premises - much increased in the reference year by wind-damage.

Direct production inputs may include fuel for tractors or other machinery as well as fertilizers and pesticides. In addition better-off households spend significantly on hiring herd boys. Beyond the homestead they pay for transport to their jobs in timber companies or elsewhere,

The graph provides a breakdown of total cash expenditure according to category of expenditure.



some owning vehicles themselves which require maintenance. Social services expenditure is very largely on education, including school fees and uniforms. Household items for poorer households are such essential things as soap, salt, paraffin, candles and matches, but include more luxurious items for wealthier households.

Hazards

Chronic hazards: No substantial chronic hazards were reported, unless we take non-epidemic disease occurrences in livestock, including black-quarter, anthrax and heart-water in cattle.

Periodic hazards:

This is not a drought-affected area, but late onset of the main rains (expected September or early October) and poor temporal distribution of rains beyond that can damage cultivated crops. Also, after planting unusual periods of hot weather can affect crops, although some re-planting is possible even from January.

Strong winds can also cause damage to standing crops, to the timber industry, and to houses - leading to extra household expenditure for reconstruction.

Response Strategies

Increased sales of thatching grass and firewood

Increased production and sale of handicrafts including chicken-nest, grass-headed brooms, table mats, door mats and sleeping mats

Increased reliance on gifts from relatives

Increased sales of traditionally brewed beer

Increased petty trade including sale of vegetables, fat cakes, sweets and potato chips

Increased sale of poultry

In more serious circumstances, increased sale of goats and then cattle

Decrease in the number of people employed at household level.

Increased urban migration in search of work.

Hunting and increased consumption of wild foods including guavas, *emanumbela* , *emahala* , *tincozi* , *umfomfo* , *insupapa* , *ligusha* , *emahlala* etc.

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	High and early consumption of green maize amongst poor and very poor
February	Continued high consumption of green maize
March	Early harvesting and drying of grains for household consumption. Increased drop-out of children going to school
April	" " " " " "
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August	More women appearing in the market places to sell handicrafts and other products
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October	" " " " plus heightened labour migration
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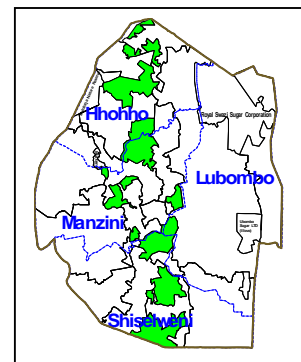
Swaziland Livelihood Profiles

The Wet Middleveld Livelihood Zone

August 2006¹

Main Conclusions and Implications

This is one of the best-favoured zones in the country in terms of climate and soil and grazing conditions (even given the progressive invasion of pastures by alien plant species). The zone is also little affected by drought except in its southern extremities. On the other hand, the same great wealth division exists here as everywhere else in rural Swaziland, as seen in the fact that poor households (not even the very poor) earn five times less than the middle wealth group (not even the better-off). Fundamentally, the poorer half of the population will not rise out of its condition without the education of its children beyond primary level; the key to the salaried employment and business activity on which the wealthier half basically depend. Schooling costs beyond primary level are prohibitive for the poor.



Meanwhile, some policy initiatives may help to make the best of local natural advantages:

- farm subsidies
- extension and vocational training
- establishment and strengthening of micro-credit schemes
- promotion of drought tolerant crops
- promotion of co-operative societies and associations to enable pooling of productive resources, scale economy and improved bargaining for reduction of input prices, enhance bargaining in input prices, access to credit and marketing of farm produce.
- provision of incentives for utilisation of communal land i.e. grazing, firewood collection, collection of medicinal plants, etc.
- local purchase of staple food in times of drought and food aid in other zones, to offset distortion of market prices and encourage production

There will however be a continuing need to strengthen social service support especially for very poor, often elderly, people.

Zone Description

In this zone the long term mean annual rainfall is upwards of 900mm, which is very satisfactory for maize production and other basic food crops. The rainfall is evenly distributed across the livelihood zone except that the central part receives slightly more rain than the other parts in most years. The altitude ranges between 700 and 800 metres above sea level provide an excellent environment for crop and livestock production given also the good soils. Generally temperatures in all ecological zones in Swaziland are favourable for the production of staple food crops but the wet Middleveld in particular offers the most appropriate temperatures ranging between 24^oc and 30^oc. Apart from maize, other crops which are both consumed and marketed include sweet potatoes, groundnuts, beans and fruits, whilst grasses are collected for sale and some grass-based handicraft items are also sold. Cattle and goats are not kept in greater numbers than in other zones, but they are important assets of the middle and better-off households. The population is of medium density, with just under 110,000 people in some 16,500 households.

This zone is not usually affected by the damaging hailstorms which mostly affect the Highveld areas. However, periodic drought is a problem in limited localities which neighbour Lowveld areas and share distortions in weather conditions. Grasslands are generally good where management practices have been

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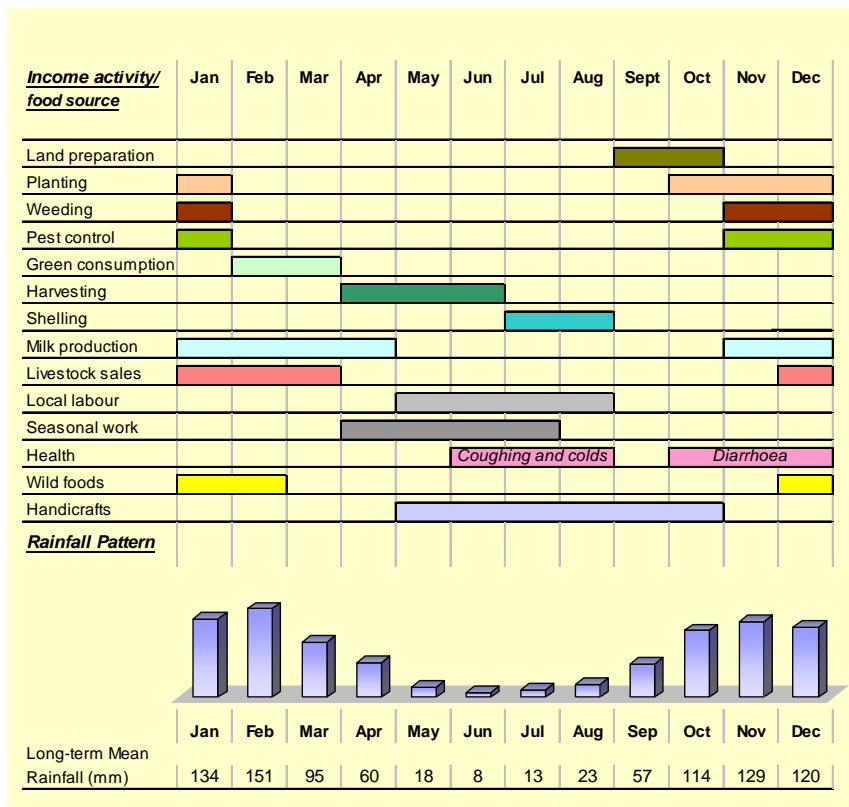
appropriate; but pastures are deteriorating due to overstocking associated with spreading cultivation and the restriction of movement for people who in the past practised mobile pastoralism which depended on extensive grazing of livestock. Invasion by alien plant species (including *chromeleana odorata* which has been introduced from its native South / Central America, and *lantana camara*) is still mostly within acceptable levels, but the northern part of the wet Middleveld is heavily infested and range resources are deteriorating at an increasing rate. There are also some areas with serious erosion problems which have not been treated, and there are uncontrolled range fires. Finally, wood cutting for firewood sold by poorer households is at unsustainable levels, further damaging the resource base.

Markets

Access to markets for the staple food crops is generally good, but there are problems for some communities during the wet season as secondary roads become impassable. However, areas located close to the Lowveld have fewer market problems as maize is often exchanged for livestock when people in that zone face seasonal shortages. Local market prices for maize tend to be relatively very high compared to the controlled prices, and this brings particular problems for poorer people during the hunger season when they are completely dependent on purchasing food. Under normal circumstances the zone is not a net importer of maize, whilst sourcing from outside is occasionally done in bad years. Otherwise purchase and bartering are mainly within the zone.

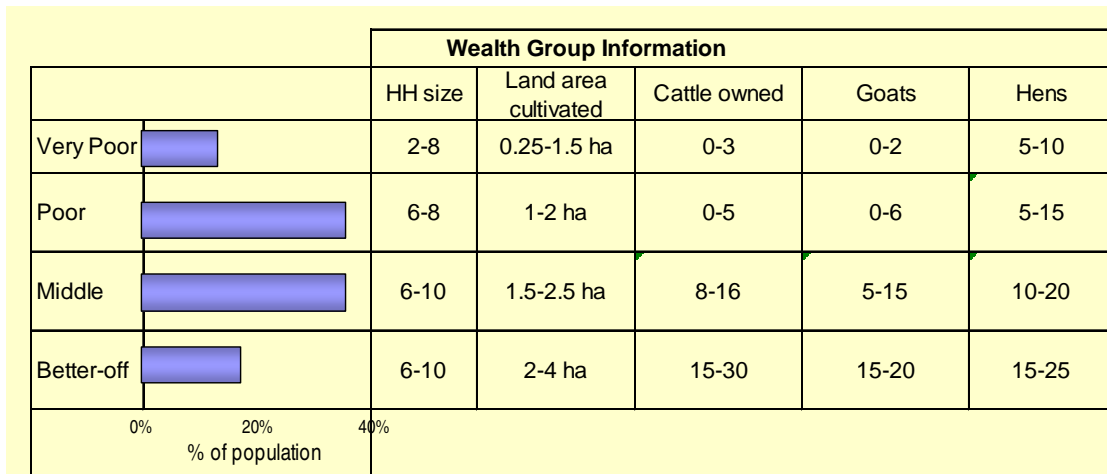
The National Maize Corporation is the main bulk buyer of maize in the zone, but at relatively low prices. This prompts people to sell in the informal sector if they can (the volumes being mostly unaccounted for in the national cereal balance sheet). A network of storage facilities is available in all regions for maize, but all other products follow the informal sector. Other produce, notably sweet and Irish potatoes, dry and fresh pulses, and fruit crops also reach Manzini market, which is positioned centrally for the zone. Roads leading to Manzini are well developed and the transport flow is sufficient. The Manzini City population is also the main purchasers of the handicrafts made from grass. Woodcraft for yokes and implements is predominately practiced by men.

Seasonal Calendar



These days there is a growing tendency for people not to prepare land before the rains, but to till and plant at the same time, i.e. with the early rains. As to seasonal food purchasing, maize purchases by the poorer groups begin as early as September and last up to March, when there is consumption of green maize. In bad years purchases may begin even earlier, and middle wealth households may also start buying grain beginning in November. Usually the price of maize is low after harvest and up to September and rises thereafter until the green maize begins to be consumed from February. Thus the hunger season is roughly from October to January.

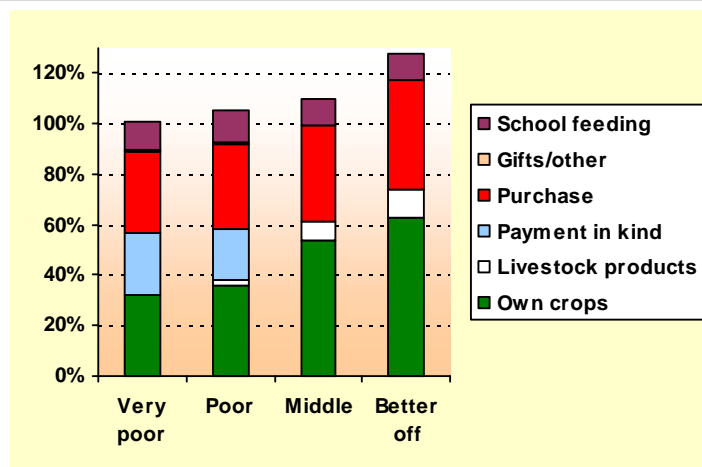
Wealth Breakdown



This zone shows a somewhat larger proportion of middle and better-off households (52%) than in other zones. The physical determinants of wealth shown here are only part of the story, although the small land holdings of the poorer groups already imply that they cannot feed themselves from their farms and must purchase grain every year. The so-to-speak invisible assets of educational level and salaried or long-term skilled employment are equally what separate the wealthier from the poorer, who rely on low-paid and seasonal employment, brewing and other activities, in order to make ends meet.

Sources of Food

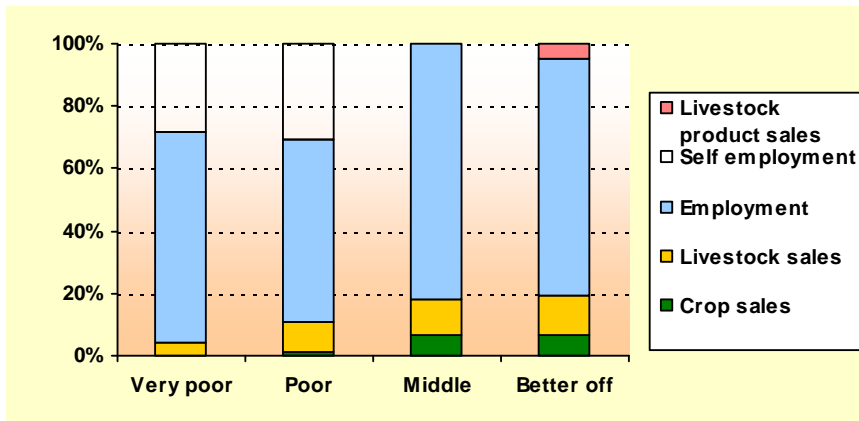
The poorer households normally cannot feed themselves from their fields for more than 3-4 months of the year. For the wealthier groups the graph can be deceptive: virtually all the better-off and some of the middle do produce at least the equivalent of a year's requirement if not more, but they need to sell maize to avoid storage losses, and so buy maize later to make up the difference. Both wealthier groups are able to consume well above their basic food requirement. The poorer groups are not able to obtain the whole of their basic requirement by their own means even in a normal year of production and employment conditions. Thus school feeding for two or three children



In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

becomes surprisingly important in bringing the household up to the 100% threshold.

Sources of Cash



Employment is paramount amongst cash sources, but it differs markedly in type and value between the wealthier households, where a member is commonly in full-time skilled or unskilled employment, and poorer households who mainly perform low-paid seasonal farm labouring work whether for short hours or as work migrants.

Crop sales are very low for any group, but livestock sales are more significant, although it should be noted that the absolute earnings differ greatly between groups; for instance the poor

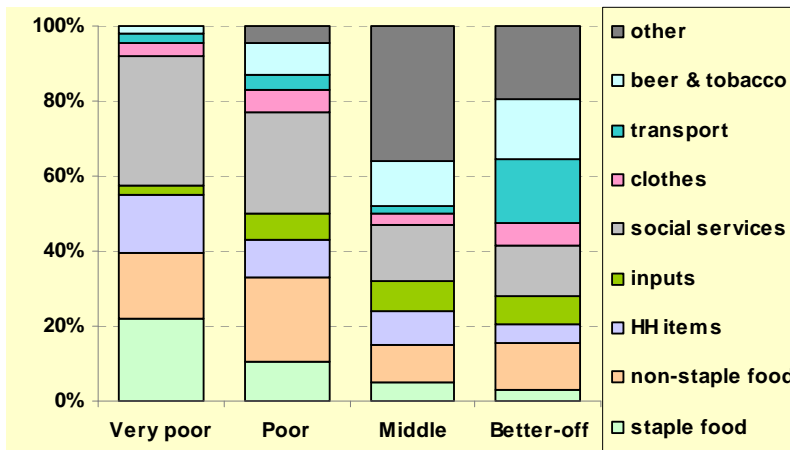
Annual Income in emalangeni	Very Poor	Poor	Middle	Better-off
	2,965	7,175	36,540	63,220

earn about SZL 700 in a year from livestock sales whilst the middle earn about SZL 4,125. Self employment, e.g. grasses and/or handicrafts, is crucial for poorer households and is made more profitable by demand from Manzini City market clientele.

Expenditure Patterns

Given that the graph is proportional, and absolute expenditure differs by about the same ratio as is evident in the cash income. Expenditure on staples diminishes with wealth and it is worth remembering that the very poor and poor also obtain substantial grain from payments in kind. The better-off and middle households spend far more on inputs per unit area of land than the poorer; and the better-off in particular spend a good amount on transport to their salaried city workplaces.

It is however striking how much of their budget the poorer households



The graph provides a breakdown of total cash expenditure according to category of expenditure.

spend on social services; chiefly education, which they know is the passport for their children into salaried employment and out of the lower wealth status. 'Other' expenditure includes home maintenance/construction costs, savings, gifts, church tithes and funeral contributions.

Hazards

- Chronic hazards:** Stock borer on maize
- Black quarter – affects cattle
- Yellow leaf - affects maize before the tasseling stage
- Newcastle – affects poultry
- Seasonal malaria and diarrhoea (affecting people)

Periodic hazard: Drought

Response Strategies

In the face of drought or other serious threat to food access, people take the following steps:

- They increase food purchases if they can;
- Food is solicited from relatives, and wealthier people voluntarily share some resources with poorer neighbours
- Children are withdrawn from school to reduce costs
- The number and quality of meals in the day are reduced
- Intensification of other income generating activities (e.g. firewood cutting and sale)
- Increased labour migration
- In extreme cases, poorer people sell off all livestock as well as productive assets such as farm equipment and wealthier people sell off their most valuable cattle

It is to be noted that some of these responses have longer term negative effects. The sale of livestock and other assets by the poor may be irrecoverable. The increase in firewood off-take is environmentally unsustainable. And increased migration for labour carries, amongst other socially undesirable effects, the risk of increase in HIV/AIDS cases.

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	10 – 20 – day Dry spells, uneven distribution, food price increase, reduction in meals, change in expenditure patterns, reduced area planted, pests and diseases
February	10 – 20 – day Dry spells
March	Cessation of rains
April	
May	
June	
July	
August	Lack of late winter rains
September	Lack of late winter & early spring
October	No rains
November	Late start of rains, food price increase, reduction in meals, change in expenditure patterns
December	10 – 20 – day Dry spells, uneven distribution, food price increase, reduction in meals, change in expenditure patterns, pests and diseases, falling water levels

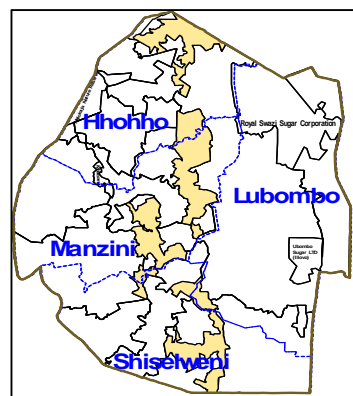
Swaziland Livelihood Profiles

The Dry Middleveld Livelihood Zone

August 2006¹

Main Conclusions and Implications

This is a zone where most people could not normally expect to grow all their basic requirements, since the average rainfall is too low to be conducive to the best results with maize, and soil conditions are comparatively unfavourable. The balancing element in the past for poorer people was earnings from local labouring work, self employment (selling firewood, marula beer, handicrafts). However, persistent drought in recent years has distorted the economy to the extent that even better off people are discouraged from maximising crop production, especially maize, which previously might have given them not only enough food but some income as cash crops - and a reason for employing their poorer neighbours. One particular sign of this decline is the fact that much of the land available to people is not cultivated; and even for wealthier people the high cost of fertilizers and other inputs is further discouragement. At the same time, although this is cattle country, failing pastures, endemic disease and cattle rustling have much damaged this sector, although livestock remain the one product which is significantly marketed beyond the zone.



Poorer people have needed food aid in order to continue a basic existence. Lack of activity by the National Maize Corporation means that for a part of the year people rely entirely on private traders to bring in maize grain on the market at whatever price, or buy maize meal at groceries. In the shorter term there may be room for official intervention on the staples market to regularise supply and ease prices. Further investment in veterinary protection would help restore the importance of livestock. In the longer-term, a basic need is to increase the value of local production, and in this respect it is noted that people have hopes for small-scale commercial sugar production but await official help through investment in irrigation. Also, the hope for poorer people is to get more than primary level education for their children, as a passport to better employment in the next generation. But school costs are a big burden and could do with some assistance - matching the undoubted benefit of school feeding.

Zone Description

The Dry Middleveld has a long-term mean annual rainfall of 600-650mm, as compared with the rainfall of some 900mm in the neighbouring Wet Middleveld. This makes for the difference between low maize production and satisfactory to good maize production, all other things being equal. But they are not equal: the Dry Middleveld is more prone to serious drought than the Wet Middleveld, and this has led to a cumulation of impoverishment in the present decade. Drought has also resulted not only in severe harvest losses but in the depletion of grazing areas affecting the production of livestock limiting the livestock sale income on which most households except the very poor rely for a slice of their annual income. The grazing areas are made worse by the invasion of alien plant species in the zone, especially the locally-named Sandanezwe. This aggressive plant destroys any useful natural vegetation cover and even occupies cropping areas, reducing arable land as well as grazing areas.

Maize is by far the major crop grown here, virtually all for home consumption. Other food crops, including groundnuts, field beans, cowpeas and juko beans, are grown these days only by a minority, again only for

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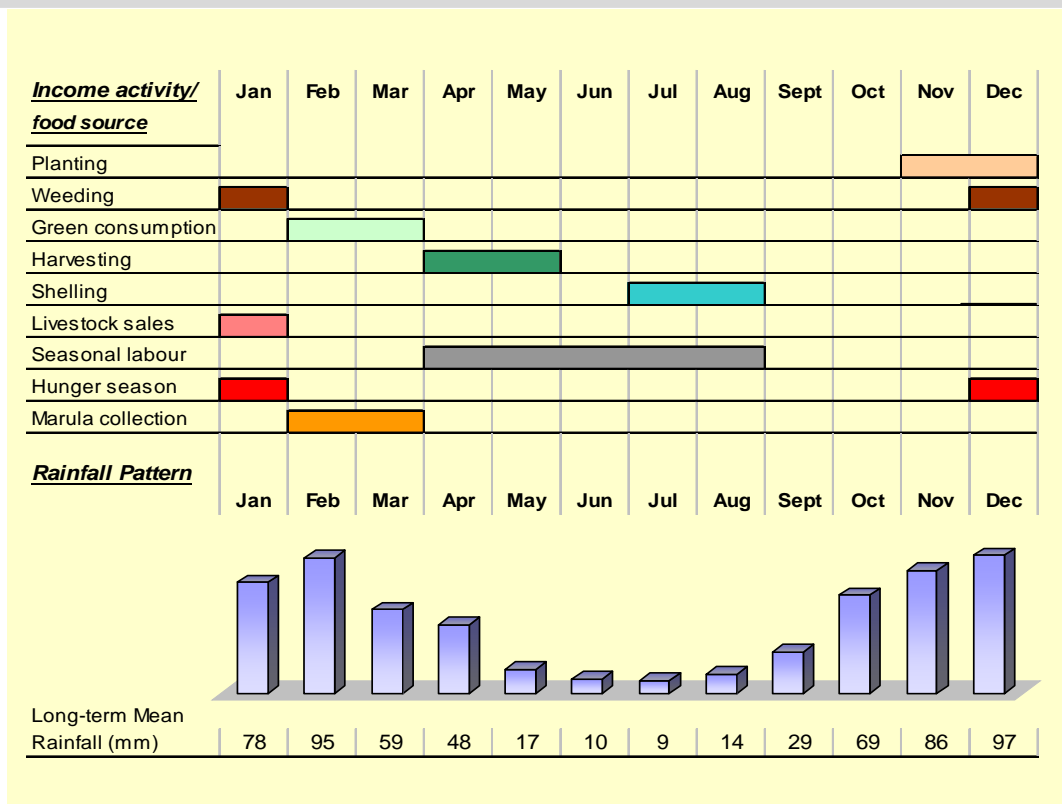
home consumption. This zone was never self-sufficient in maize, let alone an exporter; but before the recent droughts it did export some of this other produce out of the zone - although such modest cash-cropping was again done by a small minority. But although this is a comparatively unproductive zone, poorer people tend not migrate to other zones seasonally to find work but rather move within the zone trying to find income to make ends meet. Partly they do labouring work for wealthier households, but equally importantly they rely on self-employment, selling firewood and artisanal / handicraft products. However, in recent years the sum of their efforts has not given them sufficient produce or income to support their basic requirements in food and cash, and it was decided that they must receive food aid as a support. Wealthier people, especially the better off, overwhelmingly have employment or businesses outside the zone.

Markets

Market access is relatively good, with a network of major and minor trading points for basic food including maize meal, bread, sugar, beans, milk etc.. However there is no active, official maize grain outlet - i.e. via the National Maize Corporation. Maize meal does get distributed to all small traders, i.e. groceries within the zone. But maize grain is either brought in by small informal traders at high prices or imported by some rich individuals. During food shortage periods, marketed grain is normally obtainable from other zones - at a cost, since a high proportion of the population normally needs to purchase maize over several months and has little alternative but to meet the prices. But in recent years of food aid distribution this market demand has diminished.

Due to drought, this zone has not been exporting produce in any significant amount. A few areas were reported to be exporting sweet potatoes and vegetables (especially Nkwene community) to other zones. Where livestock movements are not restricted by quarantine, cattle and goats are sold out of the zone. But livestock diseases, especially black quarter, and Newcastle amongst poultry, have over the years resulted in serious depletion of livestock as a fall-back asset for sale during food shortage times.

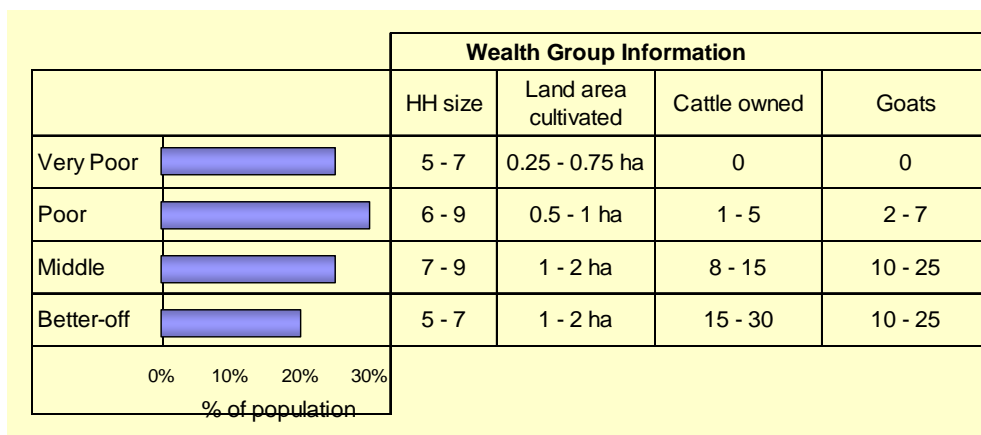
Seasonal Calendar



Agricultural activities continue from November to August: planting, weeding, pest control, early picking of green maize to diminish the hunger period, harvesting and shelling of mature grain). These days people no longer put aside a separate period for land preparation: they just go straight to tilling and planting after early rainfall.

By December or January virtually everyone is in the market to buy maize, but purchase may well start earlier depending on the household's harvest. The price of maize is usually low after harvest from July to September and then rises up to January during the hunger period. On the other hand food aid may delay as well as diminish purchase requirements. Local labouring employment peaks during the maize harvesting and shelling time, but by the same token people have to find other cash-earning occupations for six or more months of the year, depending on how much work they invest in their own land. But one occupation, marula fruit collection and brewing (*Sclerocarya birrea* subsp. *caffra*), occurs in the rainy season, as does the major sale of livestock when animals are in the best condition after using the regenerated pastures.

Wealth Breakdown

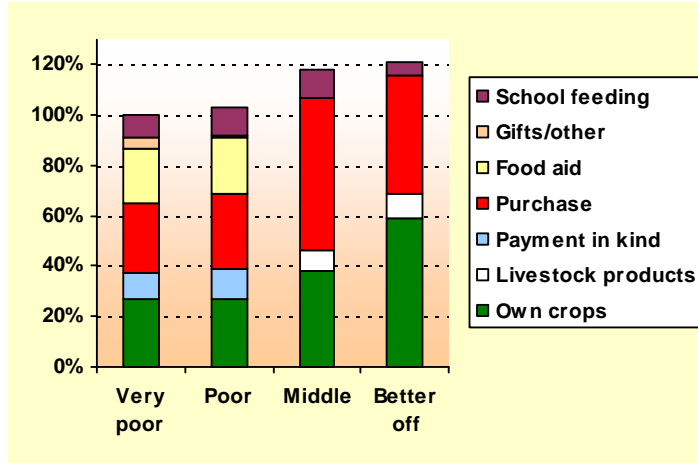


Ownership of land is not a direct determinant of wealth; rather, what matters is how much of the land owned is actually cultivated by a household. In this case a majority in all wealth groups tend to actually own two or three times as much land as they cultivate, i.e. some three hectares allocated to them during a resettlement process. But whether because of the influence of drought or other opportunity cost considerations, or because of a lack of labour in the family, land areas cultivated are comparatively low for any group. Some poorer families rent out land they cannot use to wealthier people. In some communities there are ambitions for commercial uses - i.e. sugar cane, but they await financial assistance to invest in irrigation. Otherwise, there are different patterns in land use. The poorer farmers tend to intercrop pulses and tubers with maize, whilst the wealthier go for one or two crops which promise some cash return when the drought breaks, and are therefore worth the investment of inputs and even of tractor hire. The ownership of livestock is as usual heavily skewed towards wealthier people, who benefit not only from sales but from the kraal manure for their fields - and also from milk which is a major addition to the quality of their diet.

However, the crucial determinant is not amongst these physical factors: it is the level of education of the breadwinners and the level they can afford to promote their children to - i.e. secondary and tertiary education. This determines the greater part of the income of middle and better off households through formal employment, and guarantees their future. Conversely, the usual restriction of poorer households to primary education limits their long term capacity to do more than just make ends meet - if there isn't drought.

Sources of Food

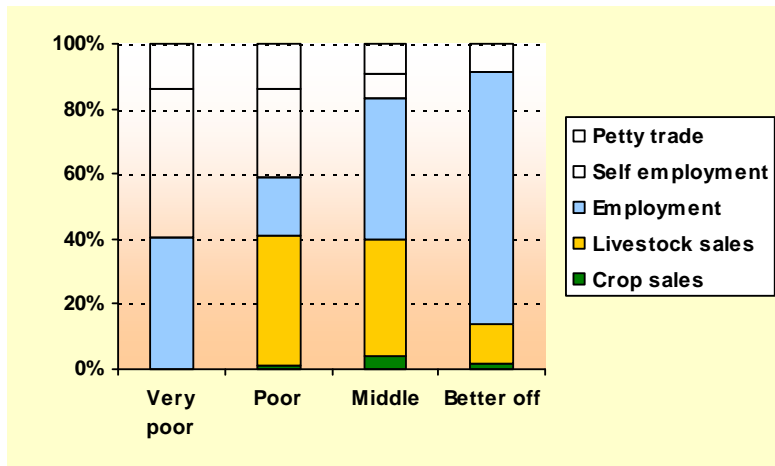
This is a picture of a deficit production area, although it does show that despite problems of low rainfall and other constraints, food consumption from own production is not negligible. With their cash earnings, the wealthier households are well able to cover the balance of their needs from purchase. In fact, in better years they produce substantially more than they consume, selling some harvest early in the year to avoid storage losses and to substitute with preferred foods.



But the poorer households, unable to earn enough to make up this balance, have had recourse to relief food aid - and even then, school feeding is depended upon significantly.

In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

Sources of Cash



The income of the poor and very poor is partly from casual and seasonal work, although self employment is more important. This dominated by marula fruit collection and brewing, but also features firewood and grass sales, and handicraft sales which the middle households also undertake. All groups are engaged in petty trade, and all but the very poor sell some livestock - although the high proportion of income gained from this by the poor should not mask the fact that in cash terms this represents only half of what the middle get and one-quarter of what the better off get.

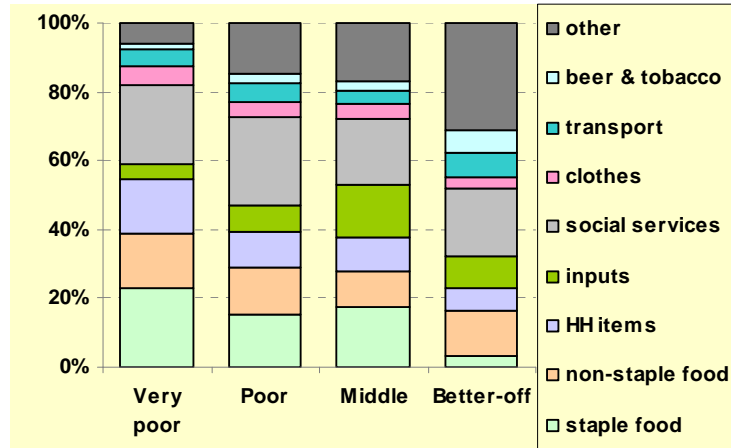
The graph provides a breakdown of total cash income according to income source.

Annual Income in emalangi	Very Poor	Poor	Middle	Better Off
	2,179	6,063	22,958	53,075

The difference in employment between poorer and wealthier household is not just in the amount of money earned but in the fact that for poorer people work is very seasonal, whilst for the wealthier it is year-round, whether salaried or skilled work. The very poor seek town work in the off-season, such as house-construction labour and domestic work. The low level of crop earnings even amongst the wealthier reflects the result of drought, which in the long run discourages efforts to use all the available land and gives a poor return on investment in inputs

Expenditure Patterns

The purchases of staple food by poorer households are rather low because they have received food aid. It should be noted that in absolute cash terms, for roughly the same size of household the better off spend twice as much on maize as the very poor and fully twelve times as much on non-staples - this is as much as anything an indicator of a great difference in the standard of living amongst a 'rural' population where wealthier people get most of their income from urban earnings. Similarly the wealthier are able to spend far more on education (social services) and on ceremonies, Church tithes etc. ('other').



The graph provides a breakdown of total cash expenditure according to category of expenditure.

Hazards

Chronic hazards: Black quarter disease in cattle is the most serious cause of mortality.

Yellow leaf affects maize before the tasseling stage

Newcastle disease regularly reduces poultry numbers

Cattle theft, especially rustling across the eastern national border has been at a level where most households are now discouraged from trying to maximise numbers kept.

Periodic hazards: Drought in recent years has perhaps felt like a chronic hazard, but in the longer term this must be seen as just a particularly long episode, ravaging harvests and weakening livestock.

Response Strategies

- Increase in staple food purchases
- Minimising other expenditure (to spend more on staple food)
- Unusual out-migration of poorer people to seek work
- Reduction of the number and quality of daily meals

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices, high staple prices
February	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices
March	Cessation of rains
April	
May	
June	Diminution of cattle fodder (especially, poor pastures)
July	Further diminution of cattle fodder
August	Lack of late winter rains, cattle deaths
September	Lack of late winter & early spring rains, cattle deaths
October	No rains, high staple prices
November	Late start of rains, high staple prices
December	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices, high staple prices

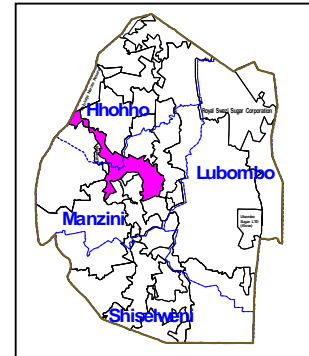
Swaziland Livelihood Profile

The Peri-Urban Corridor Livelihood Zone

August 2006

Main Conclusions and Implications

Proximity to the cities is at the base of the livelihood of each wealth group, whether through full-time salaried employment and skilled work in the town (the better-off and middle households) or through sales of commodities coming from 'self employment' such as firewood, handicrafts or collected fruit (the very poor and poor). Land holdings are rather small by most Swaziland standards, but agriculture does offer more than a token addition to livelihoods: it appears that in a satisfactory year of production not far from half of basic food requirement, mainly in the form of maize, comes from local production, some re-distributed from wealthier to poorer households via in-kind payments for labour. Nevertheless, especially if we include non-staple foods, most food is purchased.



Land shortage and very limited irrigation capacity constrain agricultural diversification, although some vegetables are grown and sold. Livestock, principally cattle, are kept in appreciable numbers by the wealthier 45% of households, and used for milk rather than for sale. But the poorer 55% do not even reach their full basic food requirement, and are therefore highly vulnerable to any level of loss in food access, whether through crop losses or through price fluctuations on the market. There is a need to develop mechanisms that prevent steep increases in food prices through an effective market intervention system which at the same time promotes private sector participation in the staple food business, in this case maize. The market infrastructure is not well developed with numbers of households depending on informal household-to-household food sales and purchases. There is a need to improve market infrastructure to promote better access by all households for both selling and buying produce.

Fortunately drought is rare, but hail frequently damages maize, whilst stalk-borer on maize periodically cause more serious losses, and livestock disease outbreaks periodically cause serious stock losses. Insofar as it is possible, crop diversification away from maize mono-cropping needs to be encouraged, to reduce the threat of hunger if there is a problem with maize. Also, maize yields are not as high as they could be, due to the insufficient usage of inputs (fertilizers, pesticides, hybrid seeds) by even some middle wealth farmers: there is need to develop policies that increase household access to inputs as a way towards improved household food security. However, in the end it is the city economy, in terms of employment and commodity demand, which determines the condition of livelihoods in this zone. This does provide a cushion against farming losses due climatic events; but improvement in livelihoods will depend on employment creation and favourable wage policies that ensure more households have access to reasonable wages to allow them at least to purchase enough food and other essentials.

Zone Description

The peri-urban livelihood zone covers the areas around the urban centres of Mbabane-Matsapha in the north-east and Manzini in the centre of the country, as well as the immediate hinterland of the main highway which links these centres and goes up to the South African border at Ngwenya. This strip of territory is the most densely populated of the rural livelihood zones, with 135,200 people in 28,726 households. The livelihoods of the people in this zone are necessarily influenced by their proximity to the urban centres. This shows most clearly amongst the middle and better-off groups, whose earnings from employment form a substantially greater proportion of their overall cash income (80-90+%) than is the case for the same groups in other zones.

The rural economy operates on land holdings which are half or less the size of those in most other zones. Purchase is the principal source of food across all the wealth groups in the zone. Yet this is a rural population in the sense that 20% to 40% of staples consumed are home-grown, and own milk consumption and livestock products are important elements in the diet of the wealthier half of households, whilst livestock earnings are particularly important for the poor group. Secondly, the general livelihood pattern in the other zones for the very poor and poor is found here: they produce only enough of their own food to last for a quarter or less of the year, and mainly survive by doing farm labour for their wealthier neighbours, much of it paid in kind (i.e. in staple food), and by selling handicrafts, vegetable, fruit, home-brewed beer etc..

The area contains both highveld and wet middleveld terrains, and mean annual rainfall, ranging between 700 and 1200 mm¹ per annum in different localities, is favourable to both crop and livestock production. Maize is the dominant crop, but vegetable and fruit production is also particularly advantageous given the nearby high demand and prices of the cities.

The area does not experience frequent droughts; in fact it is hailstorms that are the most common hazard for crops. In good crop years, some of the middle and better-off households can produce enough food to last them the whole year and even carry over some stocks into the next year. The other crops such as beans, cowpeas and sweet potatoes are grown in only very small amounts if at all. Vegetable production requires some irrigation and is grown by households with access to land along streams and rivers. Households in the middle and better-off groups can afford agriculture inputs such as fertilizer and hybrid seed and therefore usually obtain higher yields than poorer households. However most of the households in the middle and better-off households are in full-time urban employment which leaves them without the time to optimize farm management even with hired labour. The closer a community is to the urban centers the more difficult it is to obtain sufficient land for cultivation. There is thus some variation within the zone as to the importance of own food production: it increases the further away the area is from the urban centers and so does the rearing of livestock. By the same token the spreading urbanisation in the zone is resulting in a decline of own crop and livestock production as a source of food and income in favour of increasingly high market dependence. Macro-economic factors such as employment, migration resulting in reduction of arable land, wages and food prices will have an ever-growing impact on households' ability to access food.

Markets

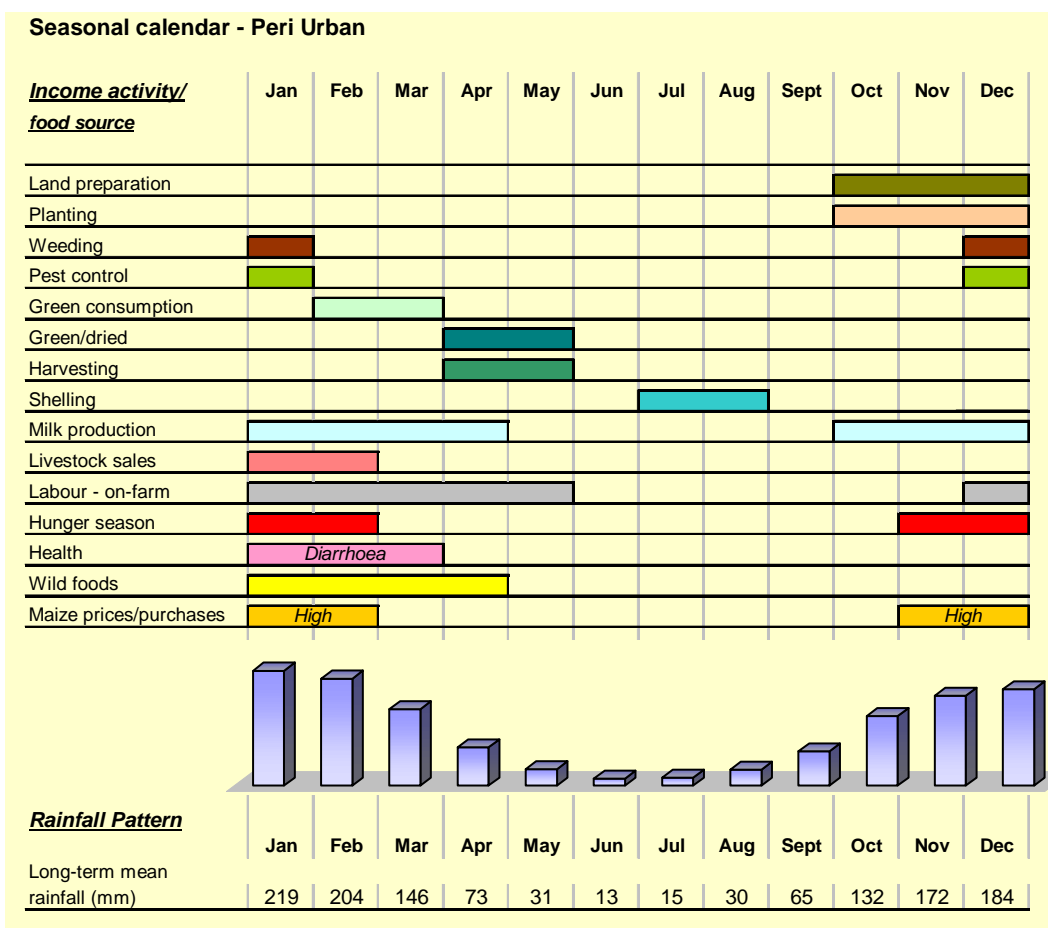
Selling of food crops (mainly maize) is not very common in the zone, and the few households who do so sell locally within the community. This usually happens around harvest time. However those households in the better-off wealth group who have significant quantities of maize for sale usually sell to the National Maize Cooperation (NMC) where prices are regulated by government, but farmers complain that the NMC prices are generally low.

Food prices especially of maize are normally highest around December/January when majority of households, especially the poor and very poor, have finished their own harvest stock and begin depending on the market for food. This demand pushes up prices. Most households buy their maize from local sources such as better-off farmers and maize meal from local shops.

Although the middle and better off households own an appreciable number of cattle, most households do not like to sell livestock unless under some economic and social obligations, including food purchase and the need to pay school fees etc.. The livestock is sold locally and to people from the urban centres such as butchers. The government also operates cattle markets that are conducted on specific days, but these are limited, forcing households to sell outside this system. Proximity to urban centers also provides a ready market for any cow's milk produced in the zone, but most is consumed at the homestead.

¹ Livestock Sub-Sector Review and Range Survey, 1994

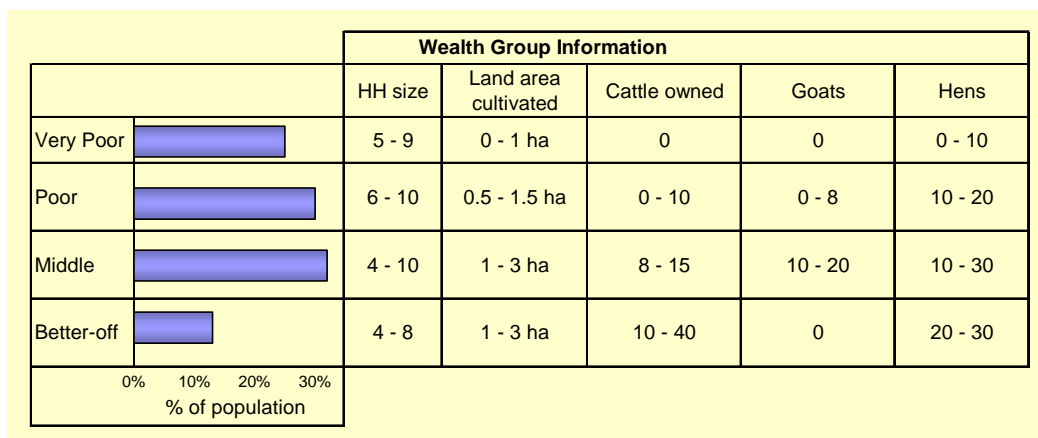
Seasonal Calendar



The agricultural rainfall season is from October to March. Land preparation and planting of maize is done concurrently from October to December. Most households across all wealth groups use tractors for ploughing. These are mostly hired from those households that own tractors (in the middle and better-off wealth groups). Although there is a government programme that hires out tractors for ploughing, it is usually difficult for the households in the poor and very poor wealth groups to access them, and hence they have to hire from the better-off farmers at a relatively high price: government tractors cost about SZL120 an hour compared to about SZL150 an hour from the private owners.

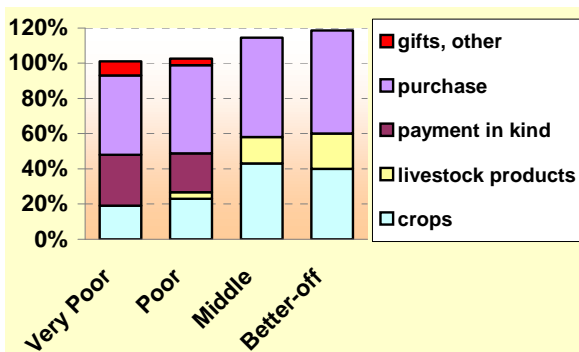
Due to lack of stocks and cash in some parts of the zone, the households in the very poor and poor wealth groups start harvesting their maize a month or two before it is fully mature. This is usually in April before the maize has completely dried, and it is force-dried at home to prepare for milling. The mature maize harvesting period is in May to June. Milking of cattle is normally done in summer from October to around February. This is the time when pastures are good and drinking water for animals is readily available. The average milk production is about 2 litres per day but can go as high as 5 litres per day. In the winter months pasture and water availability diminishes, and the condition of animals deteriorates: most households do not like to milk the animals during this time. Sale of livestock such as goats and cattle peaks in January and February, when they are in good condition, but mainly because most households are pressed to find the considerable money for school fees.

Wealth Breakdown



The very poor cultivate so little land and possess so few livestock that they are virtually completely dependent on work off their land. The other groups also have smaller plots of land than in other zones. The middle and better off 45% of households clearly have a limited capacity to offer agricultural employment to the 55% of poor and very poor households, and these must therefore rely to an unusual extent on self-employment (see Sources of Cash section below). On the other hand the middle and better-off manage to keep appreciable numbers of cattle, which are a symbol of wealth and provide much milk in season, but from which they only make little money. The better-off do not keep goats, considering them too low-value to be worth the trouble.

Sources of Food



In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

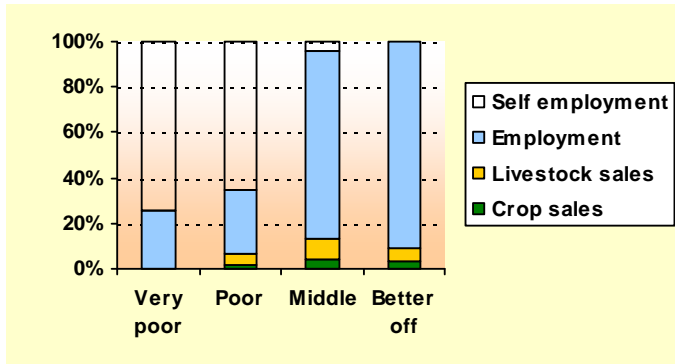
the produce of local employers, and milk consumption, somewhere near half of calories consumed by all households together are got from local production.

The first thing to note is that poorer people, especially the very poor, are unable to meet 100% of their basic food requirement without the help of food gifts. This accentuates the great difference between the very poor and poor on the one hand, and the middle and better-off on the other (see Sources of Cash below).

Food purchase is crucial for all groups, although the poorer also get food through in-kind payment for their labour. What is striking is the degree to which local production in this crowded area does feed the population: if we include in-kind payments as part of

Sources of Cash

The graph below provides a breakdown of total cash income according to income source.



Annual Income (emalangeni)	Very Poor	Poor	Middle	Better Off
	5,408	8,947	28,910	52,680

This is a highly urban-influenced picture on two counts: not only do the middle and better off groups get 90+% of their earnings from usually full-time employment in city, but the poorer households also depend heavily on the city demand for the products of the 'self-employment' which brings them the great part of their cash: firewood, handicrafts, collected guavas etc.. Grass collection and sale by the very poor is mainly for thatch and for feed-lots.

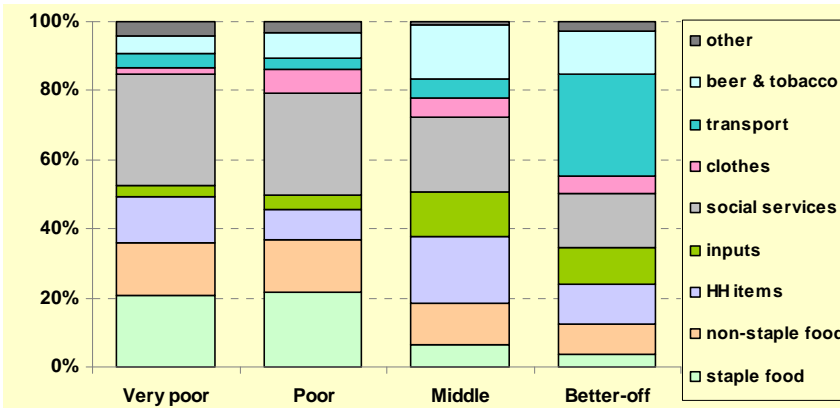
Poorer people operate mainly locally: apart from remittances from kin resident in the cities, only some 30% of their earnings are from urban employment.

Sales of crops (and vegetables) are low in any group, so also are earnings from livestock; somewhat surprising given the

numbers of cattle kept by middle and better off people. Cattle tend to be kept as a buffer against crisis rather than as a regular sales item.

The differential between poorer and wealthier people is very wide, as it is in all the zones; the middle group typically earn some three times as much as the poor group. However, the absolute incomes of the wealthier are no greater than in several other zones: proximity to the cities allows a dense population to survive in the surrounding countryside, but it doesn't mean they are wealthier than people elsewhere. On the other hand, there is some effect of self-selection: the wealthiest families reside in the cities; others - although well-off by rural standards, choose to live in the urban peripheries (i.e. in this corridor zone) to avoid high housing/rent and tax costs (rates).

Expenditure Patterns



The better-off salaried people evidently spend greatly more on transport into town than anyone else. At the other end of the scale the very poor and poor spend a large proportion of their cash on social services (mainly education), but it should be emphasised that in absolute amounts of cash this is actually far smaller than what is spent on social services by the wealthier households.

By the same token, absolute expenditure on staple food is similar across the board. On non-staple food and household items, which add to the quality of diet and life, the wealthier households spend 3-6 times what the poorer spend. Investment in agricultural inputs is minimal for the poorer households but comes to about one-tenth of annual expenditure by the wealthier, showing that they do value what they can get from the land.

Hazards

Chronic hazards:

Hailstorms can cause significant damage to crops in the area.

Pests: maize in the area is frequently affected by stalk borer, which can significantly reduce harvests.

Periodic hazards:

Excess rain can result in water-logging damage to crops

Animal diseases such as Newcastle in chickens and black-quarter in cattle occasionally cause significant losses.

Drought is a rare event.

Response Strategies

Increased food purchase is the normal response to crop failure for most of the households in the zone, given that most cash earnings do not depend on agricultural production.

Increased sale of livestock in times of really poor harvest. The very poor households may sell all their chickens to obtain cash to buy staple food; cattle owners are reluctant to sell except in extreme circumstances.

Begging is a last resort of very poor households faced with serious food shortage.

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	Hail-storm - dry spells - unusually high selling of livestock
February	10 – 20 – day Dry spells
March	Heavy rains that destroy the maturing crops
April	Heavy dependence of poor on harvest and shelling employment - but this diminishes with crop failure
May	" " " "
June	Intensive search by very poor for casual work after harvest and shelling
July	" " " "
August	Poorer people already under food stress
September	Lack of late winter & early spring
October	No rains
November to	Rains late: people are frightened of portent of drought and plant on much reduced areas. Lack of inputs purchases due to unusually low funds.
December	Exceptionally high food prices

Swaziland Livelihood Profiles

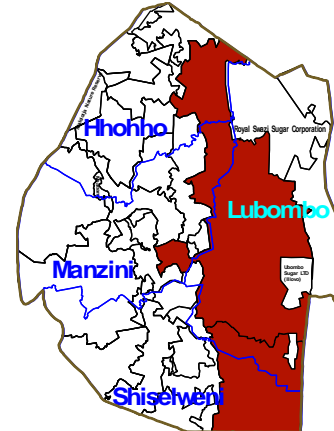
The Lowveld Maize and Cattle Zone

August 2006¹

Main Conclusions and Implications

In recent years the shock of the collapse of the cotton industry has affected virtually all households in one way or another, making an already comparatively poor zone poorer. The response by the authorities to increase food aid considerably from the usual drought relief levels has successfully substituted for purchases by the very poor, poor and middle-off but cannot on itself offer a sustainable economic solution.

Maize production is limited more by the low rainfall regime than by soil infertility, and only an extension of irrigation from commercial plantations to smallholdings would allow farmers to grow more staples and possibly some cash crops. The extra stover would also bolster a livestock sector which ought to be more prominent but has undoubtedly been depressed by drought as well as forced sales due to the losses of cotton-related earnings. Otherwise any increase in local wealth will come from beyond the zone in the form of earnings and remittances in and from the urban sector or the plantation sector; but this will not easily be invested profitably in local production, so that the zone will remain fundamentally poor.



Zone Description

The lowveld covers much of the eastern half of the country but has a relatively sparse population of some 175,000 people. The zone is sub-divided by its geology, with a higher western lowveld on sandstone or clay stone at 250 - 400 metres above sea level, and a slightly lower eastern lowveld on basalt at 200-300 meters above sea level. The western lowveld is the larger division at 3410km² with undulating terrain on a plain land-form, and the eastern lowveld is 1960 km² and also plain with gentle undulation. At 400-550mm per annum the lowveld has the lowest rainfall of all the livelihood zones and supports savanna vegetation in which there is a delicate balance between the grass and the woody components, such that the relative densities are highly variable.

Maize is the main crop, but rainfall is a serious limiting factor: moisture stress usually renders yields around half those in the middleveld and highveld, where land holdings are similar. Drought (to which the east of the country is more prone than the west) can destroy the crop altogether. However, the soils are reasonably fertile, although requiring fertilizer for the best results, and in favourable rainfall years a big harvest is obtained. Normally very few households expect to be able to feed themselves from their fields, let alone produce a surplus, and even the better-off can easily fail to produce even half of their maize requirement. The main types of livestock in this zone are cattle, goats, poultry and to a lesser extent pigs, and livestock rearing is common to all but the very poor households. Donkeys are kept especially by poor households for draught power as they are households without oxen.

Poor rainfall conditions marked the first three years of the new millennium, but the more dramatic economic shock to this zone has been the closure of the local cotton-processing factory in 2002, which had provided farmers with not only guaranteed purchase but finance/credit for seeds, fertilizers and pesticides, tractor usage and hired labour. Up to then cotton was by far the biggest cash crop, providing a good part of the cash income of middle and better-off farmers. It was also grown to a small extent even by most poorer farmers, although their main advantage from cotton was indirect, through casual work for wealthier households. Today cotton production is at its lowest ever level: currently only about 5% of farmers are growing cotton, and production has fallen from 100,000 bales (20,000 tonnes) in 2001-2 to an expected 4500 bales (900 tonnes) in 2005-6 even though the price carries a 20% subsidy from the Cotton Board. The land empty of cotton has mostly been left fallow as the fear of drought has

¹Fieldwork for this profile was undertaken in late July-early August 2006. The information presented refers to the consumption year from July 2005, i.e. from the time when the maize harvest was largely in. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five years (i.e. until 2011).

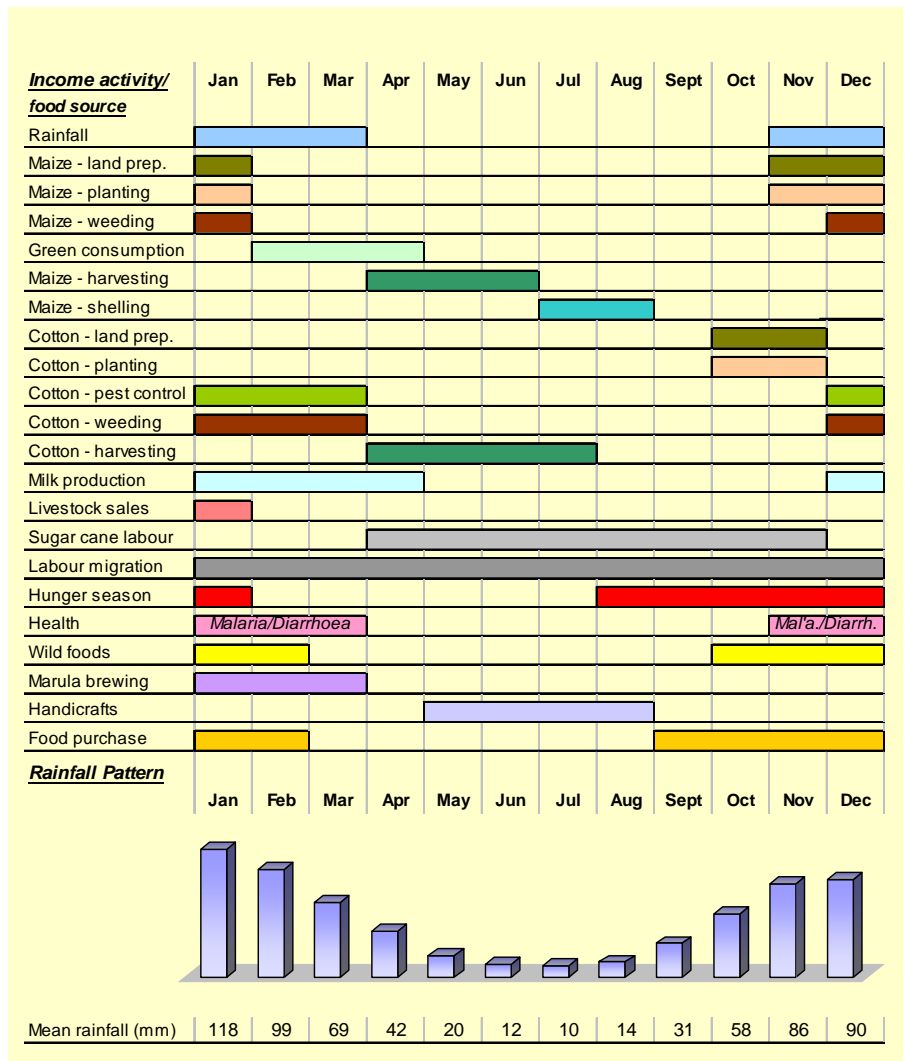
discouraged people from planting any extra maize, and the expectation of food aid further diminishes people's propensity to work extra land.

The most common types of non-salaried employment are cane weeding, cane cutting in the plantation areas and to a lesser extent labour migration to neighbouring countries, mainly South Africa, but employment at any level has not been able to make up for the cotton shock. The upshot of this is that food aid, which used to provide relief from food-crop failure for poorer people at not more than 25% of their overall food consumption, has recently provided them with 70% of their basic food as well as some cash income from the sale of at least a part of their oil and beans rations. Even middle households have received an appreciable amount of food aid; and the decline in prices offered for cotton coupled with the persistent drought conditions has resulted in many cotton farmers falling from better-off to lower wealth categories - even in some instances joining the very poor.

Markets

Market access for produce in this zone is not a problem, but there is no viable replacement for cotton in the market. Beyond what they can grow, local people purchase their staple maize in the nearest highveld and middleveld communities - who sometimes alternatively bring it down to them. One effect of the high volume of food aid in the Lowveld Zone has been a decline in the demand for maize from the neighbouring areas, with the knock-on result of a depressed market and depressed prices there. People in the south of the zone are somewhat isolated from the main trading areas of the centre and west of the country.





Seasonal Calendar



In recent years, the single rainy season has usually been interrupted by dry spells mostly in the months of December and January. The wet season (Summer) is the time not only of cultivation, but of pasture renewal and therefore of peak milk production; of brewing of the fruit of the marula tree (*Scelerocarya birrea*) and of the collection of wild foods especially by the poor. It is also the time of maximum purchase of staple food at rising prices, and therefore, of the pre-harvest hunger season; and of diseases promoted by seasonal conditions, notably diarrhoea and malaria.

The dry season, with less agricultural work after harvesting, is the time of handicraft production and off-farm employment.

Wealth Breakdown

		Wealth Group Information				
		HH size	Land area cultivated	Cattle owned	Goats	Hens
Very Poor		7	1 acre	0	0	15
Poor		9	2 acres	5	5	15
Middle		8	3 acres	10	16	25
Better-off		6	3 acres	20	17	35

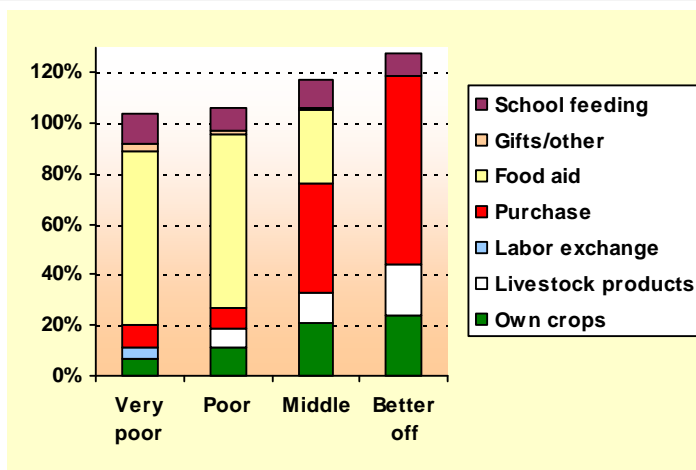
0% 20% 40%
% of population

Land holdings for the middle and better-off are not much different to other zones which have higher maize yields; and livestock holdings are not higher. This, together with the lack of crop diversity or of employment opportunities, contributes to the picture of a relatively poor livelihood zone even before the recent seasons of rain failure and the collapse of the cotton industry. As to cattle, a generation ago people kept far more cattle than now. The recent drought has merely added to a declining trend begun by the catastrophic drought of 1992-93, when huge numbers of stock were lost, and farmers retained a fear of similar disaster in the subsequent years.

Sources of Food

It is clear that food aid has substituted for most food purchase by the very poor and poor (and to a significant extent even by the middle) - purchase which was formerly largely covered by household earnings from employment and cotton sales.

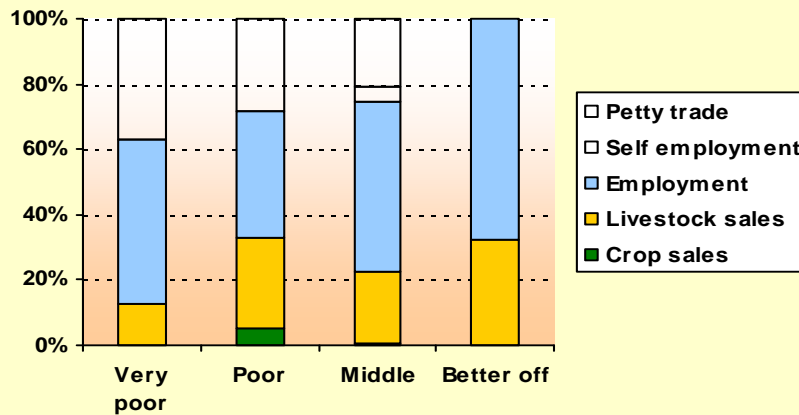
Food from own crop production is very low, even amongst the better-off. But livestock products, largely milk, are important for dietary quality even amongst the poor, suggesting good milk yields from such cattle as are maintained in this area. Poorer people with few or no cattle nevertheless benefit from Sisa cattle which they keep for others.



In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

School feeding for 2-3 children per household is a significant element in allowing the very poor and poor households as a whole to reach their basic food requirement.

Sources of Cash



The graph provides a breakdown of total cash income according to income source.

Annual Income in emalangeni	Very Poor	Poor	Middle	Better-off
	2,179	6,063	22,958	53,075

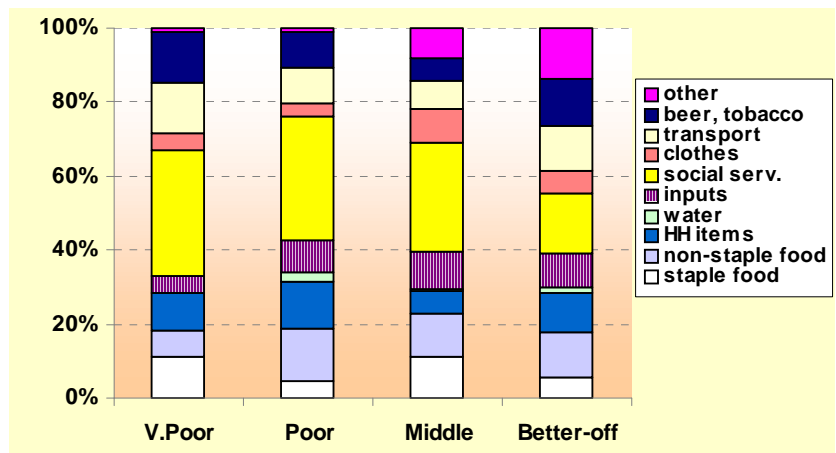
an important source of cash across the board, and even the very poor manage to make about 10% of their income in this way: however this represents the value of a single goat sold. But milk production is the first thing to dwindle when drought hits pastures, so that there are no significant milk sales. The poorer households cannot raise the capital to engage effectively in petty trade, and the higher educational level of the middle group helps them in managing small business activities as it does in matters of employment. The better-off are at an income level from employment or commercial activity level where they do not need to consider engaging in petty trade.

Employment is the single most important source of cash taking all households together. However, poorer people tend to undertake labouring jobs, whilst wealthier people take on skilled or salaried work, reflecting their educational level. For the poor too, self-employment is very important: brewing beer and marula, handicrafts (e.g. mats), selling poles and firewood, carving yokes and implement handles, baking bread.

The very poor diversify activities further to help make ends meet: fencing, house construction labour, laundering clothes, thatching. Livestock sales are

Expenditure Patterns

It should be emphasised that the expenditure of the very poor and poor, is greatly diminished by their receipt of food aid, and this also affects the middle group. The pattern of proportional expenditure is based on great differences in absolute amounts. Total expenditure ranges from roughly SZL 2000 for the very poor and SZL 40,000 for the better-off, thus the expenditure on social services (including education and medical costs) is the single largest item for all groups except the better-off; but the better-off actually spend



The graph provides a breakdown of total cash expenditure according to category of expenditure.

some 9 times more on social services than very poor households and about 4 times more than poor households (and 10-17 times more on beer and tobacco). The need to pay school fees is by far the biggest reason for the peak of livestock sales in January. It is also notable that agricultural inputs are not a major investment: the better-off spend about half as much on this as on social services, and the middle about one-third.

Hazards

The collapse of the cotton industry has been the biggest recent economic shock in this zone. But this is perhaps not to be defined as a 'hazard' in the usual sense of the term.

Chronic hazards: Irregularity and shortage of rain is by far the main chronic hazard.

HIV/AIDs may be considered a chronic hazard in that it affects the labour capacity and therefore the livelihoods of many households.

Periodic hazard: Drought is by far the most serious threat, and in fact repeated, serious rain failures over recent years have made drought seem like a chronic hazard.

Response Strategies

Food aid has played such an important role over recent years for the very poor, poor and even middle groups that it has to some extent overlaid potential response strategies by households.

The very poor do not have any effective strategies to respond to hazards, since they have virtually no assets/savings and very little labour capacity with which to try to increase employment.

The poor are able to seek extra earnings from employment, although this must be on the sugar plantations rather than for local farmers when local crops are failing.

The middle and the better-off increase livestock sales, and the middle also try to increase their petty trade.

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices, high staple prices
February	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices
March	Cessation of rains
April	
May	
June	Diminution of cattle fodder (especially, poor pastures)
July	Further diminution of cattle fodder
August	Lack of late winter rains, cattle deaths
September	Lack of late winter & early spring rains, cattle deaths
October	No rains, high staple prices
November	Late start of rains, high staple prices
December	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices, high staple prices

Swaziland Livelihood Profiles

The Lubombo Plateau Livelihood Zone

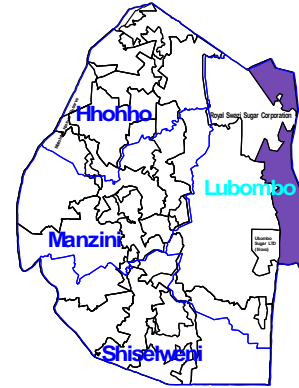
August 2006¹

Main Conclusions and Implications

This zone is geographically isolated to markets and therefore economically marginal to the country's economy, but part of the zone is reasonably favourable for trading especially Lomahasha area given its strategic border location. The cross border trade brings wealth to a minority, but hardly to the poorer rural population. If they are to benefit from it they will need some access to credit, as a start along a path out of the vicious cycle in which lack of cash limits their capacity to get their children educated, and lack of education limits their children's capacity to engage in employment or commercial activity.

A sparse population on mediocre land with low-to-medium rainfall (when there is no drought) is faced also with threats to its potentially good livestock sector; a quarantine on exports because of endemic foot & mouth disease, and cattle rustling across the border which has depleted herds and gravely discouraged wealthier people from further investment.

In the shorter term, poorer people need help to recover from their impoverishment by drought, including support to food production which should diminish the need for food aid whose negative effects include depression of the local market for surplus produced by wealthier farmers. Insofar as food aid continues, consideration should be given to local purchase of maize. And as food aid diminishes, there should be some official market activity to reduce the annual hike in maize prices just as people go into the 'hunger season' prior to the harvest. In the longer term there is a need for this economy to be better linked to the heart of the country, so that its products gain a wider market, whether handicrafts or (if foot & mouth can be conquered) livestock. This zone has a good productive potential, only if official markets can be established.



Zone Description

This zone comprises a plateau with an escarpment facing west from the long frontier with Mozambique, also with a short southern frontier with South Africa. Within Swaziland, the zone borders the large Royal Swazi Sugar Corporation irrigated plantation area to the north-west, and Ubombo Sugar plantation to the south-west. The zone's natural vegetation is savannah (grass & shrubs); the rainfall is up to about 800mm per annum, and temperatures are moderate compared to the hotter lowveld which borders the zone to the west. There are no recognised rivers, and apart from some earth dams, the main source of water is underground water via springs or boreholes.

The population is comparatively sparse, numbering some 44,630. This is mainly a maize and pulses area (field beans, Jugo beans, cowpeas), although sweet potatoes, Irish potatoes, pumpkins and melons are also grown, most items being commonly intercropped with maize. The very poor and poor farmers do not apply chemical fertilizer because of the cost; but the poor do apply kraal manure from their few cattle. The middle farmers mix fertilizer and kraal manure, whilst the better-off mainly use fertilizer. Cattle have traditionally been an important asset, but for some years now the area has been under quarantine for foot & mouth disease, and livestock herding has been depressed. In addition, cattle rustling especially into Mozambique have taken a toll of the local stock mainly kept by the wealthier households using communal grazing areas. The savannah vegetation, which is conducive to livestock production, especially cattle, is compromised by the invading plant species, *Chromolaena odorata* in parts of the zone, that has substantially damaged pastures. Nevertheless, local livestock sales remain

¹Fieldwork for this profile was undertaken in late July-early August 2006. The information presented refers to the consumption year from July 2005, i.e. from the time when the maize harvest was largely in. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five years (i.e. until 2011).

an important part of the annual cash earnings especially of the middle-wealth households.

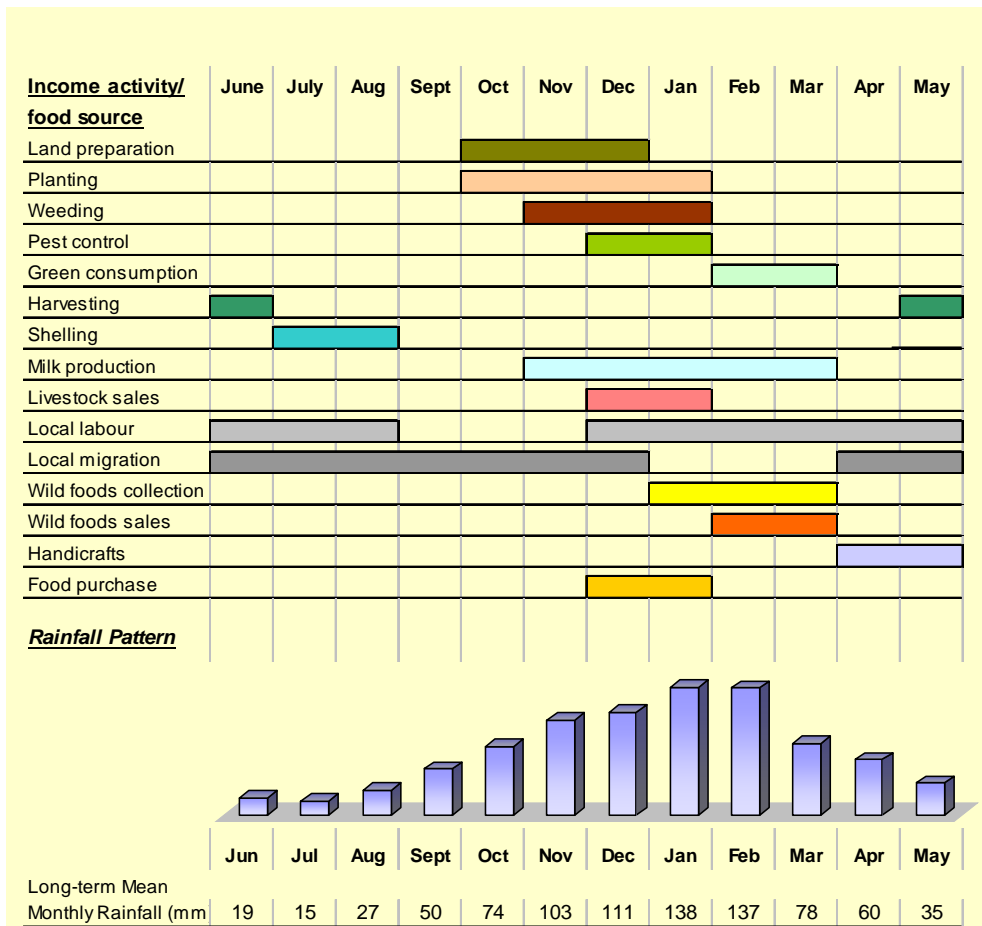
The poorer households normally manage to obtain between some 17% and 37% of their basic crop-consumption requirement from their fields. They make up part of the difference by doing agricultural work for neighbours which is paid in kind; and get the cash still needed to make ends meet, they work on home brewing and other 'self-employment', and also migrate seasonally to work on the neighbouring sugar plantations. Added to this long-term pattern has been food aid in response to repeated drought since 2002, giving poorer households some 20% of their basic annual food requirement, but depressing local maize prices to the disadvantage of the middle and better-off who sell maize. These latter make by far the greater part of their cash through regular skilled or office employment whether in the public or the private sector, often requiring migration to cities.

Markets

Access to markets is reliable due to the good transport and road network. The Lomahasha border gate to Mozambique is the central focus for a cross-border exchange of goods and services while there is also an imminent potential with the opening of the Mhlumeni border. However, there is a need for a detailed study to identify the type of commodities and routes feeding into the market. There are certain market problems; one is that the zone is far from the main commercial demand area in the central-west of the country. Nevertheless, middle and better-off households normally produce a significant part of their maize and beans for sale, and these as well as tubers are marketed on and beyond the Lubombo Plateau; notably to the neighbouring Lowveld. Food aid for poorer families since 2002 both on the plateau and in the Lowveld has seriously reduced the market demand for maize.

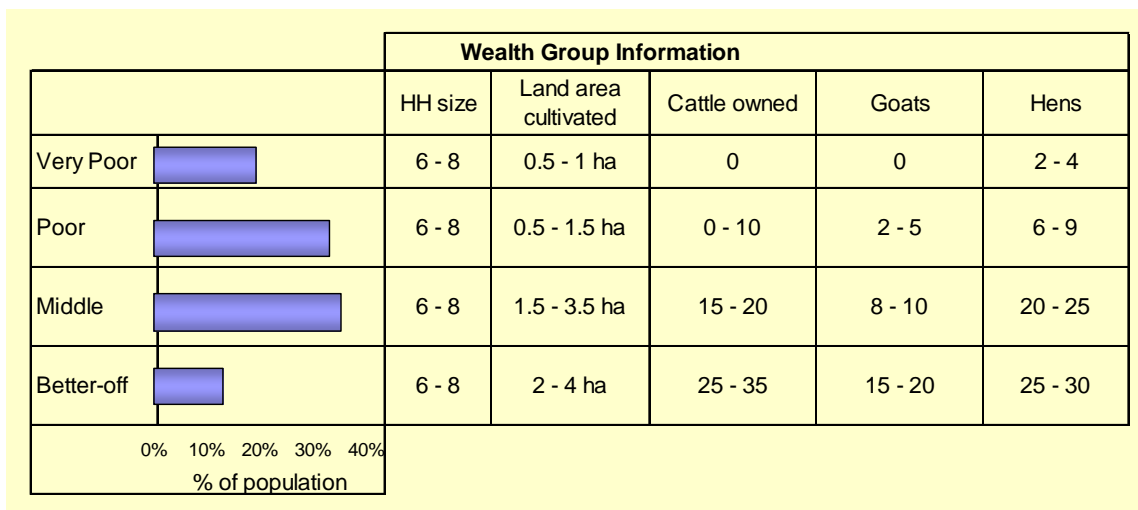
Another serious marketing problem results from the quarantine, in that ruminant livestock and their meat can only legally be marketed within the zone. This has discouraged wealthier people from developing their herds, since the local meat trade alone does not justify hope of profitable sales. Thus stock holdings are unusually low. Paradoxically, meat is imported into the zone at comparatively high prices.

Seasonal Calendar



With a mean annual precipitation of some 850mm, this is a low-to-medium rainfall area by Swaziland standards, for this and fertility reasons the yields of maize are distinctly inferior to those in the west of the country. Employment is important for all wealth groups, but the seasonal employment shown here refers largely to the poorer households who perform local agricultural labour and migrate 'locally' to the nearest zones' neighbouring sugar estates. There is no month in the year without paid labour for some.

Wealth Breakdown

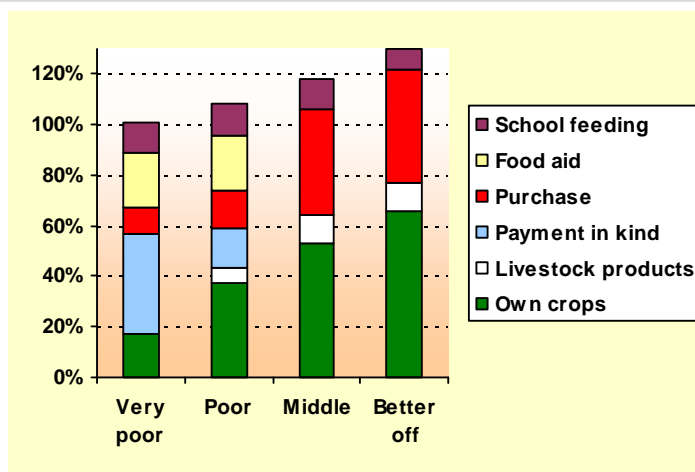


Land ownership is almost the same across the board: it is land use which differentiates poorer and wealthier farmers: the latter not only use more of their own land but sometimes rent land from poorer people, and use inputs and sometimes hire tractors in the hope of good rains and a surplus of maize to sell. Here even the very poor have access to some 2 hectares of land, but they are unable to profit from even half of it because they lack family labour and cannot pay for hiring others, and they also lack any cash for investment in seeds and equipment, let alone draught power or fertilizers, they even lack the handful of cattle that would provide kraal manure.

What they do not lack, however, is numbers in the household and a high dependency ratio, who are not productive. By contrast the better-off and many middle households can not only manage cultivation (with tractor or oxen draught power respectively) on all their land, but they can also afford fertilizers, improved seed and credit. The result is that increased yields grace increased area cultivated. The one asset common to all wealth groups, since it demands very little labour or investment, is fruit trees.

Sources of Food – A good year (2004-05)

Drought relief food aid during successive years has offered substantial support to the very poor and poor at around one-fifth of their basic annual food requirement. Directly as a result of that, the chart shows how food purchase has been reduced by these groups; somewhat at the cost of surplus producers amongst their neighbours. However it is also worth noting that even the very poor, although highly vulnerable to any further economic shock, are neither idle nor 'basket cases': by their labour on their own fields and on those of others (paid in kind) they obtain nearly 60% of their annual food needs. On the other hand, at their level of economic existence school meals for two or three children make an important difference in getting them up to 100% of food requirement.

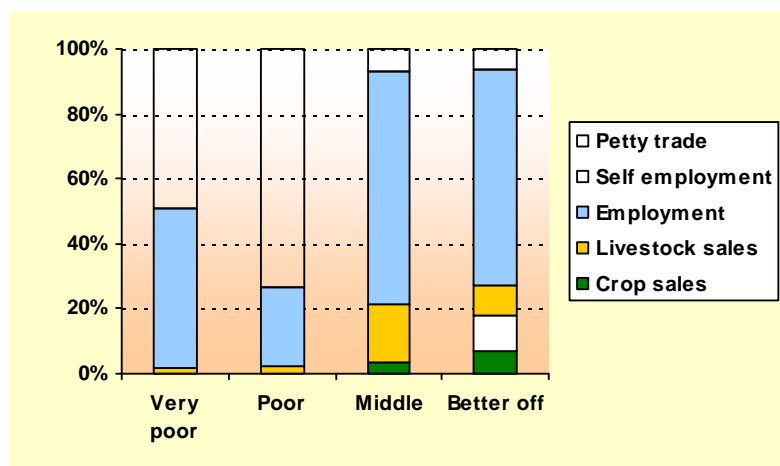


In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcs per person per day.

Getting enough calories is one thing, but the quality of diet (including its palatability) is another. In this respect the role of milk consumption amongst the wealthier households is significant and symbolic of consumption of other items too: vegetables, pulses, sugar. Such 'non-staple' items figure much higher amongst their food purchases than maize, which they nevertheless buy because they need to sell equivalent or greater amounts from their harvest to avoid the risks of storage and to meet immediate cash needs.

Sources of Cash

The graph below provides a breakdown of total cash income according to income source.



The very poor and especially the poor are highly dependent on self-employment, meaning such activities as beer-brewing and the sale of firewood, grass and handicrafts. However, they are also dependent on direct work for others, whether as farm labourers (also paid in kind) or as sugar plantation workers. These are highly seasonal jobs, and a household will be lucky if it manages to have income from one or other source every month of the year.

The better-off and middle households operate at a different economic level. They are employers of local labour, but their main income is not generated from the

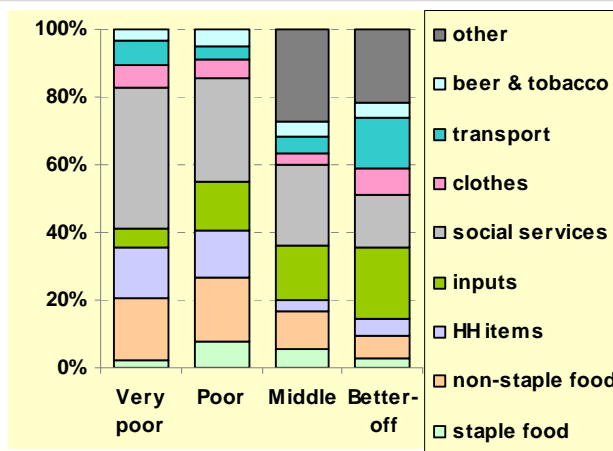
Annual Income in emalangeni	Very Poor	Poor	Middle	Better-off
	3,010	4,272	33,560	63,430

local economy but rather from waged and salaried employment (government or private) much of which is outside the zone. There is some engagement in trading, ranging from hawking to small businesses, and it should be noted that the graph shows proportions and not absolute amounts: the better-off make roughly twice as much cash from trading as the middle. By the same token, the middle make a significant proportion of their cash (about one-fifth) from local livestock sales, but in absolute cash terms the better-off make the same amount - about SZL 6,000. The better-off also have enough cattle to make somewhat more from fresh milk sales. By contrast, crop sales have been minimal, partly due directly to drought, but at least as much due indirectly to drought; food aid which has much reduced demand from their usual customers (the poor and very poor) of the plateau and the lowveld.

Expenditure Patterns

Given their low food production, the low expenditure on staple food by the poorer households is the result of both payment in kind for their labour (especially the very poor) and food aid.

Following on from the income sources graph, it should be noted that between wealth groups there are great differences in absolute expenditure; just as middle households earn some eight times what the poor earn, they also spend several times what the poor spend. Thus, for instance, it is striking that poorer families sacrifice a great part of their earnings on school costs (which form nearly all of 'social services' expenditure); but the middle actually spend six times more in cash terms. And on investment in production, the middle spend more than five times what the poor spend, and the better-off more than nine times. On the other hand, the middle spend only twice what the poor do on non-staple food, and only the better-off seem to have a really more luxurious diet, spending more than three times



what the middle spend.

The graph provides a breakdown of total cash expenditure according to category of expenditure.

Hazards

Chronic Hazards: foot & mouth disease is endemic and has made the zone subject to a quarantine order. There has been a history of livestock rustling into the neighbouring countries.

Periodic Hazards: drought, crop pests

Another factor may be considered to constitute a hazard as well as a benefit: food aid.

- a) It has helped push down the informal market buying price to levels very disadvantageous to local sellers.
- b) There is a risk that continued food aid where and when not fully needed will affect the economic behaviour of very poor and poor households in the sense of bringing a certain expectation and complacency, i.e. a kind of dependency.

Response Strategies

- Food aid has played such an important role over recent years for the very poor, poor and even middle groups that it has to some extent overlaid potential response strategies by households.
- The very poor do not have any effective strategies to respond to hazards, since they have virtually no assets/savings and very little labour capacity with which to try to increase employment.
- The poor are able to seek extra earnings from employment, although this must be on the sugar plantations rather than for local farmers when local crops are failing.
- migrate to Mozambique in search of casual work
- solicit food assistance from relatives
- sell more of their goats and poultry
- intensify production of handicrafts, grass cutting, piece work etc
- become engaged into petty trade (cross border trade)
- disposal of productive assets such as ploughs
- reduce the number and quality of meals per day
- increase firewood sales
- engage into child labour
- withdraw children from school

Indicators of Imminent Crisis

Month	Early Warning Indicator
January	Prolonged dry spells, high staple prices, High and early consumption of green maize amongst poor and very poor
February	Prolonged dry spells, high staple prices, High and early consumption of green maize amongst poor and very poor
March	Early harvesting and drying of grains for household consumption. Increased drop-out of children going to school amongst the poor and very poor.
April	No Harvest
May	No Harvest
June	Diminution of cattle fodder (especially, poor pastures)
July	Further diminution of cattle fodder
August	Lack of late winter rains, cattle deaths
September	Lack of late winter & early spring rains, cattle deaths
October	No rains, high staple prices
November	Late start of rains, high staple prices
December	10 – 20 day dry spells, increase in cattle sales, drop in cattle prices, high staple prices